

# POWERING **A NON-STOP INDIA**



**Maximum Retail Prices  
For Electrical Standard Products**  
Effective from 01-06-26

# FROM THE COO'S DESK.



Electrical & Automation

Dear Partner,

India is building at a pace and scale that few could have imagined a decade ago. **Infrastructure, metro networks, buildings, green energy corridors, the evolving new energy landscape including solar, modernising factories, and connected homes,** the demand on every link in the electrical and automation value chain has never been greater. It is a privilege to stand at the centre of this transformation, and it is a privilege we share with you.

As we step into this new phase of growth, we are sharing our updated price list. **This revision reflects the investments we continue to make in Made in India manufacturing, R&D, and the service infrastructure that you and your customers rely on every day, across every scale, segment, geography, and across all sources of power.** Our commitment to transparency, quality, and reliability remains the foundation of everything we do together.

At Lauritz Knudsen, we carry over 70 + years of experience built in India, for India. Today, that legacy powers a portfolio spanning **Low Voltage solutions, Industrial Automation, Software and Services,** designed to deliver seamlessly across diverse applications and evolving energy needs. From conventional systems to the rapidly expanding renewable and solar ecosystem, we enable consistent, high performance outcomes that power a **Non Stop India.**

It is your expertise, your relationships, and your reach that turn our solutions into real impact. Every specification advised, every installation completed, every customer served, that is where our shared purpose comes to life. We remain committed to equipping you with the products, training, and support that enable you to deliver with confidence.

As India accelerates toward its Viksit Bharat 2047 vision, the role of reliable, intelligent, and future ready electrical infrastructure has never been more critical. We are ready for what comes next, and we are proud to partner with you on this journey.

Our products and solutions are **built in India and engineered for all.**

**We Listen, We Partner, We Innovate**

A handwritten signature in blue ink, reading "Naresh Kumar".

Warm regards,  
Naresh Kumar  
COO & Sr. VP, Electrical Standard Products  
Lauritz Knudsen Electrical & Automation





# Powering a non-stop India with a wide range of solutions

## Power Distribution



• ACB



• MCCB



• ATS



• Isolator

## Motor Management



• Contactor



• Overload  
Relays



• Electronic  
Motor  
Protection



• Intelligent  
Motor  
Protection

## Energy Management



• Power  
Quality  
Analyzer



• AHF &  
ASVG



• Capacitor



• Capacitor  
Switching  
Solution

## Home & Distribution



• MCB



• RCD



• Distribution  
Board



• Switches

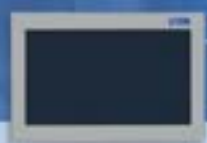
## Industrial Automation



• AC  
Drives



• PLC



• HMI



• Gateways

## Protection Relay



• Protection  
Relays



• Insulation  
Monitoring



• Thermal  
Monitoring

## Panel Solutions



• IEC  
Solutions



• Hybrid APFC  
Panel

## Software

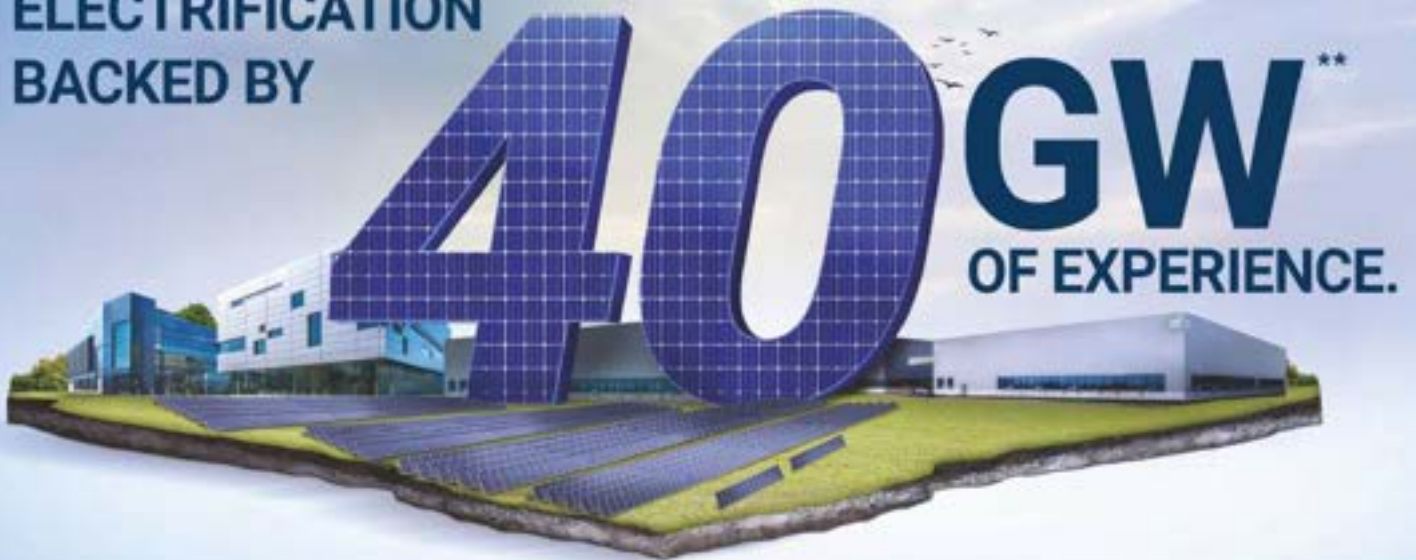
### SMARTCOMM

-  **Design**
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-  **Build**
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-  **Commission**
  - Configuration And Testing Of Various Products
-  **Operate**
  - Power Management Software To Connect Electrical Systems And Process Efficiency
-  **Predict**
  - Asset Management and predictive Maintenance





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# Efficient DC Solutions up to 1500V DC

## Applications:

- › Battery Energy Storage System
- › Central Inverter Application
- › EV System

## MCCB

- › Range from 16A to 800A
- › DC Operational Voltages of 1500V, 1000V, 750V, 500V & 250V
- › Ambient Temperature Compensated DC Releases
- › Internal Accessory Compatibility for all DC Applications
- › Service Breaking Capacity Ics upto 50kA



## ACB - SD

- › Disconnector versions up to 6300A\*
- › DC Voltage ratings 1500V<sup>#</sup>, 1000V, 750V, 500V & 250V
- › Service Breaking Capacity Ics upto 100kA

\* 6300A in two pole series connection for voltage up to 500V DC

<sup>#</sup> Upcoming version



## SWITCH DISCONNECTOR

- › Range: 125A to 630A
- › Voltage: 1000/1500V DC

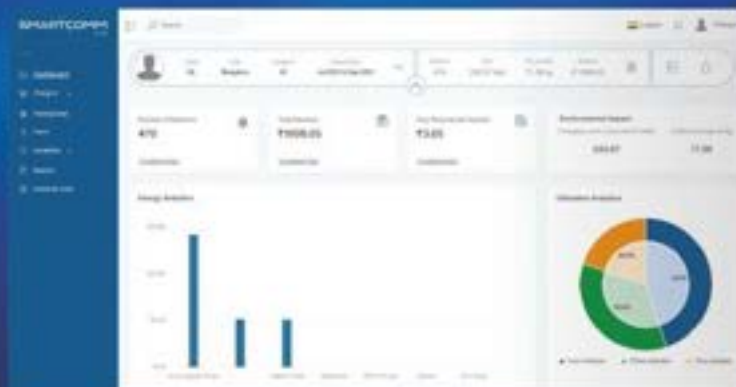


## MCB

- › Conforms to IEC 60947-2
- › Current rating upto 63A
- › Available in SP/DP and FP versions
- › Voltage rating available from 130V DC to 1000V DC



## Powering the **Future of Mobility** with **Integrated EV Charging Solutions**



### „ INTEGRATED SYSTEM:

### • RATINGS:

## • TAKE CONTROL OF YOUR EV CHARGING NETWORK:

• **SECURE ACCESS:**

**- CUSTOM TARIFF & BILLING:**

### • USAGE ANALYTICS DASHBOARD:

Track revenue, session frequency, and user behavior to optimize your operations





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Note:

[Black colour : HSN code]

Current GST 18%, subject to changes as per Govt. notification

**Please contact the nearest branch office for  
Prices of the following products :**

- › Final Distribution Products - 6kA MCBs
- › Wires, Cables and Flat Cables
- › Busbar Trunking Systems
- › Rotary Switches
- › Modular Remote Control Units & Indicating Units
- › Timing Devices & Supply Monitors
- › Cable Ducts & Load Break Switches
- › Modular Switches and Sockets
- › Medium Voltage AIS upto 36kV
- › Agricultural Electrical Products

**Note:** Product photographs shown, are for representative purposes only.





# SMARTSHOP

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### Power Contactors

#### 2 Pole

- › MNX
- › MU-2P

#### 3 Pole

- › MO
- › MNX
- › MI
- › MX Power
- › ML
- › MDX (DC Control/Electronic coil Control)

#### 4 Pole

- › MCX

### Control Relays (Auxiliary Contactors)

- › MX0 (Mini) AC/DC
- › MO0 AC/DC

### Capacitor Duty Contactors

- › MO C

## MI Contactors 6-150A, AC-3 Rating

Optimum solution  
for your applications



Understanding customer requirements, we make sure that our range of contactors caters to their evolving needs. Considering the changing expectations of customers and a need for an optimum and reliable solution, we introduce MI range of contactors for applications upto 150 A AC3 rating.

#### Features

- › Finger proof terminals upto 40A
- › Can be used with existing MN Range of thermal overload relays
- › Top mounting add-on blocks possible upto 80A
- › Spares available for entire range
- › Optimised for AC1/AC3 applications

#### Applications

- › Street lighting
- › VFD, Soft Starters applications
- › UPS
- › Solar and Wind inverters
- › Resistive loads
- › Battery charging
- › Motor Starters

\* For accessories and more details please contact nearest branch.

| Type                          | Cat. No. | M.R.P. (₹)<br>Per Unit  |
|-------------------------------|----------|-------------------------|
| MI 6 (With 1 NO aux contact)  | CS90401  | Price<br>on<br>Request* |
| MI 9 (With 1 NO aux contact)  | CS90402  |                         |
| MI 12 (With 1 NO aux contact) | CS90403  |                         |
| MI 18 (With 1 NO aux contact) | CS90404  |                         |
| MI 22 (With 1 NO aux contact) | CS90405  |                         |
| MI 25 (With 1 NO aux contact) | CS90406  |                         |
| MI 32                         | CS90407  |                         |
| MI 40                         | CS90408  |                         |
| MI 45                         | CS90704  |                         |
| MI 50                         | CS90705  |                         |
| MI 70                         | CS90706  |                         |
| MI 80                         | CS90707  |                         |
| MI 95                         | CS90724  |                         |
| MI 120                        | CS90725  |                         |
| MI 150                        | CS90726  |                         |

#### Notes:

- 1) Standard coil voltage: 110V, 220V, 240V and 415V, 50Hz
- 2) For ordering Suffix, please refer page No. 10

#### Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: [www.LK-EA.com](http://www.LK-EA.com) | e-mail: [CIC@LK-EA.com](mailto:CIC@LK-EA.com)







## 2 Pole Power Contactors [8536]

### 2 Pole Power Contactors - Type MNX

#### Features

- › Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- › Range from 9A - 650A AC-3
- › DC ratings available
- › Click fit type construction up to 40A
- › Coil on top design in 95A and above
- › Common spares and accessories as MNX 3P

| Size | AC3 Rating (A) | AC1 Rating (A) | Type       | Aux. Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|----------------|----------------|------------|---------------|----------|---------------------|------------------|
| Fr 1 | 9              | 25             | MNX 9-2P   | 1 NO          | CS90232  | 1190                | 10               |
|      | 12             | 30             | MNX 12-2P  | 1 NO          | CS90234  | 1375                | 10               |
|      | 18             | 30             | MNX 18-2P  | 1 NO          | CS90236  | 1640                | 10               |
|      | 22             | 32             | MNX 22-2P  | 1 NO          | CS90238  | 1800                | 10               |
| Fr 2 | 25             | 45             | MNX 25-2P  | #             | CS90240  | 1850                | 10               |
|      | 32             | 55             | MNX 32-2P  | #             | CS90241  | 4070                | 10               |
|      | 40             | 55             | MNX 40-2P  | #             | CS90242  | 6040                | 10               |
|      | 50             | 85             | MNX 50-2P  | #             | CS94061  | 8780                | 1                |
| Fr 3 | 70             | 100            | MNX 70-2P  | #             | CS94062  | 12380               | 1                |
|      | 80             | 100            | MNX 80-2P  | #             | CS94063  | 15400               | 1                |
|      | 95             | 160            | MNX 95-2P  | #             | CS94064  | 24800               | 1                |
|      | 110            | 160            | MNX 110-2P | #             | CS94065  | 30300               | 1                |
| Fr 4 | 140            | 160            | MNX 140-2P | #             | CS94066  | 38700               | 1                |
|      | 185            | 250            | MNX 185-2P | 2 NO + 2 NC   | CS94978  | 47200               | 1                |
|      | 225            | 300            | MNX 225-2P | 2 NO + 2 NC   | CS94979  | 52600               | 1                |
|      | 250            | 300            | MNX 250-2P | 2 NO + 2 NC   | CS90301  | 58800               | 1                |
| Fr 5 | 300            | 400            | MNX 300-2P | 2 NO + 2 NC   | CS90346  | 71000               | 1                |
|      | 400            | 425            | MNX 400-2P | 2 NO + 2 NC   | CS94069  | 103300              | 1                |
|      | 550            | 650            | MNX 550-2P | 2 NO + 2 NC   | CS90243  | 151700              | 1                |
|      | 650            | 800            | MNX 650-2P | 2 NO + 2 NC   | CS90578  | 227000              | 1                |

## 3 Pole Power Contactors [8536]

### 3 Pole Power Contactors - Type MDX

#### Features

- › Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- › Range from 9 - 115A AC-3
- › Built in surge suppressor for MDX 9 - 115



MDX 25



MDX 38



MDX 115

| Size                         | AC3 Rating (A) | AC1 Rating (A) | Type    | Aux. Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------|----------------|----------------|---------|---------------|----------|---------------------|------------------|
| Fr 1 (DC Control Coil)       | 9              | 25             | MDX 9   | 1 NO          | CS96564  | 3000                | 1                |
|                              | 12             | 28             | MDX 12  | 1 NO          | CS96565  | 3430                | 1                |
|                              | 18             | 32             | MDX 18  | 1 NO          | CS96566  | 4090                | 1                |
|                              | 25             | 32             | MDX 25  | 1 NO          | CS96567  | 5490                | 1                |
| Fr 2 (DC Control Coil)       | 32             | 56             | MDX 32  | #             | CS96552  | 10940               | 1                |
|                              | 38             | 56             | MDX 38  | #             | CS96553  | 14510               | 1                |
| Fr 3 (Electronic Coil-AC/DC) | 50             | 90             | MDX 50  | #             | CS91584  | 21070               | 1                |
|                              | 65             | 110            | MDX 65  | #             | CS91585  | 23860               | 1                |
|                              | 80             | 125            | MDX 80  | #             | CS91586  | 29590               | 1                |
|                              | 95             | 125            | MDX 95  | #             | CS91857  | 35750               | 1                |
|                              | 115            | 125            | MDX 115 | #             | CS91858  | 40180               | 1                |

\* (Frame 1&2) - Available till stock last

#### Notes:

- 1) # Add-on blocks can be ordered separately.
- 2) For ordering MDX/MNX add-on aux contact blocks, please refer page No.8
- 3) For ordering MNX surge suppressor and MIL kit, please refer page No.9
- 4) For ordering Suffix, please refer page No.10
- 5) Standard coil voltage: MDX - 24V, 48V, 115V and 220V DC
- 6) Standard coil voltage: MNX 2P - 240V, 50Hz
- 7) For DC power ratings refer catalogue
- 8) For MDX side add-on and top add-on can not be mounted together

## 3 Pole Power Contactors [8536]

### 3 Pole Power Contactors - Type MX Mini

#### Features

- › Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- › AC/DC Contactor in 45mm width
- › Base as well as DIN Rail mounting facility
- › Built-in Surge Suppressor in MX DC



MX 06

| AC3 Rating (A)                                                | AC1 Rating (A) | Type  | Aux. Contact | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------------------------------------|----------------|-------|--------------|----------|---------------------|------------------|
| For AC control (Std. Coil Voltage - 24, 110, 240, 415V, 50Hz) |                |       |              |          |                     |                  |
| 6A                                                            | 20A            | MX 06 | 1 NO         | CS94012  | 1840                | 10               |
| 6A                                                            | 20A            | MX 06 | 1 NC         | CS94013  | 1840                | 10               |
| 9A                                                            | 20A            | MX 09 | 1 NO         | CS94014  | 1880                | 10               |
| 9A                                                            | 20A            | MX 09 | 1 NC         | CS94015  | 1880                | 10               |
| 12A                                                           | 20A            | MX 12 | 1 NO         | CS94016  | 2080                | 10               |
| 12A                                                           | 20A            | MX 12 | 1 NC         | CS94017  | 2080                | 10               |
| For DC control (Std. Coil Voltage - 24, 110, 220V)            |                |       |              |          |                     |                  |
| 6A                                                            | 20A            | MX 06 | 1 NO         | CS94021  | 2840                | 10               |
| 6A                                                            | 20A            | MX 06 | 1 NC         | CS94022  | 2840                | 10               |
| 9A                                                            | 20A            | MX 09 | 1 NO         | CS94023  | 3010                | 10               |
| 9A                                                            | 20A            | MX 09 | 1 NC         | CS94024  | 3010                | 10               |
| 12A                                                           | 20A            | MX 12 | 1 NO         | CS94025  | 3380                | 10               |
| 12A                                                           | 20A            | MX 12 | 1 NC         | CS94026  | 3380                | 10               |

### 3 Pole Power Contactors - Type ML

#### Features

- › Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- › Range from 25A- 300A AC-3
- › Robust and suitable for hostile applications



ML 1.5



ML 3

| Size | AC3 Rating (A) | AC1 Rating (A) | Type   | Aux. Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|----------------|----------------|--------|---------------|----------|---------------------|------------------|
| Fr 1 | 25             | 25             | ML 1.5 | 2 NO + 2 NC   | SS91851  | 8150                | 1                |
| Fr 2 | 32             | 40             | ML 2   | 2 NO + 2 NC   | SS90701  | 15140               | 1                |
|      | 40             | 45             | ML 3   | 2 NO + 2 NC   | SS90721  | 22330               | 1                |
| Fr 3 | 70             | 100            | ML 4   | 2 NO + 2 NC   | SS90910  | 36480               | 1                |
|      | 110            | 125            | ML 6   | 2 NO + 2 NC   | SS90921  | 57730               | 1                |
| Fr 4 | 300            | 400            | ML 12  | 2 NO + 2 NC   | SS91010  | 130680              | 1                |

#### Notes:

- 1) For ordering MX add-on aux contact blocks, please refer page No.8
- 2) For ordering ML add-on aux contact blocks, please refer page No.9
- 3) For ordering MX surge suppressor and MIL kit, please refer page No.9
- 4) For Ordering Suffix, please refer page No.10
- 5) Standard Coil Voltage : ML 1.5/2/3 - 110V, 240V and 440V, 50 Hz  
ML 4/6/12 - 110V, 240V and 415V, 50 Hz



## 4 Pole Power Contactors [8536]

### 4 Pole Power Contactors - Type MCX

#### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 18A - 900A
- Wide operating band up to 130A AC-1
- Power contacts configuration - 4 NO



MCX 22



MCX 34



MCX 47

| Size | AC-1 Rating (A) | Type   | Aux Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|-----------------|--------|--------------|----------|---------------------|------------------|
| Fr 1 | 18              | MCX 01 | #            | CS97009  | 1950                | 10               |
|      | 25              | MCX 02 | #            | CS97010  | 2010                | 10               |
|      | 32              | MCX 03 | #            | CS97011  | 2230                | 10               |
|      | 40              | MCX 04 | #            | CS97012  | 3250                | 10               |
| Fr 2 | 55              | MCX 11 | #            | CS97013  | 4310                | 1                |
|      | 63              | MCX 12 | #            | CS97014  | 8740                | 1                |
|      | 80              | MCX 13 | #            | CS97015  | 11760               | 1                |
| Fr 3 | 105             | MCX 22 | #            | CS97017  | 17910               | 1                |
|      | 130             | MCX 23 | #            | CS97018  | 18910               | 1                |
| Fr 4 | 160             | MCX 32 | 2 NO + 2 NC  | CS97020  | 35240               | 1                |
|      | 200             | MCX 33 | 2 NO + 2 NC  | CS97021  | 37840               | 1                |
|      | 255             | MCX 34 | 2 NO + 2 NC  | CS97022  | 43410               | 1                |
| Fr 5 | 325             | MCX 41 | 2 NO + 2 NC  | CS97023  | 74500               | 1                |
|      | 360             | MCX 42 | 2 NO + 2 NC  | CS97024  | 81110               | 1                |
|      | 400             | MCX 43 | 2 NO + 2 NC  | CS97025  | 94150               | 1                |
|      | 560             | MCX 44 | 2 NO + 2 NC  | CS97026  | 133460              | 1                |
|      | 600             | MCX 45 | 2 NO + 2 NC  | CS97027  | 141080              | 1                |
|      | 700             | MCX 46 | 2 NO + 2 NC  | CS97028  | 158310              | 1                |
|      | 900             | MCX 47 | 2 NO + 2 NC  | CS94291  | 255910              | 1                |

### New 2 NO + 2 NC Power Contactor - Type MCX

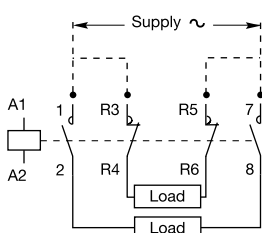
#### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 18A - 40A
- Power contacts configuration - 2 NO + 2 NC

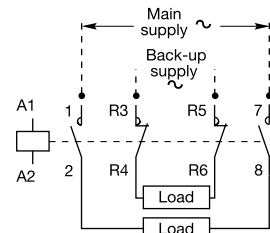
| Size | AC-1 Rating (A) | Type      | Power Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|-----------------|-----------|----------------|----------|---------------------|------------------|
| Fr 1 | 18              | MCX 01-22 | 2 NO + 2 NC    | CS91107  | 1950                | 10               |
|      | 25              | MCX 02-22 | 2 NO + 2 NC    | CS91108  | 2010                | 10               |
|      | 32              | MCX 03-22 | 2 NO + 2 NC    | CS91109  | 2230                | 10               |
|      | 40              | MCX 04-22 | 2 NO + 2 NC    | CS91110  | 3250                | 10               |

#### Block diagrams

Single supply and 2 separate loads



2 separate supplies and 2 separate loads



⚠ MCX 2NO + 2NC contactors are not suitable for a reversing starter or for controlling a single load from 2 separate supplies.

#### Notes for MCX:

- # Add-on blocks can be ordered separately.
- For ordering MCX add-on aux contact blocks, please refer page No.8
- For ordering MCX surge suppressor and MIL kit, please refer page No.9
- For Ordering Suffix, please refer page No.10
- Standard Coil Voltage: MCX - 220V, 240V and 415V 50Hz
- Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors
- MCX 01-04 and MCX 11-13 available in 48V DC coil. Contact nearest branch for more details.

To avoid coil failure due to neutral floating, it is recommended to use 415V coil

## AST System Components [9032]

### Automatic Transfer Controllers (ATC)



AuXC-2000 Controller

For AuXC 2000/2100 programming videos and more details please scan the QR code or click here



| Type                                       | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--------------------------------------------|-------------|---------------------|------------------|
| AuXC-2000 Controller                       | ATC20000000 | 43800               | 1                |
| AuXC-2100 Controller** with Optional RS485 | ATC21000000 | 87300               | 1                |
| RS485 Module for AuXC-2100 Controller**    | ETACONRS485 | 17400               | 1                |

Can be used along with ACB, Motorised MCCBs, MCX contactors & Motorised Changeover switches

\*\* Note: RS485 expansion module needs to be ordered with AuXC-2100 for communication

## Control Relays (Auxiliary Contactors) [8536]

### Type MX0 AC



MX0 22E

#### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Available with AC or DC control in same dimension
- Inbuilt Surge Suppressor in MX DC

| Rated Current                                               | Description           | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------------------------------------------|-----------------------|----------|---------------------|------------------|
| For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz |                       |          |                     |                  |
| AC-15 4A at 415V                                            | MX0 40E (4 NO)        | CS94018  | 2050                | 10               |
|                                                             | MX0 31E (3 NO + 1 NC) | CS94019  | 2050                | 10               |
|                                                             | MX0 22E (2 NO + 2 NC) | CS94020  | 2050                | 10               |
|                                                             | MX0 13E (1 NO + 3 NC) | CS94041  | 2050                | 10               |
|                                                             | MX0 04E (4 NC)        | CS94042  | 2050                | 10               |

### Type MX0 DC

| Rated Current                                    | Description           | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--------------------------------------------------|-----------------------|----------|---------------------|------------------|
| For DC control std. Coil Voltage - 24, 110, 220V |                       |          |                     |                  |
| AC-15 4A at 415V                                 | MX0 40E (4 NO)        | CS94027  | 2540                | 10               |
|                                                  | MX0 31E (3 NO + 1 NC) | CS94028  | 2540                | 10               |
|                                                  | MX0 22E (2 NO + 2 NC) | CS94029  | 2540                | 10               |
|                                                  | MX0 13E (1 NO + 3 NC) | CS94043  | 2540                | 10               |
|                                                  | MX0 04E (4 NC)        | CS94044  | 2540                | 10               |

Notes: 1) For Ordering Suffix, please refer page No.10  
2) 5 NC & above combinations are not recommended for MX0 DC Control Contactors  
3) 1 NO + 3 NC, 4 NC add-on block combinations are not recommended for MX0 DC Control Contactors.



## Type MO0 AC



### Features

- Same add-on aux. contact block in MO0 as of MO power contactors
- Common coil for 50 & 60Hz application

MO0 AC

| Rated Current                                               | Description         | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------------------------------------------|---------------------|----------|---------------------|------------------|
| For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz |                     |          |                     |                  |
| AC-15<br>4A<br>at 415V                                      | MO0 40E (4NO)       | CS91623  | 1200                | 10               |
|                                                             | MO0 31E (3NO + 1NC) | CS91624  | 1200                | 10               |
|                                                             | MO0 22E (2NO + 2NC) | CS91625  | 1200                | 10               |

**Note:** 6NC & above combination is not recommended for MO0 AC  
For ordering add-on contact blocks of MX0, MO0, please refer page no.8

## Type MO0 DC



### Features

- Same add-on aux. contact block in MO0 as of MO power contactors
- Inbuilt Surge Suppressor in MO0 DC

MO0 DC

| Rated Current                                       | Description         | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------------------------------|---------------------|----------|---------------------|------------------|
| For DC control std. Coil Voltage - 24, 48, 110, 220 |                     |          |                     |                  |
| AC-15<br>4A<br>at 415 V                             | MO0 40E (4NO)       | CS90045  | 2630                | 10               |
|                                                     | MO0 31E (3NO + 1NC) | CS90046  | 2630                | 10               |
|                                                     | MO0 22E (2NO + 2NC) | CS90047  | 2630                | 10               |

**Note:** 5NC & above combination is not recommended for MO0 DC  
For ordering add-on contact blocks of MX0, MO0, please refer page no.8

## Capacitor Duty Contactors [8536]

### Capacitor Duty Contactors - Type MO C



MO C50



MO C100

| Size | kVAR Rating @ 440V, 3Ph, 50Hz | Type      | Built-in Auxiliary Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|-------------------------------|-----------|-----------------------------|----------|---------------------|------------------|
| Fr 1 | 3                             | MO C3     | 1NO                         | CS96146  | 3110                | 1                |
|      | 5                             | MO C5     | 1NO                         | CS96127  | 3300                | 1                |
|      | 8.5                           | MO C8.5   | 1NO                         | CS96320  | 4100                | 1                |
|      | 10                            | MO C10    | 1NO                         | CS96156  | 4270                | 1                |
|      | 12.5                          | MO C12.5  | 1NO                         | CS96321  | 4500                | 1                |
|      | 15                            | MO C15    | 1NO                         | CS90019  | 5970                | 1                |
|      | 20                            | MO C20    | 1NO                         | CS90021  | 6760                | 1                |
|      | 25                            | MO C25▲   | 1NO                         | CS96322  | 7340                | 1                |
| Fr 2 | 30                            | MO C30\$  | 1NO                         | CS96148  | 11300               | 1                |
|      | 40                            | MO C40    | 1NO                         | CS96147  | 18910               | 1                |
|      | 50                            | MO C50    | 1NO                         | CS96324  | 21220               | 1                |
|      | 60                            | MO C60\$  | 1NO                         | CS96149  | 22450               | 1                |
| Fr 3 | 75                            | MO C75    | 1NO                         | CS96150  | 27080               | 1                |
|      | 85                            | MO C85    | 1NO                         | CS96157  | 28390               | 1                |
|      | 100                           | MO C100\$ | 1NO                         | CS96158  | 28950               | 1                |

### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- MO C Range available from 3 -100 kVAR, AC-6b
- Delatching type early make contacts
- Separate termination for damping resistors
- Encapsulated damping resistor assembly
- Common coil for 50 & 60Hz application
- Low pick-up VA consumption
- Standard accessories throughout the range in line with MO contactor
- Suitable for Lug as well as Lugless termination
- RoHS compliant

**For Power Quality Solutions,  
please refer page No. 87-95**

### Note:

- For ordering add-on aux. contact block, please refer page No.8
- For ordering suffix, please refer page No.10
- For ordering spare coils, please refer page No.11
- Standard coil voltage : 240V, 50/60 Hz
- For ordering MO C surge suppressor, please refer page No.9

▲ If using 16 sq mm cable use of spreader link kit is mandatory

▲ For ordering spreader link kit, Please refer page No.9

\$ Spreader link along with phase barrier included in packing

## Definite Purpose Contactors [8536]

### Two Pole Contactors - Type MU-2P

#### Features

- Wide band potted coil
- Neutral isolation



MU 16-2P

| AC3 Rating (A) | Type    | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------|---------|----------|---------------------|------------------|
| 16A            | MU16-2P | CS90117  | 1600                | 10               |
| 25A            | MU25-2P | CS90118  | 1950                | 10               |
| 40A            | MU40-2P | CS90119  | 2500                | 10               |

### Note:

- Coil voltages available for MU-2P are 220V, 240V, wide band coil 160-220V
- Ordering suffix for wide band coil of MU-2P is N000
- For ordering add-on aux. contact block, please refer page No.8





## Accessories - Add-on Auxiliary Contact Blocks [8538]

|                       | MNX<br>9-80 | MNX<br>95-650 | MO<br>9-110 | MO<br>140-300 | ML  | MX  | MDX<br>9-115 | MCX<br>01-23 | MCX<br>32-47 | MX0 | MO0 | MO C | MU-2P |
|-----------------------|-------------|---------------|-------------|---------------|-----|-----|--------------|--------------|--------------|-----|-----|------|-------|
| Front add-on possible | Yes         | No            | Yes         | No            | No  | Yes | Yes          | Yes          | No           | Yes | Yes | No   | Yes   |
| Side add-on possible  | Yes         | Yes           | Yes         | Yes           | Yes | No  | Yes          | Yes          | Yes          | No  | No  | Yes  | No    |

**Note:** 1) Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors

2) Accessories are common for MNX 2P & MNX 3P contactors

### Front Mounting Add-on aux. Contact Block



**MNX / MCX  
Front Add-on  
aux. contact Block**



**MO / MO0  
Front Add-on  
aux. contact Block**



**MDX Front  
Add-on  
aux. contact Block**



**MX Front  
Add-on  
aux. contact Block**



**MU-2P  
Front Add-on  
aux. contact Block**

| Front Mounting | Suitable for            |                        |                       |                        |                      |                        |                      |                        |                      |                        |
|----------------|-------------------------|------------------------|-----------------------|------------------------|----------------------|------------------------|----------------------|------------------------|----------------------|------------------------|
|                | MNX 9-80 /<br>MCX 01-23 | M.R.P. (₹)<br>Per Unit | MO 9-110 /<br>MO0     | M.R.P. (₹)<br>Per Unit | MDX#<br>9-115        | M.R.P. (₹)<br>Per Unit | MX<br>0/6/9/12       | M.R.P. (₹)<br>Per Unit | MU-2P                | M.R.P. (₹)<br>Per Unit |
| 4 NO           | CS94112 <sup>^</sup>    | 995                    | CS94594 <sup>^</sup>  | 995                    | -                    | -                      | CS94033 <sup>^</sup> | 935                    | -                    | -                      |
| 3 NO + 1 NC    | CS94113 <sup>^</sup>    | 995                    | CS94595 <sup>^</sup>  | 995                    | -                    | -                      | CS94034 <sup>^</sup> | 935                    | -                    | -                      |
| 2 NO + 2 NC    | CS94114 <sup>^</sup>    | 995                    | CS94596 <sup>^</sup>  | 995                    | CS96569 <sup>~</sup> | 1300                   | CS94035 <sup>^</sup> | 935                    | -                    | -                      |
| 1 NO + 3 NC    | CS94115 <sup>^</sup>    | 995                    | CS94597 <sup>^</sup>  | 995                    | CS90906 <sup>~</sup> | 1300                   | CS94036 <sup>^</sup> | 935                    | -                    | -                      |
| 4 NC           | CS94116 <sup>^</sup>    | 995                    | CS94598 <sup>^</sup>  | 995                    | -                    | -                      | CS94037 <sup>^</sup> | 935                    | -                    | -                      |
| 2 NO           | CS94117 <sup>^</sup>    | 655                    | CS94591 <sup>^^</sup> | 655                    | -                    | -                      | CS94030 <sup>^</sup> | 605                    | CS90692 <sup>^</sup> | 655                    |
| 1 NO + 1 NC    | CS94118 <sup>^</sup>    | 655                    | CS94592 <sup>^^</sup> | 655                    | CS96568 <sup>~</sup> | 760                    | CS94031 <sup>^</sup> | 605                    | CS90693 <sup>^</sup> | 655                    |
| 2 NC           | CS94119 <sup>^</sup>    | 655                    | CS94593 <sup>^^</sup> | 655                    | -                    | -                      | CS94032 <sup>^</sup> | 605                    | CS90694 <sup>^</sup> | 655                    |
| 1 NO           | CS94120 <sup>^</sup>    | 335                    | CS94585 <sup>^^</sup> | 335                    | CS96586 <sup>~</sup> | 425                    | -                    | -                      | CS90695 <sup>^</sup> | 335                    |
| 1 NC           | CS94121 <sup>^</sup>    | 335                    | CS94586 <sup>^^</sup> | 335                    |                      |                        | -                    | -                      | CS90696 <sup>^</sup> | 335                    |

\*For MDX Side add-on and top add-on can not be mounted together

\*MDX add-on available till stock last



**MNX/MCX  
Side Add-on aux. contact Block**



**MO/MO C  
Left Add-on aux. contact Block**

### Side Mounting Add-on aux. Contact Block

| Side Mounting | Suitable for |                        |                         |                      |                         |                         |                         |                         |                         |
|---------------|--------------|------------------------|-------------------------|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|               | Aux Contact  | MNX 9-40/<br>MCX 01-04 | M.R.P. (₹ )<br>Per Unit | MCX 11-13            | M.R.P. (₹ )<br>Per Unit | MNX 50-80/<br>MCX 22-23 | M.R.P. (₹ )<br>Per Unit | MO 9-110/<br>MO C 3-100 | M.R.P. (₹ )<br>Per Unit |
| First left    | 1 NO + 1 NC  | CS94220 <sup>^</sup>   | 1055                    | CS94201 <sup>^</sup> | 1140                    | CS94201 <sup>^</sup>    | 1140                    | CS94580 <sup>^</sup>    | 1055                    |
| First Right   | 1 NO + 1 NC  | CS94221 <sup>^</sup>   | 1055                    | CS94202 <sup>^</sup> | 1140                    | CS94202 <sup>^</sup>    | 1140                    | CS94581 <sup>^</sup>    | 1055                    |
| Second Left   | 1 NO + 1 NC  | -                      | -                       | -                    | -                       | CS94203 <sup>^</sup>    | 1140                    | CS94582 <sup>^</sup>    | 1055                    |
| Second right  | 1 NO + 1 NC  | -                      | -                       | -                    | -                       | CS94204 <sup>^</sup>    | 1140                    | CS94583 <sup>^</sup>    | 1055                    |

**Note:** Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors

For MO 9-18, only First left and Second left side add-on is allowed.

### Side Mounting Add-on aux. Contact Block

| Side Mounting | Suitable for |                          |                        |                      |                        |                      |
|---------------|--------------|--------------------------|------------------------|----------------------|------------------------|----------------------|
|               | Aux Contact  | MNX 95-650/<br>MCX 32-47 | M.R.P. (₹)<br>Per Unit | MO<br>140-300        | M.R.P. (₹)<br>Per Unit | MDX#<br>9-115        |
| First left    | 1 NO + 1 NC  | CS94205 <sup>^</sup>     | 1295                   | CS95033 <sup>^</sup> | 1295                   | ST94985 <sup>^</sup> |
| First Right   | 1 NO + 1 NC  | CS94206 <sup>^</sup>     | 1295                   | CS95034 <sup>^</sup> | 1295                   |                      |
| Second Left   | 1 NO + 1 NC  | CS94207 <sup>^</sup>     | 1295                   | CS95035 <sup>^</sup> | 1295                   | -                    |
| Second right  | 1 NO + 1 NC  | CS94208 <sup>^</sup>     | 1295                   | CS95036 <sup>^</sup> | 1295                   | -                    |



**MDX  
Side Add-on aux.  
contact Block**

# For MDX Side add-on and top add-on can not be mounted together

- Standard Packing is 1 <sup>^</sup>Standard Packing is 10 <sup>^^</sup>Standard Packing is 20

\* MDX add-on available till stock last



## Accessories - Add-on Auxiliary Contact Blocks [8538]

### Side Mounting Add-on aux. Contact Block - ML



ML Add-on aux. contact Block

| Side Mounting | Suitable for |                      |                     |                      |                     |
|---------------|--------------|----------------------|---------------------|----------------------|---------------------|
|               | Aux Contact  | ML 4/6               | M.R.P. (₹) Per Unit | ML 12                | M.R.P. (₹) Per Unit |
| Left          | 1 NO + 1 NC  | SS91494 <sup>^</sup> | 1600                | -                    | -                   |
| Right         | 1 NO + 1 NC  | -                    | -                   | SS91474 <sup>^</sup> | 1600                |

**Note:** Ordering Suffix for Add-on aux. contact blocks : 0000

## Accessories - Surge Suppressors [8538]

### For MX, MNX, MCX, MO & MO C



MX - S1

Ordering Suffix \* 110-240V : B000, 415V : D000

# 110V : A000, 220-240V : B000, 360-525V : D000

^ 110V : A000, 220-320V : B000, 360-415V : D000

MDX 9-115, MNX 550-650, MCX 45-47, MX DC, MX0 DC & MO0 DC have built in surge suppressor

| For Contactor                           | Cat. No.             | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------------------|----------------------|---------------------|------------------|
| MX 06 to MX 12 / MX 0 AC (S1)           | CS94039 <sup>*</sup> | 875                 | 10               |
| MNX 9 - 40 / MCX 01 - 04 (S1)           | CS94166 <sup>*</sup> | 890                 | 10               |
| MNX 50 - 80 / MCX 11 - 23 (S3)          | CS94163 <sup>*</sup> | 995                 | 10               |
| MNX 95 - 250 / MCX 32 - 34 (S4)         | CS94164 <sup>#</sup> | 3260                | 10               |
| MNX 300 - 400 / MCX 41 - 44 (S6)        | CS94165 <sup>#</sup> | 4400                | 10               |
| MO Frame 0/1, MO C Frame 1, MO0 Control | CS91706 <sup>^</sup> | 890                 | 10               |
| MO/MO C - Frame 2                       | CS91707 <sup>^</sup> | 995                 | 10               |
| MO/MO C - Frame 3                       | CS91708 <sup>^</sup> | 3260                | 10               |
| MO Frame - 4/5                          | CS91854 <sup>^</sup> | 4400                | 10               |

## Accessories - Mechanical Interlock Kits & Spreader Link Kit [8538]

### Mechanical Interlock Kit for MX, MO, MDX, MNX & MCX



MCX M3 (MCX 22)

| For Contactor         | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------|----------|---------------------|------------------|
| MX 06 to MX 12 / MX 0 | CS94038  | 840                 | 10               |
| MO 9 - 110*           | CS94584  | 1195                | 10               |
| MDX 9 - 38            | CS96572  | 995                 | 1                |
| MDX 50 - 115          | CS96573  | 3020                | 1                |
| MNX 9 - 40            | CS94126  | 685                 | 10               |
| MNX 50 - 80           | CS94197  | 4810                | 1                |
| MNX 95 - 140          | CS94198  | 7490                | 1                |
| MNX 185 - 250         | CS94199  | 8520                | 1                |
| MNX 300 - 650         | CS94200  | 9650                | 1                |
| MCX 01 - 04           | CS94126  | 685                 | 10               |
| MCX 11 - 13           | ST50540  | 1355                | 10               |
| MCX 22 - 23           | CS93095  | 6350                | 1                |
| MCX 32 - 34           | SS94992  | 6560                | 1                |
| MCX 41 - 47           | CS94301  | 10820               | 1                |

\*MDX Mechanical interlock kit Available till stock last

**Note:**

1) Ordering Suffix for Mechanical Interlock Kits : 0000

2) \*MO MIL Kit contains inbuilt 2 NC Contacts

3) Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors

4) MIL kit for MNX 50-80 comes with 2 left & 2 right side add-on aux. contact blocks i.e. 4 NO + 4 NC

5) MIL kit for MCX 22/23 comes with 2 left & 2 right side add-on aux. contact blocks i.e. 4 NO + 4 NC

### MO / MO C Spreader Link Kit

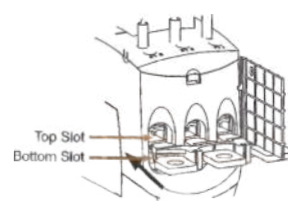


| For Contactor              | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------|----------|---------------------|------------------|
| MO 9 - 45 / MOC 3 - 30     | CS94274  | 790                 | 10               |
| MO 50 - 70 / MOC 40 - 60   | CS94093  | 1255                | 10               |
| MO 80 - 110 / MOC 75 - 100 | CS94094  | 1810                | 1                |
| MO 140 - 225               | CS91057  | 5090                | 1                |
| MO 250 - 300               | CS90940  | 7920                | 1                |

**Note:**

- 1) If using 16 sq mm cable for MO 45/ MO C25 use of spreader link is mandatory
- 2) Spreader Link Kit consists of six terminals along with phase barrier (Phase barrier not applicable for MO 250-300)
- 3) In MO C 30, MO C 60 & MO C 100 spreader link is included in packing
- 4) Ordering Suffix: 0000

⚠ 5) Insert spreader link in top slot only



### DOL Starter - Link



Contactor  
MMS Link

| Suitable For            | Cat. No.  | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|-------------------------|-----------|---------------------------|------------------------|
| MOG H1/S1 with MO 9-18  | CS90396 # | 655                       | 10                     |
| MOG H1/S1 with MO 25-45 | CS90391 # | 655                       | 10                     |

### Star Delta Starter - Link



Reversing /  
star delta Link



Paralleling  
Link



Contactor  
MMS Link



Shorting  
Link

| Suitable For            | Cat. No.  | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|-------------------------|-----------|---------------------------|------------------------|
| MOG H1/S1 with MO 9-18  | CS90549 # | 1990                      | 10                     |
| MOG H1/S1 with MO 25-45 | CS90547 # | 1990                      | 10                     |

\*Ordering Suffix 0000

### Reversing DOL Starter - Link



Reversing  
Starter



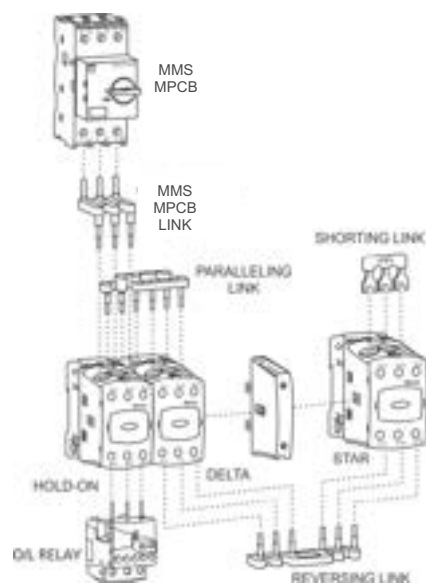
Paralleling  
Link



Contactor  
MMS Link

| Suitable For            | Cat. No.  | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|-------------------------|-----------|---------------------------|------------------------|
| MOG H1/S1 with MO 9-18  | CS90548 # | 1640                      | 10                     |
| MOG H1/S1 with MO 25-45 | CS90546 # | 1640                      | 10                     |

#### Example of Star Delta Starter Connection with Link



## Ordering Suffix for Standard Coil Voltages

| Ordering Suffix for Standard Coil Voltages |        |             |        |
|--------------------------------------------|--------|-------------|--------|
| AC Control                                 |        | DC Control* |        |
| Voltage (V)                                | Suffix | Voltage (V) | Suffix |
| 24                                         | G000   | 24          | 4000   |
| 110                                        | A000   | 48          | 5000   |
| 220                                        | K000   | 110         | 1000   |
| 240                                        | B000   | 220         | 2000   |
| 415                                        | D000   |             |        |
| 440                                        | P000   |             |        |

| Ordering suffix for Electronic coil Contactor |        |                         |
|-----------------------------------------------|--------|-------------------------|
| AC / DC control                               |        |                         |
| Voltage (V)                                   | Suffix | Contactor               |
| 20-48                                         | J000   | MDX 50-115              |
| 60-110                                        | A000   | MDX 50-115              |
| 110-240                                       | B000   | MDX 50-115 & MO 140-300 |
| 240-415                                       | D000   | MO 140-300              |

#### Note:

- \* For MX DC, MDX 9-38, MX0 DC, MO0 DC
- For other coil voltages please contact nearest branch office





## Spare Contact Kit and Spare Coil



ML Spare Kits



ML Spare Coils

| Type    | Spare Contact kit    |                     | Spare Coil           |                     |
|---------|----------------------|---------------------|----------------------|---------------------|
|         | Cat. No.             | M.R.P. (₹) Per Unit | Cat. No.             | M.R.P. (₹) Per Unit |
| ML 1.5  | SS95305 <sup>^</sup> | 4290                | SS90873 <sup>^</sup> | 1535                |
| ML 2    | SS95307 <sup>^</sup> | 7845                | SS90545 <sup>^</sup> | 2840                |
| ML 3    | SS95309 <sup>^</sup> | 13860               |                      |                     |
| ML 4    | SS95311 <sup>^</sup> | 20545               | SS91258 <sup>~</sup> | 5555                |
| ML 6    | SS95313 <sup>^</sup> | 38010               |                      |                     |
| ML 10   | SS95315 <sup>~</sup> | 74035               | SS91011 <sup>~</sup> | 11850               |
| ML 12   | SS95317 <sup>~</sup> | 79780               |                      |                     |
| MR      | -                    | -                   | CS94102 <sup>^</sup> | 1165                |
| MU16-2P | CS90217 <sup>^</sup> | 540                 | CS90793 <sup>^</sup> | 620                 |
| MU25-2P | CS90218 <sup>^</sup> | 715                 |                      |                     |
| MU40-2P | CS90219 <sup>^</sup> | 1020                |                      |                     |
| MO 0 AC | -                    | -                   | CS94841 <sup>^</sup> | 860                 |

\* MR Coils available till stock last

**Note:**

- 1) Coil voltages available for MU-2P are 220V, 240V, wide band coil 160-220V
- 2) Ordering suffix for wide band coil of MU-2P is NO00

| MO C Spare Coils |                      |                     |
|------------------|----------------------|---------------------|
| Type             | Cat. No.             | M.R.P. (₹) Per Unit |
| MO C3 - 30       | CS96317 <sup>^</sup> | 1035                |
| MO C40 - 60      | CS96318 <sup>^</sup> | 3195                |
| MO C75 - 100     | CS96319 <sup>^</sup> | 5525                |

## Front housing &amp; Moving bridge kit and Combination coil with timer for ML contactor



| Front housing and moving bridge kit |                      |                     |
|-------------------------------------|----------------------|---------------------|
| Type                                | Cat. No.             | M.R.P. (₹) Per Unit |
| ML 1.5                              | ST28734 <sup>~</sup> | 1470                |
| ML 2/ ML 3                          | ST23866 <sup>~</sup> | 2010                |
| ML 4/ ML 6                          | ST28735 <sup>~</sup> | 3640                |
| Combination coil with timer         |                      |                     |
| Type                                | Cat. No.             | M.R.P. (₹) Per Unit |
| ML 2                                | SS90650 <sup>~</sup> | 6275                |

**Note:**

- 1) Ordering Suffix for Spare Contact kit - 0000
- 2) For Spare Coil Ordering Suffix refer page No. 10

~ Standard Packing is 1  
<sup>^</sup> Standard Packing is 5  
<sup>^</sup> Standard Packing is 10  
<sup>~</sup> Standard Packing is 50

## Spare Contact Kit and Spare Coil



MNX Spare Coils

MCX Spare Kits

|                | Spare Contact kit        |                              | Spare Coil            |                     |
|----------------|--------------------------|------------------------------|-----------------------|---------------------|
|                | Type                     | Cat. No. M.R.P. (₹) Per Unit | Cat. No.              | M.R.P. (₹) Per Unit |
| MO Contactors  | MO 9 (1 NO)              | CS94843 <sup>^</sup> 975     | CS94841 <sup>^</sup>  | 860                 |
|                | MO 12 (1 NO)             | CS94844 <sup>^</sup> 1265    |                       |                     |
|                | MO 18 (1 NO)             | CS94845 <sup>^</sup> 1390    |                       |                     |
|                | MO 9                     | CS96380 <sup>^</sup> 975     |                       |                     |
|                | MO 12                    | CS96381 <sup>^</sup> 1265    | CS96317 <sup>^</sup>  | 1035                |
|                | MO 18                    | CS96382 <sup>^</sup> 1390    |                       |                     |
|                | MO 25                    | CS96383 <sup>^</sup> 1615    |                       |                     |
|                | MO 32                    | CS96384 <sup>^</sup> 3650    |                       |                     |
|                | MO 40                    | CS96385 <sup>^</sup> 6165    |                       |                     |
|                | MO 45                    | CS96386 <sup>^</sup> 6240    |                       |                     |
|                | MO 50                    | CS96387 <sup>^</sup> 6540    |                       |                     |
|                | MO 60                    | CS96388 <sup>^</sup> 8470    | CS96318 <sup>^</sup>  | 3195                |
|                | MO 70                    | CS96389 <sup>^</sup> 9405    | CS96319 <sup>^</sup>  | 5525                |
|                | MO 80                    | CS96390 <sup>^</sup> 12940   |                       |                     |
|                | MO 95                    | CS96391 <sup>^</sup> 16320   |                       |                     |
|                | MO 110                   | CS96392 <sup>^</sup> 23845   |                       |                     |
|                | MO 140                   | CS90357 <sup>~</sup> 28390   | CS90356 <sup>~</sup>  | 13090               |
|                | MO 185                   | CS90358 <sup>~</sup> 34065   |                       |                     |
|                | MO 225                   | CS90359 <sup>~</sup> 39005   |                       |                     |
|                | MO 250                   | CS94444 <sup>~</sup> 46890   | CS94442 <sup>~</sup>  | 19095               |
|                | MO 300                   | CS94443 <sup>~</sup> 52925   |                       |                     |
|                | MO 140 (electronic coil) | CS90357 <sup>~</sup> 28390   | CS90855 <sup>~</sup>  | 23715               |
|                | MO 185 (electronic coil) | CS90358 <sup>~</sup> 34065   |                       |                     |
|                | MO 225 (electronic coil) | CS90359 <sup>~</sup> 39005   |                       |                     |
|                | MO 250 (electronic coil) | CS94444 <sup>~</sup> 46890   | CS90738 <sup>~</sup>  | 23820               |
|                | MO 300 (electronic coil) | CS94443 <sup>~</sup> 52925   |                       |                     |
| MNX Contactors | MNX 9                    | CS94123 <sup>^</sup> 835     | CS94105               | 770                 |
|                | MNX 12                   | CS94124 <sup>^</sup> 1080    |                       |                     |
|                | MNX 18                   | CS94125 <sup>^</sup> 1210    |                       |                     |
|                | MNX 22                   | CS94269 <sup>^</sup> 1345    |                       |                     |
|                | MNX 25                   | CS94127 <sup>^</sup> 1385    |                       |                     |
|                | MNX 32                   | CS94128 <sup>^</sup> 3305    |                       |                     |
|                | MNX 40                   | CS94147 <sup>^</sup> 5375    | CS94192 <sup>^</sup>  | 3085                |
|                | MNX 50                   | CS94150 <sup>^</sup> 5925    |                       |                     |
|                | MNX 70                   | CS94151 <sup>^</sup> 8925    |                       |                     |
|                | MNX 80                   | CS94152 <sup>^</sup> 12165   |                       |                     |
|                | MNX 95                   | CS94153 <sup>~</sup> 16420   | CS94196 <sup>~</sup>  | 5285                |
|                | MNX 110                  | CS94154 <sup>~</sup> 23775   |                       |                     |
|                | MNX 140                  | CS94155 <sup>~</sup> 28830   |                       |                     |
|                | MNX 185                  | CS94156 <sup>~</sup> 32130   | CS94194 <sup>~</sup>  | 12065               |
|                | MNX 225                  | CS94157 <sup>~</sup> 37155   |                       |                     |
|                | MNX 250                  | CS90310 <sup>~</sup> 44230   |                       |                     |
|                | MNX 300                  | CS90283 <sup>~</sup> 49445   | CS94195 <sup>~</sup>  | 17885               |
|                | MNX 400                  | CS94161 <sup>~</sup> 74630   |                       |                     |
|                | MNX 550                  | CS94162 <sup>~</sup> 100275  | CS94193 <sup>~</sup>  | 37795               |
|                | MNX 650                  | CS96336 <sup>~</sup> 156565  |                       |                     |
| MCX Contactors | MCX 01-04                | -                            | CS94105 <sup>^</sup>  | 770                 |
|                | MCX 11                   | CS94077 <sup>^</sup> 2725    | CS94009 <sup>^</sup>  | 960                 |
|                | MCX 12                   | CS94078 <sup>^</sup> 5645    |                       |                     |
|                | MCX 13                   | CS90307 <sup>^</sup> 8750    |                       |                     |
|                | MCX 22                   | CS94331 <sup>~</sup> 10740   | ST91291 <sup>*~</sup> | 2590                |
|                | MCX 23                   | CS90078 <sup>~</sup> 12675   |                       |                     |
|                | MCX 32                   | CS94082 <sup>^</sup> 20485   | CS94196 <sup>~</sup>  | 5285                |
|                | MCX 33                   | CS94083 <sup>^</sup> 25250   |                       |                     |
|                | MCX 34                   | CS94084 <sup>^</sup> 29810   |                       |                     |
|                | MCX 41                   | CS94295 <sup>~</sup> 43565   | CS94195 <sup>~</sup>  | 17885               |
|                | MCX 42                   | CS94296 <sup>~</sup> 50245   |                       |                     |
|                | MCX 43                   | CS94297 <sup>~</sup> 60290   |                       |                     |
|                | MCX 44                   | CS94298 <sup>~</sup> 80585   |                       |                     |
|                | MCX 45                   | CS94299 <sup>~</sup> 81630   |                       |                     |
|                | MCX 46                   | CS94300 <sup>~</sup> 92590   |                       |                     |
|                | MCX 47                   | CS90308 <sup>~</sup> 138925  | CS94193 <sup>~</sup>  | 37795               |

\* Ordering Suffix for 240V AC - F000, 415V AC - R000

## Type MN - Suitable for MNX Contactor

### Features

- › Available in 3 frame sizes from 0.2-570 A
- › Ambient temperature compensated up to 55°C
- › Built-in Single Phasing protection
- › Manual and auto reset mode
- › Conforms IS/IEC 60947-4-1 & IEC 60947-4-1



MN 2

MN 5

MN 12

MN 12L

| Type of Mounting (Operation) | Relay Range (A)                | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------|--------------------------------|-------------|---------------------|------------------|
| MN 2 (Directly Operated)     | Direct Mounting on MNX 9 - 40  |             |                     |                  |
|                              | 0.2 - 0.33                     | SS9414100EO | 2330                | 10               |
|                              | 0.3 - 0.5                      | SS9414100GO | 2330                | 10               |
|                              | 0.45 - 0.75                    | SS9414100JO | 2330                | 10               |
|                              | 0.6 - 1                        | SS9414100KO | 2330                | 10               |
|                              | 0.9 - 1.5                      | SS9414100MO | 2420                | 10               |
|                              | 1.4 - 2.3                      | SS9414100PO | 2420                | 10               |
|                              | 2 - 3.3                        | SS9414100QO | 2420                | 10               |
|                              | 3 - 5                          | SS9414100SO | 2420                | 10               |
|                              | 4.5 - 7.5                      | SS9414100UO | 2420                | 10               |
|                              | 6 - 10                         | SS9414200VO | 2420                | 10               |
|                              | 9 - 15                         | SS9414200BO | 2520                | 10               |
|                              | 14 - 23                        | SS9414400DO | 2670                | 10               |
|                              | 20 - 33                        | SS9414500EO | 4030                | 10               |
|                              | 24 - 40                        | SS9414500FO | 4210                | 10               |
| MN 5 (Directly Operated)     | Direct Mounting on MNX 50 - 80 |             |                     |                  |
|                              | 9 - 15                         | SS9413500BO | 4980                | 10               |
|                              | 14 - 23                        | SS9413500DO | 4980                | 10               |
|                              | 20 - 33                        | SS9413600EO | 4980                | 10               |
|                              | 30 - 50                        | SS9413600GO | 6240                | 10               |
|                              | 36 - 60                        | SS9413600TO | 6700                | 10               |
|                              | 45 - 75                        | SS9413700JO | 7270                | 10               |
| MN 12 (CT Operated)          | Separate Mounting              |             |                     |                  |
|                              | 28 - 46.5                      | SB9421100GO | 12180               | 1                |
|                              | 42 - 69                        | SS9413800HO | 12180               | 1                |
|                              | 60 - 100                       | SS9413800KO | 12180               | 1                |
|                              | 90 - 150                       | SS9413800MO | 12180               | 1                |
|                              | 135 - 225                      | SS9413800PO | 13650               | 1                |
|                              | 180 - 300                      | SS9413900QO | 15310               | 1                |
| MN 12L # (CT Operated)       | Separate Mounting              |             |                     |                  |
|                              | 42 - 69                        | SS9412700HO | 37120               | 1                |
|                              | 60 - 100                       | SS9412700KO | 37120               | 1                |
|                              | 90 - 150                       | SS9412700MO | 37120               | 1                |
|                              | 135 - 225                      | SS9412700PO | 37120               | 1                |
|                              | 180 - 300                      | SS9412700QO | 37120               | 1                |
|                              | 340 - 570                      | SS9412700SO | 37120               | 1                |

# For motors with longer starting time (Trip class 30)

## Type RTO - Suitable for MO Contactor

### Features

- › Ambient temperature compensated upto 55°C
- › Built-in Single Phasing protection
- › Manual and auto reset mode
- › Front access to START and STOP/RESET buttons
- › Sealable in OFF condition
- › Conforms IS/IEC 60947-4-1 & IEC 60947-4-1



RTO 1

RTO 2

RTO 3

| Type of Mounting (Operation) | Relay Range (A)                | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------|--------------------------------|-------------|---------------------|------------------|
| RTO - 1 (Directly Operated)  | Direct Mounting on MO 9 - 45   |             |                     |                  |
|                              | 0.23 - 0.41                    | CS9635500FO | 3790                | 10               |
|                              | 0.31 - 0.55                    | CS9635500GO | 3790                | 10               |
|                              | 0.55 - 0.85                    | CS9635500JO | 3790                | 10               |
|                              | 0.78 - 1.2                     | CS9635500LO | 3790                | 10               |
|                              | 1.2 - 2.0                      | CS9635500NO | 3790                | 10               |
|                              | 1.9 - 2.8                      | CS9635500PO | 3890                | 10               |
|                              | 2.4 - 3.6                      | CS9635500QO | 3890                | 10               |
|                              | 3.5 - 5.2                      | CS9635500SO | 3890                | 10               |
|                              | 4.6 - 6.7                      | CS9635500TO | 3890                | 10               |
|                              | 6.7 - 9.7                      | CS9635500VO | 3890                | 10               |
|                              | 8.5 - 12.5                     | CS9635500AO | 3940                | 10               |
|                              | 12.5 - 18.5                    | CS9635600CO | 4210                | 10               |
|                              | 17 - 25.5                      | CS9635600DO | 4210                | 10               |
|                              | 25 - 37                        | CS9635600EO | 6290                | 10               |
|                              | 35 - 45                        | CS9635600GO | 6490                | 10               |
| RTO - 2 (Directly Operated)  | Direct Mounting on MO 50 - 70  |             |                     |                  |
|                              | 5 - 7.5                        | CS9636600UO | 7550                | 1                |
|                              | 7 - 11                         | CS9636600VO | 7550                | 1                |
|                              | 10.5 - 16                      | CS9636600BO | 7550                | 1                |
|                              | 15 - 21                        | CS9636600CO | 7550                | 1                |
|                              | 20 - 31                        | CS9636600EO | 7860                | 1                |
|                              | 30 - 43                        | CS9636600FO | 9410                | 1                |
|                              | 40 - 57                        | CS9636600SO | 10460               | 1                |
|                              | 50 - 75                        | CS9636700JO | 10810               | 1                |
| RTO - 3 (Directly Operated)  | Direct Mounting on MO 80 - 110 |             |                     |                  |
|                              | 23 - 30                        | CS9087300EO | 11530               | 1                |
|                              | 29 - 38                        | CS9630300QO | 11980               | 1                |
|                              | 37 - 49                        | CS9630400GO | 12360               | 1                |
|                              | 47 - 62                        | CS9631200TO | 12590               | 1                |
|                              | 60 - 78                        | CS9631300JO | 14830               | 1                |
|                              | 75 - 110                       | CS9631400KO | 16200               | 1                |
| RTO - 4 (CT Operated)        | Separate Mounting              |             |                     |                  |
|                              | 23.4 - 36                      | CS9709600GO | 18800               | 1                |
|                              | 36 - 60                        | CS9709600JO | 18800               | 1                |
|                              | 57 - 84                        | CS9709600KO | 18800               | 1                |
|                              | 72 - 108                       | CS9709600LO | 18800               | 1                |
|                              | 105 - 156                      | CS9709600MO | 18800               | 1                |
|                              | 138 - 201                      | CS9709600NO | 23090               | 1                |
|                              | 201 - 291                      | CS9709600QO | 23700               | 1                |
|                              | 255 - 375                      | CS9709600RO | 29570               | 1                |



## Thermal Overload Relays [8536]

### Type RX

#### Features

- › Direct mounting on MX contactor
- › Built-in single phasing protection
- › Front access to START and STOP/RESET buttons

| Type of Mounting (Operation)     | Relay Range (A) | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------|-----------------|-------------|---------------------|------------------|
| RX (Directly Operated)           | 0.23-0.41       | CS9635700FO | 2050                | 10               |
|                                  | 0.45-0.78       | CS9635700JO | 2050                | 10               |
|                                  | 0.78-1.2        | CS9635700LO | 2050                | 10               |
|                                  | 1.2-1.9         | CS9635700NO | 2050                | 10               |
|                                  | 1.8-2.8         | CS9635700PO | 2050                | 10               |
| Direct Mounting on MX Contactors | 2.6-3.6         | CS9635700QO | 2050                | 10               |
|                                  | 3.6-5.2         | CS9635700SO | 2050                | 10               |
|                                  | 4.8-7           | CS9635700TO | 2050                | 10               |
|                                  | 6.4-9.7         | CS9635700VO | 2050                | 10               |
|                                  | 8.2-12.1        | CS9635700AO | 2050                | 10               |

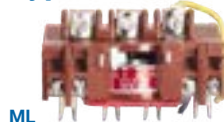
### Type MU-2P (2 Pole)



MU-2P

| Type of Mounting (Operation)       | Relay Range (A) | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------------|-----------------|-------------|---------------------|------------------|
| Direct Mounting on MU-2P Contactor | MU 2P (2 Pole)  |             |                     |                  |
|                                    | 1 - 1.6A        | CS9020700MO | 1130                | 1                |
|                                    | 1.5 - 2.5A      | CS9020700PO | 1130                | 1                |
|                                    | 2.5 - 4A        | CS9020700RO | 1130                | 1                |
|                                    | 4 - 6.5A        | CS9020700TO | 1130                | 1                |
|                                    | 6 - 10A         | CS9020700VO | 1130                | 1                |
|                                    | 9 - 14A         | CS9020700AO | 1130                | 1                |

### Type ML



ML

| Type of Mounting (Operation)    | Relay Range (A)                      | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|--------------------------------------|-------------|---------------------|------------------|
| ML 1 (Directly Operated)        | Direct Mounting on ML 1.5 Contactors |             |                     |                  |
|                                 | 0.15 - 0.25                          | SS9185800DO | 5500                | 10               |
|                                 | 0.25 - 0.4                           | SS9185800FO | 5500                | 10               |
|                                 | 0.4 - 0.65                           | SS9185800HO | 5500                | 10               |
|                                 | 0.6 - 1                              | SS9185800KO | 5500                | 10               |
|                                 | 1 - 1.6                              | SS9185800MO | 5500                | 10               |
|                                 | 1.5 - 2.5                            | SS9185800PO | 5500                | 10               |
|                                 | 2.5 - 4                              | SS9185800RO | 5500                | 10               |
|                                 | 4 - 6.5                              | SS9185800TO | 5500                | 10               |
|                                 | 6 - 10                               | SS9185800VO | 5500                | 10               |
|                                 | 10 - 16                              | SS9185800BO | 5500                | 10               |
|                                 | 11 - 18                              | SS9185800CO | 5500                | 10               |
| ML 2 / ML 3 (Directly Operated) | Direct Mounting on ML 2/3 Contactors |             |                     |                  |
|                                 | 9 - 14                               | SS9185900AO | 8140                | 10               |
|                                 | 13 - 21                              | SS9185900CO | 8140                | 10               |
|                                 | 20 - 32                              | SS9185900EO | 8140                | 10               |
|                                 | 28 - 42                              | SS9185900FO | 8140                | 10               |

| Type of Mounting (Operation)       | Relay Range (A) | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------------|-----------------|-------------|---------------------|------------------|
| Direct Mounting on MU-2P Contactor | MU 2P (2 Pole)  |             |                     |                  |
|                                    | 11 - 18A        | CS9020700CO | 1260                | 1                |
|                                    | 13 - 22A        | CS9020700DO | 1260                | 1                |
|                                    | 16 - 26A        | CS9020700BO | 1260                | 1                |
|                                    | 20 - 32A        | CS9020700EO | 1580                | 1                |
|                                    | 26 - 40A        | CS9020700FO | 1580                | 1                |

## Accessories for Thermal Overload Relays [8538]

### Accessories for Thermal Overload Relays



Relay Mounting Kit



Kit for Mounting MN5 Relay



Din Rail Mounting Kit MN2 Relay

| Description                                                   | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------------------------------------|-------------|---------------------|------------------|
| Push button extn. unit for MN 2 Relays                        | SS949680000 | 95                  | 100              |
| Kit for Mounting MN 2 Relay on ML 1.5 contactor               | SS947010000 | 330                 | 50               |
| Kit for Mounting MN 2 Relay separately (Direct Mounting Type) | SS947000000 | 330                 | 50               |
| Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor   | SS946380000 | 530                 | 20               |
| Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor          | SS941510000 | 340                 | 20               |
| Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor           | SS941520000 | 470                 | 20               |
| DIN Rail Mounting Kit Relay on MN 2 Relay                     | SS918870000 | 260                 | 50               |

### Separate Mounting Kit for RTO Relay



### Relay Reset Cord for MN & RTO relay



400 mm



650 mm



900 mm



1200 mm

| Description                   | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------------|-------------|---------------------|------------------|
| MN Relay reset cord - 400mm   | SB942070000 | 1190                | 1                |
| MN Relay reset cord - 650mm   | SB942080000 | 1240                | 1                |
| MN Relay reset cord - 900mm   | SB942090000 | 1270                | 1                |
| MN Relay reset cord - 1200mm  | SB942100000 | 1430                | 1                |
| RTO Relay reset cord - 400mm  | CS909410000 | 1190                | 1                |
| RTO Relay reset cord - 650mm  | CS909420000 | 1240                | 1                |
| RTO Relay reset cord - 900mm  | CS909430000 | 1270                | 1                |
| RTO Relay reset cord - 1200mm | CS909440000 | 1430                | 1                |

| Description                       | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------------|-------------|---------------------|------------------|
| RTO-1 Relay Separate Mounting Kit | CS963350000 | 445                 | 1                |
| RTO-2 Relay Separate Mounting Kit | CS963060000 | 1050                | 1                |
| RTO-3 Relay Separate Mounting Kit | CS963070000 | 1500                | 1                |



Type REO - Electronic Overload Relay

Features

- » Protections:

» Overload

» Single Phasing, Phase unbalance

» Locked Rotor

» Earth Fault in REO 1.1G & REO 4G
- » Trip indication

» Selectable Trip class - 10A, 10, 20, 30 as per IEC 60947-4-1

» Conforms IS/IEC 60947-4-1 & IEC 60947-4-1



To Experience the Benefits of REO Electronic Overload Relay



Click or Scan

| Model   | Type of Mounting           | Relay Range (A) | Without earth fault protection |                     | Model    | With in-built earth fault protection |                     | Std. Pkg. (Nos.) |
|---------|----------------------------|-----------------|--------------------------------|---------------------|----------|--------------------------------------|---------------------|------------------|
|         |                            |                 | Cat. No.                       | M.R.P. (₹) Per Unit |          | Cat. No.                             | M.R.P. (₹) Per Unit |                  |
| REO 1.1 | Direct Mounting on MO 9-45 | 0.15-0.75       | CS9041800JO                    | 8780                | REO 1.1G | CS9042300JO                          | 14640               | 10               |
|         |                            | 0.6-3           | CS9041800QO                    | 8780                |          | CS9042300QO                          | 14640               | 10               |
|         |                            | 2.4-12          | CS9041800LO                    | 8780                |          | CS9042300LO                          | 14640               | 10               |
|         |                            | 9-45            | CS9041800GO                    | 9860                |          | CS9042300GO                          | 15130               | 10               |
| REO 4   | Separate Mounting          | 18-90           | CS9041800UO                    | 26020               | REO 4G   | CS9042300UO                          | 26270               | 1                |
|         |                            | 72-360          | CS9041800RO                    | 35650               |          | CS9042300RO                          | 35780               | 1                |

Type REO - Electronic Over Current Relay

Electronic Overcurrent Relay (EOCR) is a type of Electronic relay that has tripping based on Definite mean time characteristics. The tripping of relay is decided by trip time selected by user.

Features

- » Protections:

» Overload

» Single Phasing, Phase unbalance

» Locked Rotor
- » Settable start time (5s, 10s, 20s, 40s) and trip time (2s, 4s, 8s, 16s)

» Trip indication

» Conforms IS/IEC 60947-4-1 & IEC 60947-4-1



| Model    | Type of Mounting           | Relay Range (A) | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------|----------------------------|-----------------|-------------|---------------------|------------------|
| REO 1.1c | Direct Mounting on MO 9-45 | 0.15-0.75       | CS9191100JO | 11280               | 1                |
|          |                            | 0.6-3           | CS9191100QO | 11280               | 1                |
|          |                            | 2.4-12          | CS9191100LO | 11280               | 1                |
|          |                            | 9-45            | CS9191100GO | 11280               | 1                |

Accessories for REO - Electronic Overload Relay

| Description                                       | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------------------------|-------------|---------------------|------------------|
| REO Relay Reset Cord - 400mm                      | CS904250000 | 1190                | 1                |
| Separate Mounting Kit for REO 1.1/1.1G/1.1c Relay | CS963350000 | 445                 | 1                |







Electrical & Automation

# eMPR300D & eMPR300I

Microcontroller based Motor Protection  
Relay with Inbuilt CTs,  
Display and Communication.

Protect Your Motors, Enhance Plant Performance.



Electronic Overload +  
Overcurrent Protection



EOLR + EOCR  
in one product



Current rating  
1 to 88 Amp



RS-485  
Communication

Remote Monitoring of Motor Feeders with SMARTCOMM



## eMPR150 - Electronic Motor Protection Relay



- › **Protections**
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Under Current
- › **Inbuilt CT's (1 A to 88 A)**
- › **Trip indication**
- › **Test facility**
- › **Site Selectable – Fail-safe / Non Fail-safe mode**
- › **Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1**

| Model   | Aux.Supply | Thermal O/L Range (A) | Device Code      | Cat. No.    | M.R.P. (₹) Per Unit |
|---------|------------|-----------------------|------------------|-------------|---------------------|
| eMPR150 | 110V AC    | 1-5.5                 | 49, 51LR, 37, 46 | EMPR150XAAO | 4000                |
|         |            | 4-22                  |                  | EMPR150XABO | 6100                |
|         |            | 16-88                 |                  | EMPR150XACO | 8200                |
|         | 230V AC    | 1-5.5                 |                  | EMPR150XBAO | 4000                |
|         |            | 4-22                  |                  | EMPR150XBBO | 6100                |
|         |            | 16-88                 |                  | EMPR150XBCO | 8200                |

eMPR selection must be done as per Line Current of Motor

## eMPR300 - Electronic Motor Protection Relay with Built-in Earth Fault Protection



- › **Protections**
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
- › **Inbuilt CT's (1 A to 88 A)**
- › **Trip indication**
- › **Test facility**
- › **Site Selectable Phase Sequence - RYB/ RBY**
- › **Site Selectable – Fail-safe / Non Fail-safe mode**
- › **Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1**

| Model   | Aux.Supply | Thermal O/L Range (A) | Device Code          | Cat. No.    | M.R.P. (₹) Per Unit |
|---------|------------|-----------------------|----------------------|-------------|---------------------|
| eMPR300 | 110V AC    | 1-5.5                 | 49, 51LR, 64, 37, 46 | EMPR300XAAO | 10500               |
|         |            | 4-22                  |                      | EMPR300XABO | 12600               |
|         |            | 16-88                 |                      | EMPR300XACO | 14700               |
|         | 230V AC    | 1-5.5                 |                      | EMPR300XBAO | 10500               |
|         |            | 4-22                  |                      | EMPR300XBBO | 12600               |
|         |            | 16-88                 |                      | EMPR300XBCO | 14700               |

eMPR selection must be done as per Line Current of Motor

New

## eMPR300D - Electronic Motor Protection Relay with inbuilt display

One solution for both EOLR and EOCR applications



- › **Protections**
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Dry Run Protection with Programmable Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
  - » Overcurrent
- › **7 Segment LED Display**
- › **Inbuilt CT's (1 A to 88 A)**
- › **5 trip records**
- › **Test facility**
- › **Site Selectable – Fail-safe / Non Fail-safe mode**
- › **Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1**

| Model    | Aux.Supply | Thermal O/L Range (A) | Device Code              | Cat. No.    | M.R.P. (₹) Per Unit |
|----------|------------|-----------------------|--------------------------|-------------|---------------------|
| eMPR300D | 85-265V AC | 1-5.5                 | 37, 46, 49, 51LR, 51, 64 | EMPR300DCAO | 11800               |
|          |            | 4-22                  |                          | EMPR300DCBO | 13900               |
|          |            | 16-88                 |                          | EMPR300DCCO | 16000               |

eMPR selection must be done as per Line Current of Motor

New

## eMPR300I - Electronic Motor Protection Relay with inbuilt display & Modbus RTU Communication

One solution for both EOLR and EOCR applications



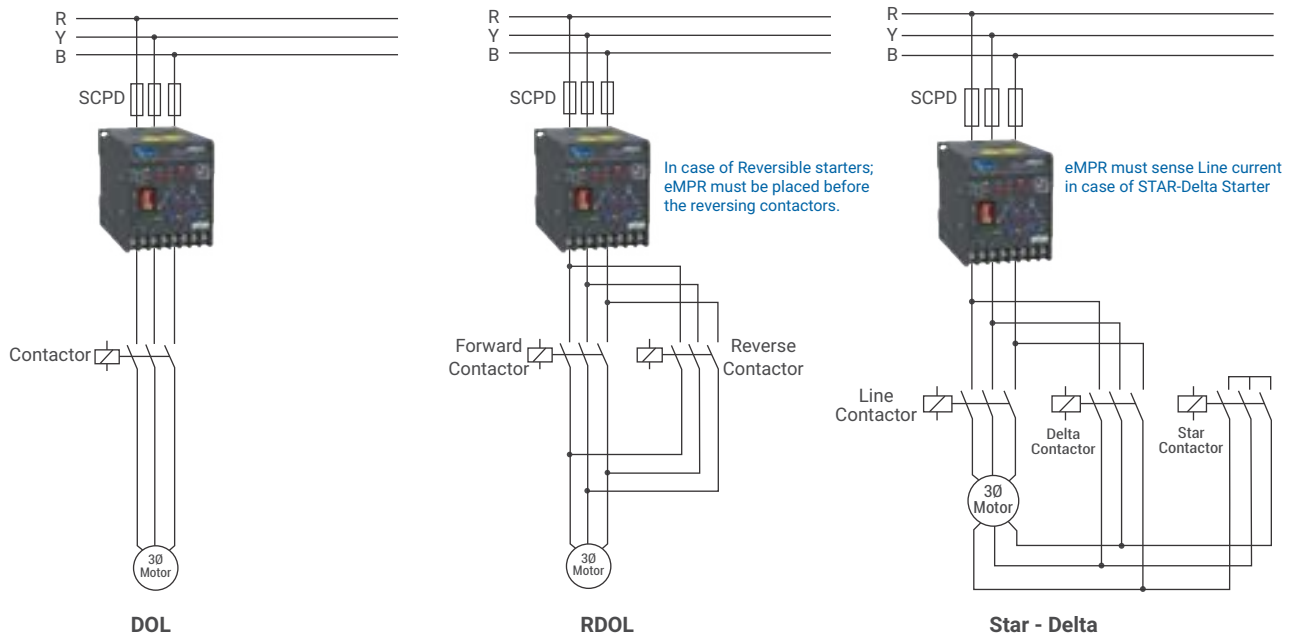
- › **Protections**
  - » Overload
  - » Locked Rotor
  - » Single Phasing, Current Unbalance,
  - » Dry Run Protection with Programmable Under Current
  - » Earth Fault
  - » Phase Sequence Reversal
  - » Overcurrent
- › **7 Segment LED Display**
- › **Inbuilt CT's (1 A to 88 A)**
- › **5 trip records**
- › **Test facility**
- › **Site Selectable – Fail-safe / Non Fail-safe mode**
- › **Selectable trip class - 10A, 10, 20 and 30 as per IEC 60947-4-1**
- › **Inbuilt Communication port Modbus - RS-485**

| Model    | Aux.Supply | Thermal O/L Range (A) | Device Code              | Cat. No.    | M.R.P. (₹) Per Unit |
|----------|------------|-----------------------|--------------------------|-------------|---------------------|
| eMPR300I | 85-265V AC | 1-5.5                 | 37, 46, 49, 51LR, 51, 64 | EMPR300ICAO | 17000               |
|          |            | 4-22                  |                          | EMPR300ICBO | 19100               |
|          |            | 16-88                 |                          | EMPR300ICCO | 21200               |

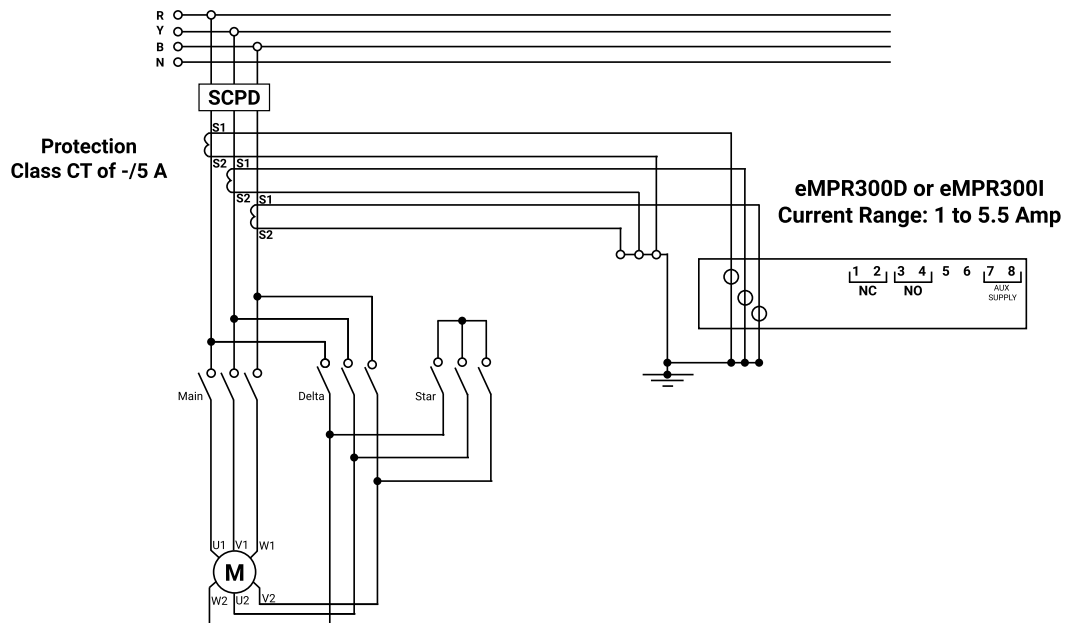
eMPR selection must be done as per Line Current of Motor



## Application Schemes : eMPR150, eMPR300, eMPR300D, eMPR300I



## eMPR300D or eMPR300I with External 5P10 Class CTs for Motors with FLC > 88 Amp



## Compact Motor Protection Relay - MM10

### Features

- › Flush Mounting with display
- › Last trip data recording
- › Protections:
  - » Thermal Overload with pre-alarm
  - » Short Circuit
  - » Earth fault
  - » Phase loss, Unbalance, Phase reversal
  - » Under Current
  - » Prolong starting, Locked Rotor



## Draw-out Motor Protection Relay - MPR21\* New

- › MPR21 – 37, 46, 48, 49, 50BF, 50, 51, 50N, 51N, 51LR, 64, 66, 74TCS.
- › Microcontroller-based design
- › Draw-out enclosure.
- › CT rating\* - 1A/ 5A (site selectable)
- › Display of 250 event and 30 Trip records
- › 128\*64 graphical display
- › Modbus RS-485 Communication
- › Front Micro USB port for numrAL Suite



| Model | Aux. Supply         | CT* secondary | Device code                   | Cat. No.    | M.R.P. (₹) Per Unit |
|-------|---------------------|---------------|-------------------------------|-------------|---------------------|
| MM10  | 110 - 240 V AC / DC | 5 Amp         | 37, 46, 49, 50 / 51, 51LR, 64 | MM10240E005 | 42400               |

# - Protection Class CT

| Model        | Aux. Supply (V)            | Communication | Cat. No.    | M.R.P. (₹) Per Unit |
|--------------|----------------------------|---------------|-------------|---------------------|
| numrAL MPR21 | 20 - 60V DC                | Modbus RS 485 | NRMPR2A28RA | 60000               |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485 | NRMPR2B28RA | 60000               |

# - Protection Class CT  
\*- Available On Request







Electrical & Automation

# Redundant and Reliable network for Intelligent Motor Management Solution with **iMMR**

DISPLAY UNIT



CT UNIT



iMMR MAIN  
UNIT

Powered By  
**SMARTCOMM**

## iMMR - Intelligent Motor Management Relay

Besides control, protection and diagnostics, iMMR provides accurate real time data for analytics and insights into the performance of plant and process



Optimum Protection



Accurate real time data



Predictive Maintenance



Cloud Computing



Profinet/Modbus Protocol

Intelligent Motor Management Solutions for enhancement of process and energy efficiency.

Comprehensive Protection and Reliable Motor control with Ethernet based redundant communication network.

Real time monitoring and Predictive analytics with SmartComm

Ring & Star communication networking with Profinet & Ethernet IP





## iMMR - Intelligent Motor Management Relay [8536]



iMMR is a comprehensive Motor protection, control and monitoring relay for intelligent MCC's

"Besides control, protection and diagnostics, iMMR provides accurate real time data for analytics and insights into the performance of plant and process"

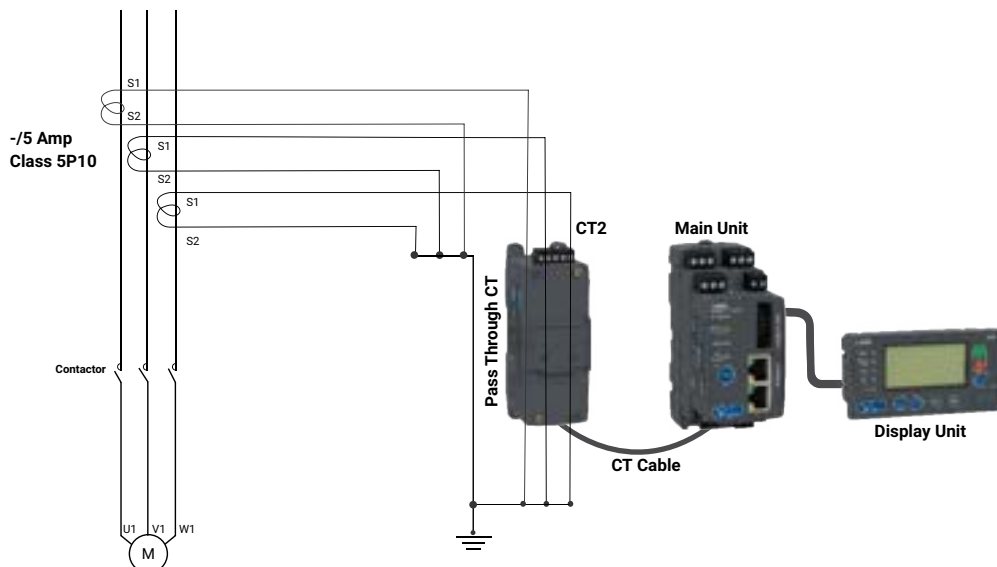
## Features

- › Comprehensive Current & Voltage based Protections
- › 20 nos. of last trip records, 100 event records and 20 IRF Records are available
- › Preprogrammed Starter logics reduces manufacturing and commissioning time
- › Software iMMR Suite is available for Easy and effective configuration and monitoring
- › Ethernet IP, Profinet, Modbus RTU, Modbus TCP/IP and Profibus-DP protocols available for seamless integration with DCS/PLC
- › Redundant network for seamless Motor control and monitoring, with Profinet/ Ethernet IP

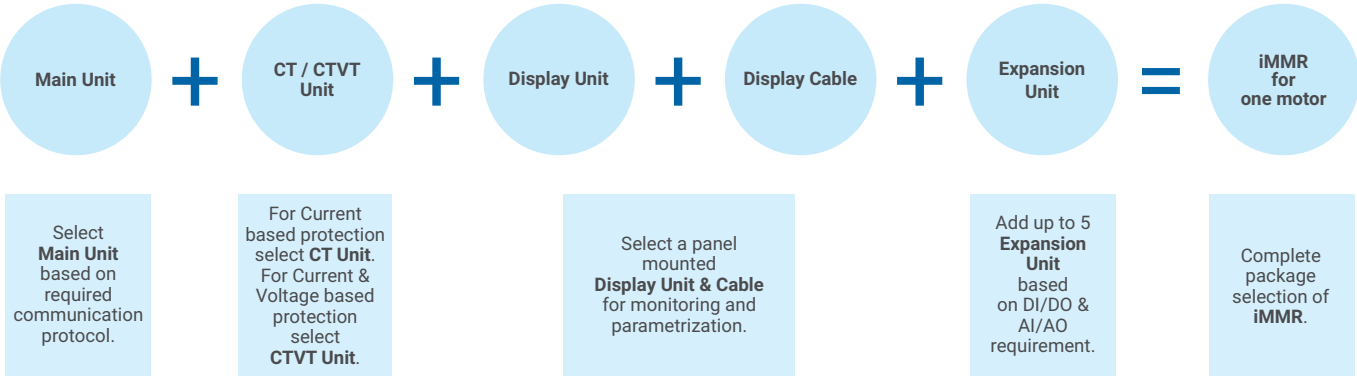
| Product        | Description                                         | Cat. No.              | M.R.P. (₹)<br>Per Unit |
|----------------|-----------------------------------------------------|-----------------------|------------------------|
| Main Unit      | iMMR MODBUS RTU 85-265 VAC/DC                       | CS912440000           | 27500                  |
|                | iMMR PROFIBUS-DP 85-265 VAC/DC                      | *Available On Request |                        |
|                | iMMR MODBUS TCP/IP 85-265 VAC/DC                    | *Available On Request |                        |
|                | iMMR Ethernet IP 85-265 VAC/DC                      | *Available On Request |                        |
|                | iMMR Profinet 85-265 VAC/DC                         | *Available On Request |                        |
| CT Unit        | CT1 (0.3-3A) with 15 cm cable                       | CS912450000           | 6000                   |
|                | CT2 (2.5-25A) with 15 cm cable                      | CS912460000           | 8000                   |
|                | CT3 (7-70A) with 15 cm cable                        | CS912470000           | 12700                  |
| CTVT Unit      | CT1 (0.3-3A) + VT with 15 cm cable                  | CS912490000           | 14000                  |
|                | CT2 (2.5-25A) + VT with 15 cm cable                 | CS912500000           | 16500                  |
|                | CT3 (7-70A) + VT with 15 cm cable                   | CS912510000           | 22000                  |
| Display Unit   | iMMR Display unit without cable                     | CS912530000           | 14500                  |
| Display Cable  | iMMR Display Cable - 1 meter                        | XK131280000           | 1350                   |
|                | iMMR Display Cable - 2 meter                        | XK131290000           | 2000                   |
| Expansion Unit | iMMR EXP 4DI + 2DO with 10 cm cable                 | *Available On Request |                        |
|                | iMMR EXP 6DI 110V/240V with 10cm cable              | *Available On Request |                        |
|                | iMMR EXP Earth Leakage + 2DI + 2DO with 10 cm cable | *Available On Request |                        |
|                | iMMR EXP 2AI + 1AO with 10 cm cable                 | *Available On Request |                        |

\* Please contact our nearest branch for details

## iMMR with external CT's for Motors >37kW



iMMR selection guide



Cat.no. selection guide

Modbus RTU communication and **Current** based protection and metering

| Motor Rating    | Total MRP | Main Unit - Modbus RTU | CT Unit      | Display Unit | Display Cable - 2 meter |
|-----------------|-----------|------------------------|--------------|--------------|-------------------------|
| <1.1 KW         | 50000     | CS912440000            | CS912450000  | CS912530000  | XK131290000             |
| 1.1 KW to 11 KW | 52000     | CS912440000            | CS912460000  | CS912530000  | XK131290000             |
| 11 KW to 37 KW  | 56700     | CS912440000            | CS912470000  | CS912530000  | XK131290000             |
| >37 KW          | 52000     | CS912440000            | CS912460000* | CS912530000  | XK131290000             |

\* with External Protection class CT's of -/5Amp

Modbus RTU communication and **Current + Voltage** based protection and metering

| Motor Rating    | Total MRP | Main Unit - Modbus RTU | CTVT Unit    | Display Unit | Display Cable - 2 meter |
|-----------------|-----------|------------------------|--------------|--------------|-------------------------|
| <1.1 KW         | 58000     | CS912440000            | CS912490000  | CS912530000  | XK131290000             |
| 1.1 KW to 11 KW | 60500     | CS912440000            | CS912500000  | CS912530000  | XK131290000             |
| 11 KW to 37 KW  | 66000     | CS912440000            | CS912510000  | CS912530000  | XK131290000             |
| >37 KW          | 60500     | CS912440000            | CS912500000* | CS912530000  | XK131290000             |

\* with External Protection class CT's of -/5Amp



## Rocker Type

- › MOG-S1: upto 32A
- › Short circuit + Overload protection

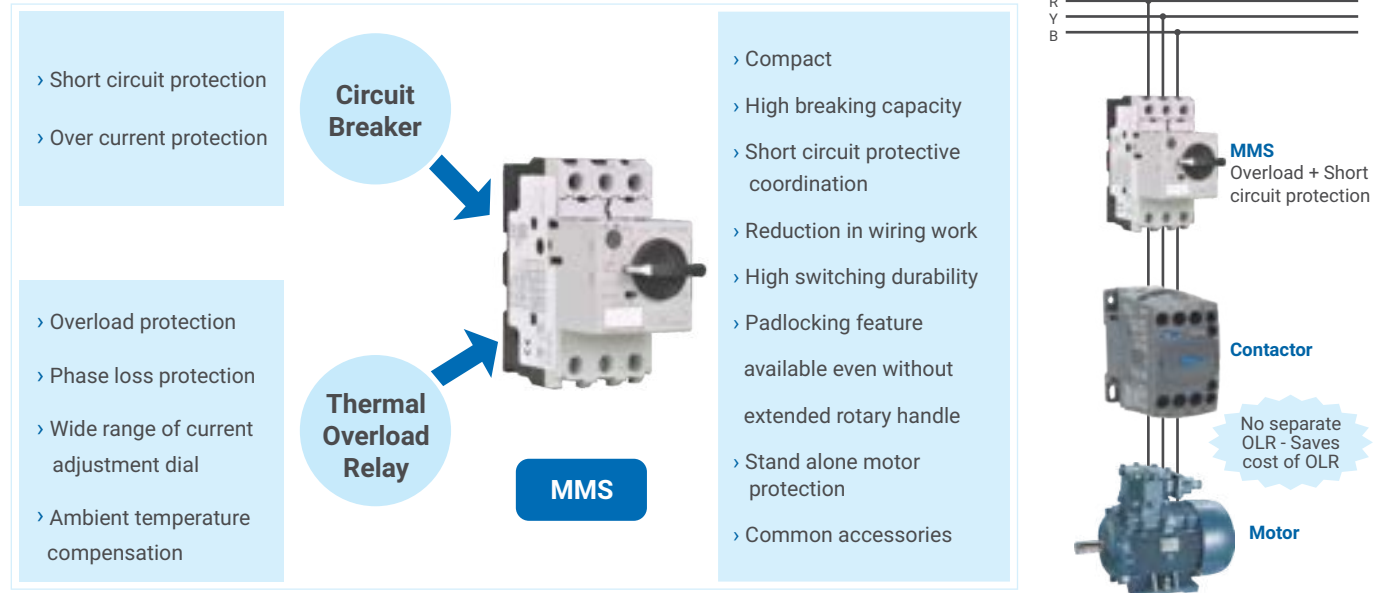
## Rotary Type

- › MOG-H1M: upto 32A
- › MOG-H2M: 32A-63A
- › Short circuit protection

## Rotary Type

- › MOG-H1: upto 32A
- › MOG-H2: 32A-63A
- › Short circuit + Overload protection

Rocker type and Rotary Type Manual Motor Starters conforms to IEC 60947-4-1



## Type MOG-S1 (Rocker Type)

With short circuit & overload protection



| Rating (A) | Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW) | Thermal Release range (A) | Instantaneous Trip Current (A) | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------|---------------------------------------------------|---------------------------|--------------------------------|-------------|---------------------|------------------|
| 0.16       | -                                                 | 0.1 - 0.16                | 2.1                            | ST418890000 | 4395                | 1                |
| 0.25       | 0.06                                              | 0.16 - 0.25               | 3.3                            | ST418900000 | 4395                | 1                |
| 0.40       | 0.09                                              | 0.25 - 0.40               | 5.2                            | ST418910000 | 4395                | 1                |
| 0.63       | 0.12                                              | 0.40 - 0.63               | 8.2                            | ST418920000 | 5005                | 1                |
| 1.00       | 0.25                                              | 0.63 - 1.00               | 13                             | ST418930000 | 5005                | 1                |
| 1.60       | 0.55                                              | 1.00 - 1.60               | 20.8                           | ST418940000 | 5030                | 1                |
| 2.50       | 0.75                                              | 1.60 - 2.50               | 32.5                           | ST418950000 | 5030                | 1                |
| 4.00       | 1.50                                              | 2.50 - 4.00               | 52                             | ST418960000 | 5220                | 1                |
| 6.30       | 2.20                                              | 4.00 - 6.30               | 81.9                           | ST418970000 | 5220                | 1                |
| 10.00      | 4.00                                              | 6.30 - 10.00              | 130                            | ST418980000 | 5570                | 1                |
| 13.00      | 5.40                                              | 9.00 - 13.00              | 169                            | ST418990000 | 6265                | 1                |
| 16.00      | 7.50                                              | 11.00 - 16.00             | 208                            | ST419000000 | 6860                | 1                |
| 20.00      | 9.00                                              | 14.00 - 20.00             | 260                            | ST419010000 | 7205                | 1                |
| 25.00      | 12.50                                             | 19.00 - 25.00             | 325                            | ST419020000 | 7570                | 1                |
| 32.00      | 15.00                                             | 24.00 - 32.00             | 416                            | ST419030000 | 13445               | 1                |

**Note:** Extended rotary handle cannot be fitted with MOG - S1

## Type MOG-H1 (Rotary Type) - Frame1

With short circuit & overload protection



| Rating (A) | Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW) | Thermal Release range (A) | Instantaneous Trip Current | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------|---------------------------------------------------|---------------------------|----------------------------|-------------|---------------------|------------------|
| 0.16       | -                                                 | 0.1 - 0.16                | 2.1                        | ST419040000 | 5310                | 1                |
| 0.25       | 0.06                                              | 0.16 - 0.25               | 3.3                        | ST419050000 | 5405                | 1                |
| 0.40       | 0.09                                              | 0.25 - 0.40               | 5.2                        | ST419060000 | 5405                | 1                |
| 0.63       | 0.12                                              | 0.40 - 0.63               | 8.2                        | ST419070000 | 6045                | 1                |
| 1.00       | 0.25                                              | 0.63 - 1.00               | 13                         | ST419080000 | 6045                | 1                |
| 1.60       | 0.55                                              | 1.00 - 1.60               | 20.8                       | ST419090000 | 6240                | 1                |
| 2.50       | 0.75                                              | 1.60 - 2.50               | 32.5                       | ST419100000 | 6240                | 1                |
| 4.00       | 1.50                                              | 2.50 - 4.00               | 52                         | ST419110000 | 6355                | 1                |
| 6.30       | 2.20                                              | 4.00 - 6.30               | 81.9                       | ST419120000 | 6415                | 1                |
| 10.00      | 4.00                                              | 6.30 - 10.00              | 130                        | ST419130000 | 6835                | 1                |
| 13.00      | 5.40                                              | 9.00 - 13.00              | 169                        | ST419140000 | 7580                | 1                |
| 16.00      | 7.50                                              | 11.00 - 16.00             | 208                        | ST419150000 | 8150                | 1                |
| 20.00      | 9.00                                              | 14.00 - 20.00             | 260                        | ST419160000 | 8785                | 1                |
| 25.00      | 12.50                                             | 19.00 - 25.00             | 325                        | ST419170000 | 9135                | 1                |
| 32.00      | 15.00                                             | 24.00 - 32.00             | 416                        | ST419180000 | 14810               | 1                |



## Type MOG-H1M (Rotary Type) - Frame 1



With short circuit protection only

| Rating (A) | Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW) | Instantaneous Trip Current | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------|---------------------------------------------------|----------------------------|-------------|---------------------|------------------|
| 0.16       | -                                                 | 2.1                        | ST419230000 | 4945                | 1                |
| 0.25       | 0.06                                              | 3.3                        | ST419240000 | 4945                | 1                |
| 0.40       | 0.09                                              | 5.2                        | ST419250000 | 4945                | 1                |
| 0.63       | 0.12                                              | 8.2                        | ST419260000 | 5595                | 1                |
| 1.00       | 0.25                                              | 13                         | ST419270000 | 5700                | 1                |
| 1.60       | 0.55                                              | 20.8                       | ST419280000 | 5700                | 1                |
| 2.50       | 0.75                                              | 32.5                       | ST419290000 | 5740                | 1                |
| 4.00       | 1.50                                              | 52                         | ST419300000 | 5805                | 1                |
| 6.30       | 2.20                                              | 81.9                       | ST419310000 | 5805                | 1                |
| 10.00      | 4.00                                              | 130                        | ST419320000 | 5990                | 1                |
| 13.00      | 5.40                                              | 169                        | ST419330000 | 6255                | 1                |
| 16.00      | 7.50                                              | 208                        | ST419340000 | 6255                | 1                |
| 20.00      | 9.00                                              | 260                        | ST419350000 | 6570                | 1                |
| 25.00      | 12.50                                             | 325                        | ST419360000 | 6770                | 1                |
| 32.00      | 15.00                                             | 416                        | ST419370000 | 10940               | 1                |

## Type MOG-H2 (Rotary Type) - Frame 2



With short circuit & overload protection

| Rating (A) | Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW) | Thermal Release range (A) | Instantaneous Trip Current | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------|---------------------------------------------------|---------------------------|----------------------------|-------------|---------------------|------------------|
| 32.00      | 15.00                                             | 24.00 - 32.00             | 416                        | ST419190000 | 18480               | 1                |
| 40.00      | 20.00                                             | 28.00 - 40.00             | 520                        | ST419200000 | 20380               | 1                |
| 50.00      | 25.00                                             | 35.00 - 50.00             | 650                        | ST419210000 | 25440               | 1                |
| 63.00      | 34.00                                             | 45.00 - 63.00             | 819                        | ST419220000 | 25815               | 1                |

## Type MOG-H2M (Rotary Type) - Frame 2



With short circuit protection only

| Rating (A) | Recommended Motor Rating at 415V, 3-Ph, 50Hz (KW) | Instantaneous Trip Current | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------|---------------------------------------------------|----------------------------|-------------|---------------------|------------------|
| 32.00      | 15.00                                             | 416                        | ST419380000 | 17720               | 1                |
| 40.00      | 20.00                                             | 520                        | ST419390000 | 17845               | 1                |
| 50.00      | 25.00                                             | 650                        | ST419400000 | 18350               | 1                |
| 63.00      | 34.00                                             | 819                        | ST419410000 | 18730               | 1                |

## Accessories for MOG [8538]



Short Circuit Alarm



Auxiliary + Alarm



Extended Rotary Handle



Shunt Trip

| Mounting Position * | Description                                  | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------|----------------------------------------------|-------------|---------------------|------------------|
| F1/F2               | Auxiliary Contact Front mtg. 1NO             | ST419420000 | 855                 | 10               |
| F1/F2               | Auxiliary Contact Front mtg. 1NC             | ST419430000 | 855                 | 10               |
| L                   | Auxiliary Contact Left side mtg. 2NO         | ST419440000 | 1175                | 1                |
| L                   | Auxiliary Contact Left side mtg. 1NO + 1NC   | ST419450000 | 1175                | 1                |
| L                   | Auxiliary Contact Left side mtg. 2NC         | ST419460000 | 1175                | 1                |
| F2                  | Trip Alarm Contact Front mtg. 1NO            | ST419470000 | 1520                | 10               |
| F2                  | Trip Alarm Contact Front mtg. 1NC            | ST419480000 | 1520                | 10               |
| L                   | Auxiliary + Alarm Left side mtg. 2NO         | ST419490000 | 1615                | 1                |
| L                   | Short circuit alarm Left side mtg. 1NO + 1NC | ST419500000 | 1615                | 1                |
| R                   | Shunt trip 24V DC                            | ST419510000 | 3105                | 1                |
| R                   | Shunt trip 110V, 50Hz                        | ST419520000 | 3270                | 1                |
| R                   | Shunt trip 230V, 50Hz                        | ST429520000 | 3270                | 1                |
| R                   | Under Voltage release, 110V, 50Hz            | ST419530000 | 3270                | 1                |
| R                   | Under Voltage release, 415V, 50Hz            | ST419540000 | 3270                | 1                |
| -                   | External operating handle, (Black) Frame 1   | ST419550000 | 1885                | 1                |
| -                   | External operating handle, (Black) Frame 2   | ST419560000 | 1885                | 1                |

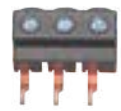
\* F1- Front left slot F2- Front right slot L- Left side R- Right side



MMSs with bus bar connection



Connecting Busbar link



3 Phase Feed in terminal

| Description                             | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------------------|-------------|---------------------|------------------|
| Connecting Busbar link                  |             |                     |                  |
| 2 MMS 45 mm width w/o acc               | ST419570000 | 985                 | 5                |
| 3 MMS 45 mm width w/o acc               | ST419580000 | 1080                | 5                |
| 4 MMS 45 mm width w/o acc               | ST419590000 | 1170                | 5                |
| 5 MMS 45 mm width w/o acc               | ST419600000 | 1490                | 5                |
| 2 MMS 45 mm width with one acc 9 mm     | ST419610000 | 1150                | 5                |
| 3 MMS 45 mm width with one acc 9 mm     | ST419620000 | 1240                | 5                |
| 4 MMS 45 mm width with one acc 9 mm     | ST419630000 | 1335                | 5                |
| 5 MMS 45 mm width with one acc 9 mm     | ST419640000 | 1425                | 5                |
| 2 MMS 55 mm width w/o acc               | ST419660000 | 1795                | 1                |
| 3 MMS 55 mm width w/o acc               | ST419670000 | 2045                | 1                |
| 4 MMS 55 mm width w/o acc               | ST419680000 | 2455                | 1                |
| 2 MMS 55 mm width with one acc 9 mm     | ST419690000 | 1955                | 1                |
| 3 MMS 55 mm width with one acc 9 mm     | ST419700000 | 2225                | 1                |
| 4 MMS 55 mm width with one acc 9 mm     | ST419710000 | 2615                | 1                |
| 2 MMS 55 mm width with two acc 18 mm    | ST419720000 | 2285                | 1                |
| 4 MMS 55 mm width with two acc 18 mm    | ST419730000 | 2550                | 1                |
| Feed in terminal for 45 mm width Busbar | ST419650000 | 1150                | 1                |
| Feed in terminal for 55 mm width Busbar | ST419740000 | 1985                | 1                |
| Bus bar safety cover 45 mm width Busbar | ST419750000 | 495                 | 10               |
| Bus bar safety cover 55 mm width Busbar | ST419760000 | 540                 | 10               |

acc: Accessories





## Motor Starters [8536]

### Direct-on-Line Starters

in Sheet-Steel Enclosure Type MN / ML  
(Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)



MN 16



ML 1.5

| Max. Motor Output at 415V, 3-Ph |      | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP                              | kW   |                      |             |          |                     |                  |
| 10.0                            | 7.5  | 9 - 15               | MN 16 DOL   | SS94351  | 8050                | 1                |
| 15.0                            | 11.0 | 14 - 23              | MN 25 DOL   | SS94352  | 12290               | 1                |
| 20.0                            | 15.0 | 20 - 33              | MN 32 DOL   | SS94353  | 19800               | 1                |
| 30.0                            | 22.5 | 30 - 50              | MN 45 DOL   | SS94017  | 33800               | 1                |
| 45.0                            | 33.5 | 45 - 75              | MN 65 DOL   | SS94018  | 46400               | 1                |
| 30.0                            | 22.5 | 28 - 42              | ML 3 DOL    | SS90722  | 43700               | 1                |

### Fully Automatic Star-Delta Starters [8536]

in Sheet-Steel Enclosure Type MN / ML  
(Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)

| Max. Motor Output at 415V, 3-Ph |       | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|-------|----------------------|-------------|----------|---------------------|------------------|
| HP                              | kW    |                      |             |          |                     |                  |
| 17.5                            | 13.0  | 9 - 15               | MN 16 FASD  | SS94362  | 27100               | 1                |
| 30.0                            | 22.5  | 14 - 23              | MN 25 FASD  | SS94364  | 30300               | 1                |
| 40.0                            | 30.0  | 20 - 33              | MN 32 FASD  | SS94366  | 49800               | 1                |
| 50.0                            | 37.5  | 30 - 50              | MN 45 FASD  | SS94021  | 79900               | 1                |
| 75.0                            | 55.0  | 45 - 75              | MN 65 FASD  | SS94022  | 132600              | 1                |
| 90.0                            | 67.5  | 45 - 75              | MN 80 FASD  | SS94705  | 144800              | 1                |
| 150.0                           | 110.0 | 66 - 110             | MN 110 FASD | SS94706  | 189700              | 1                |
| 180.0                           | 132.0 | 90 - 150             | MN 140 FASD | SS94707  | 207200              | 1                |
| 50.0                            | 37.5  | 28 - 42              | ML3 FASD    | SS90730  | 105300              | 1                |
| 75.0                            | 55.0  | 45 - 75              | ML4 FASD    | SS90913  | 180300              | 1                |
| 125.0                           | 90.0  | 66 - 110             | ML6 FASD    | SS90923  | 295900              | 1                |

### Ordering Suffix for ML & MN Starters

| Coil Voltages | Relay Range (A) |
|---------------|-----------------|
| B - 240 V     | ML              |
| C - 360 V     | A : 9 - 14      |
| D - 415 V     | B : 10 - 16     |
| P - 440 V     | C : 13 - 21     |
|               | E : 20 - 32     |
|               | F : 28 - 42     |
|               | G : 30 - 50     |
|               | J : 45 - 75     |
|               | K : 66 - 110    |
|               | M : 90 - 150    |
|               | P : 135 - 225   |
|               | Q : 180 - 310   |
|               | R : 2.5 - 4     |
|               | T : 13 - 21     |
|               | MN              |
|               | B : 9 - 15      |
|               | D : 14 - 23     |
|               | E : 20 - 33     |
|               | G : 30 - 50     |
|               | J : 45 - 75     |
|               | K : 66 - 110    |
|               | Q : 2 - 3.3     |
|               | S : 3 - 5       |
|               | T : 36 - 60     |
|               | U : 4.5 - 7.5   |
|               | V : 6 - 10      |
|               | M : 90 - 150    |

### Spares for MN Starters [8538]

| Description                            | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------------|-------------|---------------------|------------------|
| Bracket for Mounting cont. MNX 25 - 32 | SS940300000 | 260                 | 20               |
| MN DOL/FASD Push Button                | SS939410000 | 450                 | 10               |

### Timers

### Electronic Timers Type ST100 [9107]



ST 100

| Description                | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------|-------------|---------------------|------------------|
| 240 / 360 / 415V, 50Hz for |             |                     |                  |
| 3 - 30 secs.               | ST803280000 | 2470                | 1                |
| 12 - 120 secs.             | ST803290000 | 2470                | 1                |

#### Note:

ST 100 supplied with Mounting Kit, suitable for ET 100 replacement.  
For Complete range of Timing Devices, please refer the Panel Accessories Price List.

All our Type 2 charts are available on **Knowledge Portal**



Access E&A's Knowledge Portal from  
[www.LK-EA.com/kp](http://www.LK-EA.com/kp)

Following combination of Type 2 Charts available

| Fuse Based Charts |         | Fuseless Charts |          |          |          |
|-------------------|---------|-----------------|----------|----------|----------|
| IE2/IE3           | IE2/IE3 | IE2             | IE2      | IE3      | IE3      |
| DOL               | SD      | DOL             | SD       | DOL      | SD       |
| FN                | FN      | MMS/MCCB        | MMS/MCCB | MMS/MCCB | MMS/MCCB |
| MNX/MO            | MNX/MO  | MNX/MO          | MNX/MO   | MNX/MO   | MNX/MO   |

Charts available at Iq of

- › 50kA
- › 65kA
- › 80kA
- › 100kA

MCCB charts are available with  
Microprocessor Releases too



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Time-based,  
Volume-based  
& Sensor-based  
operation



Remote  
application  
& control



Program &  
scheduling



Central monitoring  
with web & mobile  
application





# SIMPLIFYING WATER CONTROL CHALLENGES



## SzLC WLC Series



Settable OFF-timer  
ranging from  
15-150 minutes



Power ON  
Delay Timer-  
3-30 seconds



Application:  
Single & Double Tank



LED  
Indication



Auto/Manual/Bypass  
operating mode available\*



Use for Single Phase Monoset  
and Submersible Pump upto 3 HP  
and for Three Phase Submersible Pump

\*AUTO/ON/OFF - SzLC  
AUTO/MANUAL/BYPASS - SzLC1 & SzLC3

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# Most Flexible Integrated ATS

Engineered for seamless power switchover and uninterrupted productivity:  
A comprehensive solution ensures smooth power transfer, making it  
suitable for a wide range of applications.



Plug and Play  
Solution



RS-485 for  
Seamless connectivity



Application  
friendly



Large Display  
unit



No change in  
Footprint



Features of  
C-line intact

| Description                   | Type  | Cat. No.           | M.R.P. (₹)<br>Per Unit | Std. Pkg.<br>(Nos.) |
|-------------------------------|-------|--------------------|------------------------|---------------------|
| Integrated ATS, Frame 2-125A  | 125A  | <b>CK90161BATS</b> | <b>80000</b>           | 1                   |
| Integrated ATS, Frame 2-160A  | 160A  | <b>CK90162BATS</b> | <b>85000</b>           | 1                   |
| Integrated ATS, Frame 2-200A  | 200A  | <b>CK90163BATS</b> | <b>96100</b>           | 1                   |
| Integrated ATS, Frame 3-250A  | 250A  | <b>CK90164BATS</b> | <b>114600</b>          | 1                   |
| Integrated ATS, Frame 3-315A  | 315A  | <b>CK90165BATS</b> | <b>116500</b>          | 1                   |
| Integrated ATS, Frame 4-400A  | 400A  | <b>CK90166BATS</b> | <b>138600</b>          | 1                   |
| Integrated ATS, Frame 4-630A  | 630A  | <b>CK90167BATS</b> | <b>168200</b>          | 1                   |
| Integrated ATS, Frame 5-800A  | 800A  | <b>CK90169BATS</b> | <b>233370</b>          | 1                   |
| Integrated ATS, Frame 5-1000A | 1000A | <b>CK90170BATS</b> | <b>262500</b>          | 1                   |







## Switch to ATS

Now, experience seamless transfer between two power sources...



### Convenience

- › Ample Space for Cable Termination
- › Ease of Generator Control (ON-OFF, Cooling Cycle Self-Test)
- › Cyclic Event Logger: Logs 100 Events



### Performance

- › Wide range: 125A to 630A, 415V ac.
- › Double-Break Contact System offering High Short-time Withstand (Icw)
- › High Mechanical and Electrical Life: Double than requirement of IS/IEC standard
- › Suitable for Aluminum Termination



### Flexibility

- › Priority Source Selection
- › Adjustable Time Delay (0.1sec to 3 hours)
- › Suitable for 3-Phase as well as 1-Phase Sources



### Safety

- › Protections: UV/OV, Phase Sequence, Single Phasing, Frequency
- › Authorized Access Control through Password Protection
- › Terminal Shrouds, Phase Barriers & Source Separator

| Description                 | Type | Cat. No.           | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------|------|--------------------|---------------------|------------------|
| Enclosed ATS, Frame 2, 125A | 125A | <b>CK90161BS00</b> | <b>100760</b>       | 1                |
| Enclosed ATS, Frame 2, 160A | 160A | <b>CK90162BS00</b> | <b>112240</b>       | 1                |
| Enclosed ATS, Frame 2, 200A | 200A | <b>CK90163BS00</b> | <b>120490</b>       | 1                |
| Enclosed ATS, Frame 3, 250A | 250A | <b>CK90164BS00</b> | <b>139010</b>       | 1                |
| Enclosed ATS, Frame 3, 315A | 315A | <b>CK90165BS00</b> | <b>147240</b>       | 1                |
| Enclosed ATS, Frame 4, 400A | 400A | <b>CK90166BS00</b> | <b>175400</b>       | 1                |
| Enclosed ATS, Frame 4, 630A | 630A | <b>CK90167BS00</b> | <b>213080</b>       | 1                |

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For AuXC 2000 programming videos and more details please scan the QR code or click here



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## Changeover Switch-Disconnecter (Conforms to IEC 60947-3, IS/IEC 60947-3)

### Features offered by Manual Changeover

- Range 63A to 2000A, 415V, AC 23A, 4P
- Enclosure version does not require separate cable gland box
- Terminal Shrouds, Source Separator and Phase Barriers included
- Staggered Terminals make cable termination easy
- Suitable for horizontal as well as vertical mounting



Open execution



SS enclosure



Motorised Changeover

### Features offered by Motorised Changeover

- Range 40 A to 2000A, 415V, AC 23A, 4P (Control Voltage 240 Vac)
- No change in HxWxD dimension of motorised and manual changeover switch
- Padlocking in OFF position
- Option for selection between manual and auto mode

| Size | Rated Current (A) | Type     | Manual Changeover Open Execution |                     | Manual Changeover In Sheet Steel Enclosure# |                     | Motorised Changeover Open Execution |                     | Std. Pkg. (Nos.) |
|------|-------------------|----------|----------------------------------|---------------------|---------------------------------------------|---------------------|-------------------------------------|---------------------|------------------|
|      |                   |          | Cat. No.                         | M.R.P. (₹) Per Unit | Cat. No.                                    | M.R.P. (₹) Per Unit | Cat. No.                            | M.R.P. (₹) Per Unit |                  |
| Fr 1 | 40                | CO1-40   | -                                | -                   | -                                           | -                   | <b>New</b> CK90944B000              | 29770               | 1                |
|      | 63                | CO1-63   | CO106300000                      | 6560                | CO106300S00                                 | 11000               | <b>New</b> CK90945B000              | 31600               | 1                |
|      | 63                | CO1-63   | CO10630000D ▲                    | 6370                |                                             |                     | <b>New</b> CK90946B000              | 38590               | 1                |
|      | 100               | CO1-100  | CO110000000                      | 8810                | CO110000S00                                 | 13380               | <b>New</b> CK90947B000              | 41030               | 1                |
|      | 100               | CO1-100  | CO11000000D ▲                    | 8610                |                                             |                     | CK90161B000                         | 55120               | 1                |
| Fr 2 | 125               | CO1-125  | CO112500000                      | 11720               | CO112500S00                                 | 17060               | CK90162B000                         | 67380               | 1                |
|      | 125               | CO2-125  | CO212500000                      | 14150               | CO212500S00                                 | 21560               | CK90163B000                         | 73470               | 1                |
|      | 160               | CO2-160  | CO216000000                      | 15510               | CO216000S00                                 | 22660               | CK90164B000                         | 88870               | 1                |
| Fr 3 | 200               | CO2-200  | CO22000000A                      | 19080               | CO220000S00                                 | 26060               | CK90165B000                         | 92990               | 1                |
|      | 250               | CO3-250  | CO325000000                      | 25290               | CO325000S00                                 | 36030               | CK90166B000                         | 124640              | 1                |
| Fr 4 | 315               | CO3-315  | CO331500000                      | 26600               | CO331500S00                                 | 37900               | CK90167B000                         | 148760              | 1                |
|      | 400               | CO4-400  | CO440000000                      | 42790               | CO440000S00                                 | 56680               | CK90168B000                         | 161540              | 1                |
| Fr 5 | 630               | CO4-630  | CO463000000                      | 49960               | CO463000S00                                 | 68830               | CK90169B000                         | 216040              | 1                |
|      | 630               | CO5-630  | CO563000000                      | 63540               | -                                           | -                   | CK90170B000                         | 283280              | 1                |
| Fr 6 | 800               | CO5-800  | CO580000000                      | 68780               | CO580000S00                                 | 122710              | CK90081B000                         | 334820              | 1                |
|      | 1000              | CO5-1000 | CO510000000                      | 146170              | CO510000S00                                 | 191870              | CK90082B000                         | 411000              | 1                |
| Fr 6 | 1250              | CO6-1250 | CO612500000                      | 176920              | -                                           | -                   | CK90083B000                         | 485750              | 1                |
|      | 1600              | CO6-1600 | CO616000000                      | 222110              | -                                           | -                   |                                     |                     |                  |
|      | 2000              | CO6-2000 | CO620000000                      | 323810              | -                                           | -                   |                                     |                     |                  |

▲ Direct handle version # Sheet Steel Enclosure version is with CO with extended handle

Note: Changeovers will be without inbuilt Aux contact and same to be purchased separately as an accessories if required.

## Spares & Accessories for Changeover S-D [8538]



Auxiliary Contact



Operating Handle (63A to 200A)



Flip-able Handle (250A to 2000A)



Castell Type Lock

| Description                                                     | Type                        | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------------------------------------------|-----------------------------|-------------|---------------------|------------------|
| Auxiliary Contact Kit (2 sets of C/O contact)                   | CO1-(63-125A)               | CX100020000 | 640                 | 1                |
|                                                                 | CO2-(125-200A)              | CX200020000 | 1190                | 1                |
|                                                                 | CO3-(250-315A)              | CX300020000 | 1690                | 1                |
|                                                                 | CO4-(400-630A)              | CX400020000 | 1790                | 1                |
|                                                                 | CO5-(630-1000A)             | CX500020000 | 2080                | 1                |
|                                                                 | CO6-(1250-2000A)            | CX600020000 | 2270                | 1                |
| Operating Handle Kit (handle + shaft + center bush + bush clip) | CO1-(63-125A)               | CX100010000 | 1060                | 1                |
|                                                                 | CO2-(125-200A)              | CX300010000 | 2240                | 1                |
|                                                                 | CO3-(250-315A)              | CK903920000 | 2300                | 1                |
|                                                                 | CO4-(400-630A)              | CX400010000 | 2340                | 1                |
|                                                                 | CO5-(630-1000A)             | CX500010000 | 2530                | 1                |
|                                                                 | CO6-(1250-2000A)            | CX600010000 | 2870                | 1                |
| Castell Type Lock                                               | CO-(125-1000A)              | CX400040000 | 3800                | 1                |
|                                                                 | CO6-(1250-2000A)            | CX600040000 | 3800                | 1                |
| Output shorting link                                            | CO1-(63-125A) Top Side      | CX10005000T | 1110                | 1                |
|                                                                 | CO1-(63-125A) Bottom Side   | CX10005000B | 1110                | 1                |
| Operating Handle for Motorised Changeover                       | C/O Frame 1 (40-125A)       | CK909370000 | 1500                | 1                |
|                                                                 | C/O Frame 2 & 3 (125-315A)  | CK903740000 | 2010                | 1                |
|                                                                 | C/O Frame 4 & 5 (400-1000A) | CK903780000 | 2530                | 1                |
|                                                                 | C/O Frame 6 (1250-2000A)    | CK906450000 | 6280                | 1                |

## Automatic Transfer Controllers (ATC) for Motorised Changeover [8538]



AST Controller with wire harness



AuXC-2000 Controller with wire harness



Illuminated Push Button assembly

| Description                    | Type                                               | Cat. No.     | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--------------------------------|----------------------------------------------------|--------------|---------------------|------------------|
| Automatic Transfer Controllers | AST Controller with wire harness                   | CK901920000  | 26930               | 1                |
|                                | AuXC-2000 Controller** with wire harness           | ATC200000000 | 43800               | 1                |
|                                | AuXC-2000 <sup>β</sup> with wire harness           | CK900990000  | 5490                | 1                |
| Control Accessories            | Illuminated Push Button assembly with Wire harness | CK901950000  | 5480                | 1                |

<sup>β</sup> Chapter ID [9032]

\*\* Note: For communication version of AuXC controller refer page no-6







# CZ Bypass Switches

## 125A to 630A

Bypass Switches are meant for special application and help to maintain continuity of power supply to the load by simply ‘bypassing’ UPS or Servo stabilizer. Removal of the UPS or Servo, for maintenance or repair is safe, as it is isolated from both input and output sides in the ‘bypass’ mode.

**Time-Saving Convenient solution**

No hassle of operating multiple devices for safe and positive isolation on both sides of Servo/UPS

**Suitable for Aluminum Termination**

Entire range is suitable for Aluminum cable/link termination as per the size prescribed by the standards

**Mounting flexibility**

Suitable for mounting in horizontal as well as vertical orientation. Also, the shaft is ‘cut-able’ and can be adjusted to suit different panel depth requirements.

**Phase Barriers**

Easy to fit and long phase barriers for complete isolation between phases

**Safety interlock and padlocking**

Door interlock is provided in ON position with defeat feature Also, Bypass Switch can be padlocked in OFF position; upto 3 padlocks can be fitted

**Finger proof protection (IP30)**

Terminal Shrouds provide protection against accidental contact with live terminals. As it is swivellable, there is no need to remove during termination/inspection

| 4P, Open Execution with extended handle |                       |             |                     |                  |
|-----------------------------------------|-----------------------|-------------|---------------------|------------------|
| Frame                                   | Rating 440Vac, AC 23A | Cat No.     | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| CZ1                                     | 125A                  | CK908130000 | 23580               | 1                |
| CZ1                                     | 160A                  | CK908140000 | 26610               | 1                |
| CZ1                                     | 200A                  | CK908150000 | 28130               | 1                |
| CZ1                                     | 250A                  | CK908160000 | 40050               | 1                |
| CZ1                                     | 315A                  | CK908170000 | 45680               | 1                |
| CZ2                                     | 315A                  | CK908750000 | 50480               | 1                |
| CZ2                                     | 400A                  | CK908760000 | 61590               | 1                |
| CZ2                                     | 630A                  | CK908770000 | 73400               | 1                |

| Accessories for CZ Bypass switch |                                        |             |                     |                  |
|----------------------------------|----------------------------------------|-------------|---------------------|------------------|
| Frame                            | Description                            | Cat No.     | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| CZ1/ CZ2                         | Auxiliary Contact Kit* (1 C/O contact) | CK908050000 | 700                 | 1                |

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 \* Upto 2 C/O contacts can be installed for status /indication

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# Multiple Applications, One Solution

## CZ Switch Disconnectors



- › Compact 2P, 3P & 4P configurations
- › 1250Vac Insulation Voltage
- › AC-23A @ 690Vac without derating
- › Suitable for 50°C ambient temperature
- › Direct termination without the need of any extended links
- › Extra assurance with visible contact system
- › High electrical and mechanical life (double than requirement in IS/IEC standards)
- › Terminal shrouds and phase barriers are provided as standard offering along with the product
- › Higher ground clearance ensure safety at all times

Versions: Upto 690V

| 4P AC Switch Disconnector |                          |             |             |                     |                  |
|---------------------------|--------------------------|-------------|-------------|---------------------|------------------|
| Frame                     | Rating Upto 690V, AC 23A | Handle Type | CAT No.     | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| CZ1                       | 125A                     | Extended    | CK907690000 | 9430                | 1                |
| CZ1                       | 160A                     | Extended    | CK907700000 | 12500               | 1                |
| CZ1                       | 200A                     | Extended    | CK907710000 | 14500               | 1                |
| CZ1                       | 250A                     | Extended    | CK907720000 | 16300               | 1                |
| CZ1                       | 315A                     | Extended    | CK907730000 | 18500               | 1                |
| CZ2                       | 315A                     | Extended    | CK908570000 | 19200               | 1                |
| CZ2                       | 400A                     | Extended    | CK908580000 | 24100               | 1                |
| CZ2                       | 630A                     | Extended    | CK908590000 | 32300               | 1                |
| CZ1                       | 125A                     | Direct      | CK907990000 | 9130                | 1                |
| CZ1                       | 160A                     | Direct      | CK908000000 | 11900               | 1                |
| CZ1                       | 200A                     | Direct      | CK908010000 | 13800               | 1                |
| CZ1                       | 250A                     | Direct      | CK908020000 | 15500               | 1                |
| CZ1                       | 315A                     | Direct      | CK908030000 | 16400               | 1                |
| CZ2                       | 315A                     | Direct      | CK908720000 | 18200               | 1                |
| CZ2                       | 400A                     | Direct      | CK908730000 | 23300               | 1                |
| CZ2                       | 630A                     | Direct      | CK908740000 | 29300               | 1                |

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| 4P AC Switch Disconnector in SS enclosure (with extended handle) |                          |             |                     |                  |
|------------------------------------------------------------------|--------------------------|-------------|---------------------|------------------|
| Frame                                                            | Rating Upto 690V, AC 23A | CAT No.     | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| CZ1                                                              | 125A                     | CK908190000 | 19400               | 1                |
| CZ1                                                              | 160A                     | CK908200000 | 22500               | 1                |
| CZ1                                                              | 200A                     | CK908210000 | 25300               | 1                |
| CZ1                                                              | 250A                     | CK908220000 | 29000               | 1                |
| CZ1                                                              | 315A                     | CK908230000 | 30700               | 1                |
| CZ2                                                              | 315A                     | CK908780000 | 36600               | 1                |
| CZ2                                                              | 400A                     | CK908790000 | 42400               | 1                |
| CZ2                                                              | 630A                     | CK908800000 | 49600               | 1                |

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| Accessories for CZ Switch Disconnector |                                       |             |                     |                  |
|----------------------------------------|---------------------------------------|-------------|---------------------|------------------|
| Frame                                  | Description                           | CAT No.     | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| CZ1/CZ2                                | Auxiliary Contact Kit (1 C/O contact) | CK908050000 | 700                 | 1                |
| CZ1                                    | Extended Handle                       | CK907400000 | 1460                | 1                |
| CZ2                                    | Extended Handle                       | CK908420000 | 1680                | 1                |

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#### Notes:

- › 2P and 3P versions are also available. Please contact our nearest branch office for further details
- › Please refer next page for details on offerings for Solar applications

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## CZ Switch Disconnectors - For Solar/PV Application

- › Designed for tough conditions at **solar sites**
- › Separate versions for **800Vac** string inverter systems and upto **1500Vdc** for central inverter systems
- › Suitable for Aluminum termination of double the size recommended by IEC standards
- › **1250Vac** Rated Insulation Voltage
- › **Direct termination** without the need of any extended links
- › Terminal shrouds and phase barriers are provided as standard offering along with the product

Versions: 800Vac | 1000Vdc | 1500Vdc



### AC SD

- › Operational Voltage upto 800Vac



### DC SD

- › Operational Voltage 1000Vdc & 1500Vdc

| DC Switch Disconnectors |        |          |              |                                |             |                     |
|-------------------------|--------|----------|--------------|--------------------------------|-------------|---------------------|
| Frame                   | Rating | Voltage  | No. of Poles | Description                    | Cat. No.    | M.R.P. (₹) Per Unit |
| CZ1                     | 125A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK907930000 | *                   |
| CZ1                     | 160A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK907940000 | *                   |
| CZ1                     | 200A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK907950000 | *                   |
| CZ1                     | 250A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK907960000 | *                   |
| CZ1                     | 315A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK907970000 | *                   |
| CZ2                     | 315A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK908690000 | *                   |
| CZ2                     | 400A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK908700000 | *                   |
| CZ2                     | 630A   | 1000Vdc  | 2            | Direct Handle, Side operated   | CK908710000 | *                   |
| CZ0                     | 16A    | 1500 Vdc | 4            | Direct Handle, Center operated | CK913140000 | *                   |
| CZ0                     | 25A    | 1500 Vdc | 4            | Direct Handle, Center operated | CK913150000 | *                   |
| CZ0                     | 32A    | 1500 Vdc | 4            | Direct Handle, Center operated | CK913160000 | *                   |
| CZ0                     | 40A    | 1500 Vdc | 4            | Direct Handle, Center operated | CK913170000 | *                   |
| CZ1                     | 125A   | 1500Vdc  | 2            | Direct Handle, Side operated   | CK907870000 | *                   |
| CZ1                     | 160A   | 1500Vdc  | 2            | Direct Handle, Side operated   | CK907880000 | *                   |
| CZ1                     | 200A   | 1500Vdc  | 2            | Direct Handle, Side operated   | CK907890000 | *                   |
| CZ1                     | 250A   | 1500Vdc  | 2            | Direct Handle, Side operated   | CK907900000 | *                   |
| CZ1                     | 315A   | 1500Vdc  | 2            | Direct Handle, Side operated   | CK907910000 | *                   |
| CZ2                     | 315A   | 1500Vdc  | 3            | Direct Handle, Side operated   | CK908660000 | *                   |
| CZ2                     | 400A   | 1500Vdc  | 3            | Direct Handle, Side operated   | CK908670000 | *                   |
| CZ2                     | 630A   | 1500Vdc  | 3            | Direct Handle, Side operated   | CK908680000 | *                   |

Chapter ID [8536]

\*Available on Request

| 800Vac, 3P Switch Disconnectors |        |             |             |                     |
|---------------------------------|--------|-------------|-------------|---------------------|
| Frame                           | Rating | Handle Type | Cat. No.    | M.R.P. (₹) Per Unit |
| CZ1                             | 125A   | Direct      | CK907570000 | *                   |
| CZ1                             | 160A   | Direct      | CK907580000 | *                   |
| CZ1                             | 200A   | Direct      | CK907590000 | *                   |
| CZ1                             | 250A   | Direct      | CK907600000 | *                   |
| CZ1                             | 315A   | Direct      | CK907610000 | *                   |
| CZ2                             | 315A   | Direct      | CK908510000 | *                   |
| CZ2                             | 400A   | Direct      | CK908520000 | *                   |
| CZ2                             | 630A   | Direct      | CK908530000 | *                   |
| CZ1                             | 125A   | Extended    | CK907630000 | *                   |
| CZ1                             | 160A   | Extended    | CK907640000 | *                   |
| CZ1                             | 200A   | Extended    | CK907650000 | *                   |
| CZ1                             | 250A   | Extended    | CK907660000 | *                   |
| CZ1                             | 315A   | Extended    | CK907670000 | *                   |
| CZ2                             | 315A   | Extended    | CK908540000 | *                   |
| CZ2                             | 400A   | Extended    | CK908550000 | *                   |
| CZ2                             | 630A   | Extended    | CK908560000 | *                   |

Chapter ID [8536]

| DC Switch Disconnectors |        |         |              |                                  |             |                     |
|-------------------------|--------|---------|--------------|----------------------------------|-------------|---------------------|
| Frame                   | Rating | Voltage | No. of Poles | Description                      | Cat. No.    | M.R.P. (₹) Per Unit |
| CZ2                     | 315A   | 1500Vdc | 2            | Direct Handle, Side operated     | CK911570000 | *                   |
| CZ2                     | 400A   | 1500Vdc | 2            | Direct Handle, Side operated     | CK911580000 | *                   |
| CZ2                     | 500A   | 1500Vdc | 2            | Direct Handle, Side operated     | CK911590000 | *                   |
| CZ2                     | 630A   | 1500Vdc | 2            | Direct Handle, Side operated     | CK911600000 | *                   |
| CZ2                     | 315A   | 1500Vdc | 2            | Direct Handle, Center operated   | CK911610000 | *                   |
| CZ2                     | 400A   | 1500Vdc | 2            | Direct Handle, Center operated   | CK911620000 | *                   |
| CZ2                     | 500A   | 1500Vdc | 2            | Direct Handle, Center operated   | CK911630000 | *                   |
| CZ2                     | 630A   | 1500Vdc | 2            | Direct Handle, Center operated   | CK911640000 | *                   |
| CZ2                     | 315A   | 1500Vdc | 2            | Extended Handle, Side operated   | CK911650000 | *                   |
| CZ2                     | 400A   | 1500Vdc | 2            | Extended Handle, Side operated   | CK911660000 | *                   |
| CZ2                     | 500A   | 1500Vdc | 2            | Extended Handle, Side operated   | CK911670000 | *                   |
| CZ2                     | 630A   | 1500Vdc | 2            | Extended Handle, Side operated   | CK911680000 | *                   |
| CZ2                     | 315A   | 1500Vdc | 2            | Extended Handle, Center operated | CK911690000 | *                   |
| CZ2                     | 400A   | 1500Vdc | 2            | Extended Handle, Center operated | CK911700000 | *                   |
| CZ2                     | 500A   | 1500Vdc | 2            | Extended Handle, Center operated | CK911710000 | *                   |
| CZ2                     | 630A   | 1500Vdc | 2            | Extended Handle, Center operated | CK911720000 | *                   |
| CZ2                     | 315A   | 1500Vdc | 4            | Direct Handle, Center operated   | CK911770000 | *                   |
| CZ2                     | 400A   | 1500Vdc | 4            | Direct Handle, Center operated   | CK911780000 | *                   |
| CZ2                     | 500A   | 1500Vdc | 4            | Direct Handle, Center operated   | CK911790000 | *                   |
| CZ2                     | 630A   | 1500Vdc | 4            | Direct Handle, Center operated   | CK911800000 | *                   |
| CZ2                     | 315A   | 1500Vdc | 4            | Extended Handle, Center operated | CK911850000 | *                   |
| CZ2                     | 400A   | 1500Vdc | 4            | Extended Handle, Center operated | CK911860000 | *                   |
| CZ2                     | 500A   | 1500Vdc | 4            | Extended Handle, Center operated | CK911870000 | *                   |
| CZ2                     | 630A   | 1500Vdc | 4            | Extended Handle, Center operated | CK911880000 | *                   |

Chapter ID [8536]

\*Available on Request

Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: www.LK-EA.com | e-mail: CIC@LK-EA.com





## Switch-Disconnecter Units [8536]

### Type FN & C-Line Switch Disconnecter (2P/TPN/4P)



FN 2P S-D



FN TPN S-D

#### Features offered by S-D

- Range 32A to 2000A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility

- Telescopic shaft for depth adjustment
- Flip-able handle 1000A and above

| Size | Rated Current (A) | Open Execution 2P S-D |             |                     | Std. Pkg. (Nos.) | Open Execution TPN S-D* |             |                     | Std. Pkg. (Nos.) |
|------|-------------------|-----------------------|-------------|---------------------|------------------|-------------------------|-------------|---------------------|------------------|
|      |                   | Type                  | Cat. No.    | M.R.P. (₹) Per Unit |                  | Type                    | Cat. No.    | M.R.P. (₹) Per Unit |                  |
| Fr 1 | 32                | FN 32 2P              | SK904180000 | 2900                | 1                | FN 32 TPN / 4P          | SK955410000 | 3520                | 1                |
|      | 63                | FN 63 2P              | SK904190000 | 3330                | 1                | FN 63 TPN / 4P          | SK955400000 | 4130                | 1                |
| Fr 2 | 100               | FN 100 2P             | SK904200000 | 5990                | 1                | FN 100 TPN              | SK955710000 | 7450                | 1                |
|      | 125               | FN 125 2P             | SK904210000 | 7500                | 1                | FN 125 TPN              | SK954050000 | 9390                | 1                |
| Fr 3 | 200               | FN 200 2P             | SK904500000 | 12300               | 1                | FN 200 TPN              | SK956070000 | 14600               | 1                |
|      | 250               | FN 250 2P             | SK904540000 | 13700               | 1                | FN 250 TPN              | SK956830000 | 16700               | 1                |
| Fr 4 | 315               | FN 315 2P             | SK904650000 | 18600               | 1                | FN 315 TPN              | SK956090000 | 20300               | 1                |
|      | 400               | FN 400 2P             | SK904660000 | 19600               | 1                | FN 400 TPN              | SK956100000 | 23500               | 1                |
| Fr 5 | 630               | FN 630 2P             | SK904670000 | 31400               | 1                | FN 630 TPN              | SK956110000 | 36900               | 1                |
|      | 800               | FN 800 2P             | SK904680000 | 33700               | 1                | FN 800 TPN              | SK955510000 | 39600               | 1                |
|      | 1000              | FN 1000 2P            | SK904690000 | 43500               | 1                | FN 1000 TPN             | SK957100000 | 61000               | 1                |
| Fr 6 | 1000              | -                     | -           | -                   | -                | C-Line SD 1000 4P\$     | COS10000040 | 74300               | 1                |
|      | 1250              | -                     | -           | -                   | -                | C-Line SD 1250 4P\$     | COS12500040 | 92600               | 1                |
|      | 1600              | -                     | -           | -                   | -                | C-Line SD 1600 4P\$     | COS16000040 | 117800              | 1                |
|      | 2000              | -                     | -           | -                   | -                | C-Line SD 2000 4P\$     | COS20000040 | 154400              | 1                |

\$ For C-Line SD 3P (1000A to 2000A), please contact nearest branch office

\* For Switched Neutral Pole in FN TPN S-D, order Switched Neutral Kit separately.

Refer 'Spares & Accessories for type FN' table

\* FN SDF and FN SD models are supplied without terminal shrouds

### Spares & Accessories for type FN [8538]



Handle Assembly



Earthing Link

| Description                              | Type                          | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------------------|-------------------------------|----------|---------------------|------------------|
| Auxiliary Contact Kit (1NO + 1 NC)       | FN 32 / 63                    | SK91302  | 800                 | 1                |
|                                          | FN 100 / 125 / 160            | SK91328  | 970                 | 1                |
|                                          | FN 200 / 250                  | SK91329  | 1300                | 1                |
|                                          | FN 315 / 400 / 630            | SK91330  | 1360                | 1                |
|                                          | FN 800/630 <sup>(1)</sup>     | CK91034# | 1360                | 1                |
| 2 <sup>nd</sup> Aux. Contact (1NO + 1NC) | FN 32 / 63                    | SK90670  | 870                 | 1                |
|                                          | FN 100 to FN 1000             | SK90696  | 1000                | 1                |
| Earthing Link                            | FN 32 to FN 1000 <sup>@</sup> | CK90396  | 800                 | 1                |
| Terminal Shroud Kit                      | FN 32 / 63                    | SK91190  | 280                 | 1                |
|                                          | FN 100 / 125 / 160            | SK91137  | 340                 | 1                |
|                                          | FN 200 / 250                  | SK91335  | 980                 | 1                |
|                                          | FN 315 / 400                  | SK91346  | 1000                | 1                |
|                                          | FN 630 / 800                  | SK91347# | 1060                | 1                |
| Handle Assembly - A                      | FN 32 / 63                    | SK91257  | 760                 | 1                |
|                                          | FN 100 to FN 250              | SK91258  | 1620                | 1                |
|                                          | FN 315 / 400 / 630 / 800      | SK91259# | 1790                | 1                |
| Handle Assembly - B                      | FN 32 / 63                    | SK91277  | 760                 | 1                |
|                                          | FN 100 to FN 250              | SK91278  | 1620                | 1                |
|                                          | FN 315 / 400 / 630 / 800      | SK91279# | 1790                | 1                |



Switched Neutral Kit



Auxiliary Contact Kit



Castell Type Lock

| Description            | Type                           | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------|--------------------------------|----------|---------------------|------------------|
| Handle Assembly - CE   | FN 32 / 63                     | SK91337  | 450                 | 1                |
| Interphase Barrier Kit | FN 200                         | SK91343  | 690                 | 1                |
|                        | FN 315 / 400                   | SK91344  | 720                 | 1                |
|                        | FN 630 / 800                   | SK91345# | 740                 | 1                |
|                        |                                |          |                     |                  |
| Castell Type Lock\$    | FN 100 / 125 / 160 / 200 / 250 | A        | SK00333             | 3820             |
|                        |                                | B        | SK00334             | 3820             |
|                        |                                | C        | SK00335             | 3820             |
|                        |                                | D        | SK00336             | 3820             |
|                        | FN 315 / 400 / 630 / 800       | A        | SK00345#            | 3820             |
|                        |                                | B        | SK00346#            | 3820             |
|                        |                                | C        | SK00347#            | 3820             |
|                        |                                | D        | SK00348#            | 3820             |
| Switched Neutral Kit   | FN 100 / 125 / 160             | SK95233  | 7340                |                  |
|                        | FN 200 / 250                   | SK95516  | 7820                | 1                |
|                        | FN 315 / 400                   | SK95517  | 8450                |                  |
|                        | FN 630 / 800                   | SK95546# | 11700               |                  |

@For terminating earth busbar upto 25mm width. Order Qty 1 for 10 earthing links

<sup>(1)</sup>FN 630 units manufactured from Dec-2025: Use Auxiliary Contact CK91034.

FN 630 units manufactured before Dec-2025: Use Auxiliary Contact SK91330.

### Fuse pulling handle [8538]

For Type HN fuse-link

For Type HF fuse-link

| Description                                                       | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------------------------------------------------|----------|---------------------|------------------|
| Fuse pulling handle for HF Fuse-link from 2A-63A                  | SK91185  | 320                 | 1                |
| Insulated fuse pulling handle for Type HN fuse-link from 63A-800A | SF90126  | 1110                | 1                |

### Spares & Accessories for type COS Switch-Disconnecter [8538]

| Type                                          | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------------------------|----------|---------------------|------------------|
| Auxiliary Contact Kit (1 sets of C/O contact) | CXS6002  | 1340                | 1                |
| Operating Handle                              | CXS6001  | 2880                | 1                |
| Castell Type Lock\$                           | CX60004  | 3820                | 1                |

\$ Chapter ID [8301]

# Also suitable for Switch-Disconnecter FN 1000

Notes: 1) Add suffix "0000" to all cat nos. of Spares and Accessories.

Lauritz Knudsen, 01.06.2026

## Type TPN S-D-F suitable for DIN fuse-link (TPN & FP) in open execution

### Features offered by FN S-D-F

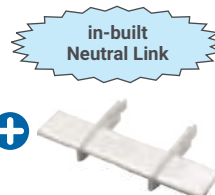
- › Range 32A to 800A, 415V, AC 23A
- › Conforms to IEC 60947-3, IS/IEC 60947-3
- › Phase Barriers included
- › Telescopic shaft for depth adjustment
- › TPN SDF has isolable neutral
- › 4P SDF has Switched Neutral Pole and is 100% rated
- › Door interlock & padlock facility



FN - TPN S-D-F  
(Open Execution)



FN - 4P S-D-F  
(Open Execution)



| Size | Rated Current (A) | Suitable HRC fuse-link |            | Open Execution Type FN (TPN) S-D-F suitable for DIN fuse-link |          |                     | Std. Pkg. (Nos.) | Open Execution Type FN S-D-F suitable for DIN fuse-link (4P) |          |                     | Std. Pkg. (Nos.) |
|------|-------------------|------------------------|------------|---------------------------------------------------------------|----------|---------------------|------------------|--------------------------------------------------------------|----------|---------------------|------------------|
|      |                   | Type                   | Range (A)  | Type                                                          | Cat. No. | M.R.P. (₹) Per Unit |                  | Type                                                         | Cat. No. | M.R.P. (₹) Per Unit |                  |
| Fr 1 | 32                | HF Size 14x51          | 2 to 32    | FN 32 TPN / FP                                                | SK95518  | 3400                | 1                | FN 32 TPN/FP                                                 | SK95518  | 3400                | 1                |
|      | 32                | HF Size 14x51          | 2 to 32    | FN 32 TPN / FP CE*                                            | SK95703* | 2950                | 1                | FN 32 TPN/FP CE*                                             | SK95703* | 2950                | 1                |
|      | 63                | HF Size 14x51          | 2 to 63    | FN 63 TPN / FP                                                | SK95421  | 4480                | 1                | FN 63 TPN/FP                                                 | SK95421  | 4480                | 1                |
|      | 63                | HF Size 14x51          | 2 to 63    | FN 63 TPN / FP CE*                                            | SK95704* | 4000                | 1                | FN 63 TPN/FP CE*                                             | SK95704* | 4000                | 1                |
| Fr 2 | 100               | HN Size 000            | 63 to 100  | FN 100C TPN                                                   | CK91079  | 7100                | 1                | -                                                            | -        | -                   | -                |
|      | 100               | HN Size 000/00         | 63 to 100  | FN 100 TPN                                                    | SK95568  | 8350                | 1                | FN 100 FP                                                    | SK90496  | 10200               | 1                |
|      | 125               | HN Size 000/00         | 63 to 125  | FN 125 TPN                                                    | SK95001  | 10800               | 1                | FN 125 FP                                                    | SK90497  | 12700               | 1                |
|      | 160               | HN Size 000/00         | 63 to 160  | FN 160 TPN                                                    | SK95713  | 11600               | 1                | FN 160 FP                                                    | SK90498  | 14300               | 1                |
| Fr 3 | 200               | HN Size 0              | 80 to 200  | FN 200 TPN                                                    | SK95418  | 15700               | 1                | FN 200 FP                                                    | SK90471  | 20400               | 1                |
|      | 250               | HN Size 1              | 125 to 250 | FN 250 TPN                                                    | SK95642  | 18300               | 1                | FN 250 FP                                                    | SK90472  | 23100               | 1                |
| Fr 4 | 315               | HN Size 1              | 125 to 315 | FN 315 TPN                                                    | SK95461  | 21900               | 1                | FN 315 FP                                                    | SK90473  | 28000               | 1                |
|      | 400               | HN Size 2              | 200 to 400 | FN 400 TPN                                                    | SK95481  | 26700               | 1                | FN 400 FP                                                    | SK90480  | 31800               | 1                |
| Fr 5 | 630               | HN Size 3              | 315 to 630 | FN 630 TPN                                                    | SK95521  | 47700               | 1                | FN 630 FP                                                    | SK90481  | 53500               | 1                |
|      | 800               | HN Size 3              | 315 to 800 | FN 800 TPN                                                    | SK95679  | 51300               | 1                | FN 800 FP                                                    | SK90482  | 60800               | 1                |

\* 'CE' handle has door interlock facility without defeat feature

\* FN SDF and FN SD models are supplied without terminal shrouds

## FN- TPN S-D-F in SS Enclosure

### Features offered by FN S-D-F in SS Enclosure:

- › Range 32A to 800A, 415V, AC 23A
- › Spacious Sheet Steel Enclosure
- › Separate cable gland box not required
- › Phase Barriers included
- › Conforms to IEC 60947-3, IS/IEC 60947-3
- › Suitable for Cylindrical/DIN fuse-link
- › Door interlock & padlock facility



FN - TPN S-D-F in SS Enclosure

| Size | Rated Current (A) | Suitable HRC fuse-link |            | In Sheet Steel Enclosure Type FN (TPN) S-D-F suitable for DIN fuse-link |          |                     | Std. Pkg. (Nos.) |
|------|-------------------|------------------------|------------|-------------------------------------------------------------------------|----------|---------------------|------------------|
|      |                   | Type                   | Range (A)  | Type                                                                    | Cat. No. | M.R.P. (₹) Per Unit |                  |
| Fr 1 | 32                | HF Size 14x51          | 2 to 32    | FN 32 TPN / FP CE*                                                      | SK90483* | 8230                | 1                |
|      | 63                | HF Size 14x51          | 2 to 63    | FN 63 TPN / FP CE*                                                      | SK90484* | 9840                | 1                |
| Fr 2 | 100               | HN Size 000/00         | 63 to 100  | FN 100 TPN                                                              | SK90485  | 15900               | 1                |
|      | 125               | HN Size 000/00         | 63 to 125  | FN 125 TPN                                                              | SK90486  | 18000               | 1                |
|      | 160               | HN Size 000/00         | 63 to 160  | FN 160 TPN                                                              | SK90487  | 18900               | 1                |
| Fr 3 | 200               | HN Size 0              | 80 to 200  | FN 200 TPN                                                              | SK90488  | 27200               | 1                |
|      | 250               | HN Size 1              | 125 to 250 | FN 250 TPN                                                              | SK90489  | 30000               | 1                |
| Fr 4 | 315               | HN Size 1              | 125 to 315 | FN 315 TPN                                                              | SK90490  | 34800               | 1                |
|      | 400               | HN Size 2              | 200 to 400 | FN 400 TPN                                                              | SK90491  | 39100               | 1                |
| Fr 5 | 630               | HN Size 3              | 315 to 630 | FN 630 TPN                                                              | SK90492  | 61100               | 1                |
|      | 800               | HN Size 3              | 315 to 800 | FN 800 TPN                                                              | SK90493  | 64900               | 1                |

\* 'CE' handle has door interlock facility without defeat feature

### Notes:

- 1) Type FN S-D-F range (Bolted fuse-link) suitable for harsh environment is also available. Please contact nearest branch office for further details
- 2) For 690V AC application, please contact nearest branch office
- 3) The prices for S-D-F range are without HRC fuses
- 4) The SDF units in SS enclosure version can be replaced with FN TPN SDF open execution units. Please refer point 5 for replacement of 250A unit
- 5) For replacement of FN 250 SDF unit in sheet steel enclosure version (Cat. No. SK904890000 & SK956810000), order Cat. No. ST978950000
- 6) Please refer Page 36 for Switch-Disconnectors
- 7) Add suffix "0000" to all cat nos.
- 8) FN SDF and FN SD models are supplied without terminal shrouds

## HRC Fuses [8536]

### Features offered by HRC fuse link

- › Conforms to IEC 60269-2, IS 13703 part 2
- › Range: 2A to 800A, 415V, AC 50Hz
- › Type: Cylindrical (2A to 63A), DIN (63A to 800A) & Bolted (2A to 630A)
- › High breaking capacity: 100kA for type HN and 80kA for type HF/HG/HQ

### Cylindrical fuse links Type HF

HF



| Size    | Rated Current (A) | Description                                                            | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------|-------------------|------------------------------------------------------------------------|----------|---------------------|------------------|
| 14 X 51 | 2                 | Suitable for Type FN 32 / 63 / FN 32 / 63 S-D-F & for HCO 32 Fuse base | SF90144  | 220                 | 30               |
|         | 4                 |                                                                        | SF90145  | 220                 | 30               |
|         | 6                 |                                                                        | SF90146  | 220                 | 30               |
|         | 8                 |                                                                        | SF90147  | 220                 | 30               |
|         | 10                |                                                                        | SF90148  | 220                 | 30               |
|         | 16                |                                                                        | SF90150  | 220                 | 30               |
|         | 20                |                                                                        | SF90151  | 220                 | 30               |
|         | 25                |                                                                        | SF90152  | 220                 | 30               |
|         | 32                |                                                                        | SF90142  | 220                 | 30               |
|         | 40                | Suitable for Type FN 63 / FN 63 S-D-F & for HC 63 Fuse base            | SF90143  | 230                 | 30               |
|         | 50                |                                                                        | SF90158  | 510                 | 30               |
|         | 63                |                                                                        | SF90159  | 550                 | 30               |

### DIN Type Fuse Links Type HN

000



00



0



1



2



3



| Size | Rated Current (A) | Description                                                                    | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|-------------------|--------------------------------------------------------------------------------|----------|---------------------|------------------|
| 000  | 63                | Suitable for Type FN 100/125/160 / FN 100/125/160 S-D-F & for HB 160 Fuse base | SF94940  | 620                 | 3                |
|      | 80                |                                                                                | SF94941  | 650                 | 3                |
|      | 100               |                                                                                | SF94942  | 660                 | 3                |
|      | 125               |                                                                                | SF94946  | 770                 | 3                |
| 00   | 63                | Suitable for Type FN 100/125/160 / FN 125/160 S-D-F & for HB 160 Fuse base     | SF94027  | 840                 | 3                |
|      | 80                |                                                                                | SF94028  | 840                 | 3                |
|      | 100               |                                                                                | SF94029  | 840                 | 3                |
|      | 125               |                                                                                | SF94030  | 810                 | 3                |
|      | 160               |                                                                                | SF94939  | 820                 | 3                |
| 0    | 80                | Suitable for Type FN 200 / FN 200 S-D-F & for HB 250 Fuse base                 | SF94128  | 1070                | 3                |
|      | 100               |                                                                                | SF94129  | 1070                | 3                |
|      | 125               |                                                                                | SF94130  | 1070                | 3                |
|      | 160               |                                                                                | SF94131  | 1080                | 3                |
|      | 200               |                                                                                | SF94132  | 1120                | 3                |
| 1    | 125               | Suitable for Type FN 250/315 / FN 250/315 S-D-F & for HB 250 Fuse base         | SF94230  | 1050                | 3                |
|      | 160               |                                                                                | SF94231  | 1120                | 3                |
|      | 200               |                                                                                | SF94232  | 1120                | 3                |
|      | 250               |                                                                                | SF94233  | 1260                | 3                |
|      | 315               |                                                                                | SF94234  | 1600                | 3                |
| 2    | 200               | Suitable for Type FN 400 / FN 400 S-D-F & for HB 800 Fuse base                 | SF94332  | 1590                | 3                |
|      | 250               |                                                                                | SF94333  | 1630                | 3                |
|      | 315               |                                                                                | SF94334  | 1680                | 3                |
|      | 400               |                                                                                | SF94335  | 1700                | 3                |
| 3    | 315               | Suitable for Type FN 630/800 / FN 630/800 S-D-F & for HB 800 Fuse base         | SF94434  | 2360                | 1                |
|      | 400               |                                                                                | SF94435  | 2500                | 1                |
|      | 500               |                                                                                | SF94436  | 2570                | 1                |
|      | 630               |                                                                                | SF94437  | 2710                | 1                |
|      | 800               |                                                                                | SF94938  | 3350                | 1                |

### Fuse holders & Fuse bases suitable for Cylindrical / DIN fuse-links



HB



HC

| Rated Current (A) | Type   | Description | Suitable fuse-link |           | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------|--------|-------------|--------------------|-----------|----------|---------------------|------------------|
|                   |        |             | Type               | Range (A) |          |                     |                  |
| 32                | HCO 32 | Fuse holder | HF                 | 2-32      | SK91314  | 420                 | 10               |
| 63                | HC 63  | Fuse holder | HF                 | 2-63      | SK91043  | 480                 | 10               |
| 160               | HB 160 | Fuse base   | HN-Size 000 & 00   | 63-160    | SK90405  | 620                 | 12               |
| 250               | HB 250 | Fuse base   | HN-Size 0 & 1      | 80-250    | SK90406  | 1360                | 3                |
| 400               | HB 400 | Fuse base   | HN-Size 2          | 200-400   | SK90717  | 1820                | 3                |
| 800               | HB 800 | Fuse base   | HN-Size 3          | 315-800   | SK91051  | 2650                | 3                |

Notes : 1) Add suffix "0000" to all cat nos.

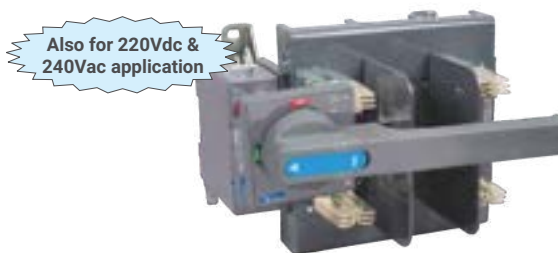




## Type FN S-D-F suitable for DIN fuse-link (2P) in open execution

### Features offered by FN S-D-F

- › Range 32A to 630A, 415V, **AC 23A**
- › Conforms to IEC 60947-3, IS/IEC 60947-3
- › **Phase Barriers included**
- › **Telescopic shaft for depth adjustment**
- › Door interlock & padlock facility



FN 2P S-D-F

| Size | Rated Current (A) | Suitable fuse-link type | Type FN (2P) S-D-F suitable for DIN fuse-link |          |                     | Std. Pkg (Nos.) |
|------|-------------------|-------------------------|-----------------------------------------------|----------|---------------------|-----------------|
|      |                   |                         | Open Execution                                |          |                     |                 |
|      |                   |                         | Type                                          | Cat. No. | M.R.P. (₹) Per Unit |                 |
| Fr 1 | 32                | HF Size 14x51           | FN 32 2P                                      | SK95594  | 2920                | 1               |
|      | 63                | HF Size 14x51           | FN 63 2P                                      | SK95595  | 3890                | 1               |
| Fr 2 | 100               | HN Size 000/00          | FN 100 2P                                     | ST35086  | 7360                | 1               |
|      | 125               | HN Size 000/00          | FN 125 2P                                     | ST35087  | 9920                | 1               |
|      | 160               | HN Size 000/00          | FN 160 2P                                     | ST35088  | 10400               | 1               |
| Fr 3 | 200               | HN Size 0               | FN 200 2P                                     | ST35089  | 13500               | 1               |
|      | 250               | HN Size 1               | FN 250 2P                                     | ST31674  | 15600               | 1               |
| Fr 4 | 315               | HN Size 1               | FN 315 2P                                     | ST38930  | 19400               | 1               |
|      | 400               | HN Size 2               | FN 400 2P                                     | ST31676  | 21800               | 1               |
| Fr 5 | 630               | HN Size 3               | FN 630 2P                                     | ST35090  | 37600               | 1               |

\* Add suffix "0000" to all cat nos.

\* FN SDF and FN SD models are supplied without terminal shrouds

## Type FN S-D-F suitable for BS fuse-link (TPN) in open execution

### For BOLTED fuse-link

### Features offered by FN S-D-F

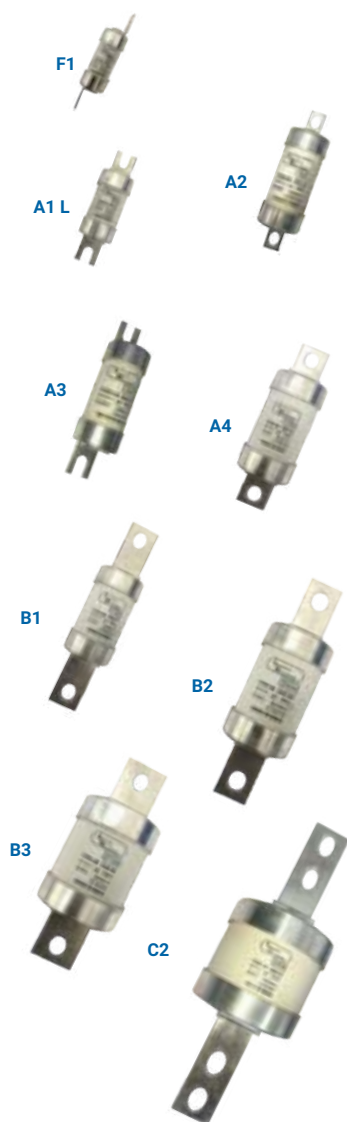
- › Range 32A to 630A, 415V, **AC 23A**
- › Conforms to IEC 60947-3, IS/IEC 60947-3
- › **Phase Barriers included**
- › **Telescopic shaft for depth adjustment**
- › Door interlock & padlock facility



FN - TPN S-D-F

| Size | Rated Current (A) | Suitable fuse-link type | Type FN (TPN) S-D-F suitable for BOLTED fuse-link |          |                     | Std. Pkg (Nos.) |
|------|-------------------|-------------------------|---------------------------------------------------|----------|---------------------|-----------------|
|      |                   |                         | Open Execution                                    |          |                     |                 |
|      |                   |                         | Type                                              | Cat. No. | M.R.P. (₹) Per Unit |                 |
| Fr 1 | 32                | A1L                     | FN 32 TPN                                         | SK95653  | 3280                | 1               |
|      | 63                | A1L                     | FN 63 TPN                                         | SK95651  | 4360                | 1               |
| Fr 2 | 100               | A4                      | FN 100 TPN                                        | SK95570  | 8570                | 1               |
|      | 125               | A4                      | FN 125 TPN                                        | SK95009  | 10800               | 1               |
|      | 160               | A4                      | FN 160 TPN                                        | SK95714  | 11700               | 1               |
| Fr 3 | 200               | B1 / B2                 | FN 200 TPN                                        | SK95588  | 15900               | 1               |
|      | 250               | B2 / B3                 | FN 250 TPN                                        | SK95682  | 18700               | 1               |
| Fr 4 | 315               | B3                      | FN 315 TPN                                        | SK95590  | 22400               | 1               |
|      | 400               | B4                      | FN 400 TPN                                        | SK95591  | 27600               | 1               |
| Fr 5 | 630               | C2                      | FN 630 TPN                                        | SK95592  | 47500               | 1               |

## Bolted fuse links: Type HG and HQ



| Type | Fixing Method       | Size | Rating (A) | Description                                                         | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|---------------------|------|------------|---------------------------------------------------------------------|----------|---------------------|------------------|
| HG   | Offset, staggered   | F1   | 2          | Suitable for type HD 20H/20P/20B, HD 32H/32P/32B fuse base          | ST30725  | 90                  | 24               |
|      |                     |      | 4          |                                                                     | ST30726  | 90                  | 24               |
|      |                     |      | 6          |                                                                     | ST30727  | 90                  | 24               |
|      |                     |      | 10         |                                                                     | ST30728  | 90                  | 24               |
|      |                     |      | 16         |                                                                     | ST30729  | 100                 | 24               |
|      |                     |      | 20         |                                                                     | ST30730  | 100                 | 24               |
|      |                     |      | 25         |                                                                     | ST30731  | 100                 | 24               |
|      |                     |      | 32         |                                                                     | ST30732  | 100                 | 24               |
| HQ   | Offset              | A1L  | 20         | Suitable for type FN 32/63 S-D-F                                    | ST34527  | 180                 | 15               |
|      |                     |      | 25         |                                                                     | ST34528  | 180                 | 15               |
|      |                     |      | 32         |                                                                     | ST34529  | 180                 | 15               |
|      |                     |      | 50         |                                                                     | ST35827  | 220                 | 15               |
|      |                     |      | 63         |                                                                     | ST35828  | 220                 | 15               |
|      |                     | A2   | 4          | Suitable for type HK 32H/32B fuse base                              | ST30747  | 150                 | 12               |
|      |                     |      | 6          |                                                                     | ST30748  | 150                 | 12               |
|      |                     |      | 10         |                                                                     | ST30749  | 150                 | 12               |
|      |                     |      | 16         |                                                                     | ST30750  | 150                 | 12               |
|      |                     |      | 20         |                                                                     | ST30751  | 150                 | 12               |
|      |                     |      | 25         |                                                                     | ST30752  | 150                 | 12               |
|      |                     |      | 32         |                                                                     | ST30753  | 150                 | 12               |
|      |                     | A3   | 35         | Suitable for type HK 63B/63H Fuse base                              | ST30759  | 230                 | 12               |
|      |                     |      | 50         |                                                                     | ST30760  | 250                 | 12               |
|      |                     |      | 63         |                                                                     | ST30761  | 260                 | 12               |
|      |                     | A4   | 80         | Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base | ST30767  | 500                 | 12               |
|      |                     |      | 100        |                                                                     | ST30768  | 500                 | 12               |
|      |                     |      | 125        |                                                                     | ST30769  | 560                 | 12               |
|      |                     |      | 160        |                                                                     | ST35829  | 640                 | 12               |
|      | Centre Tag, 2 holes | B1   | 80         | Suitable for type FN 200 S-D-F                                      | ST30774  | 560                 | 12               |
|      |                     |      | 100        |                                                                     | ST30775  | 560                 | 12               |
|      |                     |      | 125        |                                                                     | ST30776  | 660                 | 12               |
|      |                     | B2   | 125        | Suitable for type FN 200/250 S-D-F                                  | ST30777  | 680                 | 3                |
|      |                     |      | 160        |                                                                     | ST30778  | 700                 | 3                |
|      |                     |      | 200        |                                                                     | ST30779  | 760                 | 3                |
|      |                     | B3   | 250        | Suitable for type FN 250/315 S-D-F                                  | ST30781  | 1110                | 3                |
|      |                     |      | 315        |                                                                     | ST30782  | 1170                | 3                |
|      |                     | B4   | 355        | Suitable for type FN 400 S-D-F                                      | ST30783  | 1640                | 3                |
|      |                     |      | 400        |                                                                     | ST30784  | 1690                | 3                |
|      | Centre Tag, 4 holes | C2   | 400        | Suitable for type FN 630 S-D-F                                      | ST30785  | 3190                | 1                |
|      |                     |      | 500        |                                                                     | ST30786  | 3370                | 1                |
|      |                     |      | 630        |                                                                     | ST30787  | 3850                | 1                |

## Fuse holders suitable for Bolted fuse-links



| Rated Current (A) | Type    | Connection Method         | Fuse Type | Suitable Fuse Range (A) | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------|---------|---------------------------|-----------|-------------------------|----------|---------------------|------------------|
| 20                | HD 20H  | Both side cable (Front)   | F1        | 2-20                    | ST30772  | 340                 | 12               |
|                   | HD 20P  | Both side busbar (Back)   | F1        | 2-20                    | ST30773  | 350                 | 12               |
|                   | HD 20B  | Top busbar & bottom cable | F1        | 2-20                    | ST30766  | 350                 | 12               |
| 32                | HD 32H  | Both side cable (Front)   | F1        | 2-32                    | ST30733  | 360                 | 12               |
|                   | HD 32P  | Both side busbar (Back)   | F1        | 2-32                    | ST30734  | 360                 | 12               |
|                   | HD 32B  | Top busbar & bottom cable | F1        | 2-32                    | ST30735  | 370                 | 12               |
|                   | HK 32H  | Both side cable (Front)   | A2        | 4-32                    | ST30754  | 450                 | 12               |
|                   | HK 32B  | Top busbar & bottom cable | A2        | 4-32                    | ST30755  | 450                 | 12               |
|                   | HK 63H  | Both side cable (Front)   | A3        | 35-63                   | ST30762  | 640                 | 6                |
| 63                | HK 63B  | Top busbar & bottom cable | A3        | 35-63                   | ST30763  | 640                 | 6                |
|                   | HK 125H | Both side cable (Front)   | A4        | 80-125                  | ST30770  | 1770                | 3                |
| 125               | HK 125B | Top busbar & bottom cable | A4        | 80-125                  | ST30771  | 1770                | 3                |

Notes: 1) Add suffix "0000" to all cat nos.

## FEATURES TO MEET EVERY APPLICATION

### Contact System

- › **Double Break** with low let-through energy
- › High Breaking Capacity up to **200kA @ 415V AC**
- › **100kA @ 690V AC** at 100% Ics
- › **50kA @ 800V AC** offering for Solar PV String inverters
- › **1000V/1500V PV DC** Offering

### Thermal - Magnetic Release

- › **Extended Overload Setting** of 67%
- › **16A to 800A** Offering
- › **Ambient Temperature Compensation**
- › Suitable for wide temperature range

### Mechanism

- › **Class II Front Facia**
- › Double Insulation
- › Positive Isolation
- › **High Electrical and Mechanical Life**

### Microprocessor Release

- › **Extended Overload Setting** of 25%
- › **Individual Fault Indication** LEDs
- › Battery Operated **In-built Display**
- › **Advanced** Metering and Protection
- › **Motor Protection Variant** with effective Type 2 Coordination

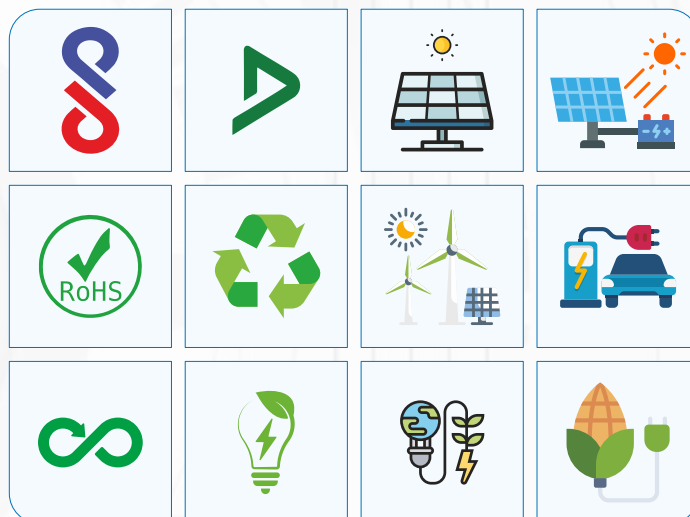
### Modular Architecture

- › **Compact Size**
- › Late Personalization
- › Interchangeability of Releases
- › **Reduced Inventory** for internal accessories

### Modules

- › **Temperature Monitoring** & Protection
- › **Zone Selective Interlocking** for effective Selectivity
- › **Communication Module** for metering & control
- › Remote Operation for **Motorized MCCB**
- › Breaker Status, Alarm & Trip with Records

## FUTURE READY FOR COMPLIANCE AND NEW APPLICATIONS





## RESILIENT FOR BETTER SAFETY AND MAINTENANCE

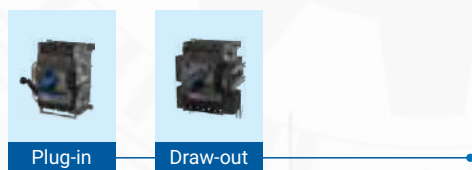
### Inventory & Application friendly Internal Accessories



### Robust Rotary & Electrically Operated Mechanisms



### Reduced Downtime with Plug-in & Drawout Modules



### Shrouds for increased personnel safety



### Multiple options for Mechanical Interlocking



### Versatile Range of Terminations



## CONNECTED TO DRIVE ENERGY EFFICIENCY



Data Analytics

Trend Analysis

Real Time Monitoring

Status & Control

Metering & Protection

Data Acquisition



**d sine** DZ With Thermal - Magnetic Release

| Rating (A)<br>Icu=Ics (kA)* | 16  | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 160 | 200 | 250 | 320 | 400 | 500 | 630 | 800 |
|-----------------------------|-----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 25/36                       | DZ0 |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
| 36/50                       | DZ1 |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
| 36/50/80/120                | DZ2 |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
| 36/50/80/120/200            |     |    |    |    |    |    |    |    |     |     | DZ4 |     |     |     |     |     |     |     |
| 36/50/80/120/200            |     |    |    |    |    |    |    |    |     |     |     |     |     |     |     | DZ6 |     | DZ7 |



dsine-DZ0 TM

- › Conforms to IS/IEC 60947-2
- › 16A to 125A, 3P & 4P
- › 25kA & 36kA breaking capacities
- › Ics= 100% of Icu\*
- › Adjustable overload settings: 0.8 - 1.0 x In
- › Fixed short-circuit settings: 10 x In
- › Compact size
- › Manual and Rotary versions available
- › Wide range of accessories

| Type      | Overload Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole              |                     | 4 Pole              |                     | Std. Pkg. (Nos.) |
|-----------|----------------------------|----------------------------------------------|---------------------|---------------------|---------------------|---------------------|------------------|
|           |                            |                                              | Cat No              | M.R.P. (₹) Per Unit | Cat No              | M.R.P. (₹) Per Unit |                  |
| DZ0-125D* | 13-16                      | 36kA                                         | DZ0T0016D5C1A0000   | 11300               | DZ0F0016D5C1A0000   | 15800               | 1                |
|           | 16-20                      |                                              | DZ0T0020D5C1A0000   | 11300               | DZ0F0020D5C1A0000   | 15800               | 1                |
|           | 20-25                      |                                              | DZ0T0025D5C1A0000   | 11300               | DZ0F0025D5C1A0000   | 15800               | 1                |
|           | 26-32                      |                                              | DZ0T0032D5C1A0000   | 11300               | DZ0F0032D5C1A0000   | 15800               | 1                |
|           | 32-40                      |                                              | DZ0T0040D5C1A0000   | 11300               | DZ0F0040D5C1A0000   | 15800               | 1                |
|           | 40-50                      |                                              | DZ0T0050D5C1A0000   | 11300               | DZ0F0050D5C1A0000   | 15800               | 1                |
|           | 50-63                      |                                              | DZ0T0063D5C1A0000   | 11000               | DZ0F0063D5C1A0000   | 15300               | 1                |
|           | 64-80                      |                                              | DZ0T0080D5C1A0000   | 11000               | DZ0F0080D5C1A0000   | 15300               | 1                |
|           | 80-100                     |                                              | DZ0T0100D5C1A0000   | 11000               | DZ0F0100D5C1A0000   | 15300               | 1                |
|           | 100-125                    |                                              | DZ0T0125D5C1A0000 ▲ | 14300               | DZ0F0125D5C1A0000 ▲ | 19100               | 1                |
| DZ0-125C  | 13-16                      | 25kA                                         | DZ0T0016CXC1A0000   | 11700               | DZ0F0016CXC1A0000   | 16400               | 1                |
|           | 16-20                      |                                              | DZ0T0020CXC1A0000   | 11700               | DZ0F0020CXC1A0000   | 16400               | 1                |
|           | 20-25                      |                                              | DZ0T0025CXC1A0000   | 11700               | DZ0F0025CXC1A0000   | 16400               | 1                |
|           | 26-32                      |                                              | DZ0T0032CXC1A0000   | 11700               | DZ0F0032CXC1A0000   | 16400               | 1                |
|           | 32-40                      |                                              | DZ0T0040CXC1A0000   | 11700               | DZ0F0040CXC1A0000   | 16400               | 1                |
|           | 40-50                      |                                              | DZ0T0050CXC1A0000   | 11700               | DZ0F0050CXC1A0000   | 16400               | 1                |
|           | 50-63                      |                                              | DZ0T0063CXC1A0000   | 11300               | DZ0F0063CXC1A0000   | 15900               | 1                |
|           | 64-80                      |                                              | DZ0T0080CXC1A0000   | 11300               | DZ0F0080CXC1A0000   | 15900               | 1                |
|           | 80-100                     |                                              | DZ0T0100CXC1A0000   | 11300               | DZ0F0100CXC1A0000   | 15900               | 1                |
|           | 100-125                    |                                              | DZ0T0125CXC1A0000 ▲ | 15700               | DZ0F0125CXC1A0000 ▲ | 19800               | 1                |

▲ - Spreader Terminals are included

**Note:**

Breaking Capacity: C = 25kA, D = 36kA

\*DZ0-125D : Ics= 50% Icu

Phase barriers are supplied with all MCCBs



**d sine** DZ With Thermal - Magnetic Release



dsine-DZ1 TM

- › Conforms to IS/IEC 60947-2
- › 16A to 800A, 3P & 4P
- › 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- › Ics= 100% of Icu
- › Adjustable overload settings: 0.67 - 1.0 x In
- › Adjustable short-circuit settings: 6 - 12 x In\*
- › Transparent sealable release cover
- › Ambient Temperature Compensation
- › Compact size
- › Fixed, Plug-in, Drawout, Rotary and Motorised versions available
- › Wide range of accessories

| Type                  | Overload Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole             |                     | 4 Pole             |                     | Std. Pkg. (Nos.) |
|-----------------------|----------------------------|----------------------------------------------|--------------------|---------------------|--------------------|---------------------|------------------|
|                       |                            |                                              | Cat No             | M.R.P. (₹) Per Unit | Cat No             | M.R.P. (₹) Per Unit |                  |
| DZ1-160D/<br>DZ1-200D | 11-16                      | 36kA                                         | DZ1T0016DXC1A0000  | 18200               | DZ1F0016DXC1A0000  | 22600               | 1                |
|                       | 14-20                      |                                              | DZ1T0020DXC1A0000  | 18200               | DZ1F0020DXC1A0000  | 22600               | 1                |
|                       | 17-25                      |                                              | DZ1T0025DXC1A0000  | 18200               | DZ1F0025DXC1A0000  | 22600               | 1                |
|                       | 22-32                      |                                              | DZ1T0032DXC1A0000  | 18200               | DZ1F0032DXC1A0000  | 22600               | 1                |
|                       | 27-40                      |                                              | DZ1T0040DXC1A0000  | 18200               | DZ1F0040DXC1A0000  | 22600               | 1                |
|                       | 34-50                      |                                              | DZ1T0050DXC1A0000  | 18200               | DZ1F0050DXC1A0000  | 22600               | 1                |
|                       | 43-63                      |                                              | DZ1T0063DXD1A0000  | 17600               | DZ1F0063DXD1A0000  | 21800               | 1                |
|                       | 54-80                      |                                              | DZ1T0080DXD1A0000  | 17600               | DZ1F0080DXD1A0000  | 21800               | 1                |
|                       | 67-100                     |                                              | DZ1T0100DXD1A0000  | 17600               | DZ1F0100DXD1A0000  | 21800               | 1                |
|                       | 84-125                     |                                              | DZ1T0125DXD1A0000  | 19800               | DZ1F0125DXD1A0000  | 24400               | 1                |
|                       | 108-160                    |                                              | DZ1T0160DXD1A0000  | 26000               | DZ1F0160DXD1A0000  | 30900               | 1                |
|                       | 134-200                    |                                              | DZ1T0200DXD1A0000▲ | 43600               | DZ1F0200DXD1A0000▲ | 52400               | 1                |
| DZ2-160D              | 11-16                      | 36kA                                         | DZ2T0016DXC1A0000  | 20500               | DZ2F0016DXC1A0000  | 25600               | 1                |
|                       | 14-20                      |                                              | DZ2T0020DXC1A0000  | 20500               | DZ2F0020DXC1A0000  | 25600               | 1                |
|                       | 17-25                      |                                              | DZ2T0025DXC1A0000  | 20500               | DZ2F0025DXC1A0000  | 25600               | 1                |
|                       | 22-32                      |                                              | DZ2T0032DXC1A0000  | 20500               | DZ2F0032DXC1A0000  | 25600               | 1                |
|                       | 27-40                      |                                              | DZ2T0040DXC1A0000  | 20500               | DZ2F0040DXC1A0000  | 25600               | 1                |
|                       | 34-50                      |                                              | DZ2T0050DXC1A0000  | 20500               | DZ2F0050DXC1A0000  | 25600               | 1                |
|                       | 43-63                      |                                              | DZ2T0063DXD1A0000  | 19800               | DZ2F0063DXD1A0000  | 24800               | 1                |
|                       | 54-80                      |                                              | DZ2T0080DXD1A0000  | 19800               | DZ2F0080DXD1A0000  | 24800               | 1                |
|                       | 67-100                     |                                              | DZ2T0100DXD1A0000  | 19800               | DZ2F0100DXD1A0000  | 24800               | 1                |
|                       | 84-125                     |                                              | DZ2T0125DXD1A0000  | 22300               | DZ2F0125DXD1A0000  | 27600               | 1                |
|                       | 108-160                    |                                              | DZ2T0160DXD1A0000  | 29200               | DZ2F0160DXD1A0000  | 34800               | 1                |
|                       |                            |                                              |                    |                     |                    |                     |                  |
| DZ4-250D              | 108-160                    | 36kA                                         | DZ4T0160DXD1A0000  | 37600               | DZ4F0160DXD1A0000  | 46300               | 1                |
|                       | 134-200                    |                                              | DZ4T0200DXD1A0000  | 43100               | DZ4F0200DXD1A0000  | 51800               | 1                |
|                       | 168-250                    |                                              | DZ4T0250DXD1A0000  | 45400               | DZ4F0250DXD1A0000  | 54600               | 1                |
| DZ6-400D              | 134-200                    | 36kA                                         | DZ6T0200DXD1A0000  | 56000               | DZ6F0200DXD1A0000  | 68400               | 1                |
|                       | 168-250                    |                                              | DZ6T0250DXD1A0000  | 60100               | DZ6F0250DXD1A0000  | 73400               | 1                |
|                       | 215-320                    |                                              | DZ6T0320DXD1A0000  | 62200               | DZ6F0320DXD1A0000  | 75800               | 1                |
|                       | 268-400                    |                                              | DZ6T0400DXD1A0000  | 62200               | DZ6F0400DXD1A0000  | 75800               | 1                |
| DZ7-800D              | 335-500                    | 36kA                                         | DZ7T0500DXD1A0000  | 69800               | DZ7F0500DXD1A0000  | 88000               | 1                |
|                       | 422-630                    |                                              | DZ7T0630DXD1A0000  | 69800               | DZ7F0630DXD1A0000  | 88000               | 1                |
|                       | 536-800                    |                                              | DZ7T0800DXD1A0000  | 97300               | DZ7F0800DXD1A0000  | 123800              | 1                |

▲- Spreader Terminals are included

**Note:**

Breaking Capacity: D = 36kA, N = 50kA, H = 80kA

dsine DZ-120kA & 200kA @415V (Ics=100% Icu) MCCBs are available on request.

It is recommended to use spreader terminals for enhancing termination capacity

For Motor back-up protection, use 'M' series of MCCBs such as DZ0-N, DZ1-N, DZ4-N, DZ6-N, DZ7-N

\* For DZ1 & DZ2 - 16A to 50A, Fixed Magnetic setting (375A)

For DZ7 630A / 800A, Magnetic setting from 6 In to 10 In / 6 In to 8 In respectively



| Type                  | Overload Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole             |                    | 4 Pole             |                    | Std. Pkg. (Nos.) |
|-----------------------|----------------------------|----------------------------------------------|--------------------|--------------------|--------------------|--------------------|------------------|
|                       |                            |                                              | Cat No             | M.R.P.(₹) Per Unit | Cat No             | M.R.P.(₹) Per Unit |                  |
| DZ1-160N/<br>DZ1-200N | 11-16                      | 50kA                                         | DZ1T0016NXC1A0000  | 24300              | DZ1F0016NXC1A0000  | 29200              | 1                |
|                       | 14-20                      |                                              | DZ1T0020NXC1A0000  | 24300              | DZ1F0020NXC1A0000  | 29200              | 1                |
|                       | 17-25                      |                                              | DZ1T0025NXC1A0000  | 24300              | DZ1F0025NXC1A0000  | 29200              | 1                |
|                       | 22-32                      |                                              | DZ1T0032NXC1A0000  | 24300              | DZ1F0032NXC1A0000  | 29200              | 1                |
|                       | 27-40                      |                                              | DZ1T0040NXC1A0000  | 24300              | DZ1F0040NXC1A0000  | 29200              | 1                |
|                       | 34-50                      |                                              | DZ1T0050NXC1A0000  | 24300              | DZ1F0050NXC1A0000  | 29200              | 1                |
|                       | 43-63                      |                                              | DZ1T0063NXD1A0000  | 23500              | DZ1F0063NXD1A0000  | 28300              | 1                |
|                       | 54-80                      |                                              | DZ1T0080NXD1A0000  | 23500              | DZ1F0080NXD1A0000  | 28300              | 1                |
|                       | 67-100                     |                                              | DZ1T0100NXD1A0000  | 23500              | DZ1F0100NXD1A0000  | 28300              | 1                |
|                       | 84-125                     |                                              | DZ1T0125NXD1A0000  | 31000              | DZ1F0125NXD1A0000  | 34300              | 1                |
|                       | 108-160                    |                                              | DZ1T0160NXD1A0000  | 33700              | DZ1F0160NXD1A0000  | 40300              | 1                |
|                       | 134-200                    |                                              | DZ1T0200NXD1A0000▲ | 48600              | DZ1F0200NXD1A0000▲ | 61000              | 1                |
| DZ2-160N              | 11-16                      | 50kA                                         | DZ2T0016NXC1A0000  | 27500              | DZ2F0016NXC1A0000  | 33000              | 1                |
|                       | 14-20                      |                                              | DZ2T0020NXC1A0000  | 27500              | DZ2F0020NXC1A0000  | 33000              | 1                |
|                       | 17-25                      |                                              | DZ2T0025NXC1A0000  | 27500              | DZ2F0025NXC1A0000  | 33000              | 1                |
|                       | 22-32                      |                                              | DZ2T0032NXC1A0000  | 27500              | DZ2F0032NXC1A0000  | 33000              | 1                |
|                       | 27-40                      |                                              | DZ2T0040NXC1A0000  | 27500              | DZ2F0040NXC1A0000  | 33000              | 1                |
|                       | 34-50                      |                                              | DZ2T0050NXC1A0000  | 27500              | DZ2F0050NXC1A0000  | 33000              | 1                |
|                       | 43-63                      |                                              | DZ2T0063NXD1A0000  | 26600              | DZ2F0063NXD1A0000  | 32000              | 1                |
|                       | 54-80                      |                                              | DZ2T0080NXD1A0000  | 26600              | DZ2F0080NXD1A0000  | 32000              | 1                |
|                       | 67-100                     |                                              | DZ2T0100NXD1A0000  | 26600              | DZ2F0100NXD1A0000  | 32000              | 1                |
|                       | 84-125                     |                                              | DZ2T0125NXD1A0000  | 35000              | DZ2F0125NXD1A0000  | 38600              | 1                |
|                       | 108-160                    |                                              | DZ2T0160NXD1A0000  | 38000              | DZ2F0160NXD1A0000  | 45400              | 1                |
| DZ4-250N              | 108-160                    | 80kA                                         | DZ4T0160NXD1A0000  | 44000              | DZ4F0160NXD1A0000  | 55600              | 1                |
|                       | 134-200                    |                                              | DZ4T0200NXD1A0000  | 48000              | DZ4F0200NXD1A0000  | 60200              | 1                |
|                       | 168-250                    |                                              | DZ4T0250NXD1A0000  | 50600              | DZ4F0250NXD1A0000  | 63500              | 1                |
| DZ6-400N              | 134-200                    |                                              | DZ6T0200NXD1A0000  | 58600              | DZ6F0200NXD1A0000  | 72400              | 1                |
|                       | 168-250                    |                                              | DZ6T0250NXD1A0000  | 61700              | DZ6F0250NXD1A0000  | 76300              | 1                |
|                       | 215-320                    |                                              | DZ6T0320NXD1A0000  | 63700              | DZ6F0320NXD1A0000  | 78700              | 1                |
|                       | 268-400                    |                                              | DZ6T0400NXD1A0000  | 63700              | DZ6F0400NXD1A0000  | 78700              | 1                |
| DZ7-800N              | 335-500                    |                                              | DZ7T0500NXD1A0000  | 77500              | DZ7F0500NXD1A0000  | 100200             | 1                |
|                       | 422-630                    |                                              | DZ7T0630NXD1A0000  | 77500              | DZ7F0630NXD1A0000  | 100200             | 1                |
|                       | 536-800                    |                                              | DZ7T0800NXD1A0000  | 104600             | DZ7F0800NXD1A0000  | 133200             | 1                |
| DZ2-160H              | 11-16                      | 80kA                                         | DZ2T0016HXC1A0000  | 35300              | DZ2F0016HXC1A0000  | 39000              | 1                |
|                       | 14-20                      |                                              | DZ2T0020HXC1A0000  | 35300              | DZ2F0020HXC1A0000  | 39000              | 1                |
|                       | 17-25                      |                                              | DZ2T0025HXC1A0000  | 35300              | DZ2F0025HXC1A0000  | 39000              | 1                |
|                       | 22-32                      |                                              | DZ2T0032HXC1A0000  | 35300              | DZ2F0032HXC1A0000  | 39000              | 1                |
|                       | 27-40                      |                                              | DZ2T0040HXC1A0000  | 35300              | DZ2F0040HXC1A0000  | 39000              | 1                |
|                       | 34-50                      |                                              | DZ2T0050HXC1A0000  | 35300              | DZ2F0050HXC1A0000  | 39000              | 1                |
|                       | 43-63                      |                                              | DZ2T0063HXD1A0000  | 34200              | DZ2F0063HXD1A0000  | 37900              | 1                |
|                       | 54-80                      |                                              | DZ2T0080HXD1A0000  | 34200              | DZ2F0080HXD1A0000  | 37900              | 1                |
|                       | 67-100                     |                                              | DZ2T0100HXD1A0000  | 34200              | DZ2F0100HXD1A0000  | 37900              | 1                |
|                       | 84-125                     |                                              | DZ2T0125HXD1A0000  | 51000              | DZ2F0125HXD1A0000  | 56400              | 1                |
|                       | 108-160                    |                                              | DZ2T0160HXD1A0000  | 54400              | DZ2F0160HXD1A0000  | 60800              | 1                |
| DZ4-250H              | 108-160                    |                                              | DZ4T0160HXD1A0000  | 61900              | DZ4F0160HXD1A0000  | 69100              | 1                |
|                       | 134-200                    |                                              | DZ4T0200HXD1A0000  | 72000              | DZ4F0200HXD1A0000  | 86600              | 1                |
|                       | 168-250                    |                                              | DZ4T0250HXD1A0000  | 75000              | DZ4F0250HXD1A0000  | 90100              | 1                |
| DZ6-400H              | 134-200                    |                                              | DZ6T0200HXD1A0000  | 80900              | DZ6F0200HXD1A0000  | 95800              | 1                |
|                       | 168-250                    |                                              | DZ6T0250HXD1A0000  | 83400              | DZ6F0250HXD1A0000  | 98800              | 1                |
|                       | 215-320                    |                                              | DZ6T0320HXD1A0000  | 84400              | DZ6F0320HXD1A0000  | 99800              | 1                |
|                       | 268-400                    |                                              | DZ6T0400HXD1A0000  | 84400              | DZ6F0400HXD1A0000  | 99800              | 1                |
| DZ7-800H              | 335-500                    |                                              | DZ7T0500HXD1A0000  | 100400             | DZ7F0500HXD1A0000  | 119800             | 1                |
|                       | 422-630                    |                                              | DZ7T0630HXD1A0000  | 100400             | DZ7F0630HXD1A0000  | 119800             | 1                |
|                       | 536-800                    |                                              | DZ7T0800HXD1A0000  | 118000             | DZ7F0800HXD1A0000  | 154200             | 1                |





d sine

DZ MCCB with Microprocessor Release

| Rating (A)<br>Icu (kA) | 40  | 63 | 100 | 160 | 200 | 250 | 400 | 630 | 800 | 1000 |
|------------------------|-----|----|-----|-----|-----|-----|-----|-----|-----|------|
| 36/50                  | DZ1 |    |     |     |     |     |     |     |     |      |
| 36/50/80/120           | DZ2 |    |     |     |     |     |     |     |     |      |
| 36/50/80/120/200       |     |    |     | DZ4 |     | DZ4 |     |     |     |      |
| 36/50/80/120/200       |     |    |     |     |     | DZ6 |     | DZ7 |     |      |

d sine

DZ MCCB with Microprocessor Release iTRP1



dsine-DZ iTRP1

- › Conforms to IS/IEC 60947-2
- › 16A to 1000A, 3P & 4P
- › 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- › Ics=100% Icu
- › Adjustable overload setting from 0.25 to 1.0 x In
- › Adjustable short-circuit setting from 1.5 to 12 x Ir\*
- › Switchable thermal memory
- › Variable trip class
- › Transparent sealable release cover
- › Compact size
- › Fixed, Plug-in, Drawout, Rotary and Motorised versions available
- › Wide range of accessories

| Type                                | Overload Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole              |                     | 4 Pole              |                     | Std. Pkg. (Nos.) |
|-------------------------------------|----------------------------|----------------------------------------------|---------------------|---------------------|---------------------|---------------------|------------------|
|                                     |                            |                                              | Cat No              | M.R.P. (₹) Per Unit | Cat No              | M.R.P. (₹) Per Unit |                  |
| DZ1-160D <sup>†</sup> /<br>DZ1-200D | 10-40                      | 36kA                                         | DZ1T0040DXF1A0000   | 34400               | DZ1F0040DXF1A0000   | 42000               | 1                |
|                                     | 16-63                      |                                              | DZ1T0063DXF1A0000   | 34400               | DZ1F0063DXF1A0000   | 42000               | 1                |
|                                     | 25-100                     |                                              | DZ1T0100DXF1A0000   | 34400               | DZ1F0100DXF1A0000   | 42000               | 1                |
|                                     | 40-160                     |                                              | DZ1T0160DXF1A0000   | 40500               | DZ1F0160DXF1A0000   | 56500               | 1                |
|                                     | 50-200                     |                                              | DZ1T0200DXF1A0000 ▲ | 53000               | DZ1F0200DXF1A0000 ▲ | 73300               | 1                |
| DZ2-160D <sup>†</sup>               | 10-40                      |                                              | DZ2T0040DXF1A0000   | 38000               | DZ2F0040DXF1A0000   | 46300               | 1                |
|                                     | 16-63                      |                                              | DZ2T0063DXF1A0000   | 38000               | DZ2F0063DXF1A0000   | 46300               | 1                |
|                                     | 25-100                     |                                              | DZ2T0100DXF1A0000   | 38000               | DZ2F0100DXF1A0000   | 46300               | 1                |
|                                     | 40-160                     |                                              | DZ2T0160DXF1A0000   | 44800               | DZ2F0160DXF1A0000   | 62200               | 1                |
| DZ4-250D                            | 40-160                     |                                              | DZ4T0160DXF1A0000   | 52400               | DZ4F0160DXF1A0000   | 73000               | 1                |
|                                     | 63-250                     |                                              | DZ4T0250DXF1A0000   | 54600               | DZ4F0250DXF1A0000   | 75600               | 1                |
| DZ6-400D                            | 63-250                     |                                              | DZ6T0250DXF1A0000   | 62600               | DZ6F0250DXF1A0000   | 81100               | 1                |
|                                     | 100-400                    |                                              | DZ6T0400DXF1A0000   | 65900               | DZ6F0400DXF1A0000   | 85300               | 1                |
| DZ7-800D/<br>DZ7-1000D              | 158-630                    |                                              | DZ7T0630DXF1A0000   | 74400               | DZ7F0630DXF1A0000   | 96400               | 1                |
|                                     | 200-800                    |                                              | DZ7T0800DXF1A0000   | 105800              | DZ7F0800DXF1A0000   | 131000              | 1                |
|                                     | 250-1000                   |                                              | DZ7T1000DXF1A0000 ▲ | 173800              | DZ7F1000DXF1A0000 ▲ | 241000              | 1                |
|                                     |                            |                                              |                     |                     |                     |                     |                  |
| DZ1-160N <sup>†</sup> /<br>DZ1-200N | 10-40                      | 50kA                                         | DZ1T0040NXF1A0000   | 39900               | DZ1F0040NXF1A0000   | 55000               | 1                |
|                                     | 16-63                      |                                              | DZ1T0063NXF1A0000   | 39900               | DZ1F0063NXF1A0000   | 55000               | 1                |
|                                     | 25-100                     |                                              | DZ1T0100NXF1A0000   | 39900               | DZ1F0100NXF1A0000   | 55000               | 1                |
|                                     | 40-160                     |                                              | DZ1T0160NXF1A0000   | 50100               | DZ1F0160NXF1A0000   | 65800               | 1                |
|                                     | 50-200                     |                                              | DZ1T0200NXF1A0000 ▲ | 62500               | DZ1F0200NXF1A0000 ▲ | 79100               | 1                |
| DZ2-160N <sup>†</sup>               | 10-40                      |                                              | DZ2T0040NXF1A0000   | 43900               | DZ2F0040NXF1A0000   | 60700               | 1                |
|                                     | 16-63                      |                                              | DZ2T0063NXF1A0000   | 43900               | DZ2F0063NXF1A0000   | 60700               | 1                |
|                                     | 25-100                     |                                              | DZ2T0100NXF1A0000   | 43900               | DZ2F0100NXF1A0000   | 60700               | 1                |
|                                     | 40-160                     |                                              | DZ2T0160NXF1A0000   | 55200               | DZ2F0160NXF1A0000   | 72400               | 1                |

**d sine** DZ MCCB with Microprocessor Release iTRP1

| Type                   | Overload Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole              |                     | 4 Pole              |                     | Std. Pkg. (Nos.) |
|------------------------|----------------------------|----------------------------------------------|---------------------|---------------------|---------------------|---------------------|------------------|
|                        |                            |                                              | Cat No              | M.R.P. (₹) Per Unit | Cat No              | M.R.P. (₹) Per Unit |                  |
| DZ4-250N               | 40-160                     | 50kA                                         | DZ4T0160NXF1A0000   | 60300               | DZ4F0160NXF1A0000   | 77300               | 1                |
|                        | 63-250                     |                                              | DZ4T0250NXF1A0000   | 64300               | DZ4F0250NXF1A0000   | 81500               | 1                |
| DZ6-400N               | 63-250                     |                                              | DZ6T0250NXF1A0000   | 69800               | DZ6F0250NXF1A0000   | 91100               | 1                |
|                        | 100-400                    |                                              | DZ6T0400NXF1A0000   | 73400               | DZ6F0400NXF1A0000   | 95800               | 1                |
| DZ7-800N/<br>DZ7-1000N | 158-630                    |                                              | DZ7T0630NXF1A0000   | 82200               | DZ7F0630NXF1A0000   | 105100              | 1                |
|                        | 200-800                    |                                              | DZ7T0800NXF1A0000   | 121200              | DZ7F0800NXF1A0000   | 154200              | 1                |
|                        | 250-1000                   |                                              | DZ7T1000NXF1A0000 ▲ | 216400              | DZ7F1000NXF1A0000 ▲ | 300100              | 1                |
| DZ2-160H <sup>#</sup>  | 10-40                      | 80kA                                         | DZ2T0040HXF1A0000   | 51400               | DZ2F0040HXF1A0000   | 63800               | 1                |
|                        | 16-63                      |                                              | DZ2T0063HXF1A0000   | 51400               | DZ2F0063HXF1A0000   | 63800               | 1                |
|                        | 25-100                     |                                              | DZ2T0100HXF1A0000   | 51400               | DZ2F0100HXF1A0000   | 63800               | 1                |
|                        | 40-160                     |                                              | DZ2T0160HXF1A0000   | 67100               | DZ2F0160HXF1A0000   | 84000               | 1                |
| DZ4-250H               | 40-160                     |                                              | DZ4T0160HXF1A0000   | 68900               | DZ4F0160HXF1A0000   | 86200               | 1                |
|                        | 63-250                     |                                              | DZ4T0250HXF1A0000   | 77200               | DZ4F0250HXF1A0000   | 106100              | 1                |
| DZ6-400H               | 63-250                     |                                              | DZ6T0250HXF1A0000   | 92500               | DZ6F0250HXF1A0000   | 122300              | 1                |
|                        | 100-400                    |                                              | DZ6T0400HXF1A0000   | 97400               | DZ6F0400HXF1A0000   | 128500              | 1                |
| DZ7-800H/<br>DZ7-1000H | 158-630                    |                                              | DZ7T0630HXF1A0000   | 100900              | DZ7F0630HXF1A0000   | 147000              | 1                |
|                        | 200-800                    |                                              | DZ7T0800HXF1A0000   | 146900              | DZ7F0800HXF1A0000   | 192100              | 1                |
|                        | 250-1000                   |                                              | DZ7T1000HXF1A0000 ▲ | 251100              | DZ7F1000HXF1A0000 ▲ | 363300              | 1                |

▲- Spreader Terminals are included

\* For DZ7 630A / 800A & 1000A: Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively

# For 25A, please contact nearest branch office

**Note:**

Breaking Capacity: D = 36kA, N = 50kA, H = 80kA

dsine DZ-120kA & 200kA @415V (Ics=100% Icu) MCCBs are available on request.

It is recommended to use spreader terminals for enhancing termination capacity

dsine DZ Selectivity Version MCCBs are available on request.

**d sine** DZ MCCB with Microprocessor Release iTRP3



**dsine-DZ iTRP3**

- › Conforms to IS/IEC 60947-2
- › 16A to 1000A, 3P & 4P
- › 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- › Ics=100% Icu
- › Adjustable overload setting from 0.25 to 1.0 x In
- › Adjustable short-circuit setting from 1.5 to 12 x Ir\*
- › Adjustable Instantaneous setting, 6 In & 12 In
- › Inbuilt ground fault protection from 20% to 70% of In
- › Adjustable neutral overload protection from 50% to 200% of Ir
- › Switchable thermal memory
- › Provision for release testing
- › Individual fault indication LEDs
- › Transparent sealable release cover
- › Compact size
- › Fixed, Plug-in, Drawout, Rotary and Motorised versions available
- › Wide range of accessories




**DZ MCCB with Microprocessor Release iTRP3**

| Type                                | Overload Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole               |                     | 4 Pole               |                     | Std. Pkg. (Nos.) |
|-------------------------------------|----------------------------|----------------------------------------------|----------------------|---------------------|----------------------|---------------------|------------------|
|                                     |                            |                                              | Cat No               | M.R.P. (₹) Per Unit | Cat No               | M.R.P. (₹) Per Unit |                  |
| DZ1-160D <sup>#</sup> /<br>DZ1-200D | 10-40                      | 36kA                                         | DZ1T0040DXH1A0000    | 57800               | DZ1F0040DXH1A0000    | 67300               | 1                |
|                                     | 16-63                      |                                              | DZ1T0063DXH1A0000    | 57800               | DZ1F0063DXH1A0000    | 67300               | 1                |
|                                     | 25-100                     |                                              | DZ1T0100DXH1A0000    | 57800               | DZ1F0100DXH1A0000    | 67300               | 1                |
|                                     | 40-160                     |                                              | DZ1T0160DXH1A0000    | 66400               | DZ1F0160DXH1A0000    | 81800               | 1                |
|                                     | 50-200                     |                                              | DZ1T0200DXH1A0000 ▲  | 75900               | DZ1F0200DXH1A0000 ▲  | 93100               | 1                |
| DZ2-160D <sup>#</sup>               | 10-40                      |                                              | DZ2T0040DXH1A0000    | 63100               | DZ2F0040DXH1A0000    | 73600               | 1                |
|                                     | 16-63                      |                                              | DZ2T0063DXH1A0000    | 63100               | DZ2F0063DXH1A0000    | 73600               | 1                |
|                                     | 25-100                     |                                              | DZ2T0100DXH1A0000    | 63100               | DZ2F0100DXH1A0000    | 73600               | 1                |
|                                     | 40-160                     |                                              | DZ2T0160DXH1A0000    | 72500               | DZ2F0160DXH1A0000    | 89300               | 1                |
| DZ4-250D                            | 40-160                     |                                              | DZ4T0160DXH1A0000    | 75000               | DZ4F0160DXH1A0000    | 92200               | 1                |
|                                     | 63-250                     |                                              | DZ4T0250DXH1A0000    | 78200               | DZ4F0250DXH1A0000    | 96000               | 1                |
| DZ6-400D                            | 63-250                     |                                              | DZ6T0250DXH1A0000    | 86300               | DZ6F0250DXH1A0000    | 100000              | 1                |
|                                     | 100-400                    |                                              | DZ6T0400DXH1A0000    | 90700               | DZ6F0400DXH1A0000    | 105200              | 1                |
| DZ7-800D/<br>DZ7-1000D              | 158-630                    |                                              | DZ7T0630DXH1A0000    | 101300              | DZ7F0630DXH1A0000    | 126200              | 1                |
|                                     | 200-800                    |                                              | DZ7T0800DXH1A0000    | 135800              | DZ7F0800DXH1A0000    | 161400              | 1                |
|                                     | 250-1000                   |                                              | DZ7T1000DXH1A0000 ▲  | 202300              | DZ7F1000DXH1A0000 ▲  | 267100              | 1                |
| DZ1-160N <sup>#</sup> /<br>DZ1-200N | 10-40                      | 50kA                                         | DZ1T0040NXH1A0000    | 64000               | DZ1F0040NXH1A0000    | 76300               | 1                |
|                                     | 16-63                      |                                              | DZ1T0063NXH1A0000    | 64000               | DZ1F0063NXH1A0000    | 76300               | 1                |
|                                     | 25-100                     |                                              | DZ1T0100NXH1A0000    | 64000               | DZ1F0100NXH1A0000    | 76300               | 1                |
|                                     | 40-160                     |                                              | DZ1T0160NXH1A0000    | 76000               | DZ1F0160NXH1A0000    | 91000               | 1                |
|                                     | 50-200                     |                                              | DZ1T0200NXH1A0000 ▲  | 85400               | DZ1F0200NXH1A0000 ▲  | 104300              | 1                |
| DZ2-160N <sup>#</sup>               | 10-40                      |                                              | DZ2T0040NXH1A0000    | 69800               | DZ2F0040NXH1A0000    | 83300               | 1                |
|                                     | 16-63                      |                                              | DZ2T0063NXH1A0000    | 69800               | DZ2F0063NXH1A0000    | 83300               | 1                |
|                                     | 25-100                     |                                              | DZ2T0100NXH1A0000    | 69800               | DZ2F0100NXH1A0000    | 83300               | 1                |
|                                     | 40-160                     |                                              | DZ2T0160NXH1A0000    | 83000               | DZ2F0160NXH1A0000    | 99500               | 1                |
| DZ4-250N                            | 40-160                     |                                              | DZ4T0160NXH1A0000    | 84700               | DZ4F0160NXH1A0000    | 103300              | 1                |
|                                     | 63-250                     |                                              | DZ4T0250NXH1A0000    | 88000               | DZ4F0250NXH1A0000    | 107500              | 1                |
| DZ6-400N                            | 63-250                     |                                              | DZ6T0250NXH1A0000    | 92400               | DZ6F0250NXH1A0000    | 110200              | 1                |
|                                     | 100-400                    |                                              | DZ6T0400NXH1A0000    | 97300               | DZ6F0400NXH1A0000    | 115900              | 1                |
| DZ7-800N/<br>DZ7-1000N              | 158-630                    |                                              | DZ7T0630NXH1A0000    | 107800              | DZ7F0630NXH1A0000    | 142600              | 1                |
|                                     | 200-800                    |                                              | DZ7T0800NXH1A0000    | 166200              | DZ7F0800NXH1A0000    | 197300              | 1                |
|                                     | 250-1000                   |                                              | DZ7T1000NXH1A0000 ▲  | 252000              | DZ7F1000NXH1A0000 ▲  | 332500              | 1                |
| DZ2-160H <sup>#</sup>               | 10-40                      | 80kA                                         | DZ2T0040HXXH1A0000   | 83200               | DZ2F0040HXXH1A0000   | 98900               | 1                |
|                                     | 16-63                      |                                              | DZ2T0063HXXH1A0000   | 83200               | DZ2F0063HXXH1A0000   | 98900               | 1                |
|                                     | 25-100                     |                                              | DZ2T0100HXXH1A0000   | 83200               | DZ2F0100HXXH1A0000   | 98900               | 1                |
|                                     | 40-160                     |                                              | DZ2T0160HXXH1A0000   | 99000               | DZ2F0160HXXH1A0000   | 110400              | 1                |
| DZ4-250H                            | 40-160                     |                                              | DZ4T0160HXXH1A0000   | 101500              | DZ4F0160HXXH1A0000   | 117100              | 1                |
|                                     | 63-250                     |                                              | DZ4T0250HXXH1A0000   | 116200              | DZ4F0250HXXH1A0000   | 136900              | 1                |
| DZ6-400H                            | 63-250                     |                                              | DZ6T0250HXXH1A0000   | 128400              | DZ6F0250HXXH1A0000   | 160800              | 1                |
|                                     | 100-400                    |                                              | DZ6T0400HXXH1A0000   | 135400              | DZ6F0400HXXH1A0000   | 169200              | 1                |
| DZ7-800H/<br>DZ7-1000H              | 158-630                    |                                              | DZ7T0630HXXH1A0000   | 146500              | DZ7F0630HXXH1A0000   | 201400              | 1                |
|                                     | 200-800                    |                                              | DZ7T0800HXXH1A0000   | 196700              | DZ7F0800HXXH1A0000   | 245500              | 1                |
|                                     | 250-1000                   |                                              | DZ7T1000HXXH1A0000 ▲ | 316300              | DZ7F1000HXXH1A0000 ▲ | 410100              | 1                |

▲ - Spreader Terminals are included

\* For DZ7 630A / 800A & 1000A: Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively

# For 25A, please contact nearest branch office

**Note:**

Breaking Capacity : D = 36kA, N = 50kA, H = 80kA

dsine DZ 120kA & 200kA @415V (Ics=100% Icu) MCCBs are available on request.

It is recommended to use spreader terminals for enhancing termination capacity

dsine DZ Selectivity Version MCCBs are available on request.



| Rating (A)<br>Icu (kA) | 40               | 63 | 100 | 160 | 200 | 250 | 400 | 630 | 800 | 1000 |
|------------------------|------------------|----|-----|-----|-----|-----|-----|-----|-----|------|
|                        | DZ1 <sup>§</sup> |    |     |     |     |     |     |     |     |      |
| 36/50/80/120           | DZ2              |    |     |     |     |     |     |     |     |      |
| 36/50/80/120/200       |                  |    |     | DZ4 |     | DZ4 |     |     |     |      |
| 36/50/80/120/200       |                  |    |     |     |     | DZ6 |     | DZ7 |     |      |

<sup>§</sup> iTRP4 Only

## **d sine** DZ MCCB with Microprocessor Releases iTRP4 & iTRP5

- › Confirms to IS/IEC 60947-2
- › 16A to 1000A, 3P & 4P
- › 36kA, 50kA, 80kA, 120kA & 200kA breaking capacities
- › Ics=100% Icu
- › Adjustable Overload Settings from 0.25 to 1 In (in steps of 0.01)
- › Adjustable Short Circuit Settings from 1.5 to 12 Ir (in steps of 0.1)
- › Adjustable Instantaneous Settings from 1.5 to 12 Ir (in steps of 0.1)
- › In-built Ground Fault Protection from 0.1 to 1 In (in steps of 0.05)
- › Adjustable Neutral Overload Protection from 50% to 160% of Ir
- › Local LCD Display Menu Navigation using Keypad
- › Modbus RTU Communication Capable
- › Switchable Thermal Memory
- › Provision for Release Testing
- › Variable trip class
- › Transparent sealable release cover
- › Compact size
- › Wide range of accessories

**Advance Metering  
Solution**



## Measurement & Diagnostics

- › Advanced Current based protection function via iTRP4 Release
- › Advanced Energy based protection function via iTRP5 Release
- › I<sup>2</sup>T, SI, LI-VI based over load curves
- › Advanced Protections like Maximum Demand, Phase Sequence, THD etc
- › Common Fault Indication and Diagnostic LED
- › Self, Auxiliary and Battery Mode
- › Trip & Event Records available
- › Communication module for remote monitoring & control
- › Temperature module with thermal sensors for online temperature monitoring
- › Zone Selective Interlocking (ZSI) module for system level coordination of faults

## Accessories for iTRP4 & iTRP5 [8538]

| Modules                                   | Details |
|-------------------------------------------|---------|
| Communication Module                      | *       |
| Aux. Power Supply Module                  |         |
| Temperature Module (with Thermal Sensors) |         |
| Zone Selective Interlocking Module        |         |
| Programmable Relay Module                 |         |

\* On request





**d sine** DZ MCCBs for Motor back-up Protection

- › Range: 16A to 800A, 50kA
- › Suitable for isolation
- › Wide Range of snap fit Internal and External Accessories

| 3 Pole                |                    |                                               |                     |                     |                  |
|-----------------------|--------------------|-----------------------------------------------|---------------------|---------------------|------------------|
| Type                  | Current Rating (A) | Breaking Capacity Icu at 415V. AC, 50Hz. (kA) | Cat. No.            | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| DZ0-125N              | 32                 | 50kA                                          | DZ0T0032N5M1A0000   | 9400                | 1                |
|                       | 40                 |                                               | DZ0T0040N5M1A0000   | 9400                | 1                |
|                       | 63                 |                                               | DZ0T0063N5M1A0000   | 9300                | 1                |
|                       | 80                 |                                               | DZ0T0080N5M1A0000   | 9300                | 1                |
|                       | 100                |                                               | DZ0T0100N5M1A0000   | 9300                | 1                |
|                       | 125                |                                               | DZ0T0125N5M1A0000 ▲ | 12200               | 1                |
| DZ1-160N/<br>DZ1-200N | 32                 |                                               | DZ1T0032NXM1A0000   | 12300               | 1                |
|                       | 40                 |                                               | DZ1T0040NXM1A0000   | 12300               | 1                |
|                       | 63                 |                                               | DZ1T0063NXM1A0000   | 12200               | 1                |
|                       | 80                 |                                               | DZ1T0080NXM1A0000   | 12200               | 1                |
|                       | 100                |                                               | DZ1T0100NXM1A0000   | 12200               | 1                |
|                       | 125                |                                               | DZ1T0125NXM1A0000   | 12700               | 1                |
|                       | 160                |                                               | DZ1T0160NXM1A0000   | 14600               | 1                |
|                       | 200                |                                               | DZ1T0200NXM1A0000 ▲ | 27300               | 1                |
| DZ4-250N              | 250                |                                               | DZ4T0250NXM1A0000   | 32300               | 1                |
| DZ6-400N              | 320                |                                               | DZ6T0320NXM1A0000   | 40800               | 1                |
|                       | 400                |                                               | DZ6T0400NXM1A0000   | 42800               | 1                |
| DZ7-800N              | 500                |                                               | DZ7T0500NXM1A0000   | 47300               | 1                |
|                       | 630                |                                               | DZ7T0630NXM1A0000   | 50300               | 1                |
|                       | 800                |                                               | DZ7T0800NXM1A0000   | 52400               | 1                |

▲- Spreader Terminals are included

**Note:**

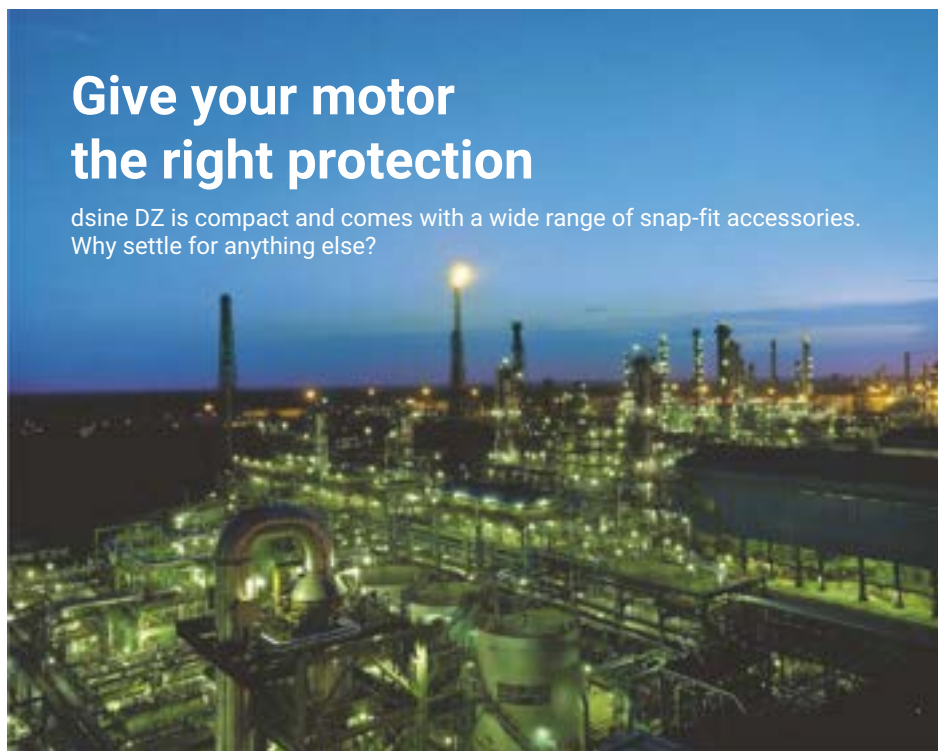
Please contact nearest branch office for Fuseless Type 2 Co-ordination selection charts.  
For Microprocessor based Motor back-up Protection MCCBs, please contact nearest branch office.  
For lower HP Motors, Please select MMS. Details are given on page no.21



Representative Application Image

## Give your motor the right protection

dsine DZ is compact and comes with a wide range of snap-fit accessories. Why settle for anything else?



**d sine** -DZ



## d sine DZ 800V MCCB Range [8536]

| Rating (A)<br>Icu (kA) @ 800V | 200 | 250 | 320 | 400 | 500 | 630 |
|-------------------------------|-----|-----|-----|-----|-----|-----|
| 25/36/50                      | DZ6 |     |     |     |     |     |
| 36/50                         |     |     |     |     | DZ7 |     |



dsine-DZ TM

- › Conforms to IS/IEC 60947-2
- › 200A to 630A, 3P/4P
- › 25kA, 36kA & 50kA @800V breaking capacities
- › Ics=100% Icu
- › Rated insulation voltage: 1250V AC rms
- › Adjustable overload settings:  $0.67 - 1.0 \times I_n$
- › Adjustable short-circuit settings:  $6 - 12 \times I_n^{**}$
- › Transparent sealable release cover
- › Ambient Temperature Compensation
- › High Electrical & Mechanical life<sup>\*\*\*</sup>
- › Manual and Rotary versions available
- › Standard Back Insulating Plates included for 3P MCCBs
- › Wide range of accessories

## d sine DZ 800V with Thermal - Magnetic Release

| Type     | Overload Release Range (A) | Breaking Capacity Icu at 800V AC, 50Hz. (kA) | 3 Pole            |                     | 4 Pole            |                     | Std. Pkg. (Nos.) |
|----------|----------------------------|----------------------------------------------|-------------------|---------------------|-------------------|---------------------|------------------|
|          |                            |                                              | Cat No            | M.R.P. (₹) Per Unit | Cat No            | M.R.P. (₹) Per Unit |                  |
| DZ6-400W | 134-200                    | 25kA                                         | DZ6T0200WXd1A0000 | *                   | DZ6F0200WXd1A0000 | *                   | 1                |
|          | 168-250                    |                                              | DZ6T0250WXd1A0000 |                     | DZ6F0250WXd1A0000 |                     | 1                |
| DZ6-400Y | 134-200                    | 36kA                                         | DZ6T0200YXd1A0000 | *                   | DZ6F0200YXd1A0000 | *                   | 1                |
|          | 168-250                    |                                              | DZ6T0250YXd1A0000 |                     | DZ6F0250YXd1A0000 |                     | 1                |
|          | 214-320                    |                                              | DZ6T0320YXd1A0000 |                     | DZ6F0320YXd1A0000 |                     | 1                |
|          | 268-400                    |                                              | DZ6T0400YXd1A0000 |                     | DZ6F0400YXd1A0000 |                     | 1                |
| DZ7-800Y | 335-500                    |                                              | DZ7T0500YXd1A0000 |                     | DZ7F0500YXd1A0000 |                     | 1                |
|          | 422-630                    |                                              | DZ7T0630YXd1A0000 |                     | DZ7F0630YXd1A0000 |                     | 1                |
| DZ6-400Z | 134-200                    | 50kA                                         | DZ6T0200ZXd1A0000 | *                   | DZ6F0200ZXd1A0000 | *                   | 1                |
|          | 168-250                    |                                              | DZ6T0250ZXd1A0000 |                     | DZ6F0250ZXd1A0000 |                     | 1                |
|          | 214-320                    |                                              | DZ6T0320ZXd1A0000 |                     | DZ6F0320ZXd1A0000 |                     | 1                |
|          | 268-400                    |                                              | DZ6T0400ZXd1A0000 |                     | DZ6F0400ZXd1A0000 |                     | 1                |
| DZ7-800Z | 335-500                    |                                              | DZ7T0500ZXd1A0000 |                     | DZ7F0500ZXd1A0000 |                     | 1                |
|          | 422-630                    |                                              | DZ7T0630ZXd1A0000 |                     | DZ7F0630ZXd1A0000 |                     | 1                |

\* Price on request

\*\* For DZ7 630A - Magnetic setting from 6 In to 10 In

\*\*\* Mechanical Life - 20000 Operations; Electrical Life - 4000 Operations (DZ6) & 2500 Operations (DZ7)

### General Information

- › Ambient temperature compensation in MCCBs helps prevent nuisance tripping by adjusting for temperature variations that affect the thermal elements. High ambient temperatures can cause premature tripping, while low temperatures may delay it. This is most suitable for Solar application.



| Rating (A)<br>Icu (kA) @ 800V | 125 | 160 | 200 | 250 | 320 | 400 | 500 | 630 | 800 |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 25/36/50                      | DZ6 |     |     |     |     |     |     |     |     |
| 36/50                         |     |     |     |     |     |     | DZ7 |     |     |



dsine-DZ iTRP1

- › Conforms to IS/IEC 60947-2
- › 125A to 800A, 3P/4P
- › 25kA, 36kA & 50kA @800V breaking capacities
- › Ics=100% Icu
- › Rated insulation voltage: 1250V AC rms
- › Adjustable overload setting from 0.25 to 1.0 x In
- › Adjustable short-circuit setting from 1.5 to 12 x Ir\*\*
- › Switchable thermal memory
- › Variable trip class
- › Transparent sealable release cover
- › High Electrical & Mechanical life\*\*\*
- › Manual and Rotary versions available
- › Standard Back Insulating Plates included for 3P MCCBs
- › Wide range of accessories

**d sine** DZ 800V with Microprocessor Release iTRP1

| Type     | Overload Release Range (A) | Breaking Capacity Icu at 800V AC, 50Hz. (kA) | 3 Pole            |                     | 4 Pole            |                     | Std. Pkg. (Nos.) |
|----------|----------------------------|----------------------------------------------|-------------------|---------------------|-------------------|---------------------|------------------|
|          |                            |                                              | Cat No            | M.R.P. (₹) Per Unit | Cat No            | M.R.P. (₹) Per Unit |                  |
| DZ6-400W | 31-125                     | 25kA                                         | DZ6T0125WXF1A0000 | *                   | DZ6F0125WXF1A0000 | *                   | 1                |
|          | 40-160                     |                                              | DZ6T0160WXF1A0000 |                     | DZ6F0160WXF1A0000 |                     | 1                |
|          | 50-200                     |                                              | DZ6T0200WXF1A0000 |                     | DZ6F0200WXF1A0000 |                     | 1                |
|          | 63-250                     |                                              | DZ6T0250WXF1A0000 |                     | DZ6F0250WXF1A0000 |                     | 1                |
|          | 80-320                     |                                              | DZ6T0320WXF1A0000 |                     | DZ6F0320WXF1A0000 |                     | 1                |
|          | 100-400                    |                                              | DZ6T0400WXF1A0000 |                     | DZ6F0400WXF1A0000 |                     | 1                |
| DZ6-400Y | 31-125                     | 36kA                                         | DZ6T0125YXF1A0000 | *                   | DZ6F0125YXF1A0000 | *                   | 1                |
|          | 40-160                     |                                              | DZ6T0160YXF1A0000 |                     | DZ6F0160YXF1A0000 |                     | 1                |
|          | 50-200                     |                                              | DZ6T0200YXF1A0000 |                     | DZ6F0200YXF1A0000 |                     | 1                |
|          | 63-250                     |                                              | DZ6T0250YXF1A0000 |                     | DZ6F0250YXF1A0000 |                     | 1                |
|          | 80-320                     |                                              | DZ6T0320YXF1A0000 |                     | DZ6F0320YXF1A0000 |                     | 1                |
|          | 100-400                    |                                              | DZ6T0400YXF1A0000 |                     | DZ6F0400YXF1A0000 |                     | 1                |
| DZ7-800Y | 125-500                    |                                              | DZ7T0500YXF1A0000 |                     | DZ7F0500YXF1A0000 |                     | 1                |
|          | 156-630                    |                                              | DZ7T0630YXF1A0000 |                     | DZ7F0630YXF1A0000 |                     | 1                |
|          | 200-800                    |                                              | DZ7T0800YXF1A0000 |                     | DZ7F0800YXF1A0000 |                     | 1                |
| DZ6-400Z | 31-125                     | 50kA                                         | DZ6T0125ZXF1A0000 | *                   | DZ6F0125ZXF1A0000 | *                   | 1                |
|          | 40-160                     |                                              | DZ6T0160ZXF1A0000 |                     | DZ6F0160ZXF1A0000 |                     | 1                |
|          | 50-200                     |                                              | DZ6T0200ZXF1A0000 |                     | DZ6F0200ZXF1A0000 |                     | 1                |
|          | 63-250                     |                                              | DZ6T0250ZXF1A0000 |                     | DZ6F0250ZXF1A0000 |                     | 1                |
|          | 80-320                     |                                              | DZ6T0320ZXF1A0000 |                     | DZ6F0320ZXF1A0000 |                     | 1                |
|          | 100-400                    |                                              | DZ6T0400ZXF1A0000 |                     | DZ6F0400ZXF1A0000 |                     | 1                |
| DZ7-800Z | 125-500                    |                                              | DZ7T0500ZXF1A0000 |                     | DZ7F0500ZXF1A0000 |                     | 1                |
|          | 156-630                    |                                              | DZ7T0630ZXF1A0000 |                     | DZ7F0630ZXF1A0000 |                     | 1                |
|          | 200-800                    |                                              | DZ7T0800ZXF1A0000 |                     | DZ7F0800ZXF1A0000 |                     | 1                |

\* Price on request

\*\* For DZ7 630A / 800A, Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively

\*\*\* Mechanical Life - 20000 Operations; Electrical Life - 4000 Operations (DZ6) & 2500 Operations (DZ7)



| Rating (A)<br>Icu (kA) @ 800V | 200 | 250 | 320 | 400 | 500 | 630 | 800 |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|
| 25/36/50                      | DZ6 |     |     |     |     |     |     |
| 36/50                         |     |     |     |     | DZ7 |     |     |



**dsine-DZ iTRP3**

- › Conforms to IS/IEC 60947-2
- › 125A to 800A, 3P/4P
- › 25kA, 36kA & 50kA @800V breaking capacities
- › Ics=100% Icu
- › Rated insulation voltage: 1250V AC rms
- › Adjustable overload setting from 0.25 to 1.0 x In
- › Adjustable short-circuit setting from 1.5 to 12 x Ir\*\*
- › Adjustable Instantaneous setting, 6 In & 12 In
- › Inbuilt ground fault protection from 20% to 70% of In
- › Adjustable neutral overload protection from 50% to 200% of Ir
- › Switchable thermal memory
- › Variable trip class
- › Individual fault indication LEDs
- › Transparent sealable release cover
- › High Electrical & Mechanical life\*\*\*
- › Manual and Rotary versions available
- › Standard Back Insulating Plates included for 3P MCCBs
- › Wide range of accessories

**d sine** DZ 800V with Microprocessor Release iTRP3

| Type     | Overload Release Range (A) | Breaking Capacity Icu at 800V AC, 50Hz. (kA) | 3 Pole            |                     | 4 Pole            |                     | Std. Pkg. (Nos.) |
|----------|----------------------------|----------------------------------------------|-------------------|---------------------|-------------------|---------------------|------------------|
|          |                            |                                              | Cat No            | M.R.P. (₹) Per Unit | Cat No            | M.R.P. (₹) Per Unit |                  |
| DZ6-400W | 50-200                     | 25kA                                         | DZ6T0200WXH1A0000 | *                   | DZ6F0200WXH1A0000 | *                   | 1                |
|          | 63-250                     |                                              | DZ6T0250WXH1A0000 |                     | DZ6F0250WXH1A0000 |                     | 1                |
|          | 80-320                     |                                              | DZ6T0320WXH1A0000 |                     | DZ6F0320WXH1A0000 |                     | 1                |
|          | 100-400                    |                                              | DZ6T0400WXH1A0000 |                     | DZ6F0400WXH1A0000 |                     | 1                |
| DZ6-400Y | 50-200                     | 36kA                                         | DZ6T0200YXH1A0000 | *                   | DZ6F0200YXH1A0000 | *                   | 1                |
|          | 63-250                     |                                              | DZ6T0250YXH1A0000 |                     | DZ6F0250YXH1A0000 |                     | 1                |
|          | 80-320                     |                                              | DZ6T0320YXH1A0000 |                     | DZ6F0320YXH1A0000 |                     | 1                |
|          | 100-400                    |                                              | DZ6T0400YXH1A0000 |                     | DZ6F0400YXH1A0000 |                     | 1                |
| DZ7-800Y | 125-500                    |                                              | DZ7T0500YXH1A0000 |                     | DZ7F0500YXH1A0000 |                     | 1                |
|          | 156-630                    |                                              | DZ7T0630YXH1A0000 |                     | DZ7F0630YXH1A0000 |                     | 1                |
|          | 200-800                    |                                              | DZ7T0800YXH1A0000 |                     | DZ7F0800YXH1A0000 |                     | 1                |
| DZ6-400Z | 50-200                     | 50kA                                         | DZ6T0200ZXH1A0000 | *                   | DZ6F0200ZXH1A0000 | *                   | 1                |
|          | 63-250                     |                                              | DZ6T0250ZXH1A0000 |                     | DZ6F0250ZXH1A0000 |                     | 1                |
|          | 80-320                     |                                              | DZ6T0320ZXH1A0000 |                     | DZ6F0320ZXH1A0000 |                     | 1                |
|          | 100-400                    |                                              | DZ6T0400ZXH1A0000 |                     | DZ6F0400ZXH1A0000 |                     | 1                |
| DZ7-800Z | 125-500                    |                                              | DZ7T0500ZXH1A0000 |                     | DZ7F0500ZXH1A0000 |                     | 1                |
|          | 156-630                    |                                              | DZ7T0630ZXH1A0000 |                     | DZ7F0630ZXH1A0000 |                     | 1                |
|          | 200-800                    |                                              | DZ7T0800ZXH1A0000 |                     | DZ7F0800ZXH1A0000 |                     | 1                |

\* Price on request

\*\* For DZ7 630A / 800A, Magnetic setting from 1.5 In to 10 In / 1.5 In to 8 In respectively

\*\*\* Mechanical Life - 20000 Operations; Electrical Life - 4000 Operations (DZ6) & 2500 Operations (DZ7)





## Accessories for DZ MCCBs [8538]



**Auxiliary Contact  
Trip Alarm Contact**



**Shunt Release**



**UV Release**

| Internal Accessories                                |             |                        |                        |
|-----------------------------------------------------|-------------|------------------------|------------------------|
| Description                                         | Cat No      | M.R.P. (₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Auxiliary Contact/ Trip Alarm Contact [8538]</b> |             |                        |                        |
| DZ0 Aux/TAC 1 C/o                                   | EM909660000 | 960                    | 1                      |
| DZ1/2/4 Aux/TAC 1 C/o                               | EM901100000 | 1500                   | 1                      |
| DZ6/7 Aux/TAC 1 C/o                                 | EM901140000 | 1630                   | 1                      |
| <b>Shunt Release [8538]</b>                         |             |                        |                        |
| DZ0 Shunt 110/240/415V AC                           | EM905200M00 | 1300                   | 1                      |
| DZ1/2/4 Shunt 415V AC                               | EM900320P00 | 3980                   | 1                      |
| DZ1/2/4 Shunt 240V AC                               | EM900320B00 | 3980                   | 1                      |
| DZ1/2/4 Shunt 110V AC                               | EM900320A00 | 3980                   | 1                      |
| DZ1/2/4 Shunt 48V AC                                | EM900320J00 | 3980                   | 1                      |
| DZ1/2/4 Shunt 24V AC                                | EM900320G00 | 3980                   | 1                      |
| DZ1/2/4 Shunt 220V DC                               | EM900320200 | 3980                   | 1                      |
| DZ1/2/4 Shunt 110V DC                               | EM900320100 | 3980                   | 1                      |
| DZ1/2/4 Shunt 48V DC                                | EM900320500 | 3980                   | 1                      |
| DZ1/2/4 Shunt 24V DC                                | EM900320400 | 3980                   | 1                      |
| DZ1/2/4 Shunt 12V DC                                | EM900320300 | 3980                   | 1                      |
| DZ6/7 Shunt 415V AC                                 | EM900340P00 | 4460                   | 1                      |
| DZ6/7 Shunt 240V AC                                 | EM900340B00 | 4460                   | 1                      |
| DZ6/7 Shunt 110V AC                                 | EM900340E00 | 4460                   | 1                      |
| DZ6/7 Shunt 48V AC                                  | EM900340J00 | 4460                   | 1                      |
| DZ6/7 Shunt 24V AC                                  | EM900340G00 | 4460                   | 1                      |
| DZ6/7 Shunt 220V DC                                 | EM900340200 | 4460                   | 1                      |
| DZ6/7 Shunt 110V DC                                 | EM900340100 | 4460                   | 1                      |
| DZ6/7 Shunt 48V DC                                  | EM900340500 | 4460                   | 1                      |
| DZ6/7 Shunt 24V DC                                  | EM900340400 | 4460                   | 1                      |
| DZ6/7 Shunt 12V DC                                  | EM900340300 | 4460                   | 1                      |

| Internal Accessories                |             |                        |                        |
|-------------------------------------|-------------|------------------------|------------------------|
| Description                         | Cat No      | M.R.P. (₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Under Voltage Release [8538]</b> |             |                        |                        |
| DZ0 UVR 240V AC                     | EM90518B000 | 3910                   | 1                      |
| DZ1/2/4 UVR 415V AC                 | EM90031P000 | 5150                   | 1                      |
| DZ1/2/4 UVR 240V AC                 | EM90031B000 | 5150                   | 1                      |
| DZ1/2/4 UVR 110V AC                 | EM90031E000 | 5150                   | 1                      |
| DZ1/2/4 UVR 48V AC                  | EM90031J000 | 5150                   | 1                      |
| DZ1/2/4 UVR 24V AC                  | EM90031G000 | 5150                   | 1                      |
| DZ1/2/4 UVR 220V DC                 | EM900312000 | 5150                   | 1                      |
| DZ1/2/4 UVR 110V DC                 | EM900311000 | 5150                   | 1                      |
| DZ1/2/4 UVR 48V DC                  | EM900315000 | 5150                   | 1                      |
| DZ1/2/4 UVR 24V DC                  | EM900314000 | 5150                   | 1                      |
| DZ1/2/4 UVR 12V DC                  | EM900313000 | 5150                   | 1                      |
| DZ6/7 UVR 415V AC                   | EM90033P000 | 5720                   | 1                      |
| DZ6/7 UVR 240V AC                   | EM90033B000 | 5720                   | 1                      |
| DZ6/7 UVR 110V AC                   | EM90033E000 | 5720                   | 1                      |
| DZ6/7 UVR 48V AC                    | EM90033J000 | 5720                   | 1                      |
| DZ6/7 UVR 24V AC                    | EM90033G000 | 5720                   | 1                      |
| DZ6/7 UVR 220V DC                   | EM900332000 | 5720                   | 1                      |
| DZ6/7 UVR 110V DC                   | EM900331000 | 5720                   | 1                      |
| DZ6/7 UVR 48V DC                    | EM900335000 | 5720                   | 1                      |
| DZ6/7 UVR 24V DC                    | EM900334000 | 5720                   | 1                      |
| DZ6/7 UVR 12V DC                    | EM900333000 | 5720                   | 1                      |



## Accessories for DZ MCCBs [8538]



Direct ROM



Extended ROM



Key Lock



EOM



Spreaders Terminals



Rear Terminals



Box Clamp Terminals

| External Accessories                                       |             |                        |                        |
|------------------------------------------------------------|-------------|------------------------|------------------------|
| Description                                                | Cat No      | M.R.P. (₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Rotary Mechanism (Direct/Extended) [8538]</b>           |             |                        |                        |
| DZ0 Direct ROM                                             | EM909690000 | 1850                   | 1                      |
| DZ1 Direct ROM                                             | EM902070000 | 2060                   | 1                      |
| DZ2 Direct ROM                                             | EM902080000 | 2350                   | 1                      |
| DZ4 Direct ROM                                             | EM903860000 | 2740                   | 1                      |
| DZ6 Direct ROM                                             | EM902280000 | 3390                   | 1                      |
| DZ7 Direct ROM                                             | EM903500000 | 4700                   | 1                      |
| DZ0 Extended ROM                                           | EM909700000 | 2660                   | 1                      |
| DZ1 Extended ROM                                           | EM902090000 | 2780                   | 1                      |
| DZ2 Extended ROM                                           | EM902100000 | 3270                   | 1                      |
| DZ4 Extended ROM                                           | EM902930000 | 4150                   | 1                      |
| DZ6 Extended ROM                                           | EM902760000 | 5470                   | 1                      |
| DZ7 Extended ROM                                           | EM903810000 | 5740                   | 1                      |
| <b>Panel Door mounted Key lock for Extended ROM [8301]</b> |             |                        |                        |
| DZ0/1/2/4 Key Lock Type 1                                  | EM990310000 | 7620                   | 1                      |
| DZ0/1/2/4 Key Lock Type 2                                  | EM99031000A | 7620                   | 1                      |
| DZ0/1/2/4 Key Lock Type 3                                  | EM99031000B | 7620                   | 1                      |
| DZ0/1/2/4 Key Lock Type 12                                 | EM99031000C | 7620                   | 1                      |
| DZ0/1/2/4 Key Lock Type 23                                 | EM99031000D | 7620                   | 1                      |
| DZ6/7 Key Lock Type 1                                      | EM991410000 | 9040                   | 1                      |
| DZ6/7 Key Lock Type 2                                      | EM99141000A | 9040                   | 1                      |
| DZ6/7 Key Lock Type 3                                      | EM99141000B | 9040                   | 1                      |
| DZ6/7 Key Lock Type 12                                     | EM99141000C | 9040                   | 1                      |
| DZ6/7 Key Lock Type 23                                     | EM99141000D | 9040                   | 1                      |
| <b>Electrical Operating Mechanism [8538]</b>               |             |                        |                        |
| DZ1 240V AC                                                | EM90490B000 | 47700                  | 1                      |
| DZ2 240V AC                                                | EM90545B000 | 52100                  | 1                      |
| DZ4 240V AC                                                | *           |                        |                        |
| DZ6 240V AC                                                | EM90355B000 | 68200                  | 1                      |
| DZ7 240V AC                                                | EM90480B000 | 100600                 | 1                      |

\* Price on request

### Note:

For Electrical Operating Mechanism, refer wiring diagram from Product Catalogue or Product Manual.

| External Accessories                               |              |                        |                        |
|----------------------------------------------------|--------------|------------------------|------------------------|
| Description                                        | Cat No       | M.R.P. (₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Spreader Terminals (Up to 690V AC #) [8538]</b> |              |                        |                        |
| DZ0-100 3 Pole                                     | CM977850000® | 640                    | Set of 6               |
| DZ0-100 4 Pole                                     | CM979210000® | 1000                   | Set of 8               |
| DZ1, DZ2-160 3 Pole                                | EM906090000  | 2440                   | Set of 6               |
| DZ1, DZ2-160 4 Pole                                | EM906100000  | 3190                   | Set of 8               |
| DZ4-250 - 3 Pole                                   | EM940960000  | 3810                   | Set of 6               |
| DZ4-250 - 4 Pole                                   | EM940970000  | 5090                   | Set of 8               |
| DZ6-400 - 3 Pole                                   | EM906110000  | 5490                   | Set of 6               |
| DZ6-400 - 4 Pole                                   | EM906120000  | 7380                   | Set of 8               |
| DZ7-630 - 3 Pole                                   | EM970500000  | 13000                  | Set of 6               |
| DZ7-630 - 4 Pole                                   | EM970520000  | 16600                  | Set of 8               |
| DZ7-800 - 3 Pole                                   | EM970510000  | 16800                  | Set of 6               |
| DZ7-800 - 4 Pole                                   | EM970530000  | 20600                  | Set of 8               |
| <b>Rear Terminals [8538]</b>                       |              |                        |                        |
| DZ1-160 3 Pole                                     | EM911760000  | 6220                   | Set of 6               |
| DZ1-160 4 Pole                                     | EM911770000  | 8880                   | Set of 8               |
| DZ2-160 3 Pole                                     | EM920880000  | 6890                   | Set of 6               |
| DZ2-160 4 Pole                                     | EM920890000  | 9780                   | Set of 8               |
| DZ4-250 - 3 Pole                                   | EM940580000  | 8340                   | Set of 6               |
| DZ4-250 - 4 Pole                                   | EM940590000  | 12000                  | Set of 8               |
| DZ6-400 - 3 Pole                                   | EM960450000  | 11300                  | Set of 6               |
| DZ6-400 - 4 Pole                                   | EM960460000  | 16400                  | Set of 8               |
| DZ7-800 - 3 Pole                                   | EM970450000  | 14100                  | Set of 6               |
| DZ7-800 - 4 Pole                                   | EM970460000  | 20500                  | Set of 8               |
| <b>Box Clamp Termination [8538]</b>                |              |                        |                        |
| DZ1, DZ2-160 3 Pole                                | EM921760000  | 5600                   | Set of 6               |
| DZ1, DZ2-160 4 Pole                                | EM921770000  | 8000                   | Set of 8               |
| DZ4-250 - 3 Pole                                   | EM940940000  | 7500                   | Set of 6               |
| DZ4-250 - 4 Pole                                   | EM940950000  | 10800                  | Set of 8               |
| DZ6-400 - 3 Pole                                   | EM969850000  | 10200                  | Set of 6               |
| DZ6-400 - 4 Pole                                   | EM963700000  | 14700                  | Set of 8               |

### Note:

Phase Barriers are supplied along with MCCBs

® Change in CAT No.

# For 800V Application Spreaders, please contact nearest branch office



## Accessories for DZ MCCBs [8538]

|          | DZ1                        | DZ2 | DZ4 | DZ6 | DZ7                        |
|----------|----------------------------|-----|-----|-----|----------------------------|
| Plug-in  | Full Kit                   |     |     |     | Fixed Kit + Conversion Kit |
| Draw-out | Fixed Kit + Conversion Kit |     |     |     |                            |



Plug-in



Draw-out

| External Accessories          |             |                     |                  |
|-------------------------------|-------------|---------------------|------------------|
| Description                   | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Plug-in Module [8538]</b>  |             |                     |                  |
| DZ1 3 Pole Full Kit           | EM902010000 | *                   | 1                |
| DZ1 4 Pole Full Kit           | EM902020000 | *                   | 1                |
| DZ2 3 Pole Full Kit           | EM902620000 | *                   | 1                |
| DZ2 4 Pole Full Kit           | EM902630000 | *                   | 1                |
| DZ4 3 Pole Full Kit           | EM902500000 | *                   | 1                |
| DZ4 4 Pole Full Kit           | EM902510000 | *                   | 1                |
| DZ6 3 Pole Full Kit           | EM902460000 | *                   | 1                |
| DZ6 4 Pole Full Kit           | EM902470000 | *                   | 1                |
| DZ7-630 3 Pole Fixed Kit      | EM992560000 | *                   | 1                |
| DZ7-630 3 Pole Conversion Kit | EM992540000 | *                   | 1                |
| DZ7-630 4 Pole Fixed Kit      | EM992570000 | *                   | 1                |
| DZ7-630 4 Pole Conversion Kit | EM992550000 | *                   | 1                |
| DZ7-800 3 Pole Fixed Kit      | EM990610000 | *                   | 1                |
| DZ7-800 3 Pole Conversion Kit | EM990690000 | *                   | 1                |
| DZ7-800 4 Pole Fixed Kit      | EM990620000 | *                   | 1                |
| DZ7-800 4 Pole Conversion Kit | EM990700000 | *                   | 1                |

\* Price on request

| External Accessories          |             |                     |                  |
|-------------------------------|-------------|---------------------|------------------|
| Description                   | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Draw-out Module [8538]</b> |             |                     |                  |
| DZ4 3 Pole Fixed Kit          | EM902600000 | *                   | 1                |
| DZ4 3 Pole Conversion Kit     | EM902580000 | *                   | 1                |
| DZ4 4 Pole Fixed Kit          | EM902610000 | *                   | 1                |
| DZ4 4 Pole Conversion Kit     | EM902590000 | *                   | 1                |
| DZ6 3 Pole Fixed Kit          | EM902560000 | *                   | 1                |
| DZ6 3 Pole Conversion Kit     | EM902540000 | *                   | 1                |
| DZ6 4 Pole Fixed Kit          | EM902570000 | *                   | 1                |
| DZ6 4 Pole Conversion Kit     | EM902550000 | *                   | 1                |
| DZ7-630 3 Pole Fixed Kit      | EM991050000 | *                   | 1                |
| DZ7-630 3 Pole Conversion Kit | EM991030000 | *                   | 1                |
| DZ7-630 4 Pole Fixed Kit      | EM991060000 | *                   | 1                |
| DZ7-630 4 Pole Conversion Kit | EM991040000 | *                   | 1                |
| DZ7-800 3 Pole Fixed Kit      | EM904550000 | *                   | 1                |
| DZ7-800 3 Pole Conversion Kit | EM904530000 | *                   | 1                |
| DZ7-800 4 Pole Fixed Kit      | EM904560000 | *                   | 1                |
| DZ7-800 4 Pole Conversion Kit | EM904540000 | *                   | 1                |

Direct ROM or EOM is to be ordered mandatorily along with Drawout Module

\* Price on request

| Description                            | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------------|-------------|---------------------|------------------|
| <b>Short Terminal Shroud \$ [8538]</b> |             |                     |                  |
| DZ1-160 3 Pole                         | EM990810000 | 3190                | 1                |
| DZ1-160 4 Pole                         | EM990820000 | 3840                | 1                |
| DZ2-160 3 Pole                         | EM990850000 | 3190                | 1                |
| DZ2-160 4 Pole                         | EM990870000 | 3840                | 1                |
| DZ4-250 - 3 Pole                       | EM990890000 | 3360                | 1                |
| DZ4-250 - 4 Pole                       | EM990910000 | 4890                | 1                |
| DZ6-400 - 3 Pole                       | EM990930000 | 4460                | 1                |
| DZ6-400 - 4 Pole                       | EM990940000 | 6060                | 1                |
| DZ7-630/800 - 3 Pole                   | EM990970000 | 4860                | 1                |
| DZ7-630/800 - 4 Pole                   | EM990990000 | 6700                | 1                |

\$ Long Terminal Shrouds available on request

| Description                                       | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------------------------|-------------|---------------------|------------------|
| <b>External Neutral CT [8504]</b>                 |             |                     |                  |
| DZ1, DZ2 - 40A, 63A, 80A                          | EM905070000 | 2760                | 1                |
| DZ1, DZ2 - 100A, 160A                             | EM905080000 | 2830                | 1                |
| DZ1 - 200A                                        | EM905090000 | 4080                | 1                |
| DZ4 - 160A, 250A                                  | EM905120000 | 4840                | 1                |
| DZ6 - 250A, 400A                                  | EM905150000 | 7440                | 1                |
| DZ7 - 630A, 800A                                  | EM905160000 | 11500               | 1                |
| DZ7 - 1000A                                       | EM973260000 | 12100               | 1                |
| <b>Adaptor Kit for External Neutral CT [8538]</b> |             |                     |                  |
| DZ1, DZ2 & DZ4 - Up to 250A                       | CM999940000 | 1230                | Set of 2         |
| DZ6 - Up to 400A                                  | CM999950000 | 2280                | Set of 2         |
| DZ7 - Up to 1000A                                 | EM972270000 | 8430                | Set of 2         |



## Accessories for DZ MCCBs [8538]

| Mechanical Interlocking Kit Range | DZ1 | DZ2 | DZ4 | DZ6 |
|-----------------------------------|-----|-----|-----|-----|
| Front Slider                      | ✓   | ✓   | ✓   |     |
| Rear Base Plate                   | -   | -   | ✓   | ✓   |
| Cable Base Plate                  | ✓   | ✓   | ✓   | ✓   |



Front Slider



Cable Base Plate



Rear Base Plate

| External Accessories                          |             |                     |                  |
|-----------------------------------------------|-------------|---------------------|------------------|
| Description                                   | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Mechanical Interlocking Options [8538]</b> |             |                     |                  |
| <b>1. Front Slider MIL #</b>                  |             |                     |                  |
| DZ1 Front Slider                              | EM903960000 | 4780                | 1                |
| DZ2 Front Slider                              | EM903970000 | 5030                | 1                |
| DZ2/DZ4 Front Slider                          | EM903980000 | 6800                | 1                |

| Front Slider MIL Selection Table | DZ1 | DZ2 | DZ4 |
|----------------------------------|-----|-----|-----|
| DZ1                              | ✓   |     |     |
| DZ2                              |     | ✓   | ✓   |
| DZ4                              |     | ✓   | ✓   |

| External Accessories            |             |                     |                  |
|---------------------------------|-------------|---------------------|------------------|
| Description                     | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>2. Rear Base Plate MIL #</b> |             |                     |                  |
| DZ4 Mounting Plate ~            | EM904000000 | 4960                | 1                |
| DZ6 Mounting Plate ~            | EM903990000 | 6190                | 1                |
| DZ4 Rear Base Plate ~           | EM903540000 | 24500               | 1                |
| DZ4/DZ6 Rear Base Plate ~       | EM903530000 | 30700               | 1                |
| DZ7 Rear Base Plate             | EM991420000 | 60700               | 1                |

~ - 2 Nos of Mounting Plate and 1 No of Base Plate must be ordered together along with 2 Nos of MCCBs.

| Rear Base Plate MIL Selection Table (DZ4 & DZ6) | Base Plate |         | Mounting Plate |         |
|-------------------------------------------------|------------|---------|----------------|---------|
|                                                 | EM90353    | EM90354 | EM90399        | EM90400 |
| DZ4-DZ4                                         | X          | 1No.    | X              | 2 Nos.  |
| DZ4-DZ6                                         | 1No.       | X       | 1No.           | 1No.    |
| DZ6-DZ6                                         | 1No.       | X       | 2 Nos.         | X       |

| Cable Base Plate MIL Selection Table |         | DZ1     |         | DZ2     |         | DZ4     |         | DZ6     |         |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                      |         | EM90404 | EM90401 | EM90404 | EM90401 | EM90405 | EM90402 | EM90406 | EM90403 |
| DZ1                                  | EM90404 | L       | L       |         |         |         |         |         |         |
|                                      | EM90401 |         | M       |         |         |         |         |         |         |
| DZ2                                  | EM90404 |         |         | L       | L       | L       | M       | L       | M       |
|                                      | EM90401 |         |         |         | M       | L       | M       | M       | H       |
| DZ4                                  | EM90405 |         |         |         |         | L       | M       | L       | M       |
|                                      | EM90402 |         |         |         |         |         | H       | M       | H       |
| DZ6                                  | EM90406 |         |         |         |         |         |         | M       | H       |
|                                      | EM90403 |         |         |         |         |         |         |         | H       |

# Common for 3P & 4P MCCBs

| External Accessories                                                                                                 |             |                     |                  |
|----------------------------------------------------------------------------------------------------------------------|-------------|---------------------|------------------|
| Description                                                                                                          | Cat No      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>3. Cable Base Plate MIL #</b>                                                                                     |             |                     |                  |
| <b>a. Base Plate with Cable (for MCCBs without Rear Terminations)</b>                                                |             |                     |                  |
| DZ1/DZ2 Cable Base Plate \$                                                                                          | EM904040000 | 8570                | 1                |
| DZ4 Cable Base Plate \$                                                                                              | EM904050000 | 10300               | 1                |
| DZ6 Cable Base Plate \$                                                                                              | EM904060000 | 13400               | 1                |
| <b>b. Base Plate with Cable (for MCCBs with Rear Terminations)</b>                                                   |             |                     |                  |
| DZ1/DZ2 Cable Base Plate RT \$                                                                                       | EM904010000 | 9440                | 1                |
| DZ4 Cable Base Plate RT \$                                                                                           | EM904020000 | 11300               | 1                |
| DZ6 Cable Base Plate RT \$                                                                                           | EM904030000 | 14800               | 1                |
| <b>c. Cable Types and Lengths - For DZ1/ DZ2/ DZ4/ DZ6 MCCBs (for both MCCBs with and without Rear Terminations)</b> |             |                     |                  |
| L Cable (1 m Length) \$                                                                                              | EM004710000 | 2230                | 1                |
| L Cable (3 m Length) \$                                                                                              | EM004740000 | 3370                | 1                |
| L Cable (5 m Length) \$                                                                                              | EM004770000 | 4660                | 1                |
| M Cable (1 m Length) \$                                                                                              | EM004720000 | 2230                | 1                |
| M Cable (3 m Length) \$                                                                                              | EM004750000 | 3370                | 1                |
| M Cable (5 m Length) \$                                                                                              | EM004780000 | 4660                | 1                |
| H Cable (1 m Length) \$                                                                                              | EM004730000 | 2230                | 1                |
| H Cable (3 m Length) \$                                                                                              | EM004760000 | 3370                | 1                |
| H Cable (5 m Length) \$                                                                                              | EM004790000 | 4660                | 1                |

\$ - 2 Nos of Base Plate & 1 No of suitable length of Cable must be ordered together along with 2 Nos of MCCBs.





**d sine** DN MCCB with Thermal - Magnetic Release

| Rating (A)<br>Icu=Ics (kA)* | 16            | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 160   | 200 | 250 | 320  | 400 | 500 | 630 |
|-----------------------------|---------------|----|----|----|----|----|----|----|-----|-----|-------|-----|-----|------|-----|-----|-----|
| 25                          | DN0-100C      |    |    |    |    |    |    |    |     |     | DN1-C |     |     |      |     |     |     |
| 36                          | DN0-100D/125D |    |    |    |    |    |    |    |     |     |       |     |     | DN3B |     |     |     |
| 36/50/70                    | DN2           |    |    |    |    |    |    |    |     |     |       |     |     | DN3  |     |     |     |



**dsine TM**

- › Conforms to IS/IEC 60947-2
- › 20A to 630A, 3P & 4P
- › 25kA, 36kA, 50kA & 70kA breaking capacities
- › Ics= 100% of Icu\*
- › Adjustable overload settings: 0.8 - 1.0 x In
- › Adjustable short-circuit settings: 6 - 10 x In\*\*
- › Manual & Rotary versions available
- › Wide range of accessories

| Type      | Thermal Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|-----------|---------------------------|----------------------------------------------|---------------|---------------------|---------------|---------------------|------------------|
|           |                           |                                              | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DN0-100D* | 16-20                     | 36                                           | CM9789300C20G | 11100               | CM9791900C20G | 15600               | 1                |
|           | 20-25                     |                                              | CM9789300D20G | 11100               | CM9791900D20G | 15600               | 1                |
|           | 25-32                     |                                              | CM9789300E20G | 11100               | CM9791900E20G | 15600               | 1                |
|           | 32-40                     |                                              | CM9789300F20G | 11100               | CM9791900F20G | 15600               | 1                |
|           | 40-50                     |                                              | CM9789300G20G | 11100               | CM9791900G20G | 15600               | 1                |
|           | 50-63                     |                                              | CM9789300H20G | 10800               | CM9791900H20G | 15100               | 1                |
|           | 63-80                     |                                              | CM9789300J20G | 10800               | CM9791900J20G | 15100               | 1                |
|           | 80-100                    |                                              | CM9789300K20G | 10800               | CM9791900K20G | 15100               | 1                |
| DN0-125D* | 100-125                   |                                              | CM9068000LOOG | 13400               | CM9068100LOOG | 17700               | 1                |
| DN0-100C  | 16-20                     | 25                                           | CM9161200C00G | 11400               | CM9171200C00G | 16100               | 1                |
|           | 20-25                     |                                              | CM9161200D00G | 11400               | CM9171200D00G | 16100               | 1                |
|           | 25-32                     |                                              | CM9161200E00G | 11400               | CM9171200E00G | 16100               | 1                |
|           | 32-40                     |                                              | CM9161200F00G | 11400               | CM9171200F00G | 16100               | 1                |
|           | 40-50                     |                                              | CM9161200G00G | 11400               | CM9171200G00G | 16100               | 1                |
|           | 50-63                     |                                              | CM9161200H00G | 11100               | CM9171200H00G | 15600               | 1                |
|           | 63-80                     |                                              | CM9161200J00G | 11100               | CM9171200J00G | 15600               | 1                |
|           | 80-100                    |                                              | CM9161200K00G | 11100               | CM9171200K00G | 15600               | 1                |
| DN1-250C  | 100-125                   |                                              | CM9063800LO   | 15800               | CM9064200LO   | 19300               | 1                |
|           | 125-160                   |                                              | CM9063800MO   | 20500               | CM9064200MO   | 24900               | 1                |
|           | 160-200                   |                                              | CM9063800NO   | 26200               | CM9064200NO   | 31300               | 1                |
|           | 200-250                   |                                              | CM9063800PO   | 30700               | CM9064200PO   | 35600               | 1                |

**Note:**

Breaking Capacity : C = 25kA, D = 36kA, N = 50kA, S = 70kA

\* DN0-100D/125D : Ics= 50% Icu

\*\* For DN0, DN1, DN3B-Short Circuit Setting: 9In

For DN1-250N (50kA) please contact nearest branch office

\*\*\* From 16A to 50A, Fixed Magnetic setting (375A)




**DN MCCB with Thermal - Magnetic Release**

| Type      | Thermal Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|-----------|---------------------------|----------------------------------------------|---------------|---------------------|---------------|---------------------|------------------|
|           |                           |                                              | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DN2-250D  | 100-125                   | 36                                           | CM9200800L10G | 26600               | CM9210800L10G | 32900               | 1                |
|           | 125-160                   |                                              | CM9200800M10G | 32900               | CM9210800M10G | 40600               | 1                |
|           | 160-200                   |                                              | CM9200900N10G | 34100               | CM9210900N10G | 43600               | 1                |
|           | 200-250                   |                                              | CM9200900P10G | 36400               | CM9210900P10G | 45000               | 1                |
| DN3B-400D | 250-320                   |                                              | CM9840100Q00G | 48300               | CM9840300Q00G | 58900               | 1                |
|           | 320-400                   |                                              | CM9840100R00G | 48300               | CM9840300R00G | 58900               | 1                |
| DN3-400D  | 250-320                   |                                              | CM9400500Q10G | *                   | CM9410500Q10G | *                   | 1                |
|           | 320-400                   |                                              | CM9400500R10G | *                   | CM9410500R10G | *                   | 1                |
| DN3-630D  | 400-500                   |                                              | CM9400600S10G | 63800               | CM9410600S10G | 80400               | 1                |
|           | 500-630                   |                                              | CM9400600T10G | 63800               | CM9410600T10G | 80400               | 1                |
| DN2-250N  | 100-125                   | 50                                           | CM9200500L10G | 36900               | CM9210500L10G | 44800               | 1                |
|           | 125-160                   |                                              | CM9200500M10G | 37900               | CM9210500M10G | 47700               | 1                |
|           | 160-200                   |                                              | CM9200600N10G | 38700               | CM9210600N10G | 48500               | 1                |
|           | 200-250                   |                                              | CM9200600P10G | 39800               | CM9210600P10G | 49900               | 1                |
| DN3-400N  | 250-320                   |                                              | CM9400300Q10G | 57300               | CM9410300Q10G | 71000               | 1                |
|           | 320-400                   |                                              | CM9400300R10G | 57300               | CM9410300R10G | 71000               | 1                |
| DN3-630N  | 400-500                   |                                              | CM9400400S10G | 70900               | CM9410400S10G | 91500               | 1                |
|           | 500-630                   |                                              | CM9400400T10G | 70900               | CM9410400T10G | 91500               | 1                |
| DN2-250S  | 100-125                   | 70**                                         | CM9200200L10G | *                   | CM9210200L10G | *                   | 1                |
|           | 125-160                   |                                              | CM9200200M10G | *                   | CM9210200M10G | *                   | 1                |
|           | 160-200                   |                                              | CM9200300N10G | *                   | CM9210300N10G | *                   | 1                |
|           | 200-250                   |                                              | CM9200300P10G | *                   | CM9210300P10G | *                   | 1                |
| DN3-400S  | 250-320                   |                                              | CM9400100Q10G | *                   | CM9410100Q10G | *                   | 1                |
|           | 320-400                   |                                              | CM9400100R10G | *                   | CM9410100R10G | *                   | 1                |
| DN3-630S  | 400-500                   |                                              | CM9400200S10G | *                   | CM9410200S10G | *                   | 1                |
|           | 500-630                   |                                              | CM9400200T10G | *                   | CM9410200T10G | *                   | 1                |

\* Price on request

\*\* Available till stock lasts.

#### General Information

- › Use of phase barriers is mandatory. These are supplied along with MCCBs
- › **It is recommended to use spreader terminals for enhancing termination capacity**
- › Spreader terminals are available as accessories, unless otherwise specified against cat. nos.

#### Special Applications

- › dsine-DN/DU/DY MCCBs with TM release can be used for DC application (2P/3P/4P)
- › dsine-DN/DU MCCBs can be used for Capacitor back-up protection
- › For Motor back-up protection, use 'M' series of MCCBs
- › For isolator applications, use SD version (without protection release)



**d sine** DN MCCB with Microprocessor Release

|              |     |    |     |     |     |     |     |     |      |      |
|--------------|-----|----|-----|-----|-----|-----|-----|-----|------|------|
| Rating (A)   | 40  | 63 | 100 | 160 | 250 | 400 | 630 | 800 | 1000 | 1250 |
| Icu (kA)     |     |    |     |     |     |     |     |     |      |      |
| 36/50/70/100 | DN2 |    |     |     |     | DN3 |     |     |      |      |
| 50/70/100    |     |    |     |     |     |     |     | DN4 |      |      |

**d sine** DN MCCB with Microprocessor Release MTX1.0



dsine DN MTX1.0

- › Conforms to IS/IEC 60947-2
- › 40A to 1250A, 3P & 4P
- › 36kA, 50kA, 70kA and 100kA breaking capacities
- › Ics=100% Icu
- › Adjustable overload setting from 0.4 to 1.0 x In
- › Adjustable short-circuit setting from 1.5 to 8 x Ir
- › Inbuilt instantaneous Protection
- › Switchable thermal memory
- › Variable trip class
- › Front LED Indication
- › Manual & Rotary versions available
- › Wide range of accessories

| Type      | Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|-----------|-------------------|----------------------------------------------|---------------|---------------------|---------------|---------------------|------------------|
|           |                   |                                              | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DN2-250D  | 16-40             | 36                                           | CM920630000X1 | 42400               | CM921550000X1 | 53200               | 1                |
|           | 25-63             |                                              | CM920710000X1 | 42400               | CM921540000X1 | 53200               | 1                |
|           | 40-100            |                                              | CM920510000X1 | 42400               | CM921530000X1 | 53200               | 1                |
|           | 63-160            |                                              | CM920740000X1 | 53500               | CM921520000X1 | 74400               | 1                |
|           | 100-250           |                                              | CM920540000X1 | 55700               | CM921510000X1 | 77100               | 1                |
| DN3-400D  | 160-400           |                                              | CM930010000X1 | 68500               | CM930030000X1 | 88700               | 1                |
| DN3-630D  | 250-630           |                                              | CM930050000X1 | 75700               | CM930070000X1 | 100200              | 1                |
| DN2-250N  | 16-40             | 50                                           | CM920640000X1 | 48300               | CM921600000X1 | 63900               | 1                |
|           | 25-63             |                                              | CM920720000X1 | 48300               | CM921590000X1 | 63900               | 1                |
|           | 40-100            |                                              | CM920520000X1 | 48300               | CM921580000X1 | 63900               | 1                |
|           | 63-160            |                                              | CM920750000X1 | 62600               | CM921570000X1 | 81400               | 1                |
|           | 100-250           |                                              | CM920550000X1 | 66900               | CM921560000X1 | 83200               | 1                |
| DN3-400N  | 160-400           |                                              | CM930020000X1 | 74900               | CM930040000X1 | 97700               | 1                |
| DN3-630N  | 250-630           |                                              | CM930060000X1 | 82300               | CM930080000X1 | 107300              | 1                |
| DN4-1250N | 320-800           |                                              | CM960210000X1 | 108800              | CM961110000X1 | 138300              | 1                |
|           | 400-1000          |                                              | CM960220000X1 | 160900              | CM961120000X1 | 226500              | 1                |
|           | 500-1250          |                                              | CM960230000X1 | 200900              | CM961130000X1 | 271700              | 1                |
| DN2-250S  | 16-40             | 70**                                         | CM920650000X1 | *                   | CM921650000X1 | *                   | 1                |
|           | 25-63             |                                              | CM920730000X1 | *                   | CM921640000X1 | *                   | 1                |
|           | 40-100            |                                              | CM920590000X1 | *                   | CM921630000X1 | *                   | 1                |
|           | 63-160            |                                              | CM920760000X1 | *                   | CM921620000X1 | *                   | 1                |
|           | 100-250           |                                              | CM920560000X1 | *                   | CM921610000X1 | *                   | 1                |
| DN3-400S  | 160-400           |                                              | CM940530000X1 | *                   | CM941530000X1 | *                   | 1                |
| DN3-630S  | 250-630           |                                              | CM940790000X1 | *                   | CM941790000X1 | *                   | 1                |
| DN4-1250S | 320-800           |                                              | CM960250000X1 | 116600              | CM961150000X1 | 152800              | 1                |
|           | 400-1000          |                                              | CM960260000X1 | 168000              | CM961160000X1 | 247300              | 1                |
|           | 500-1250          |                                              | CM960270000X1 | 217500              | CM961170000X1 | 295900              | 1                |

**Note:**

## Available till stock lasts.

dsine DN-V Version (Icu=Ics=100kA) MCCBs are available till stock lasts.



**d sine DN MCCB with Microprocessor Release MTX2.0**



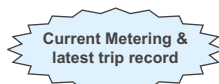
dsine DN MTX2.0

- › Conforms to IS/IEC 60947-2
- › 40A to 1250A, 3P & 4P
- › 36kA, 50kA, 70kA and 100kA breaking capacities
- › Ics=100% Icu
- › Adjustable overload setting from 0.4 to 1.0 x In
- › Adjustable short-circuit setting from 1.5 to 8 x Ir
- › Inbuilt instantaneous Protection
- › Inbuilt ground fault protection from 20%-50% of In
- › Adjustable neutral overload protection from 50% to 150% of Ir
- › Switchable thermal memory
- › Variable trip class
- › Front LED Indication
- › Panel mounted display for current metering & trip record
- › Manual & Rotary versions available
- › Wide range of accessories

| Type      | Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|-----------|-------------------|----------------------------------------------|---------------|---------------------|---------------|---------------------|------------------|
|           |                   |                                              | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DN2-250D  | 16-40             | 36                                           | CM920630000AG | 72500               | CM921550000AG | 83400               | 1                |
|           | 25-63             |                                              | CM920710000AG | 72500               | CM921540000AG | 83400               | 1                |
|           | 40-100            |                                              | CM920510000AG | 72500               | CM921530000AG | 83400               | 1                |
|           | 63-160            |                                              | CM920740000AG | 78800               | CM921520000AG | 96700               | 1                |
|           | 100-250           |                                              | CM920540000AG | 79800               | CM921510000AG | 97900               | 1                |
| DN3-400D  | 160-400           | 50                                           | CM930010000AG | 94400               | CM930030000AG | 109300              | 1                |
| DN3-630D  | 250-630           |                                              | CM930050000AG | 103300              | CM930070000AG | 125200              | 1                |
| DN2-250N  | 16-40             |                                              | CM920640000AG | 78800               | CM921600000AG | 93900               | 1                |
|           | 25-63             |                                              | CM920720000AG | 78800               | CM921590000AG | 93900               | 1                |
|           | 40-100            |                                              | CM920520000AG | 78800               | CM921580000AG | 93900               | 1                |
|           | 63-160            |                                              | CM920750000AG | 82100               | CM921570000AG | 99900               | 1                |
|           | 100-250           |                                              | CM920550000AG | 82800               | CM921560000AG | 100700              | 1                |
| DN3-400N  | 160-400           | 70 <sup>##</sup>                             | CM930020000AG | 99100               | CM930040000AG | 118300              | 1                |
| DN3-630N  | 250-630           |                                              | CM930060000AG | 109800              | CM930080000AG | 141500              | 1                |
| DN4-1250N | 320-800           |                                              | CM960210000AG | 145000              | CM961110000AG | 172100              | 1                |
|           | 400-1000          |                                              | CM960220000AG | 186700              | CM961120000AG | 247400              | 1                |
|           | 500-1250          |                                              | CM960230000AG | 233500              | CM961130000AG | 302200              | 1                |
| DN2-250S  | 16-40             | 70 <sup>##</sup>                             | CM920650000AG | *                   | CM921650000AG | *                   | 1                |
|           | 25-63             |                                              | CM920730000AG | *                   | CM921640000AG | *                   | 1                |
|           | 40-100            |                                              | CM920590000AG | *                   | CM921630000AG | *                   | 1                |
|           | 63-160            |                                              | CM920760000AG | *                   | CM921620000AG | *                   | 1                |
|           | 100-250           |                                              | CM920560000AG | *                   | CM921610000AG | *                   | 1                |
| DN3-400S  | 160-400           | 70 <sup>##</sup>                             | CM940530000AG | *                   | CM941530000AG | *                   | 1                |
| DN3-630S  | 250-630           |                                              | CM940790000AG | *                   | CM941790000AG | *                   | 1                |
| DN4-1250S | 320-800           |                                              | CM960250000AG | 166900              | CM961150000AG | 208700              | 1                |
|           | 400-1000          |                                              | CM960260000AG | 233000              | CM961160000AG | 303500              | 1                |
|           | 500-1250          |                                              | CM960270000AG | 287100              | CM961170000AG | 376500              | 1                |

**Accessories for MTX2.0 [8538]**

| Modules for MTX2.0 release                                          | Cat. No.    | M.R.P. (₹) Per Unit |
|---------------------------------------------------------------------|-------------|---------------------|
| Current Metering Module (Display & Metering Module)##               | CM956980000 | 51900               |
| Cable (2m length)##                                                 | CM011960000 | 2260                |
| Power Supply Module##                                               | CL907220000 | *                   |
| UNCO Module for Status Indication & Control through communication## | CL908520000 | 22100               |



**Note:**

\* Price on request

## Available till stock lasts.

dsine DN-V Version (Icu=Ics=100kA) MCCBs are available till stock lasts.





**d sine DN MCCB with Microprocessor Release MTX3.0**



dsine DN MTX3.0

- › Conforms to IS/IEC 60947-2 & IEC 60947-2
- › Range: 40A to 1250A, 3P & 4P
- › Choice of 36kA / 50kA / 70kA / 100kA breaking capacities
- › Ics = 100% Icu
- › Suitable for Isolation
- › Adjustable Over Load from 0.4 - 1.0 x In
- › Adjustable Short Circuit from 1.5 - 8 x Ir with selectable time delay
- › Instantaneous protection with fine settings
- › Inbuilt ground fault protection from 10% - 50% of In
- › Adjustable neutral overload protection available : 50% to 150% of Ir
- › Advanced Current, Voltage, Frequency & Power based protections
- › Other Protections like Maximum Demand, Phase Sequence, THD etc.
- › Comprehensive Current, Power, Energy, PF, MD, THD metering
- › Provision of Thermal Memory : ON/OFF
- › Variable trip class at 1.5 Ir, 6 Ir & 7.2 Ir
- › Front LED indication of Over Load, short circuit & earth fault
- › Panel mounted display available for advanced protections & metering
- › Communication capable release
- › Manual & Rotary versions available
- › For 3 phase 4 wire system, External neutral CTs available for 3P MCCBs
- › Wide Range of snap fit Internal and External Accessories

| Type      | Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|-----------|-------------------|----------------------------------------------|---------------|---------------------|---------------|---------------------|------------------|
|           |                   |                                              | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DN2-250D  | 16 - 40           | 36                                           | CM920630000BG | *                   | CM921550000BG | *                   | 1                |
|           | 25 - 63           |                                              | CM920710000BG |                     | CM921540000BG |                     | 1                |
|           | 40 - 100          |                                              | CM920510000BG |                     | CM921530000BG |                     | 1                |
|           | 63 - 160          |                                              | CM920740000BG |                     | CM921520000BG |                     | 1                |
|           | 100 - 250         |                                              | CM920540000BG |                     | CM921510000BG |                     | 1                |
| DN3-400D  | 160 - 400         | 36                                           | CM930010000BG | *                   | CM930030000BG | *                   | 1                |
| DN3-630D  | 250 - 630         |                                              | CM930050000BG |                     | CM930070000BG |                     | 1                |
| DN2-250N  | 16 - 40           | 50                                           | CM920640000BG | *                   | CM921600000BG | *                   | 1                |
|           | 25 - 63           |                                              | CM920720000BG |                     | CM921590000BG |                     | 1                |
|           | 40 - 100          |                                              | CM920520000BG |                     | CM921580000BG |                     | 1                |
|           | 63 - 160          |                                              | CM920750000BG |                     | CM921570000BG |                     | 1                |
|           | 100 - 250         |                                              | CM920550000BG |                     | CM921560000BG |                     | 1                |
| DN3-400N  | 160 - 400         | 50                                           | CM930020000BG | *                   | CM930040000BG | *                   | 1                |
| DN3-630N  | 250 - 630         |                                              | CM930060000BG |                     | CM930080000BG |                     | 1                |
| DN4-1250N | 320 - 800         | 70**                                         | CM960210000BG | *                   | CM961110000BG | *                   | 1                |
|           | 400 - 1000        |                                              | CM960220000BG |                     | CM961120000BG |                     | 1                |
|           | 500 - 1250        |                                              | CM960230000BG |                     | CM961130000BG |                     | 1                |
| DN2-250S  | 16 - 40           | 70**                                         | CM920650000BG | *                   | CM921650000BG | *                   | 1                |
|           | 25 - 63           |                                              | CM920730000BG |                     | CM921640000BG |                     | 1                |
|           | 40 - 100          |                                              | CM920590000BG |                     | CM921630000BG |                     | 1                |
|           | 63 - 160          |                                              | CM920760000BG |                     | CM921620000BG |                     | 1                |
|           | 100 - 250         |                                              | CM920560000BG |                     | CM921610000BG |                     | 1                |
| DN3-400S  | 160 - 400         | 70**                                         | CM940530000BG | *                   | CM941530000BG | *                   | 1                |
| DN3-630S  | 250 - 630         |                                              | CM940790000BG |                     | CM941790000BG |                     | 1                |
| DN4-1250S | 320 - 800         | 70**                                         | CM960250000BG | *                   | CM961150000BG | *                   | 1                |
|           | 400 - 1000        |                                              | CM960260000BG |                     | CM961160000BG |                     | 1                |
|           | 500 - 1250        |                                              | CM960270000BG |                     | CM961170000BG |                     | 1                |

**Accessories for MTX3.0 [8538]**

| Modules for MTX3.0 release                                          | Cat. No.    | M.R.P. (₹) Per Unit |
|---------------------------------------------------------------------|-------------|---------------------|
| Communication Module##                                              | CM956800000 | *                   |
| Voltage Module##                                                    | CM956850000 | *                   |
| Display Module##                                                    | CM956760000 | *                   |
| Power Supply Module##                                               | CL907220000 | *                   |
| UNCO Module for Status Indication & Control through communication## | CL908520000 | 22100               |

**Note:**

\* Price on request

## Available till stock lasts.

dsine DN-V Version (Icu=Ics=100kA) MCCBs are available till stock lasts.



**d sine DN MCCBs for Motor back-up Protection<sup>##</sup>**



- › Range: 32A to 630A, 50kA
- › Suitable for isolation
- › Wide Range of snap fit Internal and External Accessories

| 3 Pole   |                    |                                               |               |                     |                  |
|----------|--------------------|-----------------------------------------------|---------------|---------------------|------------------|
| Type     | Current Rating (A) | Breaking Capacity Icu at 415V. AC, 50Hz. (kA) | Cat. No.      | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| DN0-100M | 32                 | 50                                            | CM9894400EO   | *                   | 1                |
|          | 40                 |                                               | CM9894400FO   | *                   | 1                |
|          | 50                 |                                               | CM9894400GO   | *                   | 1                |
|          | 63                 |                                               | CM9894400HO   | *                   | 1                |
|          | 80                 |                                               | CM9894400JO   | *                   | 1                |
|          | 100                |                                               | CM9894400KO   | *                   | 1                |
| DN1-160M | 100                |                                               | CM9034500KO   | *                   | 1                |
|          | 125                |                                               | CM9034500LO   | *                   | 1                |
|          | 160                |                                               | CM9034500MO   | *                   | 1                |
| DN2-250M | 200                |                                               | CM9217100NOOG | *                   | 1                |
|          | 250                |                                               | CM9217100POOG | *                   | 1                |
| DN3-400M | 320                |                                               | CM9451600QOOG | *                   | 1                |
|          | 400                |                                               | CM9451600ROOG | *                   | 1                |
| DN3-630M | 500                |                                               | CM9451500SOOG | *                   | 1                |
|          | 630                |                                               | CM9451500TOOG | *                   | 1                |

\* Price on request

**Note:**

Please contact nearest branch office for fuseless type 2 co-ordination selection chart

For lower HP Motors, Please select MMS. Details are given on page no.21

dsine-DN M version MCCBs are available till stock lasts.

<sup>##</sup> Available till stock lasts.



Representative Application Image

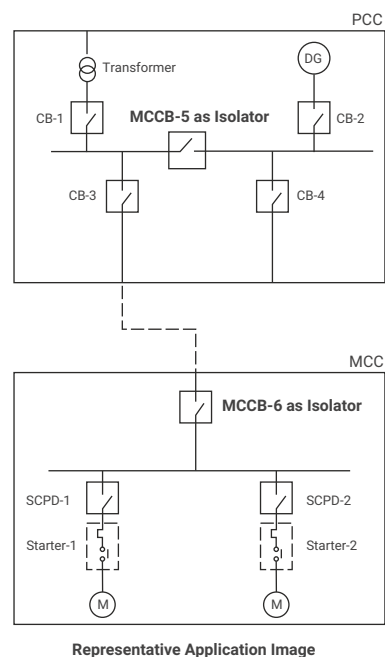


**d sine DN Switch Disconnecter - SD (MCCBs without protection release)**



- › Used as switching devices for isolation
- › Range: 32A to 1250A, 3P & 4P
- › Suitable for isolation
- › Wide Range of snap fit Internal and External Accessories

| Type       | Current Rating (A) | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|------------|--------------------|---------------|---------------------|---------------|---------------------|------------------|
|            |                    | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DN0-160SD  | 32                 | CM9071600EO   | 9540                | CM9071700EO   | 12800               | 1                |
|            | 63                 | CM9071600HO   | 9540                | CM9071700HO   | 12800               | 1                |
|            | 100                | CM9071600KO   | 11300               | CM9071700KO   | 14900               | 1                |
|            | 125                | CM9071600LO   | 12500               | CM9071700LO   | 16600               | 1                |
|            | 160                | CM9071600MO   | 13500               | CM9071700MO   | 17600               | 1                |
| DN2-250SD  | 200                | CM9681400NOOG | 27100               | CM9681500NOOG | 36100               | 1                |
|            | 250                | CM9680200POOG | 29200               | CM9680300POOG | 38600               | 1                |
| DN3B-400SD | 320                | CM9841000QOOG | 43100               | CM9841200QOOG | 55900               | 1                |
|            | 400                | CM9841000ROOG | 43100               | CM9841200ROOG | 55900               | 1                |
| DN3-630SD  | 500                | CM9680600SOOG | 48800               | CM9680700SOOG | 66700               | 1                |
|            | 630                | CM9680600TOOG | 48800               | CM9680700TOOG | 66700               | 1                |
| DN4-1250SD | 800                | CM9304100UO   | 97500               | CM9304200UO   | 120100              | 1                |
|            | 1000               | CM9304100VO   | 129500              | CM9304200VO   | 165800              | 1                |
|            | 1250               | CM9304100AO   | 171800              | CM9304200AO   | 213000              | 1                |



**Automatic Source Transfer System (ASTS)\*\***

- › 128x80 pixel, backlit LCD screen with 4 grey levels
- › Advanced programmable I/O function
- › Management of automatic generator start/stop
- › Controls of UV, OV, phase loss, asymmetry, minimum frequency, maximum frequency, with independent enabling and time delay



**Automatic Transfer Controllers (ATC) [9032]**

| Type                   | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------|-------------|---------------------|------------------|
| AuXC-2000 controller** | ATC20000000 | 43800               | 1                |

Can be used along with ACB, Motorised MCCBs, MCX contactors & Motorised Changeover switches

**Note:**

\*\* For communication version of AuXC controller refer page no-6

**2 d sine MCCBs + 2 SE-EOM + 2 ATAC + 1 MIL kit**

For AuXC 2000/2100 programming videos and more details please scan the QR code or click here



| Frame   | Accessories                                 | Total Set M.R.P. (₹) | Remarks                                                                                                         |
|---------|---------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------|
| DN2     | 2 Nos : SEOMs with Aux + Trip Alarm Contact | *                    | Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution. |
| DN3-400 | +<br>1 No. : MIL                            | *                    | Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution. |
| DN3-630 | +<br>1 No. : AuXC2000                       | *                    |                                                                                                                 |

\* Price on request

**Note:**

Picture shown is for representation purpose only, MCCB + EOM + ATAC combination, MIL kit & AuXC-2000 to be purchased separately & assembled at site.

**dsine-DN COMBO MCCBs are available till stock lasts.**

**For ASTS Solution in MCCB, please refer DZ range.**



## Accessories for DN MCCBs [8538]



Auxiliary Contact



TAC



Shunt Release



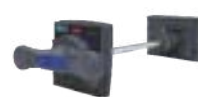
UV Release



Neutral CT



Direct ROM



Extended ROM



Key Lock

| Description                                    | Internal    |                           |                        |
|------------------------------------------------|-------------|---------------------------|------------------------|
|                                                | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Auxiliary Contact [8538]</b>                |             |                           |                        |
| DN0, DN1 - 1 C/O - Right                       | CM978860000 | 1450                      | 1                      |
| DN0, DN1 - 2 C/O - Right                       | CM978870000 | 2550                      | 1                      |
| DN2, DN3B, DN3, DN4 - 1 C/O                    | CM998010000 | 1680                      | 1                      |
| DN2, DN3B, DN3, DN4 - 2 C/O                    | CM998020000 | 3250                      | 1                      |
| <b>Trip Alarm Contact [8538]</b>               |             |                           |                        |
| DN0, DN1 - 1 C/O - Right                       | CM978880000 | 1450                      | 1                      |
| DN0, DN1 - 2 C/O - Right                       | CM978890000 | 2550                      | 1                      |
| DN2, DN3B, DN3, DN4 - 1 C/O - Right            | CM998030000 | 1760                      | 1                      |
| <b>Auxiliary 1 C/O + TAC 1 C/O [8538]</b>      |             |                           |                        |
| DN0, DN1 - Right                               | CM978900000 | 2460                      | 1                      |
| DN2, DN3B, DN3, DN4 - Right                    | CM998040000 | 3250                      | 1                      |
| <b>Shunt Release [8538]</b>                    |             |                           |                        |
| DN0, DN1 - 24V DC - Left                       | CM914020400 | 2860                      | 1                      |
| DN0, DN1 - 110V AC - Left                      | CM978830A00 | 2860                      | 1                      |
| DN0, DN1 - 240/415V AC - Left                  | CM978830M00 | 2860                      | 1                      |
| DN2, DN3 - 110V DC - Left                      | CM998070000 | 5050                      | 1                      |
| DN2, DN3B, DN3, DN4 - 110/240/415V AC, 220V DC | CM998050000 | 4210 <sup>®</sup>         | 1                      |
| DN2, DN3B, DN3 - 24V DC                        | CM989760400 | 4210 <sup>®</sup>         | 1                      |
| <b>Under Voltage Release [8538]</b>            |             |                           |                        |
| DN0, DN1 - 240V AC - Left                      | CM97892B000 | 4740                      | 1                      |
| DN2, DN3B, DN3 - 240V AC - Left                | CM99986B000 | 5860 <sup>**</sup>        | 1                      |
| DN4 - 240V AC - Left                           | CM999060000 | 6690 <sup>**</sup>        | 1                      |

@ - 'NO' of control contactor to be connected in series for DC control supply

\*\* Use these UV Cat. Nos. with Grey look MCCBs only

| Description                                       | External    |                           |                        |
|---------------------------------------------------|-------------|---------------------------|------------------------|
|                                                   | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>External Neutral CT [8504]</b>                 |             |                           |                        |
| DN2 - 40A                                         | CM999460000 | 2730                      | 1                      |
| DN2 - 63A                                         | CM999470000 | 2730                      | 1                      |
| DN2 - 100A                                        | CM999480000 | 2730                      | 1                      |
| DN2 - 160A                                        | CM999490000 | 3920                      | 1                      |
| DN2 - 250A                                        | CM999500000 | 3920                      | 1                      |
| DN3 - 400A                                        | CM999540000 | 8010                      | 1                      |
| DN3 - 630A                                        | CM999550000 | 8010                      | 1                      |
| DN4 - 800A                                        | CM998890000 | 12300                     | 1                      |
| DN4 - 1000A                                       | CM998900000 | 12800                     | 1                      |
| DN4 - 1250A                                       | CM998910000 | 14200                     | 1                      |
| <b>Adaptor kit for External Neutral CT [8538]</b> |             |                           |                        |
| DN2 - 250                                         | CM999940000 | 1230                      | Set of 2               |
| DN3 - 400                                         | CM999950000 | 2280                      | Set of 2               |
| DN3 - 630                                         | CM999970000 | 2480                      | Set of 2               |
| DN4 - 800                                         | CM999960000 | 4660                      | Set of 2               |
| DN4 - 1000                                        | CM909660000 | 9860                      | Set of 4               |
| DN4 - 1250                                        | CM999980000 | 16900                     | Set of 2               |

| Description                                                  | External     |                           |                        |
|--------------------------------------------------------------|--------------|---------------------------|------------------------|
|                                                              | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Rotary Handle [8538]</b>                                  |              |                           |                        |
| DN0 Direct ROM                                               | CM978950000  | 1840                      | 1                      |
| DN1 Direct ROM                                               | CM980400000  | 1980                      | 1                      |
| DN2 Direct ROM                                               | CM998290000  | 2040                      | 1                      |
| DN3B, DN3 Direct ROM                                         | CM998600000  | 3050                      | 1                      |
| DN0 Extended ROM                                             | CM978960000  | 2390                      | 1                      |
| DN1 Extended ROM                                             | CM980410000  | 2540                      | 1                      |
| DN2 Extended ROM                                             | CM998300000  | 3070                      | 1                      |
| DN3B, DN3 Extended ROM                                       | CM998610000  | 5020                      | 1                      |
| DN4 Extended ROM                                             | CM998840000  | 6370                      | 1                      |
| <b>Panel door mounted Key lock for Extended ROM # [8301]</b> |              |                           |                        |
| Type 1                                                       | CM99958T0000 | 8480                      | 1                      |
| Type 2                                                       | CM99958T000A | 8480                      | 1                      |
| Type 3                                                       | CM99958T000B | 8480                      | 1                      |
| Type 12                                                      | CM99958T000C | 8480                      | 1                      |
| Type 23                                                      | CM99958T000D | 8480                      | 1                      |

# - Can be used with dsine DN & DU new look extended ROM



Spreader Terminals



MIL Kit - Base Mounted

| Description                                         | External    |                           |                        |
|-----------------------------------------------------|-------------|---------------------------|------------------------|
|                                                     | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
| <b>Spreader Terminals [8538]</b>                    |             |                           |                        |
| DN0-100 - 3 Pole                                    | CM977850000 | 640                       | Set of 6               |
| DN0-125D - 3 Pole                                   | CM9068700LO | 780                       | Set of 6               |
| DN1, DN2 - 250 - 3 Pole                             | ST980530000 | 2610                      | Set of 6               |
| DN3B/DN3 - 400 - 3 Pole                             | ST980650000 | 4840                      | Set of 6               |
| DN3-630 - 3 Pole                                    | ST980540000 | 5700                      | Set of 6               |
| DN4-800 - 3 Pole                                    | CM9116100UO | 12300                     | Set of 6               |
| DN4-1000 - 3 Pole                                   | CM9116100VO | 17500                     | Set of 6               |
| DN4-1250 - 3 Pole                                   | CM9116100AO | 48800                     | Set of 6               |
| DN0-100 - 4 Pole                                    | CM979210000 | 1000                      | Set of 8               |
| DN0-125D - 4 Pole                                   | CM9068800LO | 1140                      | Set of 8               |
| DN1, DN2 - 250 - 4 Pole                             | CM920070000 | 3460                      | Set of 8               |
| DN3B/DN3-400 - 4 Pole                               | ST980660000 | 6940                      | Set of 8               |
| DN3-630 - 4 Pole                                    | CM920040000 | 7240                      | Set of 8               |
| DN4-800 - 4 Pole                                    | ST903620000 | 15800                     | Set of 8               |
| DN4-1000 - 4 Pole                                   | CM9006400VO | 23100                     | Set of 8               |
| DN4-1250 - 4 Pole                                   | ST980580000 | 62300                     | Set of 8               |
| <b>Mechanical Interlock Kit - Base Plate [8538]</b> |             |                           |                        |
| DN2-250                                             | CM997310000 | 9610                      | 1                      |
| DN3-400                                             | CM997320000 | 14700                     | 1                      |
| DN3-630                                             | CM998540000 | 15800                     | 1                      |
| <b>DIN rail kit [8538]</b>                          |             |                           |                        |
| DN0                                                 | CM909440000 | 220                       | 1                      |

### Note:

Phase Barriers are supplied along with MCCBs





## DU/DY MCCB Range [8536]

### DU/DY with Thermal - Magnetic Release :

| Rating (A) | 16     | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 160     | 200 | 250 | 320 | 400 |
|------------|--------|----|----|----|----|----|----|----|-----|-----|---------|-----|-----|-----|-----|
| Icu (kA)   |        |    |    |    |    |    |    |    |     |     |         |     |     |     |     |
| 10         | DY125U |    |    |    |    |    |    |    |     |     | DY250U1 |     |     |     |     |
| 18         | DU100D |    |    |    |    |    |    |    |     |     | DU125D  |     |     |     |     |
| 25         |        |    |    |    |    |    |    |    |     |     | DU250C  |     |     |     |     |
| 30         | DU100H |    |    |    |    |    |    |    |     |     | DU125H  |     |     |     |     |
| 36         |        |    |    |    |    |    |    |    |     |     | DU250   |     |     |     |     |
| 50         |        |    |    |    |    |    |    |    |     |     | DU400N  |     |     |     |     |

### DY125U MCCBs



- › Conforms to IS/IEC 60947-2, IEC 60947-2 & EN 60947-2
- › Range: 16A to 125A, 2P/3P/4P
- › Ics=100% of Icu
- › High Electrical & Mechanical life
- › Thermal Magnetic Release
- › No Load-Line Bias
- › ON-TRIP-OFF indication
- › Suitable for Isolation
- › Common SS Enclosure for 3P & 4P

| Type   | Current Rating (A) | Breaking Capacity Icu (kA)                                             | 2 Pole        |                     | Breaking Capacity Icu (kA)                                             | 3 Pole        |                     | 4 Pole        |                     | Std. Pkg. (Nos.) |
|--------|--------------------|------------------------------------------------------------------------|---------------|---------------------|------------------------------------------------------------------------|---------------|---------------------|---------------|---------------------|------------------|
|        |                    |                                                                        | Cat. No.      | M.R.P. (₹) Per Unit |                                                                        | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |                  |
| DY125U | 16                 | AC : 25kA @ 240V AC, 50 Hz/60 Hz<br>DC : 10kA @ 250V DC (2P in series) | EM9098200BO   | 2640                | AC : 10kA @ 415V AC, 50 Hz/60 Hz<br>DC : 10kA @ 250V DC (3P in series) | EM9098300BO   | 3100                | EM9098400BO   | 4170                | 1                |
|        | 20                 |                                                                        | EM9098200CO   | 2640                |                                                                        | EM9098300CO   | 3100                | EM9098400CO   | 4170                | 1                |
|        | 25                 |                                                                        | EM9098200DO   | 2640                |                                                                        | EM9098300DO   | 3100                | EM9098400DO   | 4170                | 1                |
|        | 32                 |                                                                        | EM9098200EO   | 2640                |                                                                        | EM9098300EO   | 3100                | EM9098400EO   | 4170                | 1                |
|        | 40                 |                                                                        | EM9098200FO   | 2640                |                                                                        | EM9098300FO   | 3100                | EM9098400FO   | 4170                | 1                |
|        | 50                 |                                                                        | EM9098200GO   | 2640                |                                                                        | EM9098300GO   | 3100                | EM9098400GO   | 4170                | 1                |
|        | 63                 |                                                                        | EM9098200HO   | 2560                |                                                                        | EM9098300HO   | 3010                | EM9098400HO   | 4050                | 1                |
|        | 80                 |                                                                        | EM9098200JO ▲ | 2820                |                                                                        | EM9098300JO ▲ | 3390                | EM9098400JO ▲ | 4680                | 1                |
|        | 100                |                                                                        | EM9081200JO   | 2560                |                                                                        | EM9081300JO   | 3010                | EM9081400JO   | 4050                | 1                |
|        |                    |                                                                        | EM9098200KO ▲ | 2820                |                                                                        | EM9098300KO ▲ | 3390                | EM9098400KO ▲ | 4680                | 1                |
|        |                    |                                                                        | EM9081200KO   | 2560                |                                                                        | EM9081300KO   | 3010                | EM9081400KO   | 4050                | 1                |
|        | 125                |                                                                        | EM9098200LO ▲ | 3940                |                                                                        | EM9098300LO ▲ | 4980                | EM9098400LO ▲ | 6110                | 1                |

▲ - Spreader Terminals are included

Note: 2 Pole in 3 Pole frame size

Phase barriers are supplied with all MCCBs

### Accessories for DY125U MCCBs [8538]



Auxiliary/Trip Alarm Contact



Shunt Release



Spreader Terminals



Direct ROM



Extended ROM

| Description                         | Internal    |                     |                  |
|-------------------------------------|-------------|---------------------|------------------|
|                                     | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Auxiliary/Trip Alarm Contact</b> |             |                     |                  |
| 1C/O                                | EM909660000 | 960                 | 1                |
| <b>Shunt Release</b>                |             |                     |                  |
| Short Rated 110/240/415V AC         | EM905200M00 | 1300                | 1                |
| <b>Under Voltage Release</b>        |             |                     |                  |
| 240V AC                             | EM90518B000 | 3910                | 1                |

| Description                  | External    |                     |                  |
|------------------------------|-------------|---------------------|------------------|
|                              | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Spreader Terminals</b>    |             |                     |                  |
| 2 Pole (upto 100A)           | CM977850002 | 400                 | Set of 4         |
| 3 Pole (upto 100A)           | CM977850000 | 640                 | Set of 6         |
| 4 Pole (upto 100A)           | CM979210000 | 1000                | Set of 8         |
| <b>Rotary Handle</b>         |             |                     |                  |
| Direct ROM                   | EM909690000 | 1850                | 1                |
| Extended ROM                 | EM909700000 | 2660                | 1                |
| <b>SS Enclosure</b>          |             |                     |                  |
| Size I Enclosure for 3P & 4P | CM909960000 | 3160                | 1                |



## DU MCCB Range [8536]

### 3 Pole / 4 Pole MCCBs DU100D/DU125D MCCBs



- › Conforms to IS/IEC 60947-2 & IEC 60947-2
- › Range: 20A to 125A, 3P & 4P
- › Ics=100% of Icu
- › Compact size
- › Common SS Enclosure for 3P & 4P
- › Wide Range of snap fit Internal and External Accessories
- › Adjustable Overload Setting: 0.8 - 1.0 x In

| Type   | Thermal Release Range (A) | Breaking Capacity Icu at 415V AC 50Hz. (kA) | 3 Pole      |                     | 4 Pole      |                     | Std. Pkg. (Nos.) |
|--------|---------------------------|---------------------------------------------|-------------|---------------------|-------------|---------------------|------------------|
|        |                           |                                             | Cat. No.    | M.R.P. (₹) Per Unit | Cat. No.    | M.R.P. (₹) Per Unit |                  |
| DU100D | 16-20                     | 18                                          | CM9051700CO | 6290                | CM9051800CO | 7920                | 1                |
|        | 20-25                     |                                             | CM9051700DO | 6290                | CM9051800DO | 7920                | 1                |
|        | 25-32                     |                                             | CM9051700EO | 6290                | CM9051800EO | 7920                | 1                |
|        | 32-40                     |                                             | CM9051700FO | 6290                | CM9051800FO | 7920                | 1                |
|        | 40-50                     |                                             | CM9051700GO | 6290                | CM9051800GO | 7920                | 1                |
|        | 50-63                     |                                             | CM9051700HO | 6110                | CM9051800HO | 7690                | 1                |
|        | 63-80                     |                                             | CM9051700JO | 6110                | CM9051800JO | 7690                | 1                |
|        | 80-100                    |                                             | CM9051700KO | 6110                | CM9051800KO | 7690                | 1                |
| DU125D | 100-125                   |                                             | CM9067600LO | 7400                | CM9067700LO | 9520                | 1                |

**Note:**  
DIN rail kit available as an accessory. Please refer DU100D/DU125D accessories table.

### 2 Pole / 3 Pole / 4 Pole MCCBs DU100H/DU125H MCCBs



- › Conforms to IS/IEC 60947-2 & IEC 60947-2
- › Range: 20A to 125A, 2P, 3P & 4P
- › Compact size
- › Common SS Enclosure for 2P, 3P & 4P
- › Wide Range of snap fit Internal and External Accessories
- › Adjustable Overload Setting: 0.8 - 1.0 x In

| Type   | Thermal Release Range (A) | Breaking Capacity Icu (kA)                         | 2 Pole      |                     | Breaking Capacity Icu at 415V AC 50Hz. (kA) | 3 Pole      |                     | 4 Pole      |                     | Std. Pkg. (Nos.) |
|--------|---------------------------|----------------------------------------------------|-------------|---------------------|---------------------------------------------|-------------|---------------------|-------------|---------------------|------------------|
|        |                           |                                                    | Cat. No.    | M.R.P. (₹) Per Unit |                                             | Cat. No.    | M.R.P. (₹) Per Unit | Cat. No.    | M.R.P. (₹) Per Unit |                  |
| DU100H | 16-20                     | AC : 65kA @ 240V AC, 50Hz                          | CM9789800C2 | 5060                | 30                                          | CM9789400C2 | 7060                | CM9793300C2 | 9400                | 1                |
|        | 20-25                     |                                                    | CM9789800D2 | 5060                |                                             | CM9789400D2 | 7060                | CM9793300D2 | 9400                | 1                |
|        | 25-32                     |                                                    | CM9789800E2 | 5060                |                                             | CM9789400E2 | 7060                | CM9793300E2 | 9400                | 1                |
|        | 32-40                     |                                                    | CM9789800F2 | 5060                |                                             | CM9789400F2 | 7060                | CM9793300F2 | 9400                | 1                |
|        | 40-50                     | DC : 15kA @ 250V DC, (2P in Series) L/R < 15 msec. | CM9789800G2 | 5060                |                                             | CM9789400G2 | 7060                | CM9793300G2 | 9400                | 1                |
|        | 50-63                     |                                                    | CM9789800H2 | 4910                |                                             | CM9789400H2 | 6850                | CM9793300H2 | 9130                | 1                |
|        | 63-80                     |                                                    | CM9789800J2 | 4910                |                                             | CM9789400J2 | 6850                | CM9793300J2 | 9130                | 1                |
|        | 80-100                    |                                                    | CM9789800K2 | 4910                |                                             | CM9789400K2 | 6850                | CM9793300K2 | 9130                | 1                |
| DU125H | 100-125                   |                                                    | CM9119800LO | 7620                |                                             | CM9067800LO | 7980                | CM9067900LO | 10400               | 1                |

**Note:** 2 Pole in 3 pole frame size

DIN rail kit available as an accessory. Please refer DU100H/DU125H accessories table.

### Accessories for DU100D/DU125D/DU100H/DU125H MCCBs [8538]



Auxiliary Contact



ATAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

| Description                           | Internal    |                     |                  |
|---------------------------------------|-------------|---------------------|------------------|
|                                       | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Auxiliary Contact</b>              |             |                     |                  |
| 1 C/O - Right                         | CM978860000 | 1450                | 1                |
| 2 C/O - Right                         | CM978870000 | 2550                | 1                |
| <b>Trip Alarm Contact</b>             |             |                     |                  |
| 1 C/O - Right                         | CM978880000 | 1450                | 1                |
| 2 C/O - Right                         | CM978890000 | 2550                | 1                |
| <b>Auxiliary + Trip Alarm Contact</b> |             |                     |                  |
| 1 C/O + 1C/O - Right                  | CM978900000 | 2460                | 1                |
| <b>Shunt Release</b>                  |             |                     |                  |
| 24V DC - Left                         | CM914020400 | 2860                | 1                |
| 110V AC - Left                        | CM978830A00 | 2860                | 1                |
| 240/415V AC - Left                    | CM978830M00 | 2860                | 1                |
| <b>Under Voltage Release</b>          |             |                     |                  |
| 240V AC - Left                        | CM97892B000 | 4740                | 1                |

| Description                 | External    |                     |                  |
|-----------------------------|-------------|---------------------|------------------|
|                             | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Spreader Terminals</b>   |             |                     |                  |
| DU100H - 2 Pole             | CM977850002 | 400                 | Set of 4         |
| DU125H - 2 Pole             | CM9119900LO | 510                 | Set of 4         |
| DU100D/DU100H - 3 Pole      | CM977850000 | 640                 | Set of 6         |
| DU125D/DU125H - 3 Pole      | CM9068700LO | 780                 | Set of 6         |
| DU100D/DU100H - 4 Pole      | CM979210000 | 1000                | Set of 8         |
| DU125D/DU125H - 4 Pole      | CM9068800LO | 1140                | Set of 8         |
| <b>Rotary Handle</b>        |             |                     |                  |
| DU100D/DU125D/ Direct ROM   | CM978950000 | 1840                | 1                |
| DU100H/DU125H Extended ROM  | CM978960000 | 2390                | 1                |
| <b>DIN rail kit</b>         |             |                     |                  |
| DU100D/DU125D/DU100H/DU125H | CM909440000 | 220                 | 1                |
| <b>SS Enclosure</b>         |             |                     |                  |
| Size I Enclosure            | CM909960000 | 3160                | 1                |

**Note:** Phase Barriers are supplied along with all MCCBs



## DU/DY MCCB Range [8536]

### 2 Pole / 3 Pole / 4 Pole MCCBs DY250U1/DU250C/DU250/DU400N MCCBs



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 160A to 400A, 2P, 3P & 4P
- Common SS Enclosure for 2P, 3P & 4P\*
- Compact size
- Wide Range of snap fit Internal and External Accessories
- Adjustable Overload Setting: 0.8 - 1.0 x I<sub>n</sub>

| Type    | Thermal Release Range (A) | Breaking Capacity Icu (kA)                                                                                                 | 2 Pole      |                     | Breaking Capacity Icu (kA) | 3 Pole       |                     | 4 Pole       |                     | Std. Pkg. (Nos.) |
|---------|---------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------|---------------------|----------------------------|--------------|---------------------|--------------|---------------------|------------------|
|         |                           |                                                                                                                            | Cat. No.    | M.R.P. (₹) Per Unit |                            | Cat. No.     | M.R.P. (₹) Per Unit | Cat. No.     | M.R.P. (₹) Per Unit |                  |
| DY250U1 | 125-160                   | -                                                                                                                          | -           | -                   | 10                         | CM9819500MO▲ | 9200                | CM9819600MO▲ | 11900               | 1                |
|         | 160-200                   |                                                                                                                            |             |                     |                            | CM9819500NO▲ | 10300               | CM9819600NO▲ | 13300               | 1                |
|         | 200-250                   |                                                                                                                            |             |                     |                            | CM9819500PO▲ | 13300               | CM9819600PO▲ | 17900               | 1                |
| DU250C  | 125-160                   | -                                                                                                                          | -           | -                   | 25                         | CM9063100MO  | 10800               | CM9063400MO  | 13800               | 1                |
|         | 160-200                   |                                                                                                                            |             |                     |                            | CM9063100NO  | 13100               | CM9063400NO  | 16600               | 1                |
|         | 200-250                   |                                                                                                                            |             |                     |                            | CM9063100PO  | 14400               | CM9063400PO  | 19000               | 1                |
| DU250   | 125-160                   | AC : 65kA @ 240V AC, 50Hz<br>DC : 15kA for DU250 @250V DC<br>& 25kA for DU400N @ 250V DC,<br>(2P in Series) L/R < 15 msec. | CM9090500MO | 9410                | 36                         | CM980620000  | 12500               | CM9806500MO  | 15500               | 1                |
|         | 160-200                   |                                                                                                                            | CM9090500NO | 10900               |                            | CM980610000  | 15400               | CM9806500NO  | 20800               | 1                |
|         | 200-250                   |                                                                                                                            | CM9090500PO | 12200               |                            | CM980600000  | 17300               | CM9806500PO  | 22800               | 1                |
| DU400N  | 250-320                   |                                                                                                                            | CM9088600QO | 23000               | 50                         | CM9840200QO  | 26900               | CM9840400QO  | 33000               | 1                |
|         | 320-400                   |                                                                                                                            | CM9088600RO | 23000               |                            | CM9840200RO  | 26900               | CM9840400RO  | 33000               | 1                |

▲ - Spreader Terminals are included

Note: 2 Pole in 3 Pole frame size \* For DU250/DU250C

### Accessories for DY250U1/DU250/DU250C MCCBs [8538]

| Description                           | Internal    |                     |                  |
|---------------------------------------|-------------|---------------------|------------------|
|                                       | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Auxiliary Contact</b>              |             |                     |                  |
| 1 C/O - Right                         | CM978860000 | 1450                | 1                |
| 2 C/O - Right                         | CM978870000 | 2550                | 1                |
| <b>Trip Alarm Contact</b>             |             |                     |                  |
| 1 C/O - Right                         | CM978880000 | 1450                | 1                |
| 2 C/O - Right                         | CM978890000 | 2550                | 1                |
| <b>Auxiliary + Trip Alarm Contact</b> |             |                     |                  |
| 1 C/O + 1C/O - Right                  | CM978900000 | 2460                | 1                |
| <b>Shunt Release</b>                  |             |                     |                  |
| 24V DC - Left                         | CM914020400 | 2860                | 1                |
| 110V AC - Left                        | CM978830A00 | 2860                | 1                |
| 240/415V AC - Left                    | CM978830M00 | 2860                | 1                |
| <b>Under Voltage Release</b>          |             |                     |                  |
| 240V AC - Left                        | CM97892B000 | 4740                | 1                |

| Description               | External    |                     |                  |
|---------------------------|-------------|---------------------|------------------|
|                           | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Spreader Terminals</b> |             |                     |                  |
| DU250 - 2 Pole            | CM909600000 | 2050                | Set of 4         |
| DU250C/DU250 - 3 Pole     | ST980530000 | 2610                | Set of 6         |
| DU250C/DU250 - 4 Pole     | CM920070000 | 3460                | Set of 8         |
| <b>Rotary Handle</b>      |             |                     |                  |
| Direct ROM                | CM980400000 | 1980                | 1                |
| Extended ROM              | CM980410000 | 2540                | 1                |
| <b>SS Enclosure</b>       |             |                     |                  |
| Size II Enclosure         | CM910030000 | 7260                | 1                |

Note: Phase Barriers are supplied along with all MCCBs

### Accessories for DU400N MCCBs [8538]



Auxiliary Contact



TAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

| Description                           | Internal    |                     |                  |
|---------------------------------------|-------------|---------------------|------------------|
|                                       | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Auxiliary Contact</b>              |             |                     |                  |
| 1 C/O                                 | CM998010000 | 1680                | 1                |
| 2 C/O                                 | CM998020000 | 3250                | 1                |
| <b>Trip Alarm Contact</b>             |             |                     |                  |
| 1 C/O - Right                         | CM998030000 | 1760                | 1                |
| <b>Auxiliary + Trip Alarm Contact</b> |             |                     |                  |
| 1 C/O + 1C/O - Right                  | CM998040000 | 3250                | 1                |
| <b>Shunt Release</b>                  |             |                     |                  |
| 110/240/415V AC, 220V DC              | CM998050000 | 4210®               | 1                |
| 24V DC                                | CM989760400 | 4210®               | 1                |
| <b>Under Voltage Release</b>          |             |                     |                  |
| 240V AC - Left                        | CM99986B000 | 5860                | 1                |

| Description               | External    |                     |                  |
|---------------------------|-------------|---------------------|------------------|
|                           | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| <b>Spreader Terminals</b> |             |                     |                  |
| 2 Pole                    | CM909640000 | 3170                | Set of 4         |
| 3 Pole                    | ST980650000 | 4840                | Set of 6         |
| 4 Pole                    | ST980660000 | 6940                | Set of 8         |
| <b>Rotary Handle</b>      |             |                     |                  |
| Direct ROM                | CM998600000 | 3050                | 1                |
| Extended ROM              | CM998610000 | 5020                | 1                |

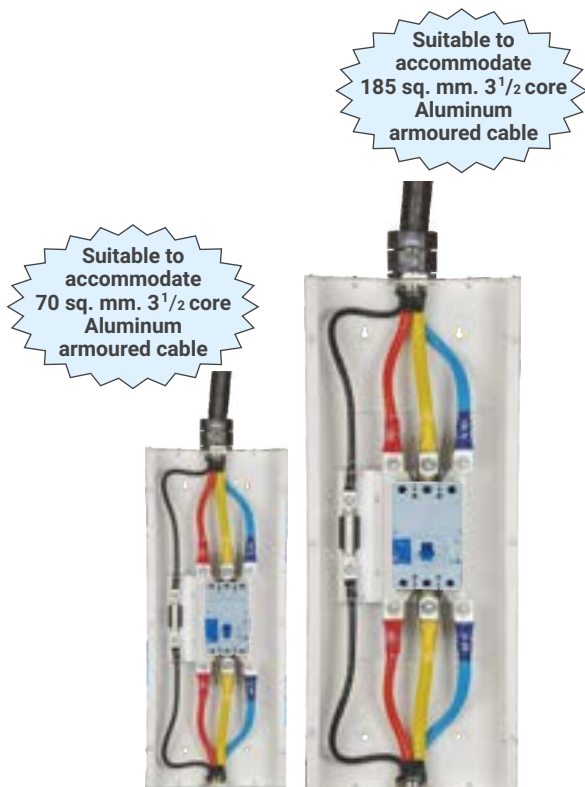
Note:

Phase Barriers are supplied along with all MCCBs

All internal accessories & ROMs are common for 2P MCCBs

@- 'NO' of control contactor to be connected in series for DC control supply

## SS Enclosure for MCCBs [8538]



Size I & Size II Enclosures

**Note:**  
Pictorial is for representation purpose only.  
Does not include cabling. MCCB to be purchased separately.

### Perfect home for your MCCB

- › Superior Aesthetics
- › Common Enclosure for 3P and 4P MCCBs
- › Generous space for cable termination
- › In-built neutral Link for TPN system
- › IK08 and IP30 Protection
- › Mounting holes for easy wall mounting
- › Louvers for better heat dissipation
- › Effortless Installation
- › Size I suitable up to 125A MCCBs, 36kA
- › Size II suitable from 160A to 250A MCCBs, 50kA

Separate cable gland box NOT required



| Description                                                 | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------------------------------------------|-------------|---------------------|------------------|
| Size I Enclosure for DU100H/DU125H/DU100D/DU125D/DN0/DY125U | CM909960000 | 3160                | 1                |
| Size II Enclosure for DY250U1/DU250C/DU250/DN1              | CM910030000 | 7260                | 1                |



Easy wall Mounting



In-built Neutral Link



Better Heat Dissipation

## Ground Fault Module [8538]

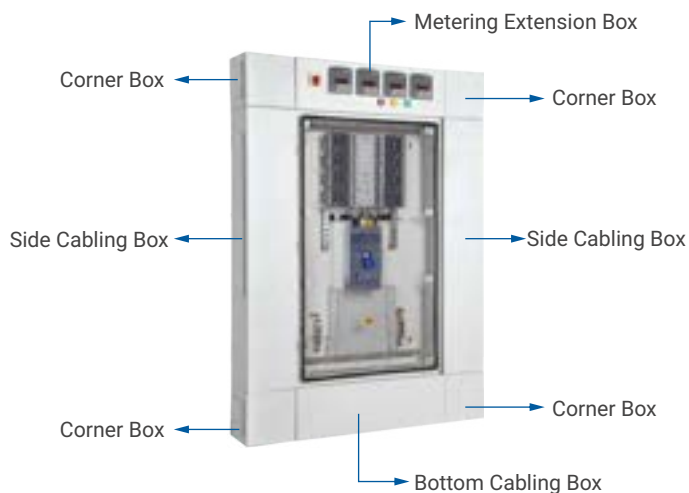


- › Provides protection against ground fault
- › GF Module for ground fault protection can be used with all Thermal Magnetic MCCBs
- › Adjustable ground fault sensitivity selection: 10% - 50% of In
- › Adjustable time delay: 100ms / 200ms
- › Test facility to check healthiness of ground fault protection system without tripping MCCB
- › Suitable for 3 phase 3 wire & 3 phase 4 wire electrical distribution network with cable termination
- › LED for earth fault indication

| Ground Fault Protection |            |             |                     |                      |                  |
|-------------------------|------------|-------------|---------------------|----------------------|------------------|
| Type                    | Range (A)  | Cat. No.    | M.R.P. (₹) Per Unit | CT                   | Std. Pkg. (Nos.) |
| GF1                     | 100 - 200A | ST277450000 | 14400               | Built in CBCT        | 1                |
| GF2                     | 200 - 400A | ST277460000 | 22000               | Built in CBCT        | 1                |
| GF11                    | up to 800A | ST285940000 | 13300 <sup>#</sup>  | External CT required | 1                |

<sup>#</sup> External CTs of 5P10 class with secondary rating of 1A or 5A





## Range Highlights

- > Sub Main Distribution Board (SMDB) with MCCB as incomer and MCCBs as outgoing devices
- > Conforms to IEC 61439-2
- > DEKRA and ASTA certified
- > Rating up to 630 A
- > Short-time withstand current
  - » 250A & 400A SMDB - 36 kA 1s
  - » 630A SMDB - 50 kA 1s
- > Ingress protection - IP 43
- > Choice in number of outgoing ways - 4, 8, 12 and 16
- > Ready to use, off the shelf solution
- > Suitable for [d sine](#) range of MCCBs
- > Metering & cabling extensions are available as accessories

## ENERSYS-S SMDB

| Description                      | Cat. No.      | No of ways |      | M.R.P. (₹)<br>Per Unit | Height (H)<br>(mm) | Width (W)<br>(mm) | Depth (D)<br>(mm) |
|----------------------------------|---------------|------------|------|------------------------|--------------------|-------------------|-------------------|
|                                  |               | 250A       | 100A |                        |                    |                   |                   |
| SMDB - TN250D, O/G 100A 4 ways   | DA20D1044CZZ0 | -          | 4    | 56450                  | 637                | 670               | 208.5             |
| SMDB - TN250D, O/G 100A 8 ways   | DA20D1084CZZ0 | -          | 8    | 68655                  | 787                | 670               | 208.5             |
| SMDB - TN250D, O/G 100A 12 ways  | DA20D1124CZZ0 | -          | 12   | 86355                  | 937                | 670               | 208.5             |
| SMDB - TN250D, O/G 100A 16 ways  | DA20D1164CZZ0 | -          | 16   | 101490                 | 1087               | 670               | 208.5             |
| SMDB - TN400D, O/G 100A 4 ways   | DA40D1044CZZ0 | -          | 4    | 63250                  | 937                | 670               | 208.5             |
| SMDB - TN400D, O/G 100A 8 ways   | DA40D1084CZZ0 | -          | 8    | 72070                  | 1087               | 670               | 208.5             |
| SMDB - TN400D, O/G 100A 12 ways  | DA40D1124CZZ0 | -          | 12   | 92670                  | 1237               | 670               | 208.5             |
| SMDB - TN400D, O/G 100A 16 ways  | DA40D1164CZZ0 | -          | 16   | 109225                 | 1387               | 670               | 208.5             |
| SMDB - TN630D, O/G 100A 8 ways   | DA60D1084CZZ0 | -          | 8    | 119500                 | 1287               | 870               | 208.5             |
| SMDB - TN630D, O/G 100A 12 ways  | DA60D1124CZZ0 | -          | 12   | 161385                 | 1507               | 870               | 208.5             |
| SMDB - TN630D, O/G 100A 16 ways  | DA60D1164CZZ0 | -          | 16   | 176900                 | 1507               | 870               | 208.5             |
| SMDB - TN630D, O/G 250A 4 ways   | DA62D1044CZZ0 | 4          | -    | 116380                 | 1067               | 870               | 208.5             |
| SMDB - TN630D, O/G 250A 8 ways   | DA62D1084CZZ0 | 8          | -    | 130345                 | 1287               | 870               | 208.5             |
| SMDB - TN630D, O/G 250A 12 ways  | DA62D1124CZZ0 | 12         | -    | 167590                 | 1507               | 870               | 208.5             |
| SMDB - TN630D, O/G 250A 16 ways  | DA62D1164CZZ0 | 16         | -    | 187765                 | 1727               | 870               | 208.5             |
| SMDB - TN630D, O/G COMBI 4 ways  | DA6AD1044CZZ0 | 2          | 2    | 114055                 | 1067               | 870               | 208.5             |
| SMDB - TN630D, O/G COMBI 8 ways  | DA6AD1084CZZ0 | 2          | 6    | 124140                 | 1287               | 870               | 208.5             |
| SMDB - TN630D, O/G COMBI 12 ways | DA6AD1124CZZ0 | 2          | 10   | 164485                 | 1507               | 870               | 208.5             |
| SMDB - TN630D, O/G COMBI 16 ways | DA6AD1164CZZ0 | 2          | 14   | 181550                 | 1507               | 870               | 208.5             |

| Incoming Device [8536] |                             |               |                        |
|------------------------|-----------------------------|---------------|------------------------|
| SMDB Type              | Description                 | Cat. No.      | M.R.P. (₹)<br>Per Unit |
| TN250D*                | DN1-250C 3 Pole MCCB - 160A | CM9063800MO   | 20500                  |
|                        | DN1-250C 3 Pole MCCB - 200A | CM9063800NO   | 26200                  |
|                        | DN1-250C 3 Pole MCCB - 250A | CM9063800PO   | 30700                  |
| TN400D                 | DN3-400D 3 Pole MCCB - 320A | CM9400500Q10G | *                      |
|                        | DN3-400D 3 Pole MCCB - 400A | CM9400500R10G | *                      |
| TN630D                 | DN3-630D 3 Pole MCCB - 500A | CM9400600S10G | 63800                  |
|                        | DN3-630D 3 Pole MCCB - 630A | CM9400600T10G | 63800                  |

### Note:

- > While ordering SMDB, incoming and outgoing MCCBs have to be ordered separately.
  - > Prices of MCCBs are not included in SMDB prices.
  - \* TN250D - Suitable for DN1-250N, DU250 & DU250C MCCB as incomer.
- ## Price on Request.**

| Outgoing Device [8536]  |                             |               |                        |
|-------------------------|-----------------------------|---------------|------------------------|
| SMDB Type               | Description                 | Cat. No.      | M.R.P. (₹)<br>Per Unit |
| TN250D, TN400D & TN630D | DN0-100C 3 Pole MCCB - 20A  | CM9161200COOG | 11400                  |
|                         | DN0-100C 3 Pole MCCB - 25A  | CM9161200DOOG | 11400                  |
|                         | DN0-100C 3 Pole MCCB - 32A  | CM9161200EOOG | 11400                  |
|                         | DN0-100C 3 Pole MCCB - 40A  | CM9161200FOOG | 11400                  |
|                         | DN0-100C 3 Pole MCCB - 50A  | CM9161200GOOG | 11400                  |
|                         | DN0-100C 3 Pole MCCB - 63A  | CM9161200HOOG | 11100                  |
|                         | DN0-100C 3 Pole MCCB - 80A  | CM9161200JOOG | 11100                  |
|                         | DN0-100C 3 Pole MCCB - 100A | CM9161200KOOG | 11100                  |
| TN630D                  | DN1-250C 3 Pole MCCB - 160A | CM9063800MO   | 20500                  |
|                         | DN1-250C 3 Pole MCCB - 200A | CM9063800NO   | 26200                  |
|                         | DN1-250C 3 Pole MCCB - 250A | CM9063800PO   | 30700                  |

DN0, DU100D & DU100H MCCBs are suitable as outgoing devices up to 100A  
 DN1-250N, DU250 & DU250C MCCBs are suitable as outgoing devices up to 250A

## Metering, Bottom Cabling & Corner Box

- › Provision of 3 nos of 1-phase ammeter (96\*96), 1 nos of 1-phase voltmeter (96\*96) with selector switch and indicating lamps.

| SMDB Type               | Description            | Cat. No.    | M.R.P. (₹) Per Unit |
|-------------------------|------------------------|-------------|---------------------|
| TN250D & TN400D         | Metering Extension Box | CM9043900PO | 8715                |
|                         | Bottom Cabling Box     | CM904370000 | 8170                |
| TN630D                  | Metering Extension Box | CM9106400TO | 9190                |
|                         | Bottom Cabling Box     | CM910620000 | 8640                |
| TN250D, TN400D & TN630D | Corner Box             | CM910890000 | 3035                |
|                         | Mounting base          | CM702600000 | 4095                |

**Note:**

- › Ammeter, voltmeter, selector switch and indicating lights have to be ordered separately.
- › Mounting base to be used without bottom cabling box.



## Side Cabling Box

| SMDB Type | No. of Ways |      | Left        |                     | Right       |                     |
|-----------|-------------|------|-------------|---------------------|-------------|---------------------|
|           | 250A        | 100A | Cat. No.    | M.R.P. (₹) Per Unit | Cat. No.    | M.R.P. (₹) Per Unit |
| TN250D    | -           | 4    | CM910850DOO | 8360                | CM910860DOO | 8360                |
|           | -           | 8    | CM910850FOO | 10795               | CM910860FOO | 10795               |
|           | -           | 12   | CM910850HOO | 12935               | CM910860HOO | 12935               |
|           | -           | 16   | CM910850KOO | 15100               | CM910860KOO | 15100               |
| TN400D    | -           | 4    | CM910870DOO | 12935               | CM910880DOO | 12935               |
|           | -           | 8    | CM910870FOO | 15100               | CM910880FOO | 15100               |
|           | -           | 12   | CM910870HOO | 16540               | CM910880HOO | 16540               |
|           | -           | 16   | CM910870KOO | 18690               | CM910880KOO | 18690               |
| TN630D    | -           | 8    | CM911200OFO | 15665               | CM911210OFO | 15665               |
|           | -           | 12   | CM911200OHO | 18250               | CM911210OHO | 18250               |
|           | -           | 16   |             |                     |             |                     |
|           | 4           | -    | CM911200ODO | 14040               | CM911210ODO | 14040               |
|           | 8           | -    | CM911200OFO | 15665               | CM911210OFO | 15665               |
|           | 12          | -    | CM911200OHO | 18250               | CM911210OHO | 18250               |
|           | 16          | -    | CM911200OKO | 19885               | CM911210OKO | 19885               |
|           | 2           | 2    | CM911200ODO | 14040               | CM911210ODO | 14040               |
|           | 2           | 6    | CM911200OFO | 15665               | CM911210OFO | 15665               |
|           | 2           | 10   | CM911200OHO | 18250               | CM911210OHO | 18250               |
|           | 2           | 14   |             |                     |             |                     |



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Peace of Mind with Priority Service for our Air Circuit Breaker

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- › **Expert Support:** Receive guidance and technical assistance from our team.
- › **Peace of Mind:** Rest assured knowing our ACB is in good hands.

## Eligibility

- › **ACB should be within the warranty period.**

**OMEGA**  
u-POWER  
Air Circuit Breakers

**C-POWER**

To learn more about the First Serve Program or  
to schedule our ACB's first service visit, please contact

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## DIGITAL READY SOLUTION TO ENHANCE ENERGY EFFICIENCY

Highest Safety with MTX Protection and Control Unit



Full Uptime with Dual Protection Set Group



Easy Maintenance with Tool Less Arc Chute Removal



Superior Performance With Double Short Circuit Protection



Remote Monitoring & Control with Digicom Module



Advanced Protection with ERMS (Energy Reduction Maintenance Settings)



In-built Industrial Communication Protocol  
(MODBUS TCP/IP - ETHERNET/MODBUS RS485/PROFIBUS)





**OMEGA** Range of Air Circuit Breakers  
Air Circuit Breakers


- › Complete range conforms to IS/IEC 60947-2 & IEC 60947-2
- › Current Rating from **400A to 6300A** in **3 Frame sizes** for application voltages **upto 690V AC**
- › Special ACB range available for Voltage Applications **upto 800V AC and 1000V AC<sup>#</sup>**
- › Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed/Draw-out version
- › Common Height & Depth across the range
- › High short time fault withstand capacity,  $I_{cu} = I_{cs} = I_{cw}$  for 1 sec for total selectivity
- › High mechanical and electrical operating life
- › Neutral pole is 100% rated, option of 50% & 200% rated neutral also available
- › Available in standard NRYB & RYBN/NBYR/BYRN configurations in 4 Pole ACBs **with on-site change facility**
- › In-built Electrical & Mechanical Anti-Pumping
- › Modular & snap-fit accessories
- › Ease of on-site conversion from Fixed to Draw-out version
- › Pollution Degree 4 suitability
- › Best in Class Overlap with Bus bars
- › Break Time of 25msec
- › RoHS Compliant

### Matrix Protection & Control Units:

- › Available in versions - MTX1.0/1G/1Gi/1.5G/1.5Gi, MTX3.5/3.5EC/3.5H & MTX 3.5T/MTX 3.5ET
- › Unique O-LED display for metering
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- › Provision for on-load self-diagnosis of Releases & modules
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- › Power & Harmonics measurement
- › Temperature rise monitoring & protection
- › Easy to integrate with HMI & PLC
- › Add-on modules for advance protections
- › Protection Releases conform to EMI/EMC standard



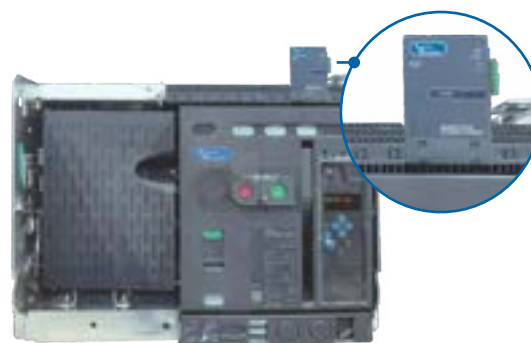
UW-MTX1G/1Gi



UW-MTX1.5G/1.5Gi



UW-MTX3.5/3.5EC/3.5H



### Breaking Capacities Offered:



Integrated MODBUS TCP/IP (ETHERNET) Communicable ACB

at 415V/440V AC (Please refer Catalogue for Breaking Capacities above 440V AC)

| I <sub>cu</sub> = I <sub>cs</sub> = I <sub>cw</sub> for 1 sec |           |        |        |        |        |        |        |        |        |        |
|---------------------------------------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Rated current                                                 | 800A      | 1000A  | 1250A  | 1600A  | 2000A  | 2500A  | 3200A  | 4000A  | 5000A  | 6300A  |
| Frame-1                                                       | N : 50kA  |        |        |        |        |        |        |        |        |        |
|                                                               | S : 65kA  |        |        |        |        |        |        |        |        |        |
|                                                               | H : 80kA  |        |        |        |        |        |        |        |        |        |
|                                                               | UW1-08    | UW1-10 | UW1-12 | UW1-16 | UW1-20 | UW1-25 |        |        |        |        |
| Frame-2                                                       | N : 50kA  |        |        |        |        |        |        |        |        |        |
|                                                               | S : 65kA  |        |        |        |        |        |        |        |        |        |
|                                                               | H : 80kA  |        |        |        |        |        |        |        |        |        |
|                                                               | UW2-08    | UW2-10 | UW2-12 | UW2-16 | UW2-20 | UW2-25 | UW2-32 | UW2-40 |        |        |
| Frame-3                                                       | H : 80kA  |        |        |        |        |        |        |        |        |        |
|                                                               | V : 100kA |        |        |        |        |        |        |        |        |        |
|                                                               | UW3-08    | UW3-10 | UW3-12 | UW3-16 | UW3-20 | UW3-25 | UW3-32 | UW3-40 | UW3-50 | UW3-63 |

Note: 400A &amp; 630A ACBs are also available on request. # Please contact the nearest branch office for more details of 1000V AC ACBs



| UW | 1 | 08 | N | X | D | 1 | 2 | 9 | 0 | 0# | UW1 800N 3P ED 1.5G BotV                                                                                                                           |  |          |
|----|---|----|---|---|---|---|---|---|---|----|----------------------------------------------------------------------------------------------------------------------------------------------------|--|----------|
|    |   |    |   |   |   |   |   |   |   |    | <b>Selection for Termination (For Drawout ACBs Only)</b>                                                                                           |  |          |
|    |   |    |   |   |   |   |   |   |   |    | Standard Termination                                                                                                                               |  | 0        |
|    |   |    |   |   |   |   |   |   |   |    | For Top Horizontal (Long), Bottom Vertical for Fr2 & Fr3                                                                                           |  | X        |
|    |   |    |   |   |   |   |   |   |   |    | For Top & Bottom Horizontal (Long) for Fr3                                                                                                         |  | Y        |
|    |   |    |   |   |   |   |   |   |   |    | Note: X is applicable for 4000A (Fr2 & Fr3) and 5000A (Fr3). Y is applicable for 4000A (Fr3) & 5000A (Fr3). X & Y recommended for Buscoupler only. |  |          |
|    |   |    |   |   |   |   |   |   |   |    | For 800V AC Application                                                                                                                            |  | ZM       |
|    |   |    |   |   |   |   |   |   |   |    | For 1000V AC Application                                                                                                                           |  | ZH       |
|    |   |    |   |   |   |   |   |   |   |    | <b>Temperature Rise Monitoring<sup>(3)</sup></b>                                                                                                   |  |          |
|    |   |    |   |   |   |   |   |   |   |    | Not Required                                                                                                                                       |  | 0        |
|    |   |    |   |   |   |   |   |   |   |    | Required                                                                                                                                           |  | 1        |
|    |   |    |   |   |   |   |   |   |   |    | <b>Selection for P&amp;C Units</b>                                                                                                                 |  |          |
|    |   |    |   |   |   |   |   |   |   |    | B/C (w/o protection)                                                                                                                               |  | 0        |
|    |   |    |   |   |   |   |   |   |   |    | UW - MTX1.0                                                                                                                                        |  | 7        |
|    |   |    |   |   |   |   |   |   |   |    | UW - MTX1G                                                                                                                                         |  | 8        |
|    |   |    |   |   |   |   |   |   |   |    | UW - MTX1Gi                                                                                                                                        |  | B        |
|    |   |    |   |   |   |   |   |   |   |    | <b>UW - MTX1.5G</b>                                                                                                                                |  | <b>9</b> |
|    |   |    |   |   |   |   |   |   |   |    | UW - MTX1.5Gi                                                                                                                                      |  | C        |
|    |   |    |   |   |   |   |   |   |   |    | UW-MTX3.5                                                                                                                                          |  | 3        |
|    |   |    |   |   |   |   |   |   |   |    | UW-MTX3.5EC <sup>(5)</sup>                                                                                                                         |  | 4        |
|    |   |    |   |   |   |   |   |   |   |    | UW-MTX4.5                                                                                                                                          |  | 5        |
|    |   |    |   |   |   |   |   |   |   |    | UW-MTX3.5H                                                                                                                                         |  | 6        |
|    |   |    |   |   |   |   |   |   |   |    | New UW-MTX3.5T <sup>(8)</sup>                                                                                                                      |  | D        |
|    |   |    |   |   |   |   |   |   |   |    | New UW-MTX3.5ET <sup>(8)</sup>                                                                                                                     |  | E        |
|    |   |    |   |   |   |   |   |   |   |    | New UW-MTX4.5T <sup>(8)</sup>                                                                                                                      |  | F        |
|    |   |    |   |   |   |   |   |   |   |    | New UW-MTX3.5A <sup>(6)</sup>                                                                                                                      |  | K        |
|    |   |    |   |   |   |   |   |   |   |    | <b>Selection for control voltage<sup>(2)</sup></b>                                                                                                 |  |          |
|    |   |    |   |   |   |   |   |   |   |    | For Manually Operated                                                                                                                              |  | 0        |
|    |   |    |   |   |   |   |   |   |   |    | <b>240V AC/DC ECD &amp; CR + 240V AC/DC SR</b>                                                                                                     |  | <b>1</b> |
|    |   |    |   |   |   |   |   |   |   |    | 240V AC/DC ECD & CR + 24V DC SR                                                                                                                    |  | 2        |
|    |   |    |   |   |   |   |   |   |   |    | 110V AC/DC ECD & CR + 110V AC/DC SR                                                                                                                |  | 3        |
|    |   |    |   |   |   |   |   |   |   |    | 240V AC/DC ECD & CR + 110V AC/DC SR                                                                                                                |  | 4        |
|    |   |    |   |   |   |   |   |   |   |    | <b>Selection for No. of Poles</b>                                                                                                                  |  |          |
|    |   |    |   |   |   |   |   |   |   |    | <b>3 Pole</b>                                                                                                                                      |  | <b>X</b> |
|    |   |    |   |   |   |   |   |   |   |    | 4 Pole 100% N                                                                                                                                      |  | F        |
|    |   |    |   |   |   |   |   |   |   |    | 4 Pole 50% N (in Fr-III only)                                                                                                                      |  | H        |
|    |   |    |   |   |   |   |   |   |   |    | 4 Pole 200% N (upto 2500A)                                                                                                                         |  | D        |

| Frame Size  |   |
|-------------|---|
| Frame - I   | 1 |
| Frame - II  | 2 |
| Frame - III | 3 |

| Current Ratings      |           |
|----------------------|-----------|
| 400A                 | 04        |
| 630A                 | 06        |
| <b>800A</b>          | <b>08</b> |
| 1000A                | 10        |
| 1250A                | 12        |
| 1600A                | 16        |
| 2000A                | 20        |
| 2500A <sup>(4)</sup> | 25        |
| 3200A                | 32        |
| 4000A                | 40        |
| 5000A                | 50        |
| 6300A                | 63        |

| Type                         |          |
|------------------------------|----------|
| Manually Operated            | 1        |
| <b>Electrically Operated</b> | <b>2</b> |

| Version                          |          |
|----------------------------------|----------|
| <b>Draw-out</b>                  | <b>D</b> |
| Fixed                            | F        |
| Cradle/Fixed Part <sup>(7)</sup> | C        |
| Breaker/Moving Part              | B        |

| Selection for Breaking Capacity (Icu=Ics) <sup>(1)</sup> |          |
|----------------------------------------------------------|----------|
| <b>50kA (Fr-I upto 2000A &amp; Fr-II upto 4000A)</b>     | <b>N</b> |
| 65kA (Fr-I & Fr-II)                                      | S        |
| 80kA (Fr-I, Fr-II & Fr-III)                              | H        |
| 100kA (Fr-III)                                           | V        |

### Please Note:

- (1) For Icu values please refer technical specification
- (2) Other options of control voltage are available as accessory
- (3) Temperature monitoring & protection is available only for Drawout type ACBs with MTX3.5 Series & above releases
- (4) For Fr-1, 2500A selection, please contact the nearest branch office
- (5) For system requiring 690V metering, kindly order separate Power Metering module with MTX3.5.
- (6) For MTX3.5A technical specifications please get in touch with the local sales team
- (7) For Cradle Cat Number last 5 digits shall be "00000" of any combination
- (8) MODBUS TCP/IP (Ethernet) ready ACB as an Integrated Release Offering

### Draw-out Version:

OMEGA ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/1.5Gi/3.5 Series/4.5 Series), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Smart-racking shutter, Safety shutter assembly, Racking Handle, Door sealing frame, Pad-locking arrangement for ON/OFF button, Rating Error Preventer, Arc shield.

A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frame 1, 2 & 3.

B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3.

C) For rating 4000A and above operation counter inbuilt for Frames 2 & 3 both.

### Fixed Version:

OMEGA ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/1.5Gi/3.5 Series/4.5 Series), Common Fault Indication microswitch, 4NO+4NC Aux. contacts, Door sealing frame & Pad-locking arrangement for ON/OFF push button.

A) For ratings upto 1600A, one side vertical terminal adaptors (Bottom) for Frames 1, 2 & 3.

B) For ratings 2000A & above, both side vertical terminal adaptors (Top & Bottom) for Frames 1, 2 & 3.

C) For ratings 4000A & above, operation counter inbuilt for Frames 2 & 3 both.



## ACBs upto 690V AC with UW-MTX1G (LSING - BCD Switches) and UW-MTX1.5G (LSING + Current Metering - BCD Switches) [8536]



| Current Rating | Version | Breaking Capacity @ 415V AC | 3 Pole Manual Draw-out ACB |                     |               |                     | 4 Pole Manual Draw-out ACB |                     |               |                     |
|----------------|---------|-----------------------------|----------------------------|---------------------|---------------|---------------------|----------------------------|---------------------|---------------|---------------------|
|                |         |                             | UW-MTX1G                   |                     | UW-MTX1.5G    |                     | UW-MTX1G                   |                     | UW-MTX1.5G    |                     |
|                |         |                             | Cat. No.                   | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.                   | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |
| 800A           | MDO     | 50kA                        | UW108NXD01800              | 288000              | UW108NXD01900 | 307400              | UW108NFD01800              | 359700              | UW108NFD01900 | 379100              |
| 1000A          |         |                             | UW110NXD01800              | 297700              | UW110NXD01900 | 317100              | UW110NFD01800              | 382600              | UW110NFD01900 | 402000              |
| 1250A          |         |                             | UW112NXD01800              | 327900              | UW112NXD01900 | 347300              | UW112NFD01800              | 413700              | UW112NFD01900 | 433100              |
| 1600A          |         |                             | UW116NXD01800              | 371600              | UW116NXD01900 | 391000              | UW116NFD01800              | 463500              | UW116NFD01900 | 482900              |
| 2000A          |         |                             | UW120NXD01800              | 453500              | UW120NXD01900 | 472900              | UW120NFD01800              | 545400              | UW120NFD01900 | 564800              |
| 2500A          |         |                             | UW225NXD01800              | 579600              | UW225NXD01900 | 599000              | UW225NFD01800              | 696900              | UW225NFD01900 | 716300              |
| 3200A          |         |                             | UW232NXD01800              | 692800              | UW232NXD01900 | 712200              | UW232NFD01800              | 850600              | UW232NFD01900 | 870000              |
| 4000A          |         |                             | UW240NXD01800              | 798300              | UW240NXD01900 | 817700              | UW240NFD01800              | 971100              | UW240NFD01900 | 990500              |

| Current Rating | Version | Breaking Capacity @ 415V AC | 3 Pole Manual Fixed ACB |                     |               |                     | 4 Pole Manual Fixed ACB |                     |               |                     |
|----------------|---------|-----------------------------|-------------------------|---------------------|---------------|---------------------|-------------------------|---------------------|---------------|---------------------|
|                |         |                             | UW-MTX1G                |                     | UW-MTX1.5G    |                     | UW-MTX1G                |                     | UW-MTX1.5G    |                     |
|                |         |                             | Cat. No.                | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit | Cat. No.                | M.R.P. (₹) Per Unit | Cat. No.      | M.R.P. (₹) Per Unit |
| 800A           | MF      | 50kA                        | UW108NXF01800           | 221500              | UW108NXF01900 | 240900              | UW108NFF01800           | 276700              | UW108NFF01900 | 296100              |
| 1000A          |         |                             | UW110NXF01800           | 229000              | UW110NXF01900 | 248400              | UW110NFF01800           | 294300              | UW110NFF01900 | 313700              |
| 1250A          |         |                             | UW112NXF01800           | 252200              | UW112NXF01900 | 271600              | UW112NFF01800           | 318200              | UW112NFF01900 | 337600              |
| 1600A          |         |                             | UW116NXF01800           | 285800              | UW116NXF01900 | 305200              | UW116NFF01800           | 356500              | UW116NFF01900 | 375900              |
| 2000A          |         |                             | UW120NXF01800           | 348800              | UW120NXF01900 | 368200              | UW120NFF01800           | 419500              | UW120NFF01900 | 438900              |
| 2500A          |         |                             | UW225NXF01800           | 445800              | UW225NXF01900 | 465200              | UW225NFF01800           | 536100              | UW225NFF01900 | 555500              |
| 3200A          |         |                             | UW232NXF01800           | 532900              | UW232NXF01900 | 552300              | UW232NFF01800           | 654300              | UW232NFF01900 | 673700              |
| 4000A          |         |                             | UW240NXF01800           | 614100              | UW240NXF01900 | 633500              | UW240NFF01800           | 747000              | UW240NFF01900 | 766400              |

| M.R.P. changes for product customization                                                                        |                                                                                                                      | M.R.P. (₹)<br>Per Unit |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------|
| MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)                                                           |                                                                                                                      | 80000                  |
| Buscoupler (without protection release)                                                                         |                                                                                                                      | ★                      |
| UW-MTX1.0 (LSI - BCD Switches)                                                                                  |                                                                                                                      |                        |
| UW-MTX1Gi (LSING + Inbuilt ZSI - BCD Switches)                                                                  |                                                                                                                      |                        |
| UW-MTX1.5Gi (LSING + Current Metering + Inbuilt ZSI - BCD Switches)                                             |                                                                                                                      |                        |
| UW-MTX3.5 (LSING + Current Metering) + can be upgraded for Power Metering & Communication                       |                                                                                                                      |                        |
| UW-MTX3.5EC (LSING + Power Metering + Communication)                                                            |                                                                                                                      |                        |
| UW-MTX3.5H (LSING + Power Metering + Harmonic Metering)                                                         |                                                                                                                      |                        |
| UW-MTX4.5 (LSING + Power Metering + Harmonic Metering + Communication with Touch Screen navigation + PS Module) |                                                                                                                      |                        |
| PS (Auxiliary power supply module for display in No-load or OFF condition)**\$                                  |                                                                                                                      |                        |
| COM Module (MODBUS) for communication\$                                                                         |                                                                                                                      |                        |
| PM Module for power metering\$                                                                                  |                                                                                                                      |                        |
| NEW                                                                                                             | UW-MTX3.5T (LSING + Current Metering + MODBUS TCP/IP (ETHERNET) Communication) + can be upgraded for Power Metering# |                        |
| NEW                                                                                                             | UW-MTX3.5ET (LSING + Power Metering +MODBUS TCP/IP (ETHERNET) Communication)#                                        |                        |

\* Available on request

\*\* Applicable only for MTX 1Gi, MTX 1.5Gi & MTX 3.5 Series

# Integrated Release along with ACB - available as Factory-fitted option only

\$ Chapter ID [8538]



## 3 Pole ACBs upto 690V AC with UW-MTX1G (LSING - BCD Switches) [8536]



| Current Rating | Version | 3 Pole Manual Draw-out ACB with UW-MTX1G |                     |                    |                     |                     |                     |
|----------------|---------|------------------------------------------|---------------------|--------------------|---------------------|---------------------|---------------------|
|                |         | S (65kA @ 415V AC)                       |                     | H (80kA @ 415V AC) |                     | V (100kA @ 415V AC) |                     |
|                |         | Cat. No.                                 | M.R.P. (₹) Per Unit | Cat. No.           | M.R.P. (₹) Per Unit | Cat. No.            | M.R.P. (₹) Per Unit |
| 800A           | MDO     | UW108SXD01800                            | *                   | UW108HXD01800      | *                   | UW308VXD01800       | *                   |
| 1000A          |         | UW110SXD01800                            |                     | UW110HXD01800      |                     | UW310VXD01800       |                     |
| 1250A          |         | UW112SXD01800                            |                     | UW112HXD01800      |                     | UW312VXD01800       |                     |
| 1600A          |         | UW116SXD01800                            |                     | UW116HXD01800      |                     | UW316VXD01800       |                     |
| 2000A          |         | UW120SXD01800                            |                     | UW120HXD01800      |                     | UW320VXD01800       |                     |
| 2500A          |         | UW225SXD01800                            |                     | UW225HXD01800      |                     | UW325VXD01800       |                     |
| 3200A          |         | UW232SXD01800                            |                     | UW232HXD01800      |                     | UW332VXD01800       |                     |
| 4000A          |         | UW240SXD01800                            |                     | UW240HXD01800      |                     | UW340VXD01800       |                     |
| 4000A          |         | -                                        |                     | UW340HXD01800      |                     | UW340VXD01800       |                     |
| 5000A          |         | -                                        |                     | UW350HXD01800      |                     | UW350VXD01800       |                     |
| 6300A          |         | -                                        | -                   | UW363HXD01800      |                     | UW363VXD01800       |                     |

| 3 Pole Manual Fixed ACB with UW-MTX1G |    |               |   |               |   |               |   |
|---------------------------------------|----|---------------|---|---------------|---|---------------|---|
| 800A                                  | MF | UW108SXF01800 | * | UW108HXF01800 | * | UW308VXF01800 | * |
| 1000A                                 |    | UW110SXF01800 |   | UW110HXF01800 |   | UW310VXF01800 |   |
| 1250A                                 |    | UW112SXF01800 |   | UW112HXF01800 |   | UW312VXF01800 |   |
| 1600A                                 |    | UW116SXF01800 |   | UW116HXF01800 |   | UW316VXF01800 |   |
| 2000A                                 |    | UW120SXF01800 |   | UW120HXF01800 |   | UW320VXF01800 |   |
| 2500A                                 |    | UW225SXF01800 |   | UW225HXF01800 |   | UW325VXF01800 |   |
| 3200A                                 |    | UW232SXF01800 |   | UW232HXF01800 |   | UW332VXF01800 |   |
| 4000A                                 |    | UW240SXF01800 |   | UW240HXF01800 |   | UW340VXF01800 |   |
| 4000A                                 |    | -             |   | UW340HXF01800 |   | UW340VXF01800 |   |
| 5000A                                 |    | -             |   | UW350HXF01800 |   | UW350VXF01800 |   |
| 6300A                                 |    | -             | - | *             |   | *             |   |

| M.R.P. changes for product customization                                                                             | M.R.P. (₹) Per Unit |
|----------------------------------------------------------------------------------------------------------------------|---------------------|
| MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)                                                                | 80000               |
| Buscoupler (without protection release)                                                                              | *                   |
| UW-MTX1.0 (LSI - BCD Switches)                                                                                       |                     |
| UW-MTX1Gi (LSING + Inbuilt ZSI - BCD Switches)                                                                       |                     |
| UW-MTX1.5G (LSING + Current Metering - BCD Switches)                                                                 |                     |
| UW-MTX1.5Gi (LSING + Current Metering + Inbuilt ZSI - BCD Switches)                                                  |                     |
| UW-MTX3.5 (LSING + Current Metering) + can be upgraded for Power Metering & Communication                            |                     |
| UW-MTX3.5EC (LSING + Power Metering + Communication)                                                                 |                     |
| UW-MTX3.5H (LSING + Power Metering + Harmonic Metering)                                                              |                     |
| UW-MTX4.5 (LSING + Power Metering + Harmonic Metering + Communication with Touch Screen navigation + PS Module)      |                     |
| PS (Auxiliary power supply module for display in No-load or OFF condition)**\$                                       |                     |
| COM Module (MODBUS) for communication\$                                                                              |                     |
| PM Module for power metering\$                                                                                       |                     |
| UW-MTX3.5T (LSING + Current Metering + MODBUS TCP/IP (ETHERNET) Communication) + can be upgraded for Power Metering# |                     |
| UW-MTX3.5ET (LSING + Power Metering + MODBUS TCP/IP (ETHERNET) Communication)#                                       |                     |

\* Available on request

\*\* Applicable only for MTX 1Gi, MTX 1.5Gi & MTX 3.5 Series

# Integrated Release along with ACB - available as Factory-fitted option only

\$ Chapter ID [8538]





## 4 Pole ACBs upto 690V AC with UW-MTX1G (LSING - BCD Switches) [8536]



| Current Rating | Version | 4 Pole Manual Draw-out ACB with UW-MTX1G |                           |                    |                           |                     |                           |
|----------------|---------|------------------------------------------|---------------------------|--------------------|---------------------------|---------------------|---------------------------|
|                |         | S (65kA @ 415V AC)                       |                           | H (80kA @ 415V AC) |                           | V (100kA @ 415V AC) |                           |
|                |         | Cat. No.                                 | M.R.P.<br>(₹)<br>Per Unit | Cat. No.           | M.R.P.<br>(₹)<br>Per Unit | Cat. No.            | M.R.P.<br>(₹)<br>Per Unit |
| 800A           | MDO     | UW108SFD01800                            | *                         | UW108HFD01800      | *                         | UW308VFD01800       | *                         |
| 1000A          |         | UW110SFD01800                            |                           | UW110HFD01800      |                           | UW310VFD01800       |                           |
| 1250A          |         | UW112SFD01800                            |                           | UW112HFD01800      |                           | UW312VFD01800       |                           |
| 1600A          |         | UW116SFD01800                            |                           | UW116HFD01800      |                           | UW316VFD01800       |                           |
| 2000A          |         | UW120SFD01800                            |                           | UW120HFD01800      |                           | UW320VFD01800       |                           |
| 2500A          |         | UW225SFD01800                            |                           | UW225HFD01800      |                           | UW325VFD01800       |                           |
| 3200A          |         | UW232SFD01800                            |                           | UW232HFD01800      |                           | UW332VFD01800       |                           |
| 4000A          |         | UW240SFD01800                            |                           | UW240HFD01800      |                           | UW340VFD01800       |                           |
| 4000A          |         | -                                        |                           | UW340HFD01800      |                           | UW340VFD01800       |                           |
| 5000A          |         | -                                        |                           | UW350HFD01800      |                           | UW350VFD01800       |                           |
| 6300A          |         | -                                        |                           | UW363HFD01800      |                           | UW363VFD01800       |                           |

| 4 Pole Manual Fixed ACB with UW-MTX1G |    |               |   |               |   |               |   |
|---------------------------------------|----|---------------|---|---------------|---|---------------|---|
| 800A                                  | MF | UW108SFF01800 | * | UW108HFF01800 | * | UW308VFF01800 | * |
| 1000A                                 |    | UW110SFF01800 |   | UW110HFF01800 |   | UW310VFF01800 |   |
| 1250A                                 |    | UW112SFF01800 |   | UW112HFF01800 |   | UW312VFF01800 |   |
| 1600A                                 |    | UW116SFF01800 |   | UW116HFF01800 |   | UW316VFF01800 |   |
| 2000A                                 |    | UW120SFF01800 |   | UW120HFF01800 |   | UW320VFF01800 |   |
| 2500A                                 |    | UW225SFF01800 |   | UW225HFF01800 |   | UW325VFF01800 |   |
| 3200A                                 |    | UW232SFF01800 |   | UW232HFF01800 |   | UW332VFF01800 |   |
| 4000A                                 |    | UW240SFF01800 |   | UW240HFF01800 |   | UW340VFF01800 |   |
| 4000A                                 |    | -             |   | UW340HFF01800 |   | UW340VFF01800 |   |
| 5000A                                 |    | -             |   | UW350HFF01800 |   | UW350VFF01800 |   |
| 6300A                                 |    | -             |   | *             |   | *             |   |

\* Available on request

## Accessories of OMEGA Air Circuit Breakers [8538]

Air Circuit Breakers

### Terminal Adaptor configuration upto 690V AC



Draw-out ACBs Terminal Adaptors



Fixed ACBs Terminal Adaptors

| Description                                      | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|--------------------------------------------------|-------------|---------------------------|
| Terminal Adaptor for Draw-out Omega ACBs         |             |                           |
| Frame-1 400-1000A N/S/H (Vertical / Horizontal)  | CL604380000 | *                         |
| Frame-1 1250-2000A N/S/H (Vertical / Horizontal) | CL609630000 |                           |
| Frame-1 2500A S/H (Vertical)                     | CL609640000 |                           |
| Frame-2 400-3200A N/S/H (Vertical / Horizontal)  | CL604200000 |                           |
| Frame-2 4000A N/S/H (Vertical)                   | CL603160000 |                           |
| Frame-2 4000A N/S/H (Horizontal)                 | CL601280000 |                           |
| Frame-3 400-4000A H/V (Vertical)#                | CL600730000 |                           |
| Frame-3 400-4000A H/V (Horizontal-Long)          | CL609660000 |                           |
| Frame-3 5000A H/V (Horizontal-Long)              | CL600670000 |                           |
| Frame-3 5000A H/V (Vertical)#                    | CL609650000 |                           |

# : Please consider 4 terminal adaptors per phase.

| Description                                            | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|--------------------------------------------------------|-------------|---------------------------|
| Terminal Adaptor for Fixed Omega ACBs                  |             |                           |
| Frame-1 400-2000A N/S (Vertical / Horizontal)          | CL609670000 | *                         |
| Frame-1 400-2000A H (Vertical / Horizontal)            | CL609680000 |                           |
| Frame-1 2500A S/H (Vertical)                           | CL609760000 |                           |
| Frame-2 400-2500A N/S (Vertical / Horizontal)          | CL601220000 |                           |
| Frame-2 400-3200A H, 3200A N/S (Vertical / Horizontal) | CL609770000 |                           |
| Frame-2 4000A S/H (Vertical)                           | CL604170000 |                           |
| Frame-3 400-4000A H/V (Vertical)#                      | CL604180000 |                           |
| Frame-3 5000A H/V (Vertical)#                          | CL603470000 |                           |
| Frame-3 400-5000A H/V (Horizontal-Long)                | CL603730000 |                           |

# : Please consider 4 terminal adaptors per phase.



## 800V AC ACBs with UW-MTX1G (LSING - BCD Switches) [8536]

Breaking Capacity @ 800V AC (Icu=Ics=Icw for 1s)



800V AC Manual Fixed/Draw-out ACB with UW-MTX1G

| Current Rating | Frame | Breaking Capacity @ 800V AC | 3P             |                     |                |                     | 4P             |                     |                |                     |
|----------------|-------|-----------------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|
|                |       |                             | Fixed          |                     | Draw-out       |                     | Fixed          |                     | Draw-out       |                     |
|                |       |                             | Cat. No.       | M.R.P. (₹) Per Unit | Cat. No.       | M.R.P. (₹) Per Unit | Cat. No.       | M.R.P. (₹) Per Unit | Cat. No.       | M.R.P. (₹) Per Unit |
| 800A           | 1     | 50kA                        | UW108NXF0180ZM | *                   | UW108NXD0180ZM | *                   | UW108NFF0180ZM | *                   | UW108NFD0180ZM | *                   |
| 1000A          |       |                             | UW110NXF0180ZM |                     | UW110NXD0180ZM |                     | UW110NFF0180ZM |                     | UW110NFD0180ZM |                     |
| 1250A          |       |                             | UW112NXF0180ZM |                     | UW112NXD0180ZM |                     | UW112NFF0180ZM |                     | UW112NFD0180ZM |                     |
| 1600A          |       |                             | UW116NXF0180ZM |                     | UW116NXD0180ZM |                     | UW116NFF0180ZM |                     | UW116NFD0180ZM |                     |
| 2000A          |       |                             | UW120NXF0180ZM |                     | UW120NXD0180ZM |                     | UW120NFF0180ZM |                     | UW120NFD0180ZM |                     |
| 2000A          | 2     | 50kA                        | UW220NXF0180ZM | *                   | UW220NXD0180ZM | *                   | UW220NFF0180ZM | *                   | UW220NFD0180ZM | *                   |
| 2500A          |       |                             | UW225NXF0180ZM |                     | UW225NXD0180ZM |                     | UW225NFF0180ZM |                     | UW225NFD0180ZM |                     |
| 3200A          |       |                             | UW232NXF0180ZM |                     | UW232NXD0180ZM |                     | UW232NFF0180ZM |                     | UW232NFD0180ZM |                     |
| 4000A          |       |                             | -              |                     | UW240NXD0180ZM |                     | -              |                     | UW240NFD0180ZM |                     |
| 3200A          | 3     | 50kA                        | UW332NXF0180ZM | *                   | UW332NXD0180ZM | *                   | UW332NFF0180ZM | *                   | UW332NFD0180ZM | *                   |
| 4000A          |       |                             | UW340NXF0180ZM |                     | UW340NXD0180ZM |                     | UW340NFF0180ZM |                     | UW340NFD0180ZM |                     |
| 5000A          |       |                             | UW350NXF0180ZM |                     | UW350NXD0180ZM |                     | UW350NFF0180ZM |                     | UW350NFD0180ZM |                     |
| 3200A          | 3     | 65kA                        | UW332SXF0180ZM | *                   | UW332SXD0180ZM | *                   | UW332SFF0180ZM | *                   | UW332SFD0180ZM | *                   |
| 4000A          |       |                             | UW340SXF0180ZM |                     | UW340SXD0180ZM |                     | UW340SFF0180ZM |                     | UW340SFD0180ZM |                     |
| 5000A          |       |                             | UW350SXF0180ZM |                     | UW350SXD0180ZM |                     | UW350SFF0180ZM |                     | UW350SFD0180ZM |                     |

Note: 1. Above mentioned Cat. No. of ACBs are without Terminal Adaptors. Please consider Terminal Adaptors from below table.

2. Phase-Barriers are mandatory to be used with 800V AC ACBs:

(a) For Draw-out ACBs, Phase-Barriers are provided as standard supply along with ACBs

(b) For Fixed ACBs, kindly consider Phase-Barriers from below table

| M.R.P. changes for product customization                                     | M.R.P. (₹) Per Unit |
|------------------------------------------------------------------------------|---------------------|
| Buscoupler (without protection release)                                      | *                   |
| UW-MTX1.0 (LSI - BCD switch for selection)                                   |                     |
| UW-MTX1G (LSING - BCD switch for selection)                                  |                     |
| UW-MTX1.5G (LSING + display - BCD switch for selection)                      |                     |
| UW-MTX3.5 (LSING + Display + Option for other features)                      |                     |
| UW-TM - Temperature Rise Module ( for MTX3.5)                                |                     |
| MDO to EDO or MF to EF Conversion kit (ECD + CR + SR)                        |                     |
| COM Module (MODBUS) for communication                                        |                     |
| PS (Auxiliary power supply module for display in No-load or OFF condition)** |                     |

\*\* Applicable only for MTX 1Gi, MTX 1.5Gi & MTX 3.5 Series

## Terminal Adaptors for 800V ACBs [8538]

| Current Rating | Frame | Fixed        |                     |             | Draw-out     |                     |             |
|----------------|-------|--------------|---------------------|-------------|--------------|---------------------|-------------|
|                |       | Cat. No.     | M.R.P. (₹) Per Unit | Qty (3P/4P) | Cat. No.     | M.R.P. (₹) Per Unit | Qty (3P/4P) |
| 630A           | 1     | CL6096700000 | *                   | (6/8)       | CL6096300000 | *                   | (6/8)       |
| 800A           |       | CL6096700000 |                     | (6/8)       | CL6096300000 |                     | (6/8)       |
| 1000A          |       | CL6096700000 |                     | (6/8)       | CL6096300000 |                     | (6/8)       |
| 1250A          |       | CL6096700000 |                     | (6/8)       | CL6096300000 |                     | (6/8)       |
| 1600A          |       | CL6096700000 |                     | (6/8)       | CL6096300000 |                     | (6/8)       |
| 2000A          | 2     | CL6012200000 |                     | (6/8)       | CL6096400000 |                     | (6/8)       |
| 2000A          |       | CL6097700000 |                     | (6/8)       | CL6096400000 |                     | (6/8)       |
| 2500A          |       | CL6031800000 |                     | (6/8)       | CL6096400000 |                     | (6/8)       |
| 3200A          |       | CL6041700000 |                     | (6/8)       | CL6041900000 |                     | (6/8)       |
| 4000A          | 3     | -            |                     | -           | CL6042000000 |                     | (6/8)       |
| 3200A          |       | CL6041800000 |                     | (12/16)     | CL6012800000 |                     | (12/16)     |
| 4000A          |       | CL6041800000 |                     | (12/16)     | CL6006700000 |                     | (12/16)     |
| 5000A          |       | CL6034700000 |                     | (12/16)     | CL6096500000 |                     | (12/16)     |



Draw-out ACBs Terminal Adaptors



Fixed ACBs Terminal Adaptors

## Phase-Barriers for 800V AC Fixed ACBs [8538]

| Cat. No.     | Type  | Pole | M.R.P. (₹) Per Unit | Qty. per ACB |
|--------------|-------|------|---------------------|--------------|
| CL9125800000 | Fixed | 3P   | *                   | 2            |
| CL9125900000 | Fixed | 4P   |                     | 2            |

\* Available on request

Note: Please contact the nearest branch office for more details of 1000V AC ACBs



U-POWER  
**Accessories of OMEGA Air Circuit Breakers**  
Air Circuit Breakers



Operation Counter



Door Interlock

| Description                                     | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|-------------------------------------------------|--------------|---------------------------|
| Other Accessories [8538]                        |              | *                         |
| Operation Counter                               | CL909830000# |                           |
| Door Interlock                                  | CL909780000  |                           |
| Electrical Position Indication (EPI)            | CL958260000  |                           |
| Microswitches for Indication [8536]             |              | *                         |
| Microswitch for Common Fault Indication (CFI)   | CL909490000  |                           |
| Microswitch for Ready To Close Indication (RTC) | CL909530000^ |                           |
| Microswitch for Shunt Release                   | CL909510000  |                           |
| Microswitch for Undervoltage Release            | CL909470000  |                           |
| Microswitch for Spring Charging Indication      | ST426720000  |                           |

# Operation Counter inbuilt for rating 4000A to 6300A

^ Cradle SIC block CL958250000 needs to be ordered separately, If EPI not installed in same ACB



R-Lock



C-Lock

| Description                                                    | Cat. No.    | M.R.P. (₹) Per Unit |
|----------------------------------------------------------------|-------------|---------------------|
| <b>Mechanical Interlock using Key &amp; Lock\$</b>             |             |                     |
| R - Lock Type - 1                                              | CL006590000 | *                   |
| R - Lock Type - 2                                              | CL006600000 |                     |
| R - Lock Type - 3                                              | CL006610000 |                     |
| R - Lock Type - 12                                             | CL006620000 |                     |
| R - Lock Type - 23                                             | CL006630000 |                     |
| Locking arrangement for OFF button with R - Lock (on breaker)  | CL908150000 |                     |
| Locking arrangement for ISO position with R - Lock (on Cradle) | CL908650000 |                     |
| Locking arrangement for ANY position with R - Lock (on Cradle) | CL909270000 |                     |
| C - Lock Type - S                                              | CL006640000 |                     |
| C - Lock Type - T                                              | CL006650000 |                     |
| C - Lock Type - ST                                             | CL006660000 |                     |
| C - Lock Type - SS                                             | CL006670000 |                     |
| C - Lock Type - TT                                             | CL006680000 |                     |
| Locking arrangement for OFF button with C - Lock (on breaker)  | CL908140000 |                     |
| Locking arrangement for ISO position for C - Lock (on Cradle)  | CL909820000 |                     |
| Locking arrangement for ANY position with C - Lock (on Cradle) | CL909810000 |                     |

**Note:** For Mechanical Interlock using Key & Lock please order combination of Lock and Locking arrangement.

\* Available on request    \$ Only locks [8301]    Locking arrangement [8538]



Closing Release



Shunt Release



UV Release

| Description                                                      | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|------------------------------------------------------------------|-------------|---------------------------|
| Electrical Charging Device (ECD) [8501]                          |             | *                         |
| 24-30V DC                                                        | CL903620000 |                           |
| 48/60V DC                                                        | CL903630000 |                           |
| 110V AC / 110-125V DC                                            | CL903600000 |                           |
| 220V AC / 200V DC                                                | CL903640000 |                           |
| 240V AC / 250V DC                                                | CL903590000 |                           |
| 415V AC / 400V DC                                                | CL903610000 |                           |
| Closing Release (CR) [8538]                                      |             | *                         |
| 24-30V DC                                                        | CL908174000 |                           |
| 48/60V DC                                                        | CL908175000 |                           |
| 110V AC / 110V DC                                                | CL90817A000 |                           |
| 125/127V DC                                                      | CL908171000 |                           |
| 220 - 240V AC / 220 - 250V DC                                    | CL90817B000 |                           |
| 415V AC                                                          | CL90817D000 |                           |
| Shunt Release (SR) [8538]                                        |             | *                         |
| 24-30V DC                                                        | CL908160400 |                           |
| 48/60V DC                                                        | CL908160500 |                           |
| 110V AC / 110V DC                                                | CL908160A00 |                           |
| 125/127V DC                                                      | CL908160100 |                           |
| 220 - 240V AC / 220 - 250V DC                                    | CL908160B00 |                           |
| 415V AC                                                          | CL908160D00 |                           |
| Under Voltage Release (UVR) with time delay (0-1-3-5 sec) [8538] |             | *                         |
| 24-30V DC                                                        | CL908184000 |                           |
| 48V DC                                                           | CL908185000 |                           |
| 110V AC / 110V DC                                                | CL90818A000 |                           |
| 240V AC / 220V DC                                                | CL90818B000 |                           |
| 415V AC                                                          | CL90818D000 |                           |



Neutral CT

| Description                                           | Cat. No.    | M.R.P. (₹) Per Unit |
|-------------------------------------------------------|-------------|---------------------|
| <b>External Neutral CT for UW-MTX Releases [8504]</b> |             |                     |
| Frame-1, 2 & 3 400-800A                               | CL007170000 | *                   |
| Frame-1, 2 & 3 1000-1600A                             | CL007180000 |                     |
| Frame-1 2000-2500A                                    | CL007190000 |                     |
| Frame-2 & 3 2000-4000A                                | CL007200000 |                     |
| Frame-3 5000-6300A                                    | CL007210000 |                     |

## Automatic Transfer Controllers (ATC) [9032]



AuXC-2000 Controller

| Type                   | Cat. No.    | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------|-------------|---------------------|------------------|
| AuXC-2000 controller** | ATC20000000 | 43800               | 1                |

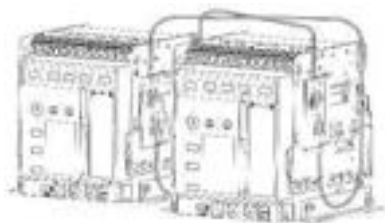
Can be used along with ACB, Motorised MCCBs, MCX contactors & Motorised Changeover switches

\*\* Note: For communication version of AuXC controller refer page no-6



For AuXC 2000/2100 programming videos and more details please scan the QR code or click here

U-POWER  
Accessories of **OMEGA** Air Circuit Breakers



**Mechanical Interlock using Bowden Cable [8538]**

| Description                                               | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|-----------------------------------------------------------|-------------|---------------------------|
| Mechanical Interlock using Bowden Cable (5 meters length) |             | *                         |
| Between 2 Incomers                                        | CL906630000 |                           |
| Between 3 Incomers                                        | CL906640000 |                           |
| Between 2 Incomers & 1 Standby                            | CL906650000 |                           |
| Between 2 Incomers & 1 Buscoupler                         | CL906660000 |                           |
| Mechanical Interlock using Bowden Cable (3 meters length) |             | *                         |
| Between 2 Incomers                                        | CL906590000 |                           |
| Between 3 Incomers                                        | CL906600000 |                           |
| Between 2 Incomers & 1 Standby                            | CL906610000 |                           |
| Between 2 Incomers & 1 Buscoupler                         | CL906620000 |                           |
| Mechanical Interlock using Bowden Cable (2 meters length) |             | *                         |
| Between 2 Incomers                                        | CL908100000 |                           |
| Between 3 Incomers                                        | CL908110000 |                           |
| Between 2 Incomers & 1 Standby                            | CL908120000 |                           |
| Between 2 Incomers & 1 Buscoupler                         | CL908130000 |                           |

**Note:** Common from 400A to 6300A and can be interlocked between Fixed / Draw-out / Mixed version

\* Available on request



MODBUS Module



Power Metering Module

| Description                                 | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------------|-------------|---------------------------|
| <b>MATRIX Releases &amp; Modules [8538]</b> |             |                           |
| UW-MTX1.0                                   | CL919660000 |                           |
| UW-MTX1G                                    | CL919710000 |                           |
| UW-MTX1Gi                                   | CL905620000 |                           |
| UW-MTX1.5G                                  | CL919650000 |                           |
| UW-MTX1.5Gi                                 | CL905520000 |                           |
| UW-MTX3.5                                   | CL906450000 |                           |
| UW-MTX3.5EC                                 | CL906440000 |                           |
| UW-MTX3.5H                                  | CL906460000 |                           |
| UW-MTX4.5                                   | *           |                           |
| New UW-MTX3.5T                              | #           |                           |
| New UW-MTX3.5ET                             | #           | *                         |
| New UW-MTX4.5T                              | #           |                           |
| New UW-MTX3.5A                              | *           |                           |
| Power supply module with 2 Ports            | CL907220000 |                           |
| New 1A Power supply module                  | CL918950000 |                           |
| New DigiCom Module                          | CL918960000 |                           |
| Relay Module                                | CL907160000 |                           |
| MODBUS Module                               | CL907090000 |                           |
| Profibus Module                             | CL902950000 |                           |
| Matrix Smart Card Module                    | CL907050000 |                           |
| Power Metering Module (415V)                | CL906490000 |                           |
| Power Metering Module (690V)                | CL906850000 |                           |
| ZSI Module                                  | CL907180000 |                           |
| TCS Module                                  | CL907190000 |                           |
| EL Module                                   | CL907200000 |                           |
| REF Module                                  | CL907210000 |                           |
| Simulation Kit                              | CL907240000 |                           |

For Energy Management Communication Software Please contact the nearest branch office  
# Integrated Release along with ACB - available as Factory-fitted option only

## Upgrade to the new-age OMEGA ACB with Minimal Modifications

Presenting the pre-engineered  
CNCS to OMEGA Retrofit kit

CNCS to OMEGA Retrofit kit is a pre-engineered solution which allows you to upgrade from the old CNCS ACB to the advanced OMEGA ACB - with minimal modification. All installations are done by trained Engineers from the nearest Authorised Service Centre to ensure total reliability and minimum shut-down time.

### Specifications

- › ETP grade Copper links with Silver Plating
- › CNCS to OMEGA Retrofit solution is available from 800A to 3200A



For more details please  
scan the QR code or click here

Pre-Engineered Retrofit Solution  
Upgrade CNCS ACB to OMEGA ACB

For retrofitting of any ACB to Omega ACB please contact the nearest branch office

Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: [www.LK-EA.com](http://www.LK-EA.com) | e-mail: [CIC@LK-EA.com](mailto:CIC@LK-EA.com)

Lauritz Knudsen, 01.06.2026

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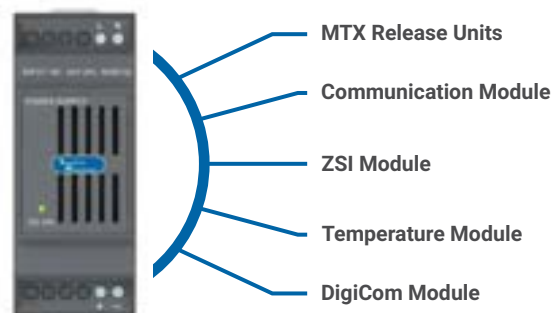


# New Digital Offerings of **OMEGA** Air Circuit Breakers

Air Circuit Breakers

## New Power Supply Module (230V AC - 24V DC 1A)

- › 100-265V AC Input Voltage
- › Regulated 24V DC Output Voltage
- › Suitability of up to 1 Amp Loading
- › Compact (2M) and Modular Design
- › Suitable for DIN Rail & Base mounting



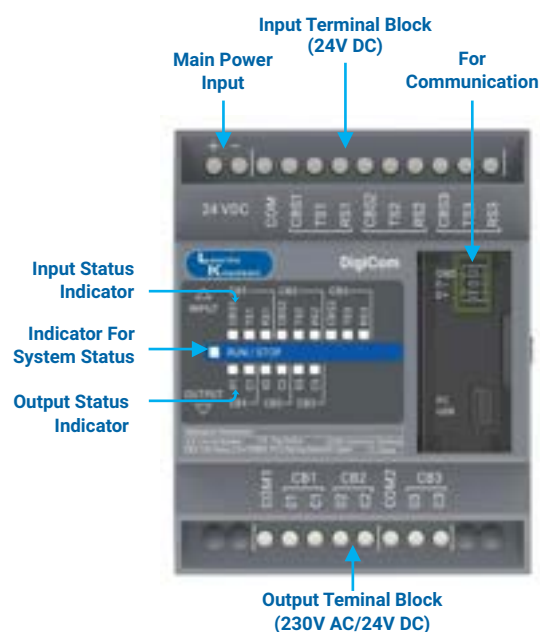
| PS Module Details                       | Function                                                                            | Module Compatibility                                                                                                | M.R.P. (₹) Per Unit |
|-----------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------|
| PS Module<br>(CAT Code: CL918950000)    | Suitable for providing regulated 24V DC Power Supply                                | All MTX Release Units for Powering ON, MODBUS Module, ZSI Module, Temperature Module, UN-CO Module & DigiCom Module | 10400               |
| UW-PS Module<br>(CAT Code: CL907220000) | Suitable for providing regulated 24V DC Power Supply and Internal Communication Bus | All MTX Release Units and MTX Modules                                                                               | 27000               |

## New DigiCom Module

### Status Monitoring & Control of up to 3 Circuit Breakers

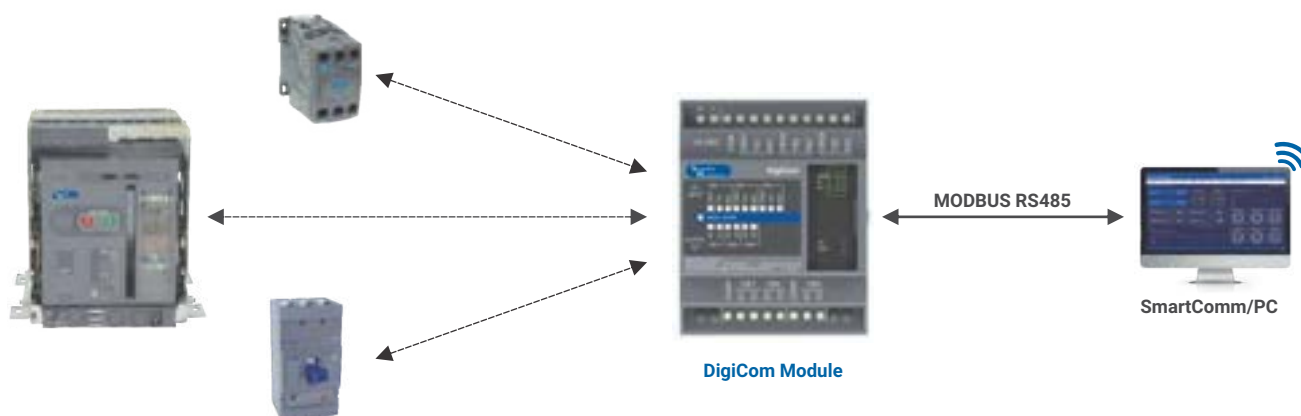
- › 3 Digital Inputs for 3 Circuit Breakers - 9 Digital Inputs
- › 2 Relay Outputs for 3 Circuit Breakers – 6 Relay Outputs
- › 24V DC Input Voltage
- › Status Monitoring & Control of up to 3 Circuit Breakers through communication over MODBUS RTU protocol with RS 485 port.
- › For optimal performance, CFI and RTC micro switches should be selected along with the ACB.

|                         |     |      |                                                                     |
|-------------------------|-----|------|---------------------------------------------------------------------|
| Input Status Indicator  | CB1 | CBS1 | ON/OFF Indication for Circuit Breaker 1                             |
|                         |     | TS1  | Trip status Indication for Circuit Breaker 1                        |
|                         |     | RS1  | Ready spring/Ready to Close Status Indication for Circuit Breaker 1 |
|                         | CB2 | CBS2 | ON/OFF Indication for Circuit Breaker 2                             |
|                         |     | TS2  | Trip status Indication for Circuit Breaker 2                        |
|                         |     | RS2  | Ready spring/Ready to Close Status Indication for Circuit Breaker 2 |
| Output Status Indicator | CB3 | CBS3 | ON/OFF Indication for Circuit Breaker 3                             |
|                         |     | TS3  | Trip status Indication for Circuit Breaker 3                        |
|                         |     | RS3  | Ready spring/Ready to Close Status Indication for Circuit Breaker 3 |
|                         | CB1 | O1   | Open Circuit Breaker 1                                              |
|                         |     | C1   | Close Circuit Breaker 1                                             |
|                         | CB2 | O2   | Open Circuit Breaker 2                                              |
|                         |     | C2   | Close Circuit Breaker 2                                             |
|                         | CB3 | O3   | Open Circuit Breaker 3                                              |
|                         |     | C3   | Close Circuit Breaker 3                                             |



| DigiCom Module Details                    | M.R.P. (₹) Per Unit |
|-------------------------------------------|---------------------|
| DigiCom Module<br>(CAT Code: CL918960000) | 30700               |

## Connection Architecture of DigiCom



### C-POWER S1 Range of Air Circuit Breakers

- › Conforms to IS/IEC 60947-2 & IEC 60947-2
- › Current rating from 400A to 3200A
- › Available in 50kA & 60kA breaking capacity
- › Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- › High short time withstand capacity,  $I_{cu} = I_{cs} = I_{cw}$  for 1 sec for total selectivity
- › High mechanical and electrical operating life
- › 100% rated neutral pole
- › Common height and depth across the range
- › Protection through Thermal - Magnetic (DN1) & Microprocessor releases (SR18G, SR18G+D & SR18Gi+D)
- › Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- › Inbuilt thermal memory
- › Protection Releases conform to EMI/EMC standards
- › Breaker Status and Control through MODBUS protocol



C-POWER S1 ACB

### C-POWER C Range of Air Circuit Breakers

- › Conforms to IS/IEC 60947-2 & IEC 60947-2
- › Current rating from 800A to 6300A
- › Available in 50,55,60 & 95kA breaking capacity
- › Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- › High short time fault withstanding capacity,  $I_{cu} = I_{cs} = I_{cw}$  for 1 sec for total selectivity
- › High mechanical and electrical operating life
- › 100% rated neutral pole
- › Protection through Thermal - Magnetic (DN1) & Microprocessor releases (SR18G, SR18G+D, SR18Gi+D)
- › Self diagnostic Microprocessor based Releases with on-load testing through TEST button
- › Inbuilt thermal memory
- › Protection Releases conform to EMI/EMC standards
- › Data communication & Power Management
- › Breaker Status and Control through MODBUS protocol



C-POWER C ACB

### C-POWER HE ACBs for Harsh Environment

- › Designed to operate at peak efficiency in Sulphur-rich Harsh corrosive environments
- › Range 1250A to 5000A, 415/690V ac
- › Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed and Draw-out versions
- › Protection through Microprocessor release
- › Operates reliably in 3C4 environmental conditions containing SO<sub>2</sub> and H<sub>2</sub>S

Please contact the nearest branch office for Details & product Selection



C-POWER HE Range

### Breaking Capacities Offered:

| I <sub>cu</sub> = I <sub>cs</sub> = I <sub>cw</sub> for 1 sec |         |      |       |       |         |       |         |       |         |       |       |
|---------------------------------------------------------------|---------|------|-------|-------|---------|-------|---------|-------|---------|-------|-------|
|                                                               | 630A    | 800A | 1000A | 1250A | 1600A   | 2000A | 2500A   | 3200A | 4000A   | 5000A | 6300A |
| CN-CS : E / G                                                 | 50kA    | 50kA | 50kA  | 50kA  | 50kA    | 50kA  |         |       |         |       |       |
|                                                               | Frame-1 |      |       |       |         |       |         |       |         |       |       |
| CN-CS : S1                                                    | 50kA    | 50kA | 50kA  | 50kA  | 50kA    | 50kA  | 60kA    | 60kA  |         |       |       |
|                                                               | Frame-1 |      |       |       |         |       | Frame-2 |       |         |       |       |
| CN-CS : C                                                     |         | 50kA | 50kA  | 50kA  | 50kA    | 55kA  | 60kA    |       |         | 95kA  | 95kA  |
| CN-CS : H                                                     |         | 65kA | 65kA  | 65kA  | 65kA    | 75kA  | 75kA    |       |         |       |       |
| CN-CS : H2                                                    |         |      |       |       |         |       |         | 75kA  | 75kA    |       |       |
| CN-CS : H / H1                                                |         |      |       |       |         |       |         | 100kA | 100kA   |       |       |
| CN-CS : HE                                                    |         |      |       | 50kA  |         | 60kA  |         | 75kA  |         | 95kA  |       |
|                                                               | Frame-1 |      |       |       | Frame-2 |       | Frame-3 |       | Frame-4 |       |       |

For technical & dimension details please refer product catalogue. 400A ACB also available on request.



## C-POWER Air Circuit Breakers [8536]



### C-POWER S1 3 & 4 Pole Draw-out ACBs

| Rating | Breaking Capacity<br>Icu=Ics=Icw<br>(1 sec) | Version |
|--------|---------------------------------------------|---------|
| 630A   | 50kA                                        | MDO     |
|        |                                             | EDO     |
| 800A   | 50kA                                        | MDO     |
|        |                                             | EDO     |
| 1000A  | 50kA                                        | MDO     |
|        |                                             | EDO     |
| 1250A  | 50kA                                        | MDO     |
|        |                                             | EDO     |
| 1600A  | 50kA                                        | MDO     |
|        |                                             | EDO     |
| 2000A  | 50kA                                        | MDO     |
|        |                                             | EDO     |
| 2500A  | 60kA                                        | MDO     |
|        |                                             | EDO     |

| Microprocessor Based SR18G |                        |          |                        |
|----------------------------|------------------------|----------|------------------------|
| 3 Pole                     |                        | 4 Pole   |                        |
| Cat. No.                   | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit |
| SL96041                    | 292600                 | SL96061  | 367000                 |
| SL96051                    | 360500                 | SL96071  | 434900                 |
| SL96042                    | 292600                 | SL96062  | 367000                 |
| SL96052                    | 360500                 | SL96072  | 434900                 |
| SL96043                    | 304200                 | SL96063  | 384400                 |
| SL96053                    | 372100                 | SL96073  | 452300                 |
| SL96044                    | 335600                 | SL96064  | 423300                 |
| SL96054                    | 403500                 | SL96074  | 491200                 |
| SL96045                    | 382600                 | SL96065  | 470600                 |
| SL96055                    | 450500                 | SL96075  | 538500                 |
| SL96046                    | 449400                 | SL96066  | 552000                 |
| SL96056                    | 517300                 | SL96076  | 619900                 |
| SL96047                    | 555500                 | SL96067  | 669600                 |
| SL96057                    | 623400                 | SL96077  | 737500                 |

| Thermal-Magnetic DN1 |                        |          |                        |
|----------------------|------------------------|----------|------------------------|
| 3 Pole               |                        | 4 Pole   |                        |
| Cat. No.             | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit |
| SL95331              | 289600                 | SL95351  | 364000                 |
| SL95341              | 357500                 | SL95361  | 431900                 |
| SL95332              | 289600                 | SL95352  | 364000                 |
| SL95342              | 357500                 | SL95362  | 431900                 |
| SL95333              | 301200                 | SL95353  | 381400                 |
| SL95343              | 369100                 | SL95363  | 449300                 |
| SL95334              | 332600                 | SL95354  | 420300                 |
| SL95344              | 400500                 | SL95364  | 488200                 |
| SL95335              | 379600                 | SL95355  | 467600                 |
| SL95345              | 447500                 | SL95365  | 535500                 |
| SL95336              | 446400                 | SL95356  | 549000                 |
| SL95346              | 514300                 | SL95366  | 616900                 |
| SL95337              | 552500                 | SL95357  | 666600                 |
| SL95347              | 620400                 | SL95367  | 734500                 |

### C-POWER S1 3 & 4 Pole Fixed ACBs

Note : Add a Suffix "0000" for all the above mentioned cat. nos.

| Rating | Breaking Capacity<br>Icu=Ics=Icw<br>(1 sec) | Version |
|--------|---------------------------------------------|---------|
| 630A   | 50kA                                        | MF      |
|        |                                             | EF      |
| 800A   | 50kA                                        | MF      |
|        |                                             | EF      |
| 1000A  | 50kA                                        | MF      |
|        |                                             | EF      |
| 1250A  | 50kA                                        | MF      |
|        |                                             | EF      |
| 1600A  | 50kA                                        | MF      |
|        |                                             | EF      |

| Microprocessor Based SR18G |                        |          |                        |
|----------------------------|------------------------|----------|------------------------|
| 3 Pole                     |                        | 4 Pole   |                        |
| Cat. No.                   | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit |
| SL95561                    | 159500                 | SL95581  | 203400                 |
| SL95571                    | 227400                 | SL95591  | 271300                 |
| SL95562                    | 159500                 | SL95582  | 203400                 |
| SL95572                    | 227400                 | SL95592  | 271300                 |
| SL95563                    | 174200                 | SL95583  | 219900                 |
| SL95573                    | 242100                 | SL95593  | 287800                 |
| SL95564                    | 200800                 | SL95584  | 250900                 |
| SL95574                    | 268700                 | SL95594  | 318800                 |
| SL95565                    | 222500                 | SL95585  | 286200                 |
| SL95575                    | 290400                 | SL95595  | 354100                 |

| Thermal-Magnetic DN1 |                        |          |                        |
|----------------------|------------------------|----------|------------------------|
| 3 Pole               |                        | 4 Pole   |                        |
| Cat. No.             | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit |
| SL95481              | 156500                 | SL95501  | 200400                 |
| SL95491              | 224400                 | SL95511  | 268300                 |
| SL95482              | 156500                 | SL95502  | 200400                 |
| SL95492              | 224400                 | SL95512  | 268300                 |
| SL95483              | 171200                 | SL95503  | 216900                 |
| SL95493              | 239100                 | SL95513  | 284800                 |
| SL95484              | 197800                 | SL95504  | 247900                 |
| SL95494              | 265700                 | SL95514  | 315800                 |
| SL95485              | 219500                 | SL95505  | 283200                 |
| SL95495              | 287400                 | SL95515  | 351100                 |

Note Add a Suffix "0000" for all the above mentioned cat. nos.

| M.R.P. changes for product customization w.r.t. SR18G ACB M.R.P. |        | M.R.P. (₹) Per Unit |
|------------------------------------------------------------------|--------|---------------------|
| Bus - Coupler (w/o protection)                                   | Reduce | 8000                |
| Microprocessor based SR18G+D (LSING + Current Metering)          | Add    | 21500               |
| Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)   | Add    | 28500               |

**C-POWER S1 Draw-Out ACBs** will have inbuilt - 2NO+2NC Aux contact for MDO & 6NO+6NC Aux contact for EDO breakers, Safety shutter assembly, Racking handle, Door sealing frame, Push-button cover & Rating error preventor.

Electrical version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

**C-POWER S1 Fixed ACBs** will have inbuilt - 2NO+2NC Aux contact for MF & 6NO+6NC Aux contact for EF breakers, Door sealing frame & Push-button cover.

Electrical version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

**Note:** 1 NO Aux contact in manual version & 2NO+2NC in electrical version breakers will be pre-wired with accessories mounted in breaker.

In electrically operated breaker with DN1 release, either earth fault or undervoltage protection can be used.

### CN-CS-E Range 3 Pole Manual Fixed

| Rating | Breaking Capacity<br>Icu=Ics=Icw<br>(1 sec) | Version |
|--------|---------------------------------------------|---------|
| 400A   | 50kA                                        | 3P MF   |
| 630A   | 50kA                                        | 3P MF   |
| 800A   | 50kA                                        | 3P MF   |
| 1000A  | 50kA                                        | 3P MF   |
| 1250A  | 50kA                                        | 3P MF   |
| 1600A  | 50kA                                        | 3P MF   |
| 2000A  | 50kA                                        | 3P MF   |

| Thermal-Magnetic Release Type DN1 |                        |
|-----------------------------------|------------------------|
| Cat. No.                          | M.R.P. (₹)<br>Per Unit |
| SL957210000                       | 103700                 |
| SL957220000                       | 104700                 |
| SL957230000                       | 110900                 |
| SL957240000                       | 113600                 |
| SL957250000                       | 142200                 |
| SL957260000                       | 149700                 |
| SL932970000                       | 171900                 |



## C-POWER Air Circuit Breakers [8536]



### C-POWER 3 & 4 Pole Draw-out ACBs

| Rating | Breaking Capacity<br>Icu=Ics=Icw<br>(1 sec) | Version | Type | Microprocessor Based SR18G |                        |          |                        | Thermal-Magnetic DN1 |                        |          |                        |
|--------|---------------------------------------------|---------|------|----------------------------|------------------------|----------|------------------------|----------------------|------------------------|----------|------------------------|
|        |                                             |         |      | 3 Pole                     |                        | 4 Pole   |                        | 3 Pole               |                        | 4 Pole   |                        |
|        |                                             |         |      | Cat. No.                   | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit | Cat. No.             | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit |
| 800A   | 65kA                                        | MDO     | H    | SL95311                    | 518000                 | #        | 671100                 | #                    | 515000                 | #        | 668100                 |
|        |                                             | EDO     | H    | SL95321                    | 585900                 | #        | 739000                 | #                    | 582900                 | #        | 736000                 |
| 1000A  | 65kA                                        | MDO     | H    | SL95312                    | 527500                 | #        | 713300                 | #                    | 524500                 | #        | 710300                 |
|        |                                             | EDO     | H    | SL95322                    | 595400                 | #        | 781200                 | #                    | 592400                 | #        | 778200                 |
| 1250A  | 65kA                                        | MDO     | H    | SL95313                    | 576800                 | #        | 765000                 | #                    | 573800                 | #        | 762000                 |
|        |                                             | EDO     | H    | SL95323                    | 644700                 | #        | 832900                 | #                    | 641700                 | #        | 829900                 |
| 1600A  | 65kA                                        | MDO     | H    | SL95314                    | 649100                 | #        | 842000                 | #                    | 646100                 | #        | 839000                 |
|        |                                             | EDO     | H    | SL95324                    | 717000                 | #        | 909900                 | #                    | 714000                 | #        | 906900                 |
| 2000A  | 75kA                                        | MDO     | H    | SL95315                    | 717400                 | #        | 860900                 | #                    | 714400                 | #        | 857900                 |
|        |                                             | EDO     | H    | SL95325                    | 785300                 | #        | 928800                 | #                    | 782300                 | #        | 925800                 |
| 2500A  | 75kA                                        | MDO     | H    | SL95316                    | 746800                 | #        | 909100                 | #                    | 743800                 | #        | 906100                 |
|        |                                             | EDO     | H    | SL95326                    | 814700                 | #        | 977000                 | #                    | 811700                 | #        | 974000                 |
| 3200A  | 75kA                                        | MDO     | H2   | SL94822                    | 786900                 | SL94826  | 965800                 | #                    | *                      | #        | *                      |
|        |                                             | EDO     | H2   | SL94824                    | 854800                 | SL94828  | 1033700                | #                    | *                      | #        | *                      |
| 4000A  | 75kA                                        | MDO     | H2   | SL94823                    | 894300                 | SL94827  | 1117600                | #                    | *                      | #        | *                      |
|        |                                             | EDO     | H2   | SL94825                    | 962200                 | SL94829  | 1185500                | #                    | *                      | #        | *                      |
| 5000A  | 95kA                                        | MDO/EDO | C    | #                          | *                      | #        | *                      | #                    | *                      | #        | *                      |
| 6300A  | 95kA                                        | MDO/EDO | C    | #                          | *                      | #        | *                      | #                    | *                      | #        | *                      |

**Note:** For higher breaking capacities & 690V AC application please contact the nearest branch office  
Add a Suffix "0000" for all the above mentioned cat. nos.

### C-POWER 3 & 4 Pole Manual Fixed ACBs

| Rating | Breaking Capacity<br>Icu=Ics=Icw<br>(1 sec) | Version | Type | Microprocessor Based SR18G |                        |          |                        | Thermal-Magnetic DN1 |                        |          |                        |
|--------|---------------------------------------------|---------|------|----------------------------|------------------------|----------|------------------------|----------------------|------------------------|----------|------------------------|
|        |                                             |         |      | 3 Pole                     |                        | 4 Pole   |                        | 3 Pole               |                        | 4 Pole   |                        |
|        |                                             |         |      | Cat. No.                   | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit | Cat. No.             | M.R.P. (₹)<br>Per Unit | Cat. No. | M.R.P. (₹)<br>Per Unit |
| 800A   | 50kA                                        | MF      | C    | *                          |                        |          |                        | *                    |                        |          |                        |
| 1000A  | 50kA                                        |         |      |                            |                        |          |                        |                      |                        |          |                        |
| 1250A  | 50kA                                        |         |      |                            |                        |          |                        |                      |                        |          |                        |
| 1600A  | 50kA                                        |         |      |                            |                        |          |                        |                      |                        |          |                        |
| 2000A  | 55kA                                        |         |      | SL97635                    | 338600                 | #        | 439200                 | SL93005              | 335600                 | #        | 436200                 |
| 2500A  | 60kA                                        |         |      | SL97636                    | 373100                 | #        | 502900                 | SL93006              | 370100                 | #        | 499900                 |

**Note:** For higher breaking capacities & 690V AC application please contact the nearest branch office  
Add a Suffix "0000" for all the above mentioned cat. nos.

| M.R.P. changes for product customization w.r.t. SR18G M.R.P.   |        | M.R.P. (₹)<br>Per Unit |
|----------------------------------------------------------------|--------|------------------------|
| Bus-Coupler (w/o protection)                                   | Reduce | 8000                   |
| Microprocessor based SR18G+D (LSING + Current Metering)        | Add    | 21500                  |
| Microprocessor based SR18Gi+D (LSING + Current metering + ZSI) | Add    | 28500                  |

**C-POWER Draw-Out ACBs** will have inbuilt - 6NO+6NC Aux contact, Safety shutter assembly, Racking handle, Door sealing frame, Push-button cover & Rating Error preventor. Option of horizontal & vertical termination upto 4000A also available. Operation counter for 4000A & above.  
EDO version includes 240V AC Shunt trip coil, Closing coil and Motor for electrical charging.

**C-POWER Fixed ACBs** will have inbuilt - 6NO+6NC Aux contact, Door sealing frame & Push-button cover. Operation counter for 4000A & above.

**Note:** 1 NO Aux contact in manual version & 2NO+2NC in electrical version breakers will be pre-wired with accessories mounted in breaker.

In electrically operated breaker with DN1 release, either earth fault or undervoltage protection can be used.

**Note:** Electrical Fixed type breakers are available on request.

# Available on "Made to order" basis. \* Available on request





## Accessories (Common for C-POWER Family)



LTPB



LIP



Shunt Release



UV Release

| Description                                             | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------------------------|-------------|---------------------------|
| <b>Lockable Trip Push Button (LTPB) [8301]</b>          |             |                           |
| Type AA                                                 | SL93148000A | 7870                      |
| Type BB                                                 | SL93148000B | 7870                      |
| Type CC                                                 | SL93148000C | 7870                      |
| Type DD                                                 | SL93148000D | 7870                      |
| Lockable Trip Push Button kit (3 I/C & 2 B/C)           | SL919360000 | 39400                     |
| <b>Locking of ACB in Isolated position (LIP) [8301]</b> |             |                           |
| Type A                                                  | SL93146000A | 7870                      |
| Type B                                                  | SL93146000B | 7870                      |
| Type C                                                  | SL93146000C | 7870                      |
| Type D                                                  | SL93146000D | 7870                      |
| <b>Locking of ACB in Any position (LAP) [8301]</b>      |             |                           |
| Type A                                                  | SL93147000A | 7870                      |
| Type B                                                  | SL93147000B | 7870                      |
| Type C                                                  | SL93147000C | 7870                      |
| Type D                                                  | SL93147000D | 7870                      |
| <b>Racking Interlock [8301]</b>                         |             |                           |
| Type AA                                                 | SL93149000A | 10800                     |
| Type BB                                                 | SL93149000B | 10800                     |
| Type CC                                                 | SL93149000C | 10800                     |
| Type DD                                                 | SL93149000D | 10800                     |
| <b>Padlock [8301]</b>                                   |             |                           |
| Racking Padlock Assembly                                | CL900250000 | 3660                      |
| <b>Other Accessories [8538]</b>                         |             |                           |
| Door Interlock                                          | SL931500000 | 5760                      |
| Mechanical Operation Counter*                           | XM808370000 | 5710                      |
| Mounting Kit for Front Mounted Counter                  | SL958820000 | 2020                      |
| Spring Charge Indication Microswitch                    | SL960000000 | 4570                      |

\* For mounting the Operation counter, mounting kit "SL958820000" needs to be ordered separately. Operation Counter inbuilt for rating 4000A to 6300A.



### Vertical Terminal Adaptor

| Description & Rating                                              | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|-------------------------------------------------------------------|-------------|---------------------------|------------------------|
| <b>Vertical Terminal Adaptors for Draw out C-POWER ACB [8538]</b> |             |                           |                        |
| 400-1250 S1/800-1000 C                                            | SL932810000 | 9800                      | 1                      |
| 1600-2000 S1/1250-1600 C/800-1600 H                               | SL932820000 | 11900                     | 1                      |
| 2000 C                                                            | SL932840000 | 17600                     | 1                      |
| 2000 H/2500 C/H                                                   | SL932850000 | 18400                     | 1                      |
| 2500 S1                                                           | SL932890000 | 18400                     | 1                      |
| 3200 S1                                                           | SL932860000 | 22700                     | 1                      |
| 3200H2/H1, 4000H2/H                                               | SL932880000 | 54800                     | 1                      |

| Description                                                                 | Cat. No.    | M.R.P.<br>(₹)<br>Per Unit |
|-----------------------------------------------------------------------------|-------------|---------------------------|
| <b>Shunt Release (SR) [8538]</b>                                            |             |                           |
| Type EA : 24/48V DC                                                         | SL927180400 | 5060                      |
| Type EA : 110V DC                                                           | SL927180100 | 5060                      |
| Type EA : 220V DC                                                           | SL927180200 | 5060                      |
| Type EA1 : 110V AC                                                          | SL927180A00 | 5060                      |
| Type EA1 : 240V AC                                                          | SL927180B00 | 5060                      |
| Type EA1 : 415V AC                                                          | SL927180D00 | 5060                      |
| <b>Under Voltage Release (UVR) [8538]</b>                                   |             |                           |
| Type MV : 24V DC                                                            | ST368770000 | 8870                      |
| Type MV : 240V AC                                                           | SL92720B000 | 8870                      |
| Type MV : 415V AC                                                           | SL92720D000 | 8870                      |
| <b>Earth Fault Release ( for DN1) [8538]</b>                                |             |                           |
| Type EF1 (10%, 20% In )                                                     | SL913400000 | 7840                      |
| Type EF2 (30%, 40%, 50% In)                                                 | SL913410000 | 7840                      |
| <b>Remote Fault Indication [8538]</b>                                       |             |                           |
| AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC         | SL946540000 | 19000                     |
| <b>Microswitches for Indication [8536]</b>                                  |             |                           |
| Microswitch for Voltmetric Releases (2) each                                | SL927030000 | 4870                      |
| Microswitch for Common Indication of O/L & S/C (3) each                     | SL927040000 | 4870                      |
| Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release) | SL927050000 | 8130                      |
| Service Position Microswitch - Right (2)                                    | SL931420000 | 3290                      |
| Service Position Microswitch - Left (2)                                     | SL931430000 | 3290                      |
| Test or Isolated Position Microswitch - Right (2)                           | SL931440000 | 3290                      |
| Test or Isolated Position Microswitch - Left (2)                            | SL931450000 | 3290                      |

### Note:

- The Numerical in brackets, against various accessories indicate the SICs required for wiring purpose in Draw-Out breakers
- Shunt release requires one set of auxiliary contacts
- Maximum 24 SICs can be fitted on an ACB. In Electrical ACBs 5 SICs are prewired for control circuit purpose

### Features

- Remote Status & Control of ACB
- Communicates on MODBUS Protocol
- Inbuilt RS485 Port

| Description                      | Cat. No.      | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|----------------------------------|---------------|---------------------------|------------------------|
| UN-CO module for Breaker control | CL908520000** | 22100                     | 1                      |

\*\*Available till stock last



## Protection Releases



**SR18G**



**SR18G+D**



**SR18Gi+D**



**CT**

| Description                        | Cat. No.           | M.R.P.<br>(₹)<br>Per Unit |
|------------------------------------|--------------------|---------------------------|
| <b>Protection Releases [8538]</b>  |                    |                           |
| Microprocessor based type SR18Gi+D | <b>SL948130000</b> | <b>93700</b>              |
| Microprocessor based type SR18G+D  | <b>SL948120000</b> | <b>86700</b>              |
| Microprocessor based type SR18G    | <b>SL960300000</b> | <b>65200</b>              |
| Thermal-Magnetic Release type DN1  | <b>SL931520000</b> | <b>62200</b>              |
| Universal Test Kit                 | <b>CL904620000</b> | <b>133500</b>             |

Universal Test Kit

Compatible with following Lauritz Knudsen Protection Releases

- › SR protection releases of C-Power ACB family
- › UNRS protection releases of U-Power ACB family
- › MTX and RC releases of D-Sine MCCB family

Retrofit kit solutions are available

For further details please contact the nearest branch office

| Description                                      | Cat. No.           | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|--------------------------------------------------|--------------------|---------------------------|------------------------|
| <b>CTs for SR18G / SR18G+D / SR18Gi+D [8504]</b> |                    |                           |                        |
| 400 S1 Fix & Draw-out                            | <b>SL015230000</b> | <b>10900</b>              | 1                      |
| 630 S1 Fix & Draw-out                            | <b>ST374950000</b> | <b>10900</b>              | 1                      |
| 800 C/H/S1 Fix & Draw-out                        | <b>SL018570000</b> | <b>10900</b>              | 1                      |
| 1000 C/H/S1 Fix & Draw-out                       | <b>SL018580000</b> | <b>10900</b>              | 1                      |
| 1250 C/H/S1 Fix & Draw-out                       | <b>SL905710000</b> | <b>13200</b>              | 1                      |
| 1600 C/H/S1 Fix & Draw-out                       | <b>SL905720000</b> | <b>13200</b>              | 1                      |
| 2000 C/H Fix & Draw-out                          | <b>SL905650000</b> | <b>14500</b>              | 1                      |
| 2000 S1 Draw-out                                 | <b>SL932100000</b> | <b>14500</b>              | 1                      |
| 2500 C/H Fix & Draw-out                          | <b>SL905660000</b> | <b>14500</b>              | 1                      |
| 2500 S1 Draw-out                                 |                    |                           |                        |
| 3200 H2/H1 Draw-out                              | <b>SL017400000</b> | <b>16800</b>              | 1                      |
| 4000 H2/H Draw-out                               | <b>SL017390000</b> | <b>19900</b>              | 1                      |

For External Neutral C.T.s please use the above Cat. No.

**Protect your equipment  
in Sulphur-rich environments**



### C-POWER HE Air Circuit Breaker

- Range 1250A to 5000A, 415/690V ac
- Available in 3 Pole/4 Pole, Manually & Electrically operated, Fixed & Draw-out versions
- Protection through Microprocessor release



### FN BOLTED HE Switch-Disconnecter-Fuse

- Range 32A to 630A, 415V ac, AC 23A
- TPN version suitable for Bolted Fuse Link
- Door Interlocking & Padlocking facility



Lauritz Knudsen Electrical & Automations HE range of Air Circuit Breakers (ACBs) and Switch-Disconnecter-Fuse (S-D-F) are designed to ensure that they operate at peak efficiency for their entire lifespan in harsh, Sulphur-rich Harsh corrosive environments.

For more details please  
scan the QR code or click here



### Customer Interaction Center (CIC)

Phone no: 022-6932 7800

Web: [www.LK-EA.com](http://www.LK-EA.com) | e-mail: [CIC@LK-EA.com](mailto:CIC@LK-EA.com)

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# S-LINE BUSBAR TRUNKING SYSTEM

A smart, safe and reliable solution for power distribution



## KEY FEATURES



Enclosure: GI or Aluminium



UL Certified Class-F  
Insulation with ROHS  
compliance



Current Rating:  
· 250A to 6300A (Aluminium)  
· 400A to 6300A (Copper)



Ingress Protection  
up to IP66



Plug-in boxes with  
Safety interlocks

Now equipped with Temperature monitoring system and

Powered By  
**SMARTCOMM**





# ENGINEERED FOR ENDURANCE

Built to withstand tough conditions



## LTXL CAPACITOR



Designed to operate at  
Temperature upto 70°C



3 x In Over Current  
withstand capacity



Highest 500 x In  
Inrush current  
withstand capacity.



Special Stainless  
Steel Earthing pad  
corrosion proof.



Glazed ceramic  
bushing provided  
better protection.



Enhanced Durability

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## Power Factor Correction Capacitors [8532]

| Parameters                               | Standard Duty |             | Heavy Duty  |             | HD Plus Gas Filled | Super Heavy Duty | APP         | LTXL Ultra Heavy Duty |             |
|------------------------------------------|---------------|-------------|-------------|-------------|--------------------|------------------|-------------|-----------------------|-------------|
|                                          | Cylindrical   | Box         | Cylindrical | Box         | Cylindrical        | Cylindrical      | Box         | Cylindrical           | Box         |
| Over current withstand capability        | 1.5 x In      | 1.5 x In    | 1.8 x In    | 1.8 x In    | 2.0 x In           | 2.5 x In         | 2.5 x In    | 3 x In                | 3 x In      |
| Operating losses                         | 0.45 W/kVAr   | 0.45 W/kVAr | 0.5 W/kVAr  | 0.5 W/kVAr  | 0.45 W/kVAr        | 0.45 W/kVAr      | 0.5 W/kVAr  | 0.45 W/kVAr           | 0.5 W/kVAr  |
| Peak Inrush current withstand capability | 200 x In      | 200 x In    | 250 x In    | 300 x In    | 300 x In           | 350 x In         | 300 x In    | 500 x In              | 500 x In    |
| Number of switching operations per year  | 5000          | 5000        | 7500        | 8000        | 10000              | 15000            | 10000       | 18000                 | 20000       |
| Max. Temperature                         | 55°C          | 55°C        | 55°C        | 55°C        | 55°C               | 65°C             | 55°C        | 65°C                  | 70°C        |
| Operating life                           | 100000 hrs.   | 100000 hrs. | 130000 hrs. | 150000 hrs. | 180000 hrs.        | 200000 hrs.      | 200000 hrs. | 300000 hrs.           | 300000 hrs. |

## Standard Duty Capacitors

### Features

- › Finger proof terminal in Cyl capacitor
- › 150% continuous current carrying capacity
- › Self-Healing property
- › Soft resin as coolant
- › Inbuilt Over Pressure Disconnecter (OPD)



| Type                                                                             | kVAr Rating  | Voltage (V) | M.R.P. (₹) per kVAr |
|----------------------------------------------------------------------------------|--------------|-------------|---------------------|
| Cylindrical<br>1 to 6 kVAr - Series : LTCCF<br>7.5 to 33.1 kVAr - Series : LTCCD | 1 to 25      | 440         | 290                 |
|                                                                                  | 1.2 to 27.7  | 480         | 290                 |
|                                                                                  | 1.3 to 33.1  | 525         | 290                 |
| Box<br>1 to 6 kVAr - Series : LTBCF<br>7.5 to 33.1 kVAr - Series : LTBCD         | 1 to 50      | 440         | 348                 |
|                                                                                  | 11.1 to 27.7 | 480         | 348                 |
|                                                                                  | 13.2 to 33.1 | 525         | 348                 |

## Heavy Duty Capacitors

### Features

- › 180% continuous current carrying capacity
- › Finger proof terminal in Cyl capacitor
- › Self-Healing property
- › Soft resin as coolant
- › Inbuilt over pressure disconnecter (OPD)
- › Low losses



| Type                       | kVAr Rating  | Voltage (V) | M.R.P. (₹) per kVAr |
|----------------------------|--------------|-------------|---------------------|
| Cylindrical Series: LTCCCH | 1 to 4       | 440 V       | 555                 |
|                            | 5 to 15      |             | 510                 |
|                            | 20 to 30     |             | 497                 |
|                            | 1.2 to 4.4*  | 480 V       | 555                 |
|                            | 5.5 to 16.6  |             | 510                 |
|                            | 22.1 to 27.7 |             | 497                 |
|                            | 1.3 to 5.3*  | 525 V       | 555                 |
|                            | 6.6 to 16.6  |             | 510                 |
|                            | 20 to 33.1   |             | 497                 |
| Box Series: LTBCCH         | 1 to 4       | 440 V       | 666                 |
|                            | 5 to 15      |             | 576                 |
|                            | 20 to 50     |             | 564                 |
|                            | 5.5 to 15    | 480 V       | 576                 |
|                            | 20 to 27.7   |             | 564                 |
|                            | 6.6 to 15    | 525 V       | 576                 |
|                            | 20 to 33.1   |             | 564                 |
|                            |              |             |                     |
|                            |              |             |                     |

\* Now smaller rating also available in Heavy Duty Cylindrical

## HD Plus Gas Filled Capacitor

### Features

- › High inrush current carrying capacity 300 x In
- › Inert gas as coolant (Non-flammable)
- › Finger proof terminal in Cyl capacitor
- › Self-Healing property
- › Inbuilt Over Pressure Disconnecter (OPD)
- › Long life



| Type                      | kVAr Rating | Voltage (V) | M.R.P. (₹) per kVAr |
|---------------------------|-------------|-------------|---------------------|
| Cylindrical Series: LTCCN | 7.5 to 15   | 440         | 566                 |
|                           | 20 & 25     |             | 526                 |
|                           | 7.5 to 15   | 480         | 566                 |
|                           | 20 to 30    |             | 526                 |
|                           | 7.5 to 15   | 525         | 566                 |
|                           | 20 to 33.1  |             | 526                 |



## Super Heavy Duty Capacitors

### Features

- › High over current withstand capacity 2.5 x In
- › High Inrush current withstand capacity 350 x In
- › Finger proof Sigut terminal in Cyl capacitor



| Type                      | kVAr Rating | Voltage (V) | M.R.P. (₹) per kVAr |
|---------------------------|-------------|-------------|---------------------|
| Cylindrical Series: LTCCR | 3 to 5      | 440 V       | 789                 |
|                           | 7.5 to 15   |             | 645                 |
|                           | 20 & 25     |             | 610                 |
|                           | 1.2 to 5.5  | 480 V       | 789                 |
|                           | 11.1 & 15   |             | 645                 |
|                           | 20 to 27.7  |             | 610                 |
|                           | 1.3 to 5    | 525 V       | 789                 |
|                           | 6.6 to 15   |             | 645                 |
|                           | 20 to 33.3  |             | 610                 |

## APP Capacitors

### Features

- › High over current withstand capacity 2.5 x In
- › High Inrush current withstand capacity 300 x In
- › Glazed ceramic bushing
- › Tinned Copper studs
- › Corrosion proof stainless steel Earthing pad



| Type              | kVAr Rating  | Voltage (V) | M.R.P. (₹) per kVAr |
|-------------------|--------------|-------------|---------------------|
| Box Series: LTBCP | 5 to 15      | 440 V       | 999                 |
|                   | 20 to 50     |             | 966                 |
|                   | 5.5 to 13.8  | 480 V       | 999                 |
|                   | 16.6 to 55.3 |             | 966                 |
|                   | 6.6 & 13.2   | 525 V       | 999                 |
|                   | 16.6 to 66.2 |             | 966                 |

## LTXL - Ultra Heavy Duty Capacitors

### Features

- › High over current withstand capacity 3 x In
- › High Inrush current withstand capacity 500 x In
- › Glazed ceramic bushing (In box type capacitor)
- › Lower thermal impedance
- › Designed to operate at temperature up to 70°C
- › Corrosion proof **stainless steel Earthing pad**



## Ordering Information for Capacitors

C - Cylindrical, B - Box

Duty: D/F – Standard\*\*  
H - Heavy  
N - Gas Filled  
R - Super Heavy  
P - APP  
U - Ultra Heavy

| Type                       | kVAr Rating | Voltage (V) | M.R.P. (₹) per kVAr |
|----------------------------|-------------|-------------|---------------------|
| Cylindrical Series : LTCCU | 5 to 15     | 440V        | 1509                |
|                            | 20 & 25     |             | 1484                |
|                            | 7.5 to 15   | 480V        | 1509                |
|                            | 20          |             | 1484                |
|                            | 7.5 to 15   | 525V        | 1509                |
| Box Series: LTBCU          | 20          |             | 1484                |
|                            | 5 to 15     | 440V        | 1680                |
|                            | 20 to 50    |             | 1648                |
|                            | 7.5 to 15   | 480V        | 1680                |
|                            | 20 to 30    |             | 1648                |
|                            | 7.5 to 15   | 525V        | 1680                |
|                            | 20 to 33.1  |             | 1648                |

L T C 3 2

Catalogue Number

### Sample ratings

kVAr Rating  
01 - 1 kVAr  
07 - 7.5 kVAr  
10 - 10 kVAr  
12 - 12.5 kVAr

Voltages: B- 440V, C- 480V, M- 525V

\*\* F - 1 to 6 kVAr. D - 7.5 kVAr & above

| Capacitor Series | kVAr ratings                                           |                                                       |                                                         |
|------------------|--------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------|
|                  | 440 V                                                  | 480 V                                                 | 525 V                                                   |
| LTCCF            | 1, 2, 3, 4, 5, 6                                       | 1.2, 2.2, 3.3, 4.4, 5.5                               | 1.3, 2.6, 3.9, 5.3, 6.6                                 |
| LTBCF            | 1, 2, 3, 4, 5, 6                                       | -                                                     | -                                                       |
| LTCCD/LTBCD      | 7.5, 8.33, 10, 12.5, 15, 20, 25, 30*                   | 11.1, 13.8, 16.6, 22.1, 27.7                          | 13.2, 16.6, 20, 26.5, 30, 33.1                          |
| LTCCCH           | 1, 2, 3, 4, 5, 7.5, 10, 12.5, 15, 20, 25, 30           | 1.2, 2.2, 3.3, 4.4, 5.5, 11.1, 13.8, 16.6, 22.1, 27.7 | 1.3, 2.6, 3.9, 5.3, 6.6, 13.2, 16.6, 20, 26.5, 30, 33.1 |
| LTBCCH           | 1, 2, 3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25, 30, 50 | 5.5, 11.1, 15, 20, 25, 27.7                           | 6.6, 13.2, 15, 20, 25, 30, 33.1                         |
| LTCCN            | 7.5, 8.33, 10, 12.5, 15, 20, 25                        | 7.5, 12.5, 15, 20, 25, 30                             | 7.5, 12.5, 15, 20, 25, 30, 33.1                         |
| LTCCR            | 3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25               | 1.2, 2.2, 3.3, 4.4, 5.5, 11.1, 15, 20, 25, 27.7       | 1.3, 2.6, 3.9, 5, 6.6, 13.2, 15, 20, 25, 30, 33.3       |
| LTBCP            | 5, 7.5, 10, 12.5, 15, 20, 25, 50                       | 5.5, 11.1, 13.8, 16.6, 22.1, 27.7, 55.3               | 6.6, 13.2, 16.6, 20, 26.5, 30, 33.1, 66.2               |
| LTCCU            | 5, 7.5, 8.33, 10, 12.5, 15, 20, 25                     | 7.5, 10, 12.5, 15, 20                                 | 7.5, 10, 12.5, 15, 20                                   |
| LTBCU            | 5, 7.5, 8.33, 10, 12.5, 15, 20, 25, 30, 50             | 7.5, 10, 12.5, 15, 20, 25, 30                         | 7.5, 12.5, 15, 20, 25, 30, 33.1                         |

\*Only LTBCD is available at 30 kVAr



## Detuned Reactors, 440 V, 50 Hz [8504]

## Features

- › Copper & Aluminium wound reactors
- › H-class insulation
- › Lower operating losses
- › 180% linearity\*
- › Thermal cut off
- › High Quality Factor



| kVar Rating | 7% Copper Reactor |                     | 7% Aluminium Reactor |                     | 14% Copper Reactor |                     | 14% Aluminium Reactor |                     |
|-------------|-------------------|---------------------|----------------------|---------------------|--------------------|---------------------|-----------------------|---------------------|
|             | Cat. No.          | M.R.P. (₹) Per Unit | Cat. No.             | M.R.P. (₹) Per Unit | Cat. No.           | M.R.P. (₹) Per Unit | Cat. No.              | M.R.P. (₹) Per Unit |
| 1           | LTFR0701B2        | 15821               | LTAL0701B2           | 9733                | LTFR1401B2         | 30755               | LTAL1401B2            | 16062               |
| 2           | LTFR0702B2        | 17277               | LTAL0702B2           | 10616               | LTFR1402B2         | 33528               | LTAL1402B2            | 17493               |
| 3           | LTFR0703B2        | 19585               | LTAL0703B2           | 12024               | LTFR1403B2         | 38025               | LTAL1403B2            | 19821               |
| 4           | LTFR0704B2        | 20817               | LTAL0704B2           | 12783               | LTFR1404B2         | 40427               | LTAL1404B2            | 21085               |
| 5           | LTFR0705B2        | 23373               | LTAL0705B2           | 13822               | LTFR1405B2         | 43710               | LTAL1405B2            | 24124               |
| 10          | LTFR0710B2        | 31927               | LTAL0710B2           | 19617               | LTFR1410B2         | 61958               | LTAL1410B2            | 34314               |
| 12.5        | LTFR0712B2        | 36028               | LTAL0712B2           | 21936               | LTFR1412B2         | 67971               | LTAL1412B2            | 39308               |
| 15          | LTFR0715B2        | 41851               | LTAL0715B2           | 26320               | LTFR1415B2         | 74783               | LTAL1415B2            | 46966               |
| 20          | LTFR0720B2        | 46350               | LTAL0720B2           | 29294               | LTFR1420B2         | 86616               | LTAL1420B2            | 53387               |
| 25          | LTFR0725B2        | 47256               | LTAL0725B2           | 29857               | LTFR1425B2         | 95122               | LTAL1425B2            | 54818               |
| 50          | LTFR0750B2        | 79216               | LTAL0750B2           | 46489               | LTFR1450B2         | 153681              | LTAL1450B2            | 77441               |
| 75          | LTFR0775B2        | 117745              | LTAL0775B2           | 68475               | LTFR1475B2         | 222318              | LTAL1475B2            | 115138              |
| 100         | LTFR0700B2        | 153209              | LTAL0700B2           | 94093               | LTFR1400B2         | 297019              | LTAL1400B2            | 155251              |

\* Prices of 200% linearity reactors are available on request.

For industries with High Voltage Harmonics, **special solutions** are available on request. Contact your nearest sales office for the customised solutions.

## Selection of capacitors for detuned harmonic filter application

| Step Size &<br>440 V<br>Reactor rating<br>(kVAr) | With 7% detuned reactor                  |                           |                           | With 14% detuned reactor                                         |                           |
|--------------------------------------------------|------------------------------------------|---------------------------|---------------------------|------------------------------------------------------------------|---------------------------|
|                                                  | Capacitor series                         | 480 V Capacitor<br>(kVAr) | 525 V Capacitor<br>(kVAr) | Capacitor series                                                 | 525 V Capacitor<br>(kVAr) |
| 1                                                | LTCCF, LTCCH, LTCCR                      | 1.2                       | 1.3                       | LTCCF, LTCCH, LTCCR                                              | 1.3                       |
| 2                                                | LTCCF, LTCCH, LTCCR                      | 2.2                       | 2.6                       | LTCCF, LTCCH, LTCCR                                              | 2.6                       |
| 3                                                | LTCCF, LTCCH, LTCCR                      | 3.3                       | 3.9                       | LTCCF, LTCCH, LTCCR                                              | 3.9                       |
| 4                                                | LTCCF, LTCCH                             | 4.4                       | 5.3                       | LTCCF, LTCCH                                                     | 5.3                       |
|                                                  | LTCCR                                    |                           | 5                         | LTCCR                                                            | 5                         |
| 5                                                | LTCCF, LTCCH, LTCCR, LTBCB, LTBCP        | 5.5                       | 6.6                       | LTCCF, LTCCH, LTCCR, LTBCB, LTBCP                                | 6.6                       |
|                                                  | LTCCN, LTCCU, LTBCU                      | 7.5                       | 7.5                       | LTCCN, LTCCU, LTBCU                                              | 7.5                       |
| 10                                               | LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP | 11.1                      | 13.2                      | LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP                         | 13.2                      |
|                                                  | LTCCN, LTCCU, LTBCU                      | 12.5                      | 12.5                      | LTCCN, LTCCU, LTBCU                                              | 12.5                      |
| 12.5                                             | LTCCN, LTCCR, LTCCU, LTBCB, LTBCU        | 15                        | 15                        | LTCCN, LTCCR, LTCCU, LTBCB, LTBCU                                | 15                        |
|                                                  | LTCCD, LTCCH, LTBCD, LTBCP               | 13.8                      | 16.6                      | LTCCD, LTCCH, LTBCD, LTBCP                                       | 16.6                      |
| 15                                               | LTCCN, LTCCR, LTCCU, LTBCB, LTBCU        | 20                        | 20                        | LTCCD, LTCCN, LTCCH, LTCCR, LTCCU,<br>LTBCD, LTBCB, LTBCP, LTBCU | 20                        |
|                                                  | LTCCD, LTCCH, LTBCD, LTBCP               | 16.6                      |                           |                                                                  |                           |
| 20                                               | LTCCN, LTCCR, LTBCB, LTBCU               | 25                        | 25                        | LTCCN, LTCCR, LTBCB, LTBCU                                       | 25                        |
|                                                  | LTCCD, LTCCH, LTBCD, LTBCP               | 22.1                      | 26.5                      | LTCCD, LTCCH, LTBCD, LTBCP                                       | 26.5                      |
|                                                  | LTCCU                                    | 7.5 + 15                  | 2 x 12.5                  | LTCCU                                                            | 2x12.5                    |
| 25                                               | LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP | 27.7                      | 33.1                      | LTCCD, LTCCN, LTCCH, LTCCR,<br>LTBCD, LTBCB, LTBCP, LTBCU        | 30                        |
|                                                  | LTBCU, LTCCN                             | 30                        |                           |                                                                  |                           |
|                                                  | LTCCU                                    | 12.5 + 15                 |                           | 15 + 20                                                          |                           |
| 50                                               | LTCCD, LTCCH, LTCCR, LTBCD, LTBCB        | 2 x 27.7                  | 2 x 33.1                  | LTCCD, LTCCN, LTCCH, LTCCR,<br>LTBCD, LTBCB, LTBCP, LTBCU        | 2 x 30                    |
|                                                  | LTBCU, LTCCN                             | 2 x 30                    |                           |                                                                  |                           |
|                                                  | LTCCU                                    | 2 x (12.5 + 15)           | 2 x (15 + 20)             | LTCCU                                                            | 3 x 20                    |
|                                                  | LTBCP                                    | 55.3                      | 66.2                      |                                                                  |                           |
| 75                                               | LTCCD, LTCCH, LTCCR, LTBCD, LTBCB        | 3 x 27.7                  | 3 x 33.1                  | LTCCD, LTCCN, LTCCH, LTCCR,<br>LTBCD, LTBCB, LTBCP, LTBCU        | 3 x 30                    |
|                                                  | LTBCU, LTCCN                             | 3 x 30                    |                           |                                                                  |                           |
|                                                  | LTCCU                                    | 3 x (12.5 + 15)           | 3 x (15 + 20)             | LTCCU                                                            | (4 x 20) + 10             |
|                                                  | LTBCP                                    | 27.7 + 55.3               | 33.1 + 66.2               |                                                                  |                           |
| 100                                              | LTCCD, LTCCH, LTCCR, LTBCD, LTBCB, LTBCP | 4 x 27.7                  | 4 x 33.1                  | LTCCD, LTCCN, LTCCH, LTCCR,<br>LTBCD, LTBCB, LTBCP, LTBCU        | 4 x 30                    |
|                                                  | LTBCU, LTCCN                             | 4 x 30                    |                           |                                                                  |                           |
|                                                  | LTCCU                                    | 4 x (12.5 + 15)           | 4 x (15 + 20)             | LTCCU                                                            | 6 x 20                    |
|                                                  | LTBCP                                    | 2 x 55.3                  | 2 x 66.2                  |                                                                  |                           |



# FAST. SILENT. LIMITLESS SWITCHING.

Dynamic Power Factor Correction  
engineered for rapidly fluctuating  
industrial loads.

-  5 ms response
-  Zero transients
-  Extended capacitor life



**TSM**

## Power Quality Solutions

### Capacitor Duty Contactors - Type MO C [8536]

#### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Delatching type early make contacts
- Separate termination for damping resistors
- Encapsulated damping resistor assembly
- Common coil for 50 & 60Hz application
- Low pick-up VA consumption
- RoHS compliant



| Size | kVAr Rating<br>@ 440V,<br>3Ph, 50Hz | Type      | Built-in<br>Auxiliary<br>Contacts | Cat. No. | M.R.P.<br>(₹)<br>Per Unit | Std.<br>Pkg.<br>(Nos.) |
|------|-------------------------------------|-----------|-----------------------------------|----------|---------------------------|------------------------|
| Fr 1 | 3                                   | MO C3     | 1NO                               | CS96146  | 3110                      | 1                      |
|      | 5                                   | MO C5     | 1NO                               | CS96127  | 3300                      | 1                      |
|      | 8.5                                 | MO C8.5   | 1NO                               | CS96320  | 4100                      | 1                      |
|      | 10                                  | MO C10    | 1NO                               | CS96156  | 4270                      | 1                      |
|      | 12.5                                | MO C12.5  | 1NO                               | CS96321  | 4500                      | 1                      |
|      | 15                                  | MO C15    | 1NO                               | CS90019  | 5970                      | 1                      |
|      | 20                                  | MO C20    | 1NO                               | CS90021  | 6760                      | 1                      |
|      | 25                                  | MO C25▲   | 1NO                               | CS96322  | 7340                      | 1                      |
| Fr 2 | 30                                  | MO C30\$  | 1NO                               | CS96148  | 11300                     | 1                      |
|      | 40                                  | MO C40    | 1NO                               | CS96147  | 18910                     | 1                      |
|      | 50                                  | MO C50    | 1NO                               | CS96324  | 21220                     | 1                      |
|      | 60                                  | MO C60\$  | 1NO                               | CS96149  | 22450                     | 1                      |
| Fr 3 | 75                                  | MO C75    | 1NO                               | CS96150  | 27080                     | 1                      |
|      | 85                                  | MO C85    | 1NO                               | CS96157  | 28390                     | 1                      |
|      | 100                                 | MO C100\$ | 1NO                               | CS96158  | 28950                     | 1                      |

### Thyristor Switching Module, 440V 50Hz [8538] New

#### Features

- High Peak Inverse Voltage (PIV) - 2.2 kV
- Inbuilt control supply voltage
- Auto thermal cut off
- LEDs for various status/fault indications
- Ambient Temperature -10° C to 55° C
- No moving parts
- On-site self test logic
- Low operating losses
- 2 Nos Aux Contact outputs for fault and status



| kVAr Rating | Cat. No.    | M.R.P. (₹)<br>Per Unit |
|-------------|-------------|------------------------|
| 10          | CS920490000 | 30223                  |
| 25          | CS920500000 | 43112                  |
| 50          | CS920510000 | 49379                  |

**Note (TSM):** Above prices include Quick Discharge Resistors (QDR)

#### Note (MOC):

- For ordering add-on aux. contact block, please refer page No. 8
- For ordering suffix, please refer page No.10
- For ordering spare coils, please refer page No. 11
- Standard coil voltage : 240V, 50/60 Hz
- For ordering MO C surge suppressor, please refer page No. 9

▲ If using 16 sq mm cable use of spreader link kit is mandatory

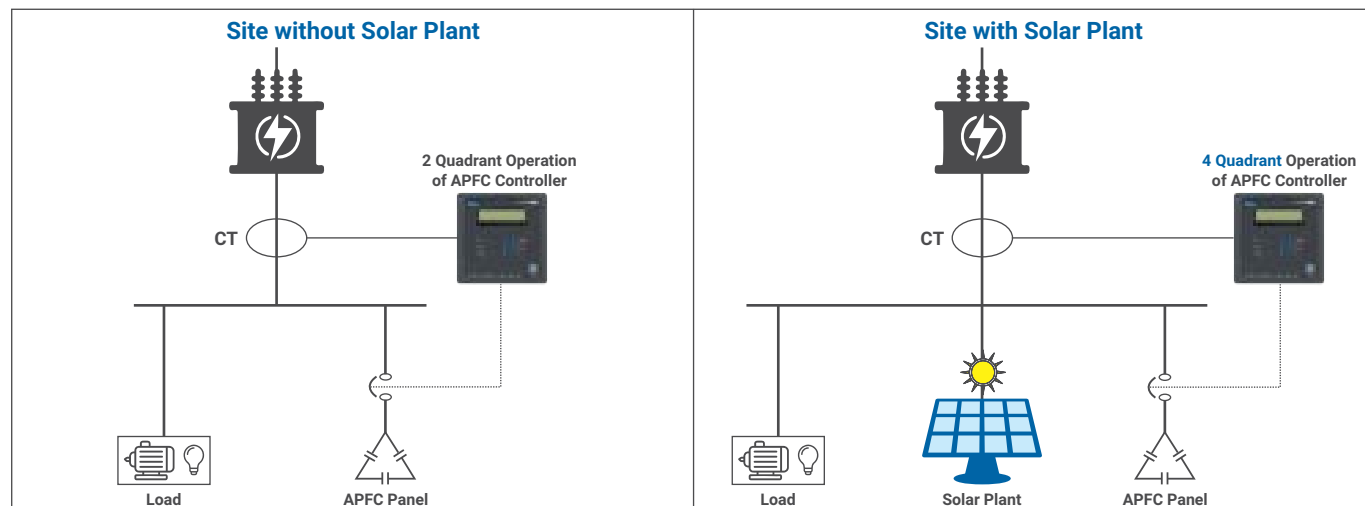
▲ For ordering spreader link kit, Please refer page No.9

\$ Spreader link along with phase barrier included in packing





etaSMART and etaULTRA Controllers are compatible for Sites with or without a Solar plant.



Enable 4 Quadrant setting in etaSMART and etaULTRA for site with Solar Plant.

## etaULTRA - APFC Controller - 3 CT inputs

### Features

- > 3 Phase Current and Voltage measurement
- > PF display - 3 Digit after decimal
- > Individual harmonics measurement up to 31st order
- > Dual PF setting for Mains - DG application
- > Communication through Inbuilt MODBUS RS-485 Protocol
- > Suitable for LT as well as HT side sensing

Cascading (Master - Slave configuration) for APFC panel with more than 16 steps



4 Quadrant Operation suitable for Solar Powered installations

| Model Name      | No. of steps (For Contactor switching) | No. of steps (For Thyristor switching) | Voltage Input | Cat No.     | Size      | M.R.P. (₹) Per Unit |
|-----------------|----------------------------------------|----------------------------------------|---------------|-------------|-----------|---------------------|
| etaULTRA 8R     | 8                                      | 0                                      | 110 / 415 V   | CS910500000 | 144 x 144 | 29000               |
| etaULTRA 16R    | 16                                     | 0                                      |               | CS910510000 |           | 38900               |
| etaULTRA 14T+2R | 2                                      | 14                                     |               | CS910530000 |           | 38900               |
| etaULTRA 8T+8R  | 8                                      | 8                                      |               | CS910540000 |           | 38900               |

Last Two Contacts can be programmed for Capacitor Switching / Alarm Function / Fan Control

## etaSMART - APFC Controller - 1 CT input

### Features

- > Simple and Smart Controller
- > Auto programming function available
- > CT secondary - 1 / 5 Amp site selectable
- > Measurement of Total harmonics distortion of current and voltage up to 13th order harmonics



4 Quadrant Operation suitable for Solar Powered installations

## etaSMART T - APFC Controller for Thyristor Switching with 1 CT input

| No. of steps (for Thyristor switching) | Size      | Cat. No.    | Single CT input | Voltage Input | M.R.P. (₹) Per Unit |
|----------------------------------------|-----------|-------------|-----------------|---------------|---------------------|
| 8                                      | 144 x 144 | CS916140000 | 1/ 5 Amp        | 415 V         | 23300               |
| 12                                     | 144 x 144 | CS916150000 |                 |               | 29000               |
| 15                                     | 144 x 144 | CS916160000 |                 |               | 33900               |

One separate relay contact is available for Alarm

## etaSMART R - APFC controller for Contactor switching with 1 CT input

| No. of steps (For Contactor Switching) | Size      | Cat. No.    | Single CT input | Voltage Input | M.R.P. (₹) Per Unit |
|----------------------------------------|-----------|-------------|-----------------|---------------|---------------------|
| 4                                      | 96 x 96   | CS908840000 | 1/ 5 Amp        | 415 V         | 11600               |
| 6                                      | 96 x 96   | CS908850000 |                 |               | 13200               |
| 8                                      | 96 x 96   | CS909020000 |                 |               | 15550               |
| 12                                     | 144 x 144 | CS909030000 |                 |               | 24600               |
| 14                                     | 144 x 144 | CS909040000 |                 |               | 30400               |
| 16                                     | 144 x 144 | CS909050000 |                 |               | 33100               |

Last Two Contacts can be Programmed for Capacitor Switching / Alarm Function / Fan Control



# Power Factor Perfected, Harmonics Mitigated

## ASVG & AHF

Experience the next generation of power quality solutions. Our Advanced Static VAR Generator (ASVG) & Active Harmonic Filter (AHF) Modules dynamically corrects power factor for varying loads and mitigates harmonic in the system, resulting in improved system performance and a longer equipment lifespan. ASVG & AHF Modules compatibility with Hybrid controller enables true hybrid solutions, offering greater control and flexibility.



Ultra-High Speed  
compensation using IGBT



Dynamic Stepless Power  
Factor Correction



Harmonic  
Mitigation

## Advanced Static VAR Generator (ASVG) [8504] New

### ASVG Features

- › Dynamic Stepless PF correction, Load balancing & Harmonic Mitigation
- › Suitable for DPF & TPF improvement
- › Harmonic Mitigation up to 15th Order
- › Fast response time of 50  $\mu$ sec
- › Scalable architecture for future expansion
- › Lower thermal losses
- › Communicable – Inbuilt MODBUS RS485 Protocol
- › Wall mount/ Rack Mount Modules
- › True Hybrid Solution Compatibility

### Hybrid controller

- › Intuitive Touchscreen display
- › Easy installation & programming
- › 18 Ports to connect Capacitor banks (Thyristor & Cap. duty Contactor Switching)
- › Alarm and Event Management
- › Bar Chart Visualization



| kVar<br>Rating                         | 3P3W ASVG (415 V <sub>r</sub> -25%+15%) |                        | 3P4W ASVG (415 V <sub>r</sub> -25%+10%) |                        |
|----------------------------------------|-----------------------------------------|------------------------|-----------------------------------------|------------------------|
|                                        | Cat. No.                                | M.R.P. (₹)<br>Per Unit | Cat. No.                                | M.R.P. (₹)<br>Per Unit |
| 30                                     | ASVG0030H3WD2 <sup>*</sup>              | On<br>Request          | ASVG0030H4WD2 <sup>*</sup>              | On<br>Request          |
| 50                                     | ASVG0050H3WD2 <sup>*</sup>              |                        | ASVG0050H4WD2 <sup>*</sup>              |                        |
| 100                                    | ASVG0100H3WD2 <sup>*</sup>              |                        | ASVG0100H4WD2 <sup>*</sup>              |                        |
| 150                                    | ASVG0150H3WD2 <sup>*</sup>              |                        | ASVG0150H4WD2 <sup>*</sup>              |                        |
| 30                                     | ASVG0030N3RD2                           |                        | ASVG0030N4RD2                           |                        |
| 50                                     | ASVG0050N3RD2                           |                        | ASVG0050N4RD2                           |                        |
| 100                                    | ASVG0100N3RD2                           |                        | ASVG0100N4RD2                           |                        |
| 150                                    | ASVG0150N3RD2                           |                        | ASVG0150N4RD2                           |                        |
| Hybrid Controller / HMI                |                                         |                        |                                         |                        |
| 18 Stage<br>Relay O/P                  |                                         | ASVGHC18R00T           |                                         | On<br>Request          |
| 18 Stage<br>Thyristor O/P              |                                         | ASVGHC00R18T           |                                         |                        |
| 9 Stage Relay<br>9 Stage Thyristor O/P |                                         | ASVGHC09R09T           |                                         |                        |
| 7 Inch HMI                             |                                         | ASVGHMI007             |                                         |                        |

\* ASVG module with inbuilt HMI



## Active Harmonic Filter (AHF) [8543]



### ACTIVE HARMONIC FILTER - MODULE New

#### Features

- › Reduces THD within IEEE - 519 limits
- › Harmonic Mitigation, Dynamic Stepless PF correction & Load balancing
- › Advanced 3 Level Inverter topology
- › Harmonic Mitigation up to 51st Order
- › Fast response time of 50 µsec
- › Lower thermal losses
- › Scalable architecture for future expansion
- › Communicable – Inbuilt MODBUS RS485 Protocol
- › Wall mount/ Rack Mount Modules
- › True Hybrid Solution Compatibility

| Ampere Rating                          | 3P3W AHF (415 V,-25%+15%) |                     | 3P4W AHF (415 V,-25%+10%) |                     |
|----------------------------------------|---------------------------|---------------------|---------------------------|---------------------|
|                                        | Cat. No.*                 | M.R.P. (₹) Per Unit | Cat. No.*                 | M.R.P. (₹) Per Unit |
| 30                                     | AHF0030H3WD2*             | On Request          | AHF0030H4WD2*             | On Request          |
| 50                                     | AHF0050H3WD2*             |                     | AHF0050H4WD2*             |                     |
| 100                                    | AHF0100H3WD2*             |                     | AHF0100H4WD2*             |                     |
| 150                                    | AHF0150H3WD2*             |                     | AHF0150H4WD2*             |                     |
| 30                                     | AHF0030N3RD2              |                     | AHF0030N4RD2              |                     |
| 50                                     | AHF0050N3RD2              |                     | AHF0050N4RD2              |                     |
| 100                                    | AHF0100N3RD2              |                     | AHF0100N4RD2              |                     |
| 150                                    | AHF0150N3RD2              |                     | AHF0150N4RD2              |                     |
| Hybrid Controller / HMI                |                           |                     |                           |                     |
| 18 Stage Relay O/P                     |                           | AHFHC18R00T         |                           | On Request          |
| 18 Stage Thyristor O/P                 |                           | AHFHC00R18T         |                           |                     |
| 9 Stage Relay<br>9 Stage Thyristor O/P |                           | AHFHC09R09T         |                           |                     |
| 7 Inch HMI                             |                           | AHFHMI007           |                           |                     |

\* AHF module with inbuilt HMI

### ACTIVE HARMONIC FILTER

#### Features

- › Reduces THD within IEEE - 519 limits
- › Harmonic mitigation up to 50th Order
- › Harmonic Mitigation, Dynamic Stepless PF correction & Load balancing
- › With complete panel enclosure
- › Up to 1000 Amp in a single enclosure
- › Customizable to withstand in extreme environment
- › Communicable – Inbuilt MODBUS RS485 Protocol
- › Modular Design allowing for future expansion
- › Ease of Monitoring using Touch Screen HMI
- › Fully Customized as per site condition\*\*

Contact your nearest sales office for customized solution.

| Ampere Rating | 3 Phase 3 wire AHF Without Neutral Compensation |                     | 3 Phase 4 wire AHF With Neutral Compensation |                     |
|---------------|-------------------------------------------------|---------------------|----------------------------------------------|---------------------|
|               | Cat. No.*                                       | M.R.P. (₹) Per Unit | Cat. No.*                                    | M.R.P. (₹) Per Unit |
| 30            | AHF030431D2                                     | On Request          | AHF030441D2                                  | On Request          |
| 60            | AHF060431D2                                     |                     | AHF060441D2                                  |                     |
| 100           | AHF100431D2                                     |                     | AHF100441D2                                  |                     |
| 125           | AHF125433D2                                     |                     | AHF125443D2                                  |                     |
| 150           | AHF150433D2                                     |                     | AHF150443D2                                  |                     |
| 200           | AHF200433D2                                     |                     | AHF200443D2                                  |                     |
| 250           | AHF250433D2                                     |                     | AHF250443D2                                  |                     |
| 300           | AHF300433D2                                     |                     | AHF300443D2                                  |                     |
| 400           | AHF400433D2                                     |                     | AHF400443D2                                  |                     |
| 500           | AHF500433D2                                     |                     | -                                            |                     |
| 600           | AHF600433D2                                     |                     | -                                            |                     |
| 750           | AHF750433D2                                     |                     | -                                            |                     |
| 1000          | AHF000433D2                                     |                     | -                                            |                     |

\*Standard CAT No. Configuration Cable Entry – Top/Cable Alley

Customisable options available  
IP Class – IP 40/IP 42/IP 54  
Conformal Coating - (3C3)



# INTRODUCING etaSYS HYBRID APFC PANEL



BUILT FOR TOTAL ACCOUNTABILITY.

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- Designed for 'Low Life-Cycle Cost'
- Integrated OEM Ecosystem
- Intelligent Thermal Management
- Optimised Total Cost of Ownership (TCO)
- Unified Hybrid Control Systems
- Smart Panels for Real-Time Monitoring and Analytics

\* Note: Hybrid Panel Combination - ASVG + APFC & AHF + APFC

## Suggested Step Ratings for APFC Panels

| Panel Rating (kVAr) | Physical Step Size (kVAr)   | No. of Physical Steps | Electrical Steps (All Possible Combination of Physical Steps) | No. of Electrical Steps |
|---------------------|-----------------------------|-----------------------|---------------------------------------------------------------|-------------------------|
| 10                  | 4 + 3 + 2 + 1               | 4                     | 1,2,3,4...8,9,10                                              | 10                      |
| 15                  | 5 + 4 + 3 + 2 + 1           | 5                     | 1,2,3,4...13,14,15                                            | 15                      |
| 20                  | 10 + 5 + 2x2 + 1            | 5                     | 1,2,3,4...18,19,20                                            | 20                      |
| 25                  | 15 + 5 + 2x2 + 1            | 5                     | 1,2,3,4...23,24,25                                            | 20                      |
| 30                  | 15 + 10 + 2x2 + 1           | 5                     | 1,2,3,4...28,29,30                                            | 22                      |
| 35                  | 20 + 10 + 2x2 + 1           | 5                     | 1,2,3,4...33,34,35                                            | 23                      |
| 40                  | 20 + 10 + 5 + 3 + 2         | 5                     | 2,3,5,7...35,37,38,40                                         | 24                      |
| 45                  | 25 + 10 + 5 + 3 + 2         | 5                     | 2,3,5,7...40,42,43,45                                         | 24                      |
| 50                  | 25 + 15 + 5 + 3 + 2         | 5                     | 2,3,5,10...45,47,48,50                                        | 24                      |
| 55                  | 25 + 15 + 10 + 3 + 2        | 5                     | 2,3,5,10...50,52,53,55                                        | 25                      |
| 60                  | 25 + 15 + 10 + 5 + 3 + 2    | 6                     | 2,3,5,7...55,57,58,60                                         | 36                      |
| 65                  | 25 + 2x15 + 5 + 3 + 2       | 6                     | 2,3,5,7...60,62,63,65                                         | 35                      |
| 70                  | 25 + 20 + 15 + 5 + 3 + 2    | 6                     | 2,3,5,7...65,67,68,70                                         | 36                      |
| 75                  | 2x25 + 15 + 5 + 3 + 2       | 6                     | 2,3,5,7...70,72,73,75                                         | 39                      |
| 80                  | 2x25 + 15 + 10 + 3 + 2      | 6                     | 2,3,5,10...75,77,78,80                                        | 36                      |
| 85                  | 50 + 20 + 5 + 4 + 2x3       | 6                     | 2,3,5,6...80,81,82,85                                         | 44                      |
| 90                  | 50 + 25 + 5 + 4 + 2x3       | 6                     | 3,4,5,6...85,86,87,90                                         | 47                      |
| 95                  | 50 + 25 + 10 + 4 + 2x3      | 6                     | 3,4,6,7...89,91,92,95                                         | 43                      |
| 100                 | 50 + 25 + 15 + 4 + 2x3      | 6                     | 3,4,6,7...94,96,97,100                                        | 44                      |
| 105                 | 50 + 25 + 15 + 5 + 4 + 2x3  | 7                     | 3,4,5,6...100,101,102,105                                     | 85                      |
| 110                 | 50 + 25 + 15 + 10 + 4 + 2x3 | 7                     | 3,4,5,6...104,106,107,110                                     | 65                      |
| 115                 | 50 + 25 + 2x15 + 4 + 2x3    | 7                     | 3,4,6,7...109,111,112,115                                     | 65                      |

| Panel Rating (kVAr) | Physical Step Size (kVAr)     | No. of Physical Steps | Electrical Steps (All Possible Combination of Physical Steps) | No. of Electrical Steps |
|---------------------|-------------------------------|-----------------------|---------------------------------------------------------------|-------------------------|
| 120                 | 50 + 25 + 20 + 15 + 4 + 2x3   | 7                     | 3,4,6,7...114,116,117,120                                     | 85                      |
| 125                 | 50 + 2x25 + 15 + 4 + 2x3      | 7                     | 3,4,6,7...119,121,122,125                                     | 55                      |
| 130                 | 50 + 2x25 + 20 + 4 + 2x3      | 7                     | 3,4,6,7...124,126,127,130                                     | 60                      |
| 135                 | 2x50 + 15 + 10 + 4 + 2x3      | 7                     | 3,4,6,7...129,131,132,135                                     | 65                      |
| 140                 | 2x50 + 20 + 10 + 4 + 2x3      | 7                     | 3,4,6,7...134,136,137,140                                     | 62                      |
| 145                 | 2x50 + 25 + 10 + 4 + 2x3      | 7                     | 3,4,6,7...139,141,142,145                                     | 65                      |
| 150                 | 2x50 + 25 + 15 + 4 + 2x3      | 7                     | 3,4,6,7...144,146,147,150                                     | 66                      |
| 155                 | 2x50 + 25 + 15 + 3x5          | 7                     | 5,10,15,20...145,150,155                                      | 31                      |
| 175                 | 2x50 + 2x25 + 10 + 3x5        | 8                     | 5,10,15,20...165,170,175                                      | 35                      |
| 200                 | 2x50 + 3x25 + 15 + 2x5        | 8                     | 5,10,15,20...190,195,200                                      | 40                      |
| 225                 | 3x50 + 2x25 + 15 + 10         | 7                     | 10,15,25,35...210,215,225                                     | 27                      |
| 250                 | 3x50 + 3x25 + 15 + 10         | 8                     | 10,15,25,35...235,240,250                                     | 30                      |
| 275                 | 4x50 + 2x25 + 15 + 10         | 8                     | 10,15,25,35...260,265,275                                     | 33                      |
| 300                 | 100 + 2x50 + 3x25 + 15 + 10   | 8                     | 10,15,25,35...285,290,300                                     | 36                      |
| 325                 | 100 + 3x50 + 2x25 + 15 + 10   | 8                     | 10,15,25,35...310,315,325                                     | 39                      |
| 350                 | 100 + 4x50 + 25 + 15 + 10     | 8                     | 10,15,25,35...335,340,350                                     | 42                      |
| 375                 | 2x100 + 2x50 + 2x25 + 15 + 10 | 8                     | 10,15,25,35...360,365,375                                     | 45                      |
| 400                 | 2x100 + 2x50 + 4x25           | 8                     | 25,50,75,100...350,375,400                                    | 16                      |
| 425                 | 2x100 + 3x50 + 3x25           | 8                     | 25,50,75,100...375,400,425                                    | 17                      |
| 450                 | 2x100 + 3x50 + 4x25           | 9                     | 25,50,75,100...400,425,450                                    | 18                      |
| 475                 | 2x100 + 4x50 + 3x25           | 9                     | 25,50,75,100...425,450,475                                    | 19                      |
| 500                 | 2x100 + 5x50 + 2x25           | 9                     | 25,50,75,100...450,475,500                                    | 20                      |

**Note:** Above mentioned steps are typical recommendations, suitable for most of the industries. For accurate compensation, step size selection may have to be decided after studying load profile of that industry.

Lauritz Knudsen, 01.06.2026





# Empower Your Grid with **PRECISION & INTELLIGENCE**



## **WC8000 & WC7000 Power Quality Meter Range Engineered** for excellence, trusted for compliance.



**Class 0.2s Accuracy**  
As per IEC 62053-22



**Smart Communication**  
RS485, Ethernet,  
Modbus RTU, MQTT



**Reporting**  
IEC61000-4-30, IEEE519,  
ITIC & CBEMA, EN50160



**Advanced Harmonics Analysis**  
Up to 127th order (WC8000)



**Web Server Enabled**  
Remote access  
& configuration



**Robust Design**  
IP51 protection, double insulation,  
wide voltage range



**Real-Time Monitoring**  
High sampling rates  
(1024/cycle for WC8000)



**Energy Efficiency Insights**  
CO<sub>2</sub> tracking, load analysis,  
TOU slots

# numrAL

## Draw-out Numerical Protection Relays with Intelligent Algorithm

Current and Voltage-based Protection ▼



▲ Single Element and Multifunction Relays

- Comprehensive Protection along with Control and Monitoring
- Enhanced interface with Display and Modbus Communication

Powered By  
**SMARTCOMM**

## APPLICATIONS



### DISTRIBUTED ENERGY SYSTEM:

Renewable and Grid Stability



### EQUIPMENT PROTECTION:

Generator, Transformer and Motor



### POWER GENERATION AND DISTRIBUTION SUBSTATIONS:

LV and MV applications



### REAL TIME MONITORING AND PREDICTIVE ANALYTICS

with SmartComm





| Correlation between ANSI/IEEE device function number and relays |                                                                  |                   |       |       |       |       |       |                       |       |       |        |       |                  |      |      |       |
|-----------------------------------------------------------------|------------------------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-----------------------|-------|-------|--------|-------|------------------|------|------|-------|
| ANSI Code                                                       | Function Name                                                    | Protection Relays |       |       |       |       |       |                       |       |       |        |       |                  |      |      |       |
|                                                                 |                                                                  | Single Function   |       |       |       |       |       | Voltage and Frequency |       |       | Feeder |       | Motor Protection |      |      |       |
|                                                                 |                                                                  | REF11             | NDR11 | OCR11 | RPR11 | TCS11 | PTF11 | VPR11                 | VPR21 | VPR22 | FDR21  | FDR22 | eMPR 300I        | iMMR | MM10 | MPR21 |
| 27                                                              | AC under-voltage relay                                           |                   |       |       |       |       |       | ✓                     | ✓     | ✓     |        |       |                  | ✓    |      |       |
| 32                                                              | Power directional relay                                          |                   |       |       | ✓     |       |       |                       |       |       |        |       |                  |      |      |       |
| 37                                                              | Under current or under power relay                               |                   |       |       |       |       |       |                       |       |       |        |       | ✓                | ✓    | ✓    | ✓     |
| 46                                                              | Reverse phase or phase balance current relay                     |                   |       |       |       |       |       |                       |       |       |        | ✓     | ✓                | ✓    | ✓    | ✓     |
| 46BC                                                            | Broken conductor Protection                                      |                   |       |       |       |       |       |                       |       |       |        | ✓     |                  |      |      |       |
| 47                                                              | Phase-sequence or single-phasing voltage relay                   |                   |       |       |       |       |       |                       | ✓     | ✓     |        |       |                  | ✓    |      |       |
| 48                                                              | Excessive Start Time Monitoring                                  |                   |       |       |       |       |       |                       |       |       |        |       |                  | ✓    | ✓    | ✓     |
| 49                                                              | Machine or transformer thermal Overload relay                    |                   |       |       |       |       |       |                       |       |       |        | ✓     | ✓                | ✓    | ✓    | ✓     |
| 50                                                              | Instantaneous overcurrent relay                                  |                   |       |       |       |       |       |                       |       |       | ✓      | ✓     |                  | ✓    | ✓    | ✓     |
| 50N                                                             | Instantaneous Earth Fault relay                                  |                   |       | ✓     |       |       |       |                       |       |       | ✓      | ✓     |                  | ✓    |      | ✓     |
| 50BF                                                            | Breaker - failure                                                |                   |       |       |       |       |       |                       |       | ✓     |        | ✓     |                  |      |      | ✓     |
| 51                                                              | AC time over current relay                                       |                   |       |       |       |       |       |                       |       |       | ✓      | ✓     | ✓                | ✓    |      | ✓     |
| 51N-(51G)                                                       | Ground fault time over current relay / Standby Earth Fault Relay |                   |       | ✓     |       |       |       |                       |       |       | ✓      | ✓     |                  | ✓    |      | ✓     |
| 51LR                                                            | Locked rotor                                                     |                   |       |       |       |       |       |                       |       |       |        |       | ✓                | ✓    | ✓    | ✓     |
| 59                                                              | AC over-voltage relay                                            |                   |       |       |       |       |       | ✓                     | ✓     | ✓     |        |       |                  | ✓    |      |       |
| 59N                                                             | Neutral Displacement Relay                                       |                   | ✓     |       |       |       |       |                       | ✓     | ✓     |        |       |                  |      |      |       |
| 59D                                                             | Positive Sequence Over-voltage protection                        |                   |       |       |       |       |       |                       | ✓     | ✓     |        |       |                  |      |      |       |
| 64REF                                                           | Restricted Earth Fault Relay                                     | ✓                 |       |       |       |       |       |                       |       |       |        |       |                  |      |      |       |
| 64                                                              | Machine Ground Fault                                             |                   |       | ✓     |       |       |       |                       |       |       |        |       | ✓                | ✓    | ✓    | ✓     |
| 66                                                              | Max. no. of starts                                               |                   |       |       |       |       |       |                       |       |       |        |       |                  | ✓    |      | ✓     |
| 81                                                              | Frequency relay                                                  |                   |       |       |       |       |       |                       | ✓     | ✓     |        |       |                  | ✓    |      |       |
| 87N-(87G)                                                       | Ground fault differential protection relay*                      | ✓                 |       |       |       |       |       |                       |       |       |        |       |                  |      |      |       |
| 74TCS                                                           | Trip Circuit supervision Protection                              |                   |       |       |       | ✓     |       |                       |       | ✓     |        | ✓     |                  |      |      | ✓     |
| 78                                                              | Vector surge protection relay                                    |                   |       |       |       |       |       |                       |       | ✓     |        |       |                  |      |      |       |
| df/dt                                                           | Rate of change of frequency                                      |                   |       |       |       |       |       |                       |       | ✓     |        |       |                  |      |      |       |
| SOTF                                                            | Switch On to Fault Protection                                    |                   |       |       |       |       |       |                       |       |       |        | ✓     |                  |      |      |       |
| PTFF                                                            | PT Fuse failure                                                  |                   |       |       |       |       | ✓     |                       |       |       |        |       |                  |      |      |       |

\* REF11 is meant for Generator Differential Protection



### 3 Phase non-directional Over Current + Earth Fault Relay

- › FDR21 – 50, 51, 50N, 51N.
- › Microcontroller-based design
- › Draw-out enclosure.
- › CT rating\* - 1A/ 5A (site selectable)
- › Display of 250 event and 30 Trip records
- › 128\*64 graphical display



| Model        | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|------------------|--------------------|---------------------|
| numrAL FDR21 | 20 - 60V DC                | Non-Communicable | <b>NRFDR2A26NX</b> | <b>26500</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Non-Communicable | <b>NRFDR2B26NX</b> | <b>26500</b>        |

\* - Protection Class CT

### 3 Phase non-directional Over Current + Earth Fault Relay

- › FDR22 - 46BC, 49, 50, 51, 50N, 51N, 50BF, 74TCS, SOTF
- › Microcontroller-based design
- › Draw-out enclosure.
- › CT rating\* - 1A/ 5A (site selectable)
- › Display of 250 event and 30 Trip records
- › 128\*64 graphical display
- › Modbus RS-485 Communication
- › Front Micro USB port for numrAL Suite



| Model        | Aux. Supply (V)            | Communication | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|---------------|--------------------|---------------------|
| numrAL FDR22 | 20 - 60V DC                | Modbus RS 485 | <b>NRFDR2A27RA</b> | <b>33500</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485 | <b>NRFDR2B27RA</b> | <b>33500</b>        |

\* - Protection Class CT

### Motor Protection Relay\*

- › MPR21 – 37, 46, 48, 49, 50BF, 50, 51, 50N, 51N, 51LR, 64, 66, 74TCS.
- › Microcontroller-based design
- › Draw-out enclosure.
- › CT rating\* - 1A/ 5A (site selectable)
- › Display of 250 event and 30 Trip records
- › 128\*64 graphical display
- › Modbus RS-485 Communication
- › Front Micro USB port for numrAL Suite



| Model        | Aux. Supply (V)            | Communication | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|---------------|--------------------|---------------------|
| numrAL MPR21 | 20 - 60V DC                | Modbus RS 485 | <b>NRMPR2A28RA</b> | <b>60000</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485 | <b>NRMPR2B28RA</b> | <b>60000</b>        |

# - Protection Class CT  
\*- Available on Request

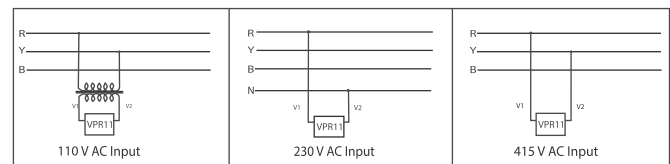
### Single Pole Over Voltage + Under Voltage Relay

#### VPR11 - Single Pole Under Voltage and Over Voltage Relay (27, 59)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Single Phase OV + UV Protection
- › System Voltage – 110/ 230/ 415 VAC (site programmable)
- › Inverse and definite time delay
- › Display of Actual value and 5 Trip records



| Model        | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|------------------|--------------------|---------------------|
| numrAL VPR11 | 20 - 60V DC                | Non-communicable | <b>NRVPR1A11NX</b> | <b>19600</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Non-communicable | <b>NRVPR1B11NX</b> | <b>19600</b>        |
|              | 20 - 60V DC                | Modbus RS 485    | <b>NRVPR1A11RA</b> | <b>24000</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485    | <b>NRVPR1B11RA</b> | <b>24000</b>        |

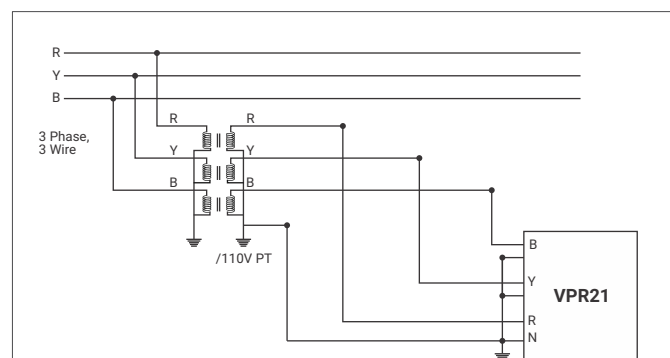
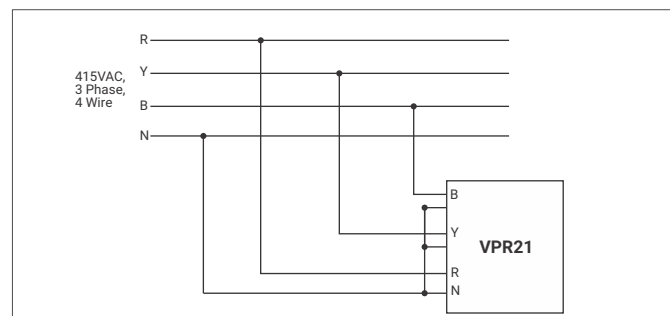


### 3 Phase Voltage + Frequency Relay

- › VPR21 – 27, 47, 59, 59N, 810/U
- › Microcontroller-based design
- › Draw-out enclosure.
- › System Voltage – 110/ 230/ 415 VAC (site programmable)
- › Display of 250 event and 30 Trip records
- › 128\*64 graphical display



| Model        | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|------------------|--------------------|---------------------|
| numrAL VPR21 | 20 - 60V DC                | Non-Communicable | <b>NRVPR2A2ANX</b> | <b>29500</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Non-Communicable | <b>NRVPR2B2ANX</b> | <b>29500</b>        |





## Restricted Earth Fault Relay

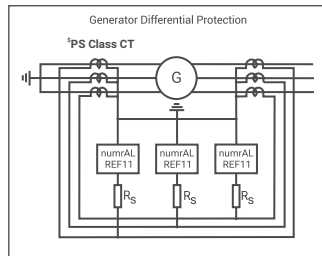
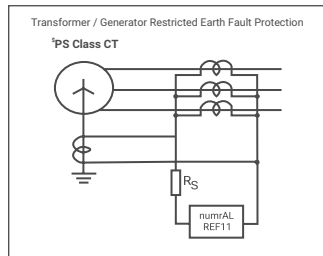
### REF11 - Restricted Earth Fault Relay (87N/64REF)

- › Microcontroller-based design
- › Draw-out Enclosure
- › CT rating<sup>§</sup> - 1A/ 5A (site selectable)
- › Single Phase high impedance Earth Fault
- › Instantaneous and definite time delay [50 msec to 1 sec (programmable)]
- › Built in third harmonic filter
- › Display of Actual value and 5 Trip records



| Model        | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|------------------|--------------------|---------------------|
| numrAL REF11 | 20 - 60V DC                | Non-communicable | <b>NRREF1A10NX</b> | <b>19600</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Non-communicable | <b>NRREF1B10NX</b> | <b>19600</b>        |
|              | 20 - 60V DC                | Modbus RS 485    | <b>NRREF1A10RA</b> | <b>24000</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485    | <b>NRREF1B10RA</b> | <b>24000</b>        |

<sup>§</sup> - PS Class CT



## Single Pole Over Current OR Earth Fault Relay

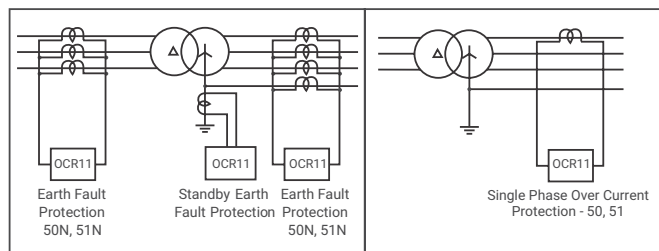
### OCR11 – Single pole Over Current or Earth Fault Relay (50, 51 OR 50N, 51N)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Single Phase OC/ EF Protection
- › CT rating<sup>§</sup> - 1A/ 5A (site selectable)
- › Inverse and definite time delay
- › Display of Actual Current value and 5 Trip records



| Model        | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|------------------|--------------------|---------------------|
| numrAL OCR11 | 20 - 60V DC                | Non-communicable | <b>NROCR1A10NX</b> | <b>19600</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Non-communicable | <b>NROCR1B10NX</b> | <b>19600</b>        |
|              | 20 - 60V DC                | Modbus RS 485    | <b>NROCR1A10RA</b> | <b>24000</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485    | <b>NROCR1B10RA</b> | <b>24000</b>        |

<sup>§</sup> - Protection Class CT



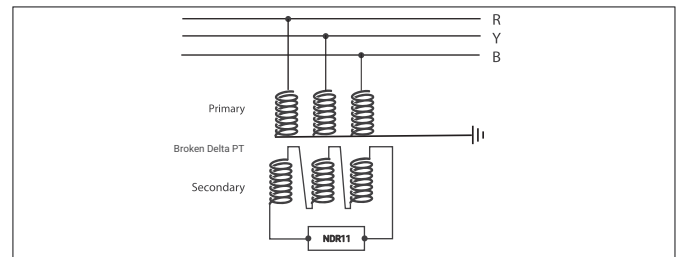
## Neutral Displacement Relay

### NDR11 - Neutral Displacement Relay (59N)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Single Phase OV Protection
- › Definite & Normal inverse time delay
- › Display of Actual value and 5 Trip records



| Model        | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------|----------------------------|------------------|--------------------|---------------------|
| numrAL NDR11 | 20 - 60V DC                | Non-communicable | <b>NRNDR1A11NX</b> | <b>19600</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Non-communicable | <b>NRNDR1B11NX</b> | <b>19600</b>        |
|              | 20 - 60V DC                | Modbus RS 485    | <b>NRNDR1A11RA</b> | <b>24000</b>        |
|              | 85 - 265V AC, 87 - 265V DC | Modbus RS 485    | <b>NRNDR1B11RA</b> | <b>24000</b>        |



## Trip Circuit Supervision Relay

### TCS11 – Trip Circuit Supervision Relay (74)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Monitors Trip Coil in Breaker ON & OFF condition
- › Site selectable Trip Coil Voltage



| Model         | Aux. Supply (V)            | Communication    | Cat. No.           | M.R.P. (₹) Per Unit |
|---------------|----------------------------|------------------|--------------------|---------------------|
| numrAL TCS11* | 20 - 60V DC                | Non-Communicable | <b>NRTCS1A13NX</b> | <b>11200</b>        |
|               | 85 - 265V AC, 87 - 265V DC | Non-Communicable | <b>NRTCS1B13NX</b> | <b>11200</b>        |

\*Available on Request - Please contact our nearest branch for details

## Reverse Power Relay

### RPR11 – Reverse Power Relay (32)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Site selectable System Voltage - 110V / 415VAC



| Model         | Aux. Supply (V)            | Communication | Cat. No.                     | M.R.P. (₹) Per Unit |
|---------------|----------------------------|---------------|------------------------------|---------------------|
| numrAL RPR11* | 20 - 60V DC                | Modbus RS 485 | <b>*Available on Request</b> |                     |
|               | 85 - 265V AC, 87 - 265V DC | Modbus RS 485 |                              |                     |

\* Please contact our nearest branch for details

## PT Fuse Failure Relay

### PTF11 – PT Fuse Failure Relay (PTFF/97)

- › Microcontroller-based design
- › Draw-out Enclosure
- › Monitors the healthiness of PT Fuse.
- › 3 Separate sensing elements.



| Model         | Aux. Supply (V)            | Communication    | Cat. No.                     | M.R.P. (₹) Per Unit |
|---------------|----------------------------|------------------|------------------------------|---------------------|
| numrAL PTF11* | 20 - 60V DC                | Non-Communicable | <b>*Available on Request</b> |                     |
|               | 85 - 265V AC, 87 - 265V DC | Non-Communicable |                              |                     |

\* Please contact our nearest branch for details



# BECAUSE YOUR IT SYSTEMS CAN'T AFFORD DOWNTIME

Discover Insulation Monitoring Relay - Your first alert to insulation failure

## Insulation Monitoring Relay



Hospitals & Pharmaceutical Facilities | Data Centres | Mining Operations  
Railways & Transport Systems | Transportable & Mobile Cranes



High visibility status  
indications



Early fault detection with  
clear visual indication



Test / Reset button



Precise customizable threshold  
resistance with easy dial control



Flexibility to operate in fail safe  
and non-fail safe mode



## Legacy Range:

| Model                         | Aux. Supply (V) | Details         | Cat. No.    | M.R.P. (₹) Per Unit |
|-------------------------------|-----------------|-----------------|-------------|---------------------|
| MRP11*<br>Reverse Power Relay | 20 - 110V AC/DC | 1A CT secondary | MRP11A10X00 | 24500               |
|                               | 20 - 110V AC/DC | 5A CT secondary | MRP11A50X00 | 24500               |
|                               | 88 - 264V AC/DC | 1A CT secondary | MRP11B10X00 | 24500               |

\* Available till stock lasts

## Insulation Monitoring Relay New

Application: Monitoring of insulation resistance between Live conductors and Earth (Ground) in case of Unearthed (IT) electrical systems. Detection of insulation faults at earlier stage prevents electrical hazards such as electric shock, fire and equipment damage.

### Features:

- › Threshold resistance setting from 1K to 100K ohm
- › Suitable for 1Phase and 3 Phase (Both 3W and 4W)
- › Test/Reset function with remote and manual facility
- › Indication of Power ON, Relay output and Fault.
- › Both fail safe and non-failsafe relay option available

### Application Segments:

- 1.Railways
- 2.Hospitals and Pharma
- 3.Data Centre
- 4.Mining



| Description                                                      | Cat Code | M.R.P. (₹) Per Unit |
|------------------------------------------------------------------|----------|---------------------|
| System voltage up to 520V.<br>Adjustable from 1-100K Ω with 2C/O | IMR520   | 12000               |

## Single Element Lockout Relay - LocR

### Features

- › Lockout Relays [Master Trip Relay] - LocR
- › Designed to operate the circuit breaker trip coils at high speed
- › Available with Hand reset contact (HRC) and hand reset Flag (HRF)

| Description                     | Output contacts | Reset Contacts | Reset Flag | Coil Voltage | Cat. No.    | M.R.P. (₹) Per Unit |
|---------------------------------|-----------------|----------------|------------|--------------|-------------|---------------------|
| Single element<br>Lockout relay | 3NO + 2NC       | Hand           | Hand       | 24VDC        | L1H32DC024X | 6000                |
|                                 |                 |                |            | 110VDC       | L1H32DC110X | 6000                |
|                                 |                 |                |            | 220VDC       | L1H32DC220X | 6000                |
|                                 |                 |                |            | 110VAC       | L1H32AC110X | 6000                |
|                                 |                 |                |            | 230VAC       | L1H32AC230X | 6000                |



ANSI Code - 86

## Three Element Auxiliary Relay - AuxR

### Features

- › AuxR relay provides additional contacts for interlocking, control and signal applications
- › Available with hand reset or self-reset contacts and hand reset Flag

| Description                      | Output Contacts | Reset Contacts | Reset Flag | Coil Voltage | Cat. No.    | M.R.P. (₹) Per Unit |
|----------------------------------|-----------------|----------------|------------|--------------|-------------|---------------------|
| Three element<br>Auxiliary relay | 4 N/O           | Hand           | Hand       | 24VDC        | A3H40DC024X | 12000               |
|                                  |                 |                |            | 110VDC       | A3H40DC110X | 12000               |
|                                  |                 |                |            | 220VDC       | A3H40DC220X | 12000               |
|                                  |                 |                |            | 110VAC       | A3H40AC110X | 12000               |
|                                  |                 |                |            | 230VAC       | A3H40AC230X | 12000               |
| Three element<br>Auxiliary relay | 2 N/O + 2 N/C   | Auto           | Hand       | 24VDC        | A3A22DC024X | 12000               |
|                                  |                 |                |            | 110VDC       | A3A22DC110X | 12000               |
|                                  |                 |                |            | 220VDC       | A3A22DC220X | 12000               |
|                                  |                 |                |            | 110VAC       | A3A22AC110X | 12000               |
|                                  |                 |                |            | 230VAC       | A3A22AC230X | 12000               |





## Metering Devices [9028]

### Single Phase kWh meter with LCD display

Model EM101+ Class 1 Base mounting



| Description                                 | Cat. No.       | M.R.P. (₹) Per Unit |
|---------------------------------------------|----------------|---------------------|
| 1P LCD Meter 5-30A                          | WM101BC5DL0    | 2360                |
| 1P LCD Meter 5-30A with BOX                 | WM101BC5DL0BOX | 3146                |
| 1P LCD Meter 5-30A with OPTICAL PORT        | WM101BC5DDH    | 3243                |
| 1P LCD Meter 5-30A with Optical port + BOX  | WM101BC5DDHBOX | 4029                |
| 1P LCD Meter 10-60A                         | WM101BC7DL0    | 2783                |
| 1P LCD Meter 10-60A with BOX                | WM101BC7DL0BOX | 3509                |
| 1P LCD Meter 10-60A with Optical Port       | WM101BC7DDH    | 3557                |
| 1P LCD Meter 10-60A with Optical Port + BOX | WM101BC7DDHBOX | 4090                |
| 1P LCD Meter 5-30 with Optical Port + RS232 | WM101BC5DLMSC  | 3630                |

### Trivector Meter Class 1 whole current meter

Model ER300P Class 1 (Base Mounting)



| Description                                       | Cat. No.       | M.R.P. (₹) Per Unit |
|---------------------------------------------------|----------------|---------------------|
| 3Ph, 4W TVM 240 V 10 - 60A BM                     | WR300BC7300    | 11108               |
| 3Ph, 4W TVM 240 V 10 - 60A BM RS 485Modbus*       | WR300BC73RS485 | 15851               |
| 3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box | WR300BC73BOXH  | 13758               |

\* - Available on request only till stock are cleared and minimum order Quantity is 100 nos

### Trivector Meter Class 0.2s

Model ER300P Class 0.2s (Base Mounting)

- › Inform CT/PT ratio while ordering
- › Meters with DLMS Protocol (IS 15959)



| Description                                            | Cat. No.    | M.R.P. (₹) Per Unit |
|--------------------------------------------------------|-------------|---------------------|
| 3Ph, 4W TVM 110V ( L-L) 1 A Class 0.2s BM RS485 Modbus | WR300BB11RS | 95796               |
| 3Ph, 4W TVM 110V ( L-L) 5 A Class 0.2s BM RS485 Modbus | WR300BB51RS | 95796               |

### Meter Reading Instrument [8471]



| Description                          | Cat. No.    | M.R.P. (₹) Per Unit |
|--------------------------------------|-------------|---------------------|
| Meter Reading Instrument - (16.5 MB) | 990MR1XX000 | 189619              |
| Meter Optical port to USB cable      | 990PCXXUSB  | 2263                |

### 3 Phase 4 Wire kWh meter LCD type

Model ER300P Base Mounting



| Description                                    | Cat. No.    | M.R.P. (₹) Per Unit |
|------------------------------------------------|-------------|---------------------|
| 3Ph 4 W kWh CT op base mtg 240V, /5A, Acc 0.5s | WR301BC3C00 | 7526                |
| 3Ph 4 W kWh Dir base mtg 240V 5-30 A Acc 1     | WR301BC4D20 | 6304                |
| 3Ph 4 W kWh Dir base mtg 240V 10-40 A Acc 1    | WR301BC6D20 | 6486                |
| 3Ph 4 W kWh Dir base mtg 240V 10-60 A Acc 1    | WR301BC7D10 | 8216                |
| 3Ph 4 W kWh Dir base mtg 240V 20-100 A Acc 1   | WR301BC8D10 | 11906               |

### Trivector Meter Class 0.5s

Model ER300P Class 0.5s (Base Mounting)

- › Inform CT/PT ratio while ordering
- › Meters with DLMS Protocol (IS 15959)



| Description                                              | Cat. No.    | M.R.P. (₹) Per Unit |
|----------------------------------------------------------|-------------|---------------------|
| 3Ph, 4W TVM 110V ( L-L) 1 A Class 0.5s BM RS 485 Modbus# | WR300BB12RS | 44407               |
| 3Ph, 4W TVM 110V ( L-L) 5 A Class 0.5s BM RS 485 Modbus# | WR300BB52RS | 44407               |
| 3Ph, 4W TVM 240V ( L-N) 5 A Cl 0.5s BM RS 485 Modbus*    | WR300BC52RS | 39821               |

# - Available on request

\* - Available on request only till stocks are cleared and minimum order Quantity is 100 nos

### Pre-Payment® & Smart Meter Solutions\$

Pre-Payment Meter (IS 15884)®, Smart Meter (IS 16444) solutions please contact our nearest Branch

® - Long lead item. Available on request

### NET/ABT Meters\$



Net Meters for solar roof top application & solar generation plant please contact our nearest Branch

### ORION (40-200A)\$



Combined CT Meter (Available for Generation and Net Metering)  
\$ For more details please contact nearest branch



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Subscription based Software



Prepaid & Postpaid Metering



MeitY Certified Cloud



Data Security, Compliance & Reliability





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**BEST BRAND BY  
THE TIMES GROUP**

# MAKING **BUSINESSES SMARTER** AT **EVERY STEP**

From designing power distribution systems to maintaining operations, SmartComm provides full visibility, precise control, and predictive insights to maintain energy efficiency



## Design

Electrical Installation Simulation  
Sizing, Calculations & Protection  
Schemes



## Build

Panel Solutions Configurator  
Estimation & Engineering



## Commission

Device Management  
Configuration & Diagnostics



## Maintain

Maintenance Digitization  
Software



## Operate

Power Management Solution  
Analytics, Control & Visualization



# SmartComm Power Management Solutions

Digitally connect, operate, and optimize with our cutting-edge SCADA-based platform, designed to improve operational efficiency and promote sustainable operations



Seamless Integration from Plant floor assets to real-time dashboards



Holistic view of Power Distribution Network using intuitive Single-Line Diagram (SLD)



Highly scalable platform from 128 to unlimited tags



Gain valuable insights with Energy Analytics dashboards & Custom Reports for data-driven decisions



Embrace open communication protocols such as Modbus TCP, MQTT, IEC61850, OPC-UA, and more



Stay ahead with alerts for power system abnormalities and fault conditions.



Industry



Commercial  
complex



Building



Utility



Infra



OEM





## THE ENERGY MANAGEMENT SYSTEM THAT FOSTERS ENERGY EFFICIENCY



SmartComm EMS is a simple yet robust solution for organizations seeking to optimize energy consumption and operational efficiency, all within a user-friendly environment. The on-premise implementation gives you direct control and oversight of energy-related data, allowing for real-time monitoring, analysis, and decision-making through an intuitive and easy-to-use interface. With cutting edge features, SmartComm EMS empowers you to proactively manage energy usage, identify savings opportunities, and ensure compliance with sustainability goals and regulations.





# Empowering You with Energy Insights, Anytime, Anywhere!

## EMS on Cloud simplifies energy monitoring with real time data

Smartcomm EMS on Cloud empowers business owners and plant heads to seamlessly monitor energy usage & efficiency across operations and facilities. With our subscription-based software license, harness the power of cloud with minimal investment, faster deployment, seamless updates and easy scalability. Businesses owners can now track and take decisions on energy optimization based on real-time as well as historical insights, thereby reducing energy costs and increasing business efficiency.

- **Accessibility:** Accessible from anywhere, enabling remote monitoring and management
- **Cost-Effectiveness:** Lower upfront costs reducing IT maintenance expenses
- **Integration:** Integrate with IoT devices for a comprehensive energy management solution
- **Updates and Maintenance:** Automatic software updates and maintenance
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## Multifunction Meter Selection Chart

| Parameters Group                  | Parameters                                                   | Basic MFM | MFM      |          |          |          |          | Advanced MFM |          |
|-----------------------------------|--------------------------------------------------------------|-----------|----------|----------|----------|----------|----------|--------------|----------|
|                                   |                                                              | 4400/4405 | 4410     | 4420     | New 4425 | 4430     | 4440     | 5010         | 5000     |
| Instantaneous Parameters          | V1, V2, V3, V12, V23, V31, Avg (VLN, VLL)                    | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | A1, A2, A3, Aavg                                             | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | An (Computed)                                                |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Frequency                                                    | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | % A Unbal, % V Unbal (Avg and Phase wise)                    |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | PF-1, PF-2, PF-3, PF (Avg)                                   | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | RPM (Rotations per minute)                                   |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Phase Angle A°1, A°2, A°3, V°1, V°2, V°3                     |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | W1, W2, W3, W(total)                                         | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | VA1, VA2, VA3, VA(total)                                     | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | VAR1, VAR2, VAR3, VAR (total)                                |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
| Cumulative Parameters             | Import Wh                                                    | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Import VAh                                                   | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Import VARh (Lead & Lag)                                     |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Import load hours                                            | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Export Wh                                                    |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | Export VAh                                                   |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | Export VARh (Lead & Lag)                                     |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | Export run hours                                             |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | No of Interrupts                                             |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
| Reset (old) Cumulative parameters | Import Wh                                                    | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Import VAh                                                   |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Import VARh (Lead & Lag)                                     |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Import load hours                                            | ✓         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Export Wh                                                    |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | Export VAh                                                   |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | Export VARh (Lead & Lag)                                     |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
|                                   | Export run hours                                             |           |          |          | ✓        | ✓        |          | ✓            | ✓        |
| Harmonic                          | V THD%, V1, V2, V3 - harmonic ( 31 <sup>st</sup> )           |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | A THD%, A1, A2, A3, - harmonic (31 <sup>st</sup> )           |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
|                                   | Individual harmonics upto 31 <sup>st</sup> (V, A)            |           |          |          | ✓        |          |          | ✓            | ✓        |
| Demand / Load parameters          | Maximum demand MD W, MD VA, MD VAR - max avg A (without RTC) |           |          | ✓        |          | ✓        |          |              |          |
|                                   | Maximum demand MD W, MD VA, MD VAR - max avg A (with RTC)    |           |          |          | ✓        |          | ✓        | ✓            | ✓        |
|                                   | Max MD & occurrence time                                     |           |          |          |          |          |          | ✓            | ✓        |
| Min / Max value                   | VLL, VLN, A, F, W, VA, VAR, PF                               |           | ✓        | ✓        | ✓        | ✓        | ✓        | ✓            | ✓        |
| Storage                           | Datalog (8MB)                                                |           |          |          |          |          |          |              | ✓        |
| Communication                     | RS485 Modbus RTU                                             | Optional  | Optional | Optional |          | Optional | Optional | Optional     | Optional |
|                                   | Ethernet Port (Modbus TCP/IP)                                |           |          |          | ✓        |          |          |              | Optional |
| Input and Output                  | Digital and Analog (input and output)                        |           |          |          |          |          |          |              | Optional |
|                                   | Pulse Output                                                 |           | Optional |          |          |          |          |              | Optional |



## Single Function Meters [9030]

### 1xxx Series

- › Accuracy Class 1.0, 0.5
- › Input voltage measurement range 50-520 VAC (P-P)
- › Aux supply 80-300 V AC / DC
- › CT secondary site selectable 1A / 5A
- › Flush mounting 96 x 96 mm
- › Inbuilt selector switch for 3 phase meters
- › CT/PT site programmable
- › Frequency parameter available in 3Ph Voltmeter additionally



| Description              | Cat. No.     | M.R.P. (₹) Per Unit |
|--------------------------|--------------|---------------------|
| 1Ph LED Ammeter CI 1     | WL1110100000 | 1130                |
| 1Ph LED Voltmeter CI 1   | WL1120100000 | 1130                |
| 3Ph LED Ammeter CI 1     | WL1310100000 | 1725                |
| 3Ph LED Voltmeter CI 1   | WL1320100000 | 1725                |
| LED Freq meter CI 0.2    | WL1130400000 | 1130                |
| 1Ph LED Ammeter CI 0.5   | WL1110200000 | 1590                |
| 1Ph LED Voltmeter CI 0.5 | WL1120200000 | 1590                |
| 3Ph LED Ammeter CI 0.5   | WL1310200000 | 2000                |
| 3Ph LED Voltmeter CI 0.5 | WL1320200000 | 2000                |

## Energy Meters [9030]

### 4000 Series

- › Accuracy Class 1.0, 0.5
- › Input voltage measurement range 50-520 VAC (P-P)
- › Aux supply 80-300 VAC/DC
- › CT secondary site selectable 1A / 5A
- › Flush mounting 96 x 96 mm
- › CT/PT site programmable
- › Auto scaling of Kilo, Mega and Giga
- › Parameters: Site selectable kWh / kVA / PF / W, Old energy



kWh or kVAh  
is site selectable

Energy display  
in kWh in its  
lifetime#

| Description                     | Cat. No.     | M.R.P. (₹) Per Unit |
|---------------------------------|--------------|---------------------|
| kWh LED meter CI 1              | WL4000100000 | 3335                |
| kWh LED meter CI 1 with RS485   | WL4000110000 | 3690                |
| kWh LED meter CI 0.5            | WL4000200000 | 4235                |
| kWh LED meter CI 0.5 with RS485 | WL4000210000 | 4595                |
| kWh LCD meter CI 1              | WC4000100000 | 3775                |
| kWh LCD meter CI 1 with RS485   | WC4000110000 | 4170                |
| kWh LCD meter CI 0.5            | WC4000200000 | 4675                |
| kWh LCD meter CI 0.5 with RS485 | WC4000210000 | 5035                |

# For 415V LL and CT Primary value of 400 and below

## VAF, VAF + PF Meters [9030]

### 41XX Series



- › Accuracy Class 1.0, 0.5
- › Input voltage measurement range 50-520 VAC (P-P)
- › Aux supply 80-300 VAC/DC
- › CT secondary site selectable 1A / 5A
- › Flush mounting 96 x 96 mm
- › Parameters: VLL, VLN, A, F, PF, On Hrs, RPM

| Description                       | Cat. No.     | M.R.P. (₹) Per Unit |
|-----------------------------------|--------------|---------------------|
| VAF meter, CI 1 <b>New</b>        | WL4100100000 | 1935                |
| VAF + PF meter, CI 1              | WL4110100000 | 2920                |
| VAF + PF meter with RS485, CI 1   | WL4110110000 | 3665                |
| VAF + PF meter, CI 0.5            | WL4110200000 | 3355                |
| VAF + PF meter with RS485, CI 0.5 | WL4110210000 | 4060                |

## DIN Type Basic Multifunction Meters [9030]

### **New** 40x0 Series

- › DIN mounting whole current operated meter
- › Accuracy Class 1.0
- › Inbuilt RS485 option
- › **Parameters** : Voltage, Current, kW, kWh, kVA, kVAh, RPM, Load hours, Interruptions



| Description                | Module | Cat. No.     | M.R.P. (₹) Per Unit |
|----------------------------|--------|--------------|---------------------|
| Single Phase - 60A         | 2      | WD4010100000 | 3580                |
| Three Phase - 80A          | 5      | WD4020100000 | 7755                |
| Single Phase - 60A (RS485) | 2      | WD4010110000 | 5295                |
| Three Phase - 80A (RS485)  | 5      | WD4020110000 | 11700               |



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Electrical & Automation

# Smart DIN Mounted Energy Meters

Empowering Smart Decisions with Micro-Level Insights

Compact, Accurate & Intelligent



## Dual Source Basic MFM [9030]

### 4040 Series

#### Features

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- DG sensing input 230 VAC
- Flush mounting 96 X 96 mm
- CT/PT site programmable
- Discrete LED for EB and DG
- True PF or Displacement PF site selectable
- Parameters on Display : kW, kVA, PF, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh
- Parameters on Communication : V, A, F, kW, kVA, PF, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh

kWh or kVAh  
is site selectable



LCD offers better readability  
of parameters

| Description                           | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------|--------------|---------------------------|
| Dualsource LED meter CI1              | WL4040100000 | 5750                      |
| Dualsource LED meter CI1 with RS485   | WL4040110000 | 6760                      |
| Dualsource LED meter CI0.5            | WL4040200000 | 6830                      |
| Dualsource LED meter CI0.5 with RS485 | WL4040210000 | 8000                      |
| Dualsource LCD meter CI1              | WC4040100000 | 6325                      |
| Dualsource LCD meter CI1 with RS485   | WC4040110000 | 7355                      |
| Dualsource LCD meter CI0.5            | WC4040200000 | 7415                      |
| Dualsource LCD meter CI0.5 with RS485 | WC4040210000 | 8490                      |

## Basic Multifunction Meters [9030]

### 4405 Series

#### Features

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- V, A, F, PF, kW, kVA, Old energy, On and Run hours, site selectable kWh/ kVAh
- True PF or Displacement PF site selectable

All parameters  
of 4400 series  
in 3 line  
LED display



| Description                           | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4405 LED meter CI 1               | WL4405100000 | 7130                      |
| MFM 4405 LED meter CI 1 with RS485    | WL4405110000 | 8050                      |
| MFM 4405 LED meter CI 0.5 with RS485  | WL4405210000 | 9255                      |
| MFM 4405 LED meter CI 0.5S with RS485 | WL4405310000 | 9325                      |

## Multifunction Meters [9030]

#### Features

- Accuracy Class 1.0, 0.5, 0.5S, 0.2, 0.2S
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- 128 samples / cycle
- My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters
- Dedicated buttons available for direct access to Basic, Power and Energy parameters

True and  
Displacement  
PF available

## Basic Multifunction Meters [9030]

### 4400 Series

#### Features

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- True PF or Displacement PF site selectable
- V, A, F, PF, kW, kVA, Old energy, Load hours, site selectable kWh/ kVAh



LCD offers better readability  
of parameters

| Description                           | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4400 LED meter CI 1               | WL4400100000 | 5515                      |
| MFM 4400 LED meter CI 1 with RS485    | WL4400110000 | 6365                      |
| MFM 4400 LED meter CI 0.5 with RS485  | WL4400210000 | 7315                      |
| MFM 4400 LED meter CI 0.5S with RS485 | WL4400310000 | 7390                      |
| MFM 4400 LCD meter CI 1               | WC4400100000 | 5800                      |
| MFM 4400 LCD meter CI 1 with RS485    | WC4400110000 | 6730                      |

Constant Wh viewing in LCD  
MFM even in auto scroll mode.  
LCD offers better readability  
of parameters



### 4410 Series

- Parameters: V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Phase angle, Interrupts, THD, Events (High-Low), Neutral Current, K Factor

| Description                           | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4410 LED meter CI 1               | WL4410100000 | 10325                     |
| MFM 4410 LED meter CI 1 with RS485    | WL4410110000 | 11605                     |
| MFM 4410 LED meter CI 0.5 with RS485  | WL4410210000 | 13340                     |
| MFM 4410 LED meter CI 0.5S with RS485 | WL4410310000 | 14745                     |
| MFM 4410 LED meter CI 0.2 with RS485  | WL4410410000 | 17550                     |
| MFM 4410 LED meter CI 0.2S with RS485 | WL4410510000 | 22465                     |
| MFM 4410 LCD meter CI 1               | WC4410100000 | 12140                     |
| MFM 4410 LCD meter CI 1 with RS485    | WC4410110000 | 12990                     |
| MFM 4410 LCD meter CI 0.5 with RS485  | WC4410210000 | 15150                     |
| MFM 4410 LCD meter CI 0.5S with RS485 | WC4410310000 | 16600                     |
| MFM 4410 LCD meter CI 0.2 with RS485  | WC4410410000 | 19490                     |
| MFM 4410 LCD meter CI 0.2S with RS485 | WC4410510000 | 24535                     |

### 4420 Series Max Demand Indicator (without Real time clock)

#### Parameters

- › All parameters of 4410 series
- › Maximum Demand (kW or kVA)

Standard  
2 Relay outputs  
for MD Alarm

| Description                           | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4420 LED meter CI 1               | WL4420100000 | 15205                     |
| MFM 4420 LED meter CI 1 with RS485    | WL4420110000 | 16320                     |
| MFM 4420 LED meter CI 0.5 with RS485  | WL4420210000 | 17915                     |
| MFM 4420 LED meter CI 0.5S with RS485 | WL4420310000 | 19295                     |
| MFM 4420 LED meter CI 0.2 with RS485  | WL4420410000 | 22050                     |
| MFM 4420 LED meter CI 0.2S with RS485 | WL4420510000 | 26875                     |
| MFM 4420 LCD meter CI 1               | WC4420100000 | 17415                     |
| MFM 4420 LCD meter CI 1 with RS485    | WC4420110000 | 18650                     |
| MFM 4420 LCD meter CI 0.5 with RS485  | WC4420210000 | 20215                     |
| MFM 4420 LCD meter CI 0.5S with RS485 | WC4420310000 | 21650                     |
| MFM 4420 LCD meter CI 0.2 with RS485  | WC4420410000 | 24535                     |
| MFM 4420 LCD meter CI 0.2S with RS485 | WC4420510000 | 29600                     |

For Max Demand Controller (with Real time clock)  
please refer 6000 series

### 4425 Series MFM for Import-Export

#### Parameters

- › All parameters of 4420 series with Bi-directional (Import-Export)
- › Demand parameters with Individual Harmonics up to 31st order
- › Built-in Ethernet port for communication

| Description                                  | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|----------------------------------------------|--------------|---------------------------|
| MFM 4425 LED meter I/E CI 1 with Ethernet    | WL4425120000 | 21120                     |
| MFM 4425 LED meter I/E CI 0.5s with Ethernet | WL4425320000 | 24965                     |
| MFM 4425 LED meter I/E CI 0.2S with Ethernet | WL4425520000 | 28160                     |

### 4430 Series MFM for Import-Export

#### Parameters

- › All parameters of Model 4420 series
- › Bi-directional (Import-Export)

Standard  
2 Relay outputs  
for MD Alarm

| Description                           | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4430 LED meter CI 1               | WL4430100000 | 21340                     |
| MFM 4430 LED meter CI 1 with RS485    | WL4430110000 | 22255                     |
| MFM 4430 LED meter CI 0.5 with RS485  | WL4430210000 | 23615                     |
| MFM 4430 LED meter CI 0.5S with RS485 | WL4430310000 | 24925                     |
| MFM 4430 LED meter CI 0.2 with RS485  | WL4430410000 | 27555                     |
| MFM 4430 LED meter CI 0.2S with RS485 | WL4430510000 | 32150                     |
| MFM 4430 LCD meter CI 1               | WC4430100000 | 22685                     |
| MFM 4430 LCD meter CI 1 with RS485    | WC4430110000 | 23560                     |
| MFM 4430 LCD meter CI 0.5 with RS485  | WC4430210000 | 24925                     |
| MFM 4430 LCD meter CI 0.5S with RS485 | WC4430310000 | 26245                     |
| MFM 4430 LCD meter CI 0.2 with RS485  | WC4430410000 | 28865                     |
| MFM 4430 LCD meter CI 0.2S with RS485 | WC4430510000 | 33465                     |

### 4440 Series

#### Parameters

- › All parameters of 4410 series
- › Maximum Demand with Real Time Clock (RTC)
- › Events (high-low) with time stamp

| Description                          | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|--------------------------------------|--------------|---------------------------|
| MFM 4440 LED meter CI 1 with RS485   | WL4440110000 | 18120                     |
| MFM 4440 LED meter CI 0.5 with RS485 | WL4440210000 | 20365                     |
| MFM 4440 LED meter CI 0.2 with RS485 | WL4440410000 | 24900                     |
| MFM 4440 LCD meter CI 1 with RS485   | WC4440110000 | 19630                     |
| MFM 4440 LCD meter CI 0.5 with RS485 | WC4440210000 | 21880                     |
| MFM 4440 LCD meter CI 0.2 with RS485 | WC4440410000 | 26415                     |

### 5000 Series

#### Features

- › Datalog (8 MB)
- › Bi-directional (Import - Export)
- › 128 samples/ cycle
- › Analog I/O, digital I/O variants available
- › Meter with Built-in Ethernet port available

True and  
Displacement  
PF available

#### Parameters

- › V, A, F, kW, KVA, kVAh, kWh, kVAh, PF, Runhr, Onhr, Interrupts, Phase angle, THD, Neutral current, Max Demand (with RTC) K Factor
- › Bi-directional (Import-Export)
- › Events (high-low) with time stamp
- › Individual Harmonics upto 31st.
- › My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters

Constant Wh viewing in LCD  
MFM even in auto scroll mode.  
LCD offers better readability  
of parameters



| Description                               | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|-------------------------------------------|--------------|---------------------------|
| MFM 5000 LED meter CI 1 with RS485        | WL5000110000 | 44090                     |
| MFM 5000 LED meter CI 1 with Ethernet     | WL5000120000 | 50100                     |
| MFM 5000 LED meter CI 0.5 with Ethernet   | WL5000220000 | 52245                     |
| MFM 5000 LED meter CI 0.5S with Ethernet  | WL5000320000 | 53685                     |
| MFM 5000 LCD meter CI 1 with RS485        | WC5000110000 | 45540                     |
| MFM 5000 LCD meter CI 1 with Ethernet     | WC5000120000 | 51535                     |
| MFM 5000 LCD meter CI 0.5 with RS485      | WC5000210000 | 47670                     |
| MFM 5000 LCD meter CI 0.5S with RS485     | WC5000310000 | 49110                     |
| MFM 5000 LCD meter CI 0.5 with Ethernet   | WC5000220000 | 53685                     |
| MFM 5000 LCD meter CI 0.5S with Ethernet  | WC5000320000 | 55105                     |
| MFM 5000 LCD meter CI 0.2 with RS485      | WC5000410000 | 51965                     |
| MFM 5000 LCD meter CI 0.2S with RS485     | WC5000510000 | 56975                     |
| MFM 5000 LED meter CI 1 RS485 2A/O        | WL5000110B00 | Price on request          |
| MFM 5000 LED meter CI 0.5 RS485 2D/I      | WL50002100B0 |                           |
| MFM 5000 LED meter CI 0.5 RS485 4D/O      | WL50002100OD |                           |
| MFM 5000 LCD meter CI 1 RS485 2A/O        | WC5000110B00 |                           |
| MFM 5000 LCD meter CI 0.5 RS485 2D/I      | WC50002100B0 |                           |
| MFM 5000 LCD meter CI 0.5 RS485 4D/O      | WC50002100OD |                           |
| MFM 5000 LCD meter CI 1 + RS485, 1AO, 1DO | WC5000110A0A |                           |

5000 series with Digital outputs are preconfigured for  
I - THD% at 8% and True PF at 0.98.

Meter can be site selected for parameters and values - A THD, V THD, VA, W, under PF, under/over (VLL, A, F) with programmable trip time (1 to 180 sec) to protect the equipments from electrical abnormalities.

| Parameters | Data Log Interval |        |        |        |
|------------|-------------------|--------|--------|--------|
|            | 15 Min            | 30 Min | 45 Min | 60 Min |
|            | No. of Days       |        |        |        |
| 1          | 10230             | 20460  | 30690  | 40920  |
| 2          | 6820              | 13640  | 20460  | 27280  |
| 4          | 4092              | 8184   | 12276  | 16368  |
| 9          | 2046              | 4092   | 6138   | 8184   |
| 14         | 1364              | 2728   | 4092   | 5456   |
| 29         | 682               | 1364   | 2046   | 2728   |



## Advanced Multifunction Meters [9030]

### 5010 Series

#### Features

- > 128 samples / cycle
- > Running demand, max demand, prediction demand in single page window

#### Parameters

- > V, A, F, kW, KVA, kVAh, kVAh, PF, Runhr, Onhr, Interrupts, Phase angle, THD, Neutral current, Max Demand (with RTC)
- > Bi-directional (Import-Export)
- > Events (high-low) with time stamp
- > Individual Harmonics upto 31st.

True and Displacement PF available



| Description                           | Cat. No.     | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------|
| MFM 5010 LED meter CI 1               | WL5010100000 | 16975               |
| MFM 5010 LED meter CI 1 with RS485    | WL5010110000 | 17705               |
| MFM 5010 LED meter CI 0.5S            | WL5010300000 | 20880               |
| MFM 5010 LED meter CI 0.5S with RS485 | WL5010310000 | 22035               |
| MFM 5010 LED meter CI 0.2 with RS485  | WL5010410000 | 24355               |

## Maximum Demand Controller [9030]

### 6000 Series

#### Features

- > Accuracy Class 1.0, 0.5S
- > Input voltage measurement range 50-520 VAC (P-P)
- > Aux supply 80-300 VAC/DC
- > CT secondary site selectable 1A / 5A
- > Flush mounting 96 x 96 mm
- > CT/PT site programmable
- > Datalog (8MB)
- > 4 relay outputs for Max. demand controller
- > Time of Day (TOD) 6 slots available
- > Block/sliding window site selectable
- > Running demand, max demand, prediction demand in single page window
- > Individual harmonics upto 31st.

8MB Datalog - Configurable for 29 parameters including kWh, Demand and Harmonics for Minimum 1 mins interval

#### Parameters

- > V, A, F, kW, KVA, kVAh, kVAh, PF, Runhr, Onhr, Intr, Phase angle, THD, Events, Neutral current, Max Demand (with RTC)



True and Displacement PF available

| Description                           | Cat. No.     | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------|
| MDC 6000 LED meter CI 1 with RS485    | WL6000110000 | 39120               |
| MDC 6000 LED meter CI 0.5S with RS485 | WL6000310000 | 42885               |
| MDC 6000 LCD meter CI 1 with RS485    | WC6000110000 | 40620               |
| MDC 6000 LCD meter CI 0.5S with RS485 | WC6000310000 | 44385               |

## Power Quality Meter Range [9030]

### WC7000 – Power Quality Monitor <sup>New</sup>

#### Parameters

- > 512 samples/cycle with Class 0.2s accuracy as per IEC 62053-22
- > LCD display with 4-digit instantaneous & 8-digit integrated readings
- > Dual Communication Port (RS485 + Ethernet) with Web Server
- > PQ Parameters Recording & monitoring like THD, TDD, Harmonics (up to 63rd order), Sag, Swell & Interruption.
- > USB Port for Downloading Data Log
- > TOU with up to 8 slots
- > Standard 2DI & 2 DO



| Description                                  | Cat. No.     | M.R.P. (₹) Per Unit |
|----------------------------------------------|--------------|---------------------|
| PQM 7000 LCD CI 0.2s RS485+Eth DL, sag+swell | WC70005300BB | Price on request    |

### WC8000 – Power Quality Analyzer <sup>New</sup>

#### Parameters

- > 1024 samples/cycle with Class 0.2s accuracy as per IEC 62053-22
- > Class A metering as per IEC 61000-4-30
- > 5.0" Color TFT with capacitive touch
- > PQ Parameters Recording & monitoring like THD, TDD, Odd, Even & Inter Harmonics (up to 127th order), Sag, Swell, Transient, Flicker, RVC & Interruption.
- > USB port for data log download as well as Event Data in CommTrade Format
- > Dual Communication Port (RS485 + Ethernet) with Web Server
- > MQTT, SMTP, SNMP protocols for secured cloud publishing
- > Report Generation - IEC 61000 - 4 - 30, IEEE 519, EN 50160, ITC/CBEMA Curve



| Description                               | Cat. No.     | M.R.P. (₹) Per Unit |
|-------------------------------------------|--------------|---------------------|
| PQA 8000 Class A TFT CI 0.2s RS485+Eth DL | WC8000530000 | Price on request    |



Gateways and converters form the backbone of interconnected networks, and are a crucial link between our devices and cloud-based or on-premises software. They facilitate seamless communication, protocol translation, and data aggregation from various type of devices, enabling efficient data transmission and integration.

### TG1000

- › Modbus RS485 to MODBUS TCP/IP Gateway
- › Easy integration with SmartComm EMS/PMS On-prem or 3<sup>rd</sup> party Software/HMI



### MQ1000 \*

- › MQTT Gateway with Ethernet port
- › Only Compatible with SmartComm EMS Cloud
- › Compact & Secure
- › Data storage in case of network failure
- › Web browser-based configuration



| Description                  | Cat. No.   | M.R.P.<br>(₹)<br>Per Unit |
|------------------------------|------------|---------------------------|
| MODBUS RTU to TCP/IP Gateway | TG10000000 | 24200                     |

### MQ2000 \*

- › 4G IoT Gateway with Sim Card (Modbus RS485 and MQTT support)
- › Only Compatible with SmartComm EMS Cloud, SmartComm Operate and SmartComm IMS
- › Compact & Secure
- › Data storage in SD Card in case of network failure
- › 4G with 2G fall back cellular connectivity



### XR SERIES \*

- › 4G IoT Gateway with Dual Sim (Modbus RS485, Modbus TCP/IP and MQTT support)
- › Only Compatible with SmartComm Operate
- › Advanced VPN Routing
- › Wide range of Industrial protocols support: IEC60870-5-101 Master / Slave , IEC 60870-5-104 Master / Slave , IEEE 62056-21 DLMS , DNP3 Slave



## Thermal Monitoring Module

### TMZ \*

- › Monitor temperature remotely
- › Wireless monitoring of 8 critical joints in a switchboard with a single module
- › Quick Installation and seamless Monitoring



### ZG1000 \*

#### Only Compatible with TMZ

- › IEEE 802.15.4 to Modbus TCP/IP Gateway
- › Built-in webpages for ease of monitoring and multi-client support
- › Integrates with SmartComm PMS/HMI/any 3<sup>rd</sup> party software on the Modbus TCP/IP side



\*For more details, please contact the nearest branch office

## LTXX\* Series

### Industrial Managed Ethernet Switch

Cyber-hardened (IEC 62443-4-1 & IEC 62443-4-2)  
IEC 61850-3 & IEEE 1613 Compliant

- › Managed Ethernet Switches with 8, 16, 24 Ports
- › Redundant Ring with recovery time less than 30ms
- › Supports RSTP/ MSTP, MRP protocol
- › IEC 61850-3/IEEE 1613 certified Ethernet switch with up to 10Gb/s connection

\*For further details please contact nearest branch.



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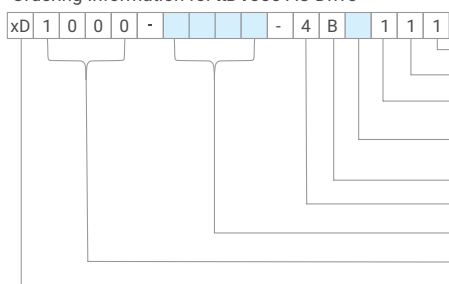
**xD1000****Range : 0.37kW HD to 30kW ND**

- › Rated @ 55°C (HD), @ 50°C (ND)
- › Transient overtorque 170%~200%
- › 4 DIs, 2 DOs, 1AI, 1AO
- › Inbuilt PID with 4 Preset PID references, Sleep & Wakeup, Predictive speed
- › Auxiliary Pump control
- › Catch on the Fly
- › Skip Frequency
- › Automatic Restart
- › Stall Prevention
- › Current limiting function

| Input Voltage       | Description                             | Cat. No.                  | Frame Size | M.R.P. (₹) Per Unit |
|---------------------|-----------------------------------------|---------------------------|------------|---------------------|
| Three Phase 415 VAC | xD1000 415V Drive 0.37kW(HD)            | <b>XD1000-01P5-4B1111</b> | S1         | *                   |
|                     | xD1000 415V Drive 0.75kW(HD)            | <b>XD1000-02P3-4B1111</b> | S1         | *                   |
|                     | xD1000 415V Drive 1.50kW(HD)            | <b>XD1000-04P1-4B2111</b> | S2         | *                   |
|                     | xD1000 415V Drive 2.20kW(HD)            | <b>XD1000-05P5-4B2111</b> | S2         | *                   |
|                     | xD1000 415V Drive 3.00kW(HD)/4.00kW(ND) | <b>XD1000-08P9-4B2111</b> | S3         | *                   |
|                     | xD1000 415V Drive 4.00kW(HD)/5.50kW(ND) | <b>XD1000-12P1-4B2111</b> | S3         | *                   |
|                     | xD1000 415V Drive 5.50kW(HD)/7.50kW(ND) | <b>XD1000-16P0-4B2111</b> | S3         | *                   |
|                     | xD1000 415V Drive 7.50kW(HD)/11.0kW(ND) | <b>XD1000-22P8-4B2111</b> | S4         | *                   |
|                     | xD1000 415V Drive 11.0kW(HD)/15.0kW(ND) | <b>XD1000-30P0-4B2111</b> | S4         | *                   |
|                     | xD1000 415V Drive 15.0kW(HD)/18.5kW(ND) | <b>XD1000-36P0-4B2111</b> | S5         | *                   |
|                     | xD1000 415V Drive 18.5kW(HD)/22.0kW(ND) | <b>XD1000-43P0-4B2111</b> | S5         | *                   |
|                     | xD1000 415V Drive 22.0kW(HD)/30.0kW(ND) | <b>XD1000-60P0-4B2111</b> | S6         | *                   |

**Note:** \* For prices please contact nearest branch office

Ordering Information for **xD1000** AC Drive



|                |                                                   |
|----------------|---------------------------------------------------|
| Future Use     | 1 : Future Use                                    |
| EMC Filter     | 1 : Without EMC Filter                            |
| DC Reactor     | 1 : Without DC Reactor                            |
| Braking Unit   | 2 : With Braking Unit<br>1 : Without Braking Unit |
| IP Class       | B: IP20                                           |
| Mains Voltage  | 4: 3Ph, 380-460 VAC                               |
| Current Rating |                                                   |
| Model no.      |                                                   |
| Drives         |                                                   |

**xD2000****Range : 0.37kW HD to 160kW ND**

- › Suitable for non-regenerative applications
- › Rated for -15 to 45°C HD as well as ND ratings
- › Inbuilt EMC filter with Category C3 EMC levels
- › Inbuilt DC reactor from 4 kW to 160kW
- › Inbuilt detachable LCD keypad
- › 6 DIs, 3 ROs, 3 AIs, 2 AOs
- › External 24 VDC connection to keep control circuit alive during power outage
- › Pump and Compressor specific functions
- › 2 functions to one DI
- › Torque Boost (IR Compensation)
- › Slip Compensation
- › Auto Tuning
- › Decel. Ramp Adaptation
- › 16 Preset speeds
- › Skip (Jump) Frequency
- › Current Limitation
- › DC Braking / Stop
- › Freewheel Stop & Fast Stop

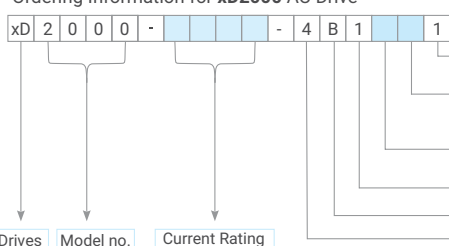
| Input Voltage       | Description                             | Cat. No.                  | Frame Size | M.R.P. (₹) Per Unit |
|---------------------|-----------------------------------------|---------------------------|------------|---------------------|
| Three Phase 415 VAC | XD2000 415V Drive 0.37kW(HD)/0.75kW(ND) | <b>XD2000-02P2-4B1121</b> | S1         | *                   |
|                     | XD2000 415V Drive 0.75kW(HD)/1.50kW(ND) | <b>XD2000-04P0-4B1121</b> | S1         | *                   |
|                     | XD2000 415V Drive 1.50kW(HD)/2.20kW(ND) | <b>XD2000-05P6-4B1121</b> | S1         | *                   |
|                     | XD2000 415V Drive 2.20kW(HD)/3.00kW(ND) | <b>XD2000-07P2-4B1121</b> | S1         | *                   |
|                     | XD2000 415V Drive 3.00kW(HD)/4.00kW(ND) | <b>XD2000-09P3-4B1221</b> | S1         | *                   |
|                     | XD2000 415V Drive 4.00kW(HD)/5.50kW(ND) | <b>XD2000-12P7-4B1221</b> | S1         | *                   |
|                     | XD2000 415V Drive 5.50kW(HD)/7.50kW(ND) | <b>XD2000-15P8-4B1221</b> | S1         | *                   |
|                     | XD2000 415V Drive 7.50kW(HD)/11.0kW(ND) | <b>XD2000-23P5-4B1221</b> | S2         | *                   |
|                     | XD2000 415V Drive 11.0kW(HD)/15.0kW(ND) | <b>XD2000-31P7-4B1221</b> | S2         | *                   |
|                     | XD2000 415V Drive 15.0kW(HD)/18.5kW(ND) | <b>XD2000-39P2-4B1221</b> | S3         | *                   |
|                     | XD2000 415V Drive 18.5kW(HD)/22.0kW(ND) | <b>XD2000-46P3-4B1221</b> | S3         | *                   |
|                     | XD2000 415V Drive 22.0kW(HD)/30.0kW(ND) | <b>XD2000-61P5-4B1221</b> | S4         | *                   |
|                     | XD2000 415V Drive 30.0kW(HD)/37.0kW(ND) | <b>XD2000-74P5-4B1221</b> | S4         | *                   |
|                     | XD2000 415V Drive 37.0kW(HD)/45.0kW(ND) | <b>XD2000-88P0-4B1221</b> | S4         | *                   |
|                     | XD2000 415V Drive 45.0kW(HD)/55.0kW(ND) | <b>XD2000-120P-4B1221</b> | S5         | *                   |
|                     | XD2000 415V Drive 55.0kW(HD)/75.0kW(ND) | <b>XD2000-145P-4B1221</b> | S5         | *                   |
|                     | XD2000 415V Drive 75.0kW(HD)/90.0kW(ND) | <b>XD2000-173P-4B1221</b> | S5         | *                   |
|                     | XD2000 415V Drive 90.0kW(HD)/110kW(ND)  | <b>XD2000-211P-4B1221</b> | S6         | *                   |
|                     | XD2000 415V Drive 110kW(HD)/132kW(ND)   | <b>XD2000-250P-4B1221</b> | S6         | *                   |
|                     | XD2000 415V Drive 132kW(HD)/160kW(ND)   | <b>XD2000-302P-4B1221</b> | S6         | *                   |

**Note:**

\* For prices please contact nearest branch office

Drives are covered under HS code 8504 40 90 and are charged at 18% GST.

Ordering Information for **xD2000** AC Drive



|                |                                               |
|----------------|-----------------------------------------------|
| Future Use     | 1 : Future Use                                |
| EMC Filter     | 2 : With EMC Filter<br>1 : Without EMC Filter |
| DC Reactor     | 2 : With DC Reactor<br>1 : Without DC Reactor |
| Braking Unit   | 1 : Without Braking Unit                      |
| IP Class       | B: IP20                                       |
| Mains Voltage  | 4: 3Ph, 380-460 VAC                           |
| Current Rating |                                               |
| Model no.      |                                               |
| Drives         |                                               |



**xD3000**  
**Range: 0.18kW HD to 15kW HD**



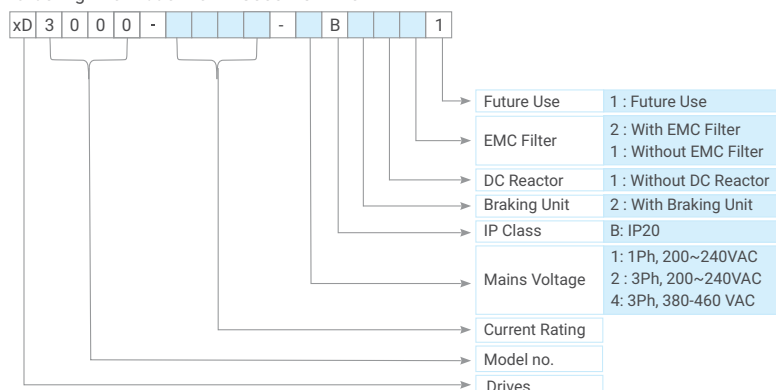
- › Suitable for machine applications
- › Rated for -10 to 50°C ambient temperature
- › Inbuilt EMC filter for EMC category C2
- › Inbuilt braking transistor
- › 6 DIs, 3 DOs, 3 AIs, 1 AOs, 1 STO input
- › External 24 VDC to keep control circuit on during power outages
- › Delinearization for Analog Inputs
- › Reference Addition, Subtraction & Multiplication
- › Hoisting - External Brake Control, Load (External Weight) Measurement, High-speed Hoisting, Rope Slack
- › Motor / Generator Torque Limit
- › Line Contactor Control & Output Contactor Control
- › Positioning by Limit Switches or Sensors
- › Traverse control for textile machines
- › 8 nos. trip history

| Input Voltage                    | Description                      | Cat. No.           | Frame Size | M.R.P.<br>(₹)<br>Per Unit |
|----------------------------------|----------------------------------|--------------------|------------|---------------------------|
| Single Phase<br>230 VAC          | XD3000 230V 1Ph Drive 0.18kW(HD) | XD3000-01P5-1B2121 | S1         | *                         |
|                                  | XD3000 230V 1Ph Drive 0.37kW(HD) | XD3000-03P3-1B2121 | S1         | *                         |
|                                  | XD3000 230V 1Ph Drive 0.55kW(HD) | XD3000-03P7-1B2121 | S1         | *                         |
|                                  | XD3000 230V 1Ph Drive 0.75kW(HD) | XD3000-04P8-1B2121 | S1         | *                         |
|                                  | XD3000 230V 1Ph Drive 1.10kW(HD) | XD3000-06P9-1B2121 | S2         | *                         |
|                                  | XD3000 230V 1Ph Drive 1.50kW(HD) | XD3000-08P0-1B2121 | S2         | *                         |
|                                  | XD3000 230V 1Ph Drive 2.20kW(HD) | XD3000-11P0-1B2121 | S2         | *                         |
| Three Phase<br>230 VAC           | XD3000 230V 3Ph Drive 0.18kW(HD) | XD3000-01P5-2B2111 | S1         | *                         |
|                                  | XD3000 230V 3Ph Drive 0.37kW(HD) | XD3000-03P3-2B2111 | S1         | *                         |
|                                  | XD3000 230V 3Ph Drive 0.55kW(HD) | XD3000-03P7-2B2111 | S1         | *                         |
|                                  | XD3000 230V 3Ph Drive 0.75kW(HD) | XD3000-04P8-2B2111 | S1         | *                         |
|                                  | XD3000 230V 3Ph Drive 1.10kW(HD) | XD3000-06P9-2B2111 | S2         | *                         |
|                                  | XD3000 230V 3Ph Drive 1.50kW(HD) | XD3000-08P0-2B2111 | S2         | *                         |
|                                  | XD3000 230V 3Ph Drive 2.20kW(HD) | XD3000-11P0-2B2111 | S2         | *                         |
|                                  | XD3000 230V 3Ph Drive 3.00kW(HD) | XD3000-13P7-2B2111 | S3         | *                         |
|                                  | XD3000 230V 3Ph Drive 4.00kW(HD) | XD3000-17P5-2B2111 | S3         | *                         |
|                                  | XD3000 230V 3Ph Drive 5.50kW(HD) | XD3000-27P5-2B2111 | S4         | *                         |
|                                  | XD3000 230V 3Ph Drive 7.50kW(HD) | XD3000-33P0-2B2111 | S4         | *                         |
|                                  | XD3000 230V 3Ph Drive 11.0kW(HD) | XD3000-54P0-2B2111 | S5         | *                         |
| XD3000 230V 3Ph Drive 15.0kW(HD) | XD3000-66P0-2B2111               | S5                 | *          |                           |
| Three Phase<br>415 VAC           | XD3000 415V 3Ph Drive 0.37kW(HD) | XD3000-01P5-4B2121 | S2         | *                         |
|                                  | XD3000 415V 3Ph Drive 0.55kW(HD) | XD3000-01P9-4B2121 | S2         | *                         |
|                                  | XD3000 415V 3Ph Drive 0.75kW(HD) | XD3000-02P3-4B2121 | S2         | *                         |
|                                  | XD3000 415V 3Ph Drive 1.10kW(HD) | XD3000-03P0-4B2121 | S2         | *                         |
|                                  | XD3000 415V 3Ph Drive 1.50kW(HD) | XD3000-04P1-4B2121 | S2         | *                         |
|                                  | XD3000 415V 3Ph Drive 2.20kW(HD) | XD3000-05P5-4B2121 | S3         | *                         |
|                                  | XD3000 415V 3Ph Drive 3.00kW(HD) | XD3000-07P1-4B2121 | S3         | *                         |
|                                  | XD3000 415V 3Ph Drive 4.00kW(HD) | XD3000-09P5-4B2121 | S3         | *                         |
|                                  | XD3000 415V 3Ph Drive 5.50kW(HD) | XD3000-14P3-4B2121 | S4         | *                         |
|                                  | XD3000 415V 3Ph Drive 7.50kW(HD) | XD3000-17P0-4B2121 | S4         | *                         |
|                                  | XD3000 415V 3Ph Drive 11.0kW(HD) | XD3000-27P7-4B2121 | S5         | *                         |
| XD3000 415V 3Ph Drive 15.0kW(HD) | XD3000-33P0-4B2121               | S5                 | *          |                           |

**Note:**

\* For prices please contact nearest branch office

### Ordering Information for xD3000 AC Drive



# xD4000 IP55 DRIVE

COMPLYING TO IEC 60529  
RANGE: 0.75kW ND TO 11kW ND



BUILDING



FOOD & BEVERAGES



TEXTILE



MINING, METAL,  
& MINERALS



PHARMA



WASTE WATER  
TREATMENT



## Robust Protection

Designed for dusty, humid, and indoor industrial environments



## Eliminates External Enclosure

Integrated DC choke, EMC filter & DBU. Reduced wiring, installation time & footprint



## Cost & Time Saving

Eliminating the external VFD panel reducing both installation time and system cost



## Digital-Architecture Ready

Modbus RTU, Modbus TCP/Ethernet IP, Profibus DP & Profinet S2 redundancy



**xD4000**

**Range : 0.37kW HD to 315kW ND**



- › Detachable 8 line Graphical LCD keypad with battery for RTC & Help Menu
- › Rated for -10 to 50°C ambient temperature
- › Inbuilt DC Reactor over entire range
- › Inbuilt EMC filter entire range for EMC levels C2 / C3
- › Inbuilt Dual port Ethernet IP / Modbus TCP & Modbus RS485 ports
- › Inbuilt Braking transistor upto 160kW HD.
- › 8 DI, 4 DOs, 3 AI, 2 AO, 2 STO inputs
- › Crane specific functions
- › Pump specific functions
- › Line & Output Contactor control
- › Load Sharing, Speed – Torque master slave
- › Multi-motor configuration Mode
- › Automatic Restart
- › Catch on the fly (Flying Start)
- › Fault Inhibition / Error detect disabling (Fire Mode)
- › 15 nos. trip histories with date and time Stamp

| Input Voltage                     | Description                             | Cat. No.           | Frame Size | M.R.P.<br>(₹)<br>Per Unit |
|-----------------------------------|-----------------------------------------|--------------------|------------|---------------------------|
| Three<br>Phase<br>415 VAC         | XD4000 415V Drive 0.37kW(HD)/0.75kW(ND) | XD4000-02P2-4C2221 | S1         | *                         |
|                                   | XD4000 415V Drive 0.75kW(HD)/1.50kW(ND) | XD4000-04P0-4C2221 | S1         | *                         |
|                                   | XD4000 415V Drive 1.50kW(HD)/2.20kW(ND) | XD4000-05P6-4C2221 | S1         | *                         |
|                                   | XD4000 415V Drive 2.20kW(HD)/3.00kW(ND) | XD4000-07P2-4C2221 | S1         | *                         |
|                                   | XD4000 415V Drive 3.00kW(HD)/4.00kW(ND) | XD4000-09P3-4C2221 | S1         | *                         |
|                                   | XD4000 415V Drive 4.00kW(HD)/5.50kW(ND) | XD4000-12P7-4C2221 | S1         | *                         |
|                                   | XD4000 415V Drive 5.50kW(HD)/7.50kW(ND) | XD4000-16P5-4C2221 | S2         | *                         |
|                                   | XD4000 415V Drive 7.50kW(HD)/11.0kW(ND) | XD4000-23P5-4C2221 | S2         | *                         |
|                                   | XD4000 415V Drive 11.0kW(HD)/15.0kW(ND) | XD4000-31P7-4C2221 | S3         | *                         |
|                                   | XD4000 415V Drive 15.0kW(HD)/18.5kW(ND) | XD4000-39P2-4C2221 | S3         | *                         |
|                                   | XD4000 415V Drive 18.5kW(HD)/22.0kW(ND) | XD4000-46P3-4C2221 | S3         | *                         |
|                                   | XD4000 415V Drive 22.0kW(HD)/30.0kW(ND) | XD4000-61P5-4C2221 | S4         | *                         |
|                                   | XD4000 415V Drive 30.0kW(HD)/37.0kW(ND) | XD4000-74P5-4C2221 | S4         | *                         |
|                                   | XD4000 415V Drive 37.0kW(HD)/45.0kW(ND) | XD4000-88P0-4C2221 | S4         | *                         |
|                                   | XD4000 415V Drive 45.0kW(HD)/55.0kW(ND) | XD4000-106P-4C2221 | S5         | *                         |
|                                   | XD4000 415V Drive 55.0kW(HD)/75.0kW(ND) | XD4000-145P-4C2221 | S5         | *                         |
|                                   | XD4000 415V Drive 75.0kW(HD)/90.0kW(ND) | XD4000-173P-4C2221 | S5         | *                         |
|                                   | XD4000 415V Drive 90.0kW(HD)/110kW(ND)  | XD4000-211P-4B2221 | S6         | *                         |
|                                   | XD4000 415V Drive 110kW(HD)/132kW(ND)   | XD4000-250P-4B2221 | S6         | *                         |
|                                   | XD4000 415V Drive 132kW(HD)/160kW(ND)   | XD4000-302P-4B2221 | S6         | *                         |
|                                   | XD4000 415V Drive 160kW(HD)/220kW(ND)   | XD4000-427P-4A2221 | S7A        | *                         |
|                                   | XD4000 415V Drive 200kW(HD)/250kW(ND)   | XD4000-481P-4A1221 | S7B        | *                         |
|                                   | XD4000 415V Drive 250kW(HD)/315kW(ND)   | XD4000-616P-4A1221 | S7B        | *                         |
|                                   | XD4000 IP55 415V Drive 0.75kW(ND)       | XD4000-02P2-4S2221 | S1         | *                         |
|                                   | XD4000 IP55 415V Drive 1.50kW(ND)       | XD4000-04P0-4S2221 | S1         | *                         |
|                                   | XD4000 IP55 415V Drive 2.20kW(ND)       | XD4000-05P6-4S2221 | S1         | *                         |
|                                   | XD4000 IP55 415V Drive 3.00kW(ND)       | XD4000-07P2-4S2221 | S1         | *                         |
|                                   | XD4000 IP55 415V Drive 4.00kW(ND)       | XD4000-09P3-4S2221 | S1         | *                         |
| XD4000 IP55 415V Drive 5.50kW(ND) | XD4000-12P7-4S2221                      | S1                 | *          |                           |
| XD4000 IP55 415V Drive 7.50kW(ND) | XD4000-16P5-4S2221                      | S2                 | *          |                           |
| XD4000 IP55 415V Drive 11.0kW(ND) | XD4000-23P5-4S2221                      | S2                 | *          |                           |

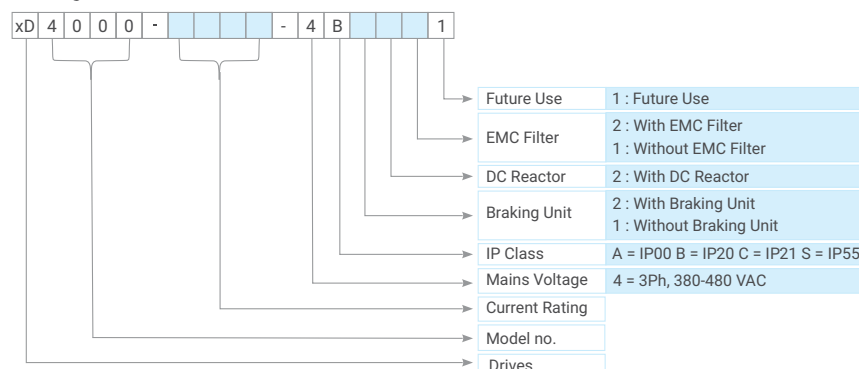
**Note:** \* For prices please contact nearest branch office

## xD4000 - IP55 with Inbuilt Power Disconnect

**Range : 0.75kW ND to 11kW ND**

- › IP55 Complying to IEC 60529
- › Built-In IP65 Graphical LCD Display with RTC
- › Supports Asynchronous, PM synchronous & reluctance motors
- › Built-in DC reactor & C2/C3 EMC filter for Harmonics & Noise reduction.
- › Built-in dynamic braking unit.
- › Starting Torque of 150% at 3Hz for V/f
- › Built-in Brake Control & Macros
- › Inbuilt PID with sleep & wake up feature
- › Conformal coating complying to IEC 60721-3-3 class 3C3, 3S2 & 3M3
- › Built-in RS 485 Modbus RTU & Modbus TCP/Ethernet IP communication and optional – Profinet S2 redundancy & Profibus

### Ordering Information for xD4000 AC Drive



## Accessories for AC Drives [8504]

| Drive Model | Description                             | Cat. No.            | M.R.P. (₹)<br>Per Unit |
|-------------|-----------------------------------------|---------------------|------------------------|
| xD1000      | IP54 LED Remote Keypad                  | <b>XDOP-DOP-100</b> | *                      |
| xD2000      | IP21 LCD Std. Graphical Keypad          | <b>XDOP-DOP-300</b> | *                      |
|             | Remote Mounting Kit for IP21 LCD Keypad | <b>XDKT-DOP-300</b> | *                      |
|             | IP65 LCD Graphical Keypad               | <b>XDOP-DOP-500</b> | *                      |
|             | Mounting kit for IP65 LCD Keypad        | <b>XDKT-DOP-500</b> | *                      |
|             | IO Expansion Card-1 - 6DI,2DO,2AI       | <b>XDIO-EX1-V01</b> | *                      |
|             | IO Expansion Card-2 - 3RO               | <b>XDIO-EX2-V01</b> | *                      |
|             | Profibus-DP Comm. Card                  | <b>XDCI-PDP-V01</b> | *                      |
| xD3000      | IP54 LED Remote Keypad                  | <b>XDOP-DOP-100</b> | *                      |
|             | IP65 LCD Graphical Keypad               | <b>XDOP-DOP-500</b> | *                      |
|             | Mounting kit for IP65 LCD Keypad        | <b>XDKT-DOP-500</b> | *                      |
|             | Communication Option Module Adapter     | <b>XDKT-ADP-V01</b> | *                      |
|             | Speed Monitoring Card                   | <b>XDEN-SPD-V01</b> | *                      |
|             | Modbus TCP/EtherNet IP Comm. Card       | <b>XDCI-ETH-V01</b> | *                      |
|             | EtherCAT Comm. Card                     | <b>XDCI-ECT-V01</b> | *                      |
|             | Profibus-DP Comm. Card                  | <b>XDCI-PDP-V01</b> | *                      |
|             | DeviceNet Comm. Card                    | <b>XDCI-DEN-V01</b> | *                      |
|             | POWERLINK Comm. Card                    | <b>XDCI-PLN-V01</b> | *                      |
|             | ProfiNet Comm. Card                     | <b>XDCI-PFN-V01</b> | *                      |
|             | CANopen DaisyChain Comm. Card           | <b>XDCI-CND-V01</b> | *                      |
|             | CANopen SUB-D Comm. Card                | <b>XDCI-CNS-V01</b> | *                      |
|             | CANopen Terminals Comm. Card            | <b>XDCI-CNT-V01</b> | *                      |
|             | Additional Safety Integrity Module      | <b>XDSI-SIM-V01</b> | *                      |
| xD4000      | IP65 LCD Graphical Keypad               | <b>XDOP-DOP-500</b> | *                      |
|             | Mounting kit for IP65 LCD Keypad        | <b>XDKT-DOP-500</b> | *                      |
|             | IO Expansion Card-1 - 6DI,2DO,2AI       | <b>XDIO-EX1-V01</b> | *                      |
|             | IO Expansion Card-2 - 3RO               | <b>XDIO-EX2-V01</b> | *                      |
|             | Digital Encoder Interface Card          | <b>XDEN-DEI-V01</b> | *                      |
|             | Analog Encoder Interface Module         | <b>XDEN-AEI-V01</b> | *                      |
|             | Resolver Interface Module               | <b>XDEN-REI-V01</b> | *                      |
|             | HTL Encoder Interface Module            | <b>XDEN-HEI-V01</b> | *                      |
|             | Profibus-DP Comm. Card                  | <b>XDCI-PDP-V01</b> | *                      |
|             | DeviceNet Comm. Card                    | <b>XDCI-DEN-V01</b> | *                      |
|             | POWERLINK Comm. Card                    | <b>XDCI-PLN-V01</b> | *                      |
|             | ProfiNet Comm. Card - Redundant         | <b>XDCI-PFN-V02</b> | *                      |
|             | CANopen DaisyChain Comm. Card           | <b>XDCI-CND-V01</b> | *                      |
|             | CANopen SUB-D Comm. Card                | <b>XDCI-CNS-V01</b> | *                      |
|             | CANopen Terminals Comm. Card            | <b>XDCI-CNT-V01</b> | *                      |

**Note:**

\* For prices please contact nearest branch office  
Drives are covered under HS code 8504 40 90 and are charged at 18% GST.





## xS1000 Soft Starters

Range: 18A to 200A



### xS1000 Soft Starters:For Standard Applications

- › Inbuilt Bypass Contactor
- › Soft Start / Soft Stop
- › Compact in size
- › Truly plug & play
- › Communication options available

| Description                               | Cat. No.                  | M.R.P.<br>(₹)<br>Per Unit | Bypass<br>Contactor |
|-------------------------------------------|---------------------------|---------------------------|---------------------|
| xS1000,18A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0018-B44111</b> | *                         | Built - In          |
| xS1000,34A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0034-B44111</b> | *                         |                     |
| xS1000,42A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0042-B44111</b> | *                         |                     |
| xS1000,48A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0048-B44111</b> | *                         |                     |
| xS1000,60A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0060-B44111</b> | *                         |                     |
| xS1000,75A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0075-B44111</b> | *                         |                     |
| xS1000,85A,M:200-440VAC,C:110/230-440VAC  | <b>XS1000-0085-B44111</b> | *                         |                     |
| xS1000,100A,M:200-440VAC,C:110/230-440VAC | <b>XS1000-0100-B44111</b> | *                         |                     |
| xS1000,140A,M:200-440VAC,C:110/230-440VAC | <b>XS1000-0140-B44111</b> | *                         |                     |
| xS1000,170A,M:200-440VAC,C:110/230-440VAC | <b>XS1000-0170-B44111</b> | *                         |                     |
| xS1000,200A,M:200-440VAC,C:110/230-440VAC | <b>XS1000-0200-B44111</b> | *                         |                     |

## xS2000 Soft Starters

Range: 18A to 200A



### xS2000 Soft Starters:For standard applications

- › Inbuilt Bypass Contactor
- › Soft start / Soft stop / Adjustable current limit
- › Essential motor protections against
  - » Overload
  - » Single phasing
  - » Instantaneous overcurrent
  - » Phase sequence reversal
  - » Abnormality in supply
  - » Unbalanced current
- › Thermistor protection through PTC
- › Excess start time setting
- › Communication options available
- › PC Interface as optional

| Description                               | Cat. No.                  | M.R.P.<br>(₹)<br>Per Unit | Bypass<br>Contactor |
|-------------------------------------------|---------------------------|---------------------------|---------------------|
| xS2000,18A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0018-B44111</b> | *                         | Built - In          |
| xS2000,34A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0034-B44111</b> | *                         |                     |
| xS2000,42A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0042-B44111</b> | *                         |                     |
| xS2000,48A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0048-B44111</b> | *                         |                     |
| xS2000,60A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0060-B44111</b> | *                         |                     |
| xS2000,75A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0075-B44111</b> | *                         |                     |
| xS2000,85A,M:200-440VAC,C:110/230-440VAC  | <b>XS2000-0085-B44111</b> | *                         |                     |
| xS2000,100A,M:200-440VAC,C:110/230-440VAC | <b>XS2000-0100-B44111</b> | *                         |                     |
| xS2000,140A,M:200-440VAC,C:110/230-440VAC | <b>XS2000-0140-B44111</b> | *                         |                     |
| xS2000,170A,M:200-440VAC,C:110/230-440VAC | <b>XS2000-0170-B44111</b> | *                         |                     |
| xS2000,200A,M:200-440VAC,C:110/230-440VAC | <b>XS2000-0200-B44111</b> | *                         |                     |

### Note:

\* For prices please contact nearest branch office

The above xS1000 & xS2000 ratings are based on 400% starting current, 10 starts per hour up to 60A & 6 starts per hour for 75A & above, 6 seconds starting time and ambient temperature of 40°C.

For proper sizing of soft starter based on the application parameters please use Winstart Software.

### Ordering Information for xS1000 & xS2000 Series Soft Starter

|      |                             |   |      |   |   |   |   |   |   |   |
|------|-----------------------------|---|------|---|---|---|---|---|---|---|
| xS   | nnnn                        | - | 1234 | - | B | V | C | D | F | F |
| xS   | Soft starters               |   |      |   |   |   |   |   |   |   |
|      | Soft starter Name           |   |      |   |   |   |   |   |   |   |
| nnnn | 1000 xS1000                 |   |      |   |   |   |   |   |   |   |
|      | 2000 xS2000                 |   |      |   |   |   |   |   |   |   |
| 1234 | Current Rating              |   |      |   |   |   |   |   |   |   |
|      | 1234 Nominal Current Rating |   |      |   |   |   |   |   |   |   |
| B    | Bypass Type                 |   |      |   |   |   |   |   |   |   |
|      | B Internal Bypass           |   |      |   |   |   |   |   |   |   |
| V    | Mains Voltage               |   |      |   |   |   |   |   |   |   |
|      | 4 3Ph, 200-440VAC           |   |      |   |   |   |   |   |   |   |
|      | 5 3Ph, 200-575VAC           |   |      |   |   |   |   |   |   |   |
| C    | Control Voltage             |   |      |   |   |   |   |   |   |   |
|      | 1 24V AC/DC                 |   |      |   |   |   |   |   |   |   |
|      | 4 110/230-440V AC           |   |      |   |   |   |   |   |   |   |
| D    | Graphical Display           |   |      |   |   |   |   |   |   |   |
|      | 1 No Graphical Display      |   |      |   |   |   |   |   |   |   |
| F    | Future Use                  |   |      |   |   |   |   |   |   |   |
|      | 1 Future Use                |   |      |   |   |   |   |   |   |   |
| F    | Future Use                  |   |      |   |   |   |   |   |   |   |
|      | 1 Future Use                |   |      |   |   |   |   |   |   |   |

We recommend the use of :

1. Line Contactor : This will isolate and protect the soft starter SCR's from any voltage transient while it's not in operation.
2. Bypass Contactor (For models without built-in bypass) : This will bypass and protect the soft starter SCR's while in running state from Current and Voltage transient's.
3. Semiconductor fuses : This will protect the starter SCR's during starting and stopping states from current transient's and excess I<sup>2</sup>T.

### Note:

\* For prices please contact nearest branch office

Soft Starters are covered under HSN code 8504 40 90 and are charged at 18% GST.



## xS3000 Soft Starters

Range: 24A to 580A



- › Built in bypass contactor
- › Compact & Flexible Design
- › Screw-less design for easy and fast servicing
- › USB port for easy and fast commissioning and data extraction
- › Full graphical display with multi-languages support
- › Built-in Simulation Mode
- › 384 event logs
- › Communication options available
- › Fire Mode Function
- › Starts per hour count

| Description                           | Cat. No.           | M.R.P.<br>(₹)<br>Per Unit | Bypass<br>Contactor |
|---------------------------------------|--------------------|---------------------------|---------------------|
| xS3000,24A,M:200-525VAC,C:110/220VAC  | XS3000-0024-B52211 | *                         | Built - In          |
| xS3000,42A,M:200-525VAC,C:110/220VAC  | XS3000-0042-B52211 | *                         |                     |
| xS3000,52A,M:200-525VAC,C:110/220VAC  | XS3000-0052-B52211 | *                         |                     |
| xS3000,64A,M:200-525VAC,C:110/220VAC  | XS3000-0064-B52211 | *                         |                     |
| xS3000,69A,M:200-525VAC,C:110/220VAC  | XS3000-0069-B52211 | *                         |                     |
| xS3000,105A,M:200-525VAC,C:110/220VAC | XS3000-0105-B52211 | *                         |                     |
| xS3000,115A,M:200-525VAC,C:110/220VAC | XS3000-0115-B52211 | *                         |                     |
| xS3000,135A,M:200-525VAC,C:110/220VAC | XS3000-0135-B52211 | *                         |                     |
| xS3000,184A,M:200-525VAC,C:110/220VAC | XS3000-0184-B52211 | *                         |                     |
| xS3000,200A,M:200-525VAC,C:110/220VAC | XS3000-0200-B52211 | *                         |                     |
| xS3000,229A,M:200-525VAC,C:110/220VAC | XS3000-0229-B52211 | *                         |                     |
| xS3000,250A,M:200-525VAC,C:110/220VAC | XS3000-0250-B52211 | *                         |                     |
| xS3000,352A,M:200-525VAC,C:110/220VAC | XS3000-0352-B52211 | *                         |                     |
| xS3000,397A,M:200-525VAC,C:110/220VAC | XS3000-0397-B52211 | *                         |                     |
| xS3000,410A,M:200-525VAC,C:110/220VAC | XS3000-0410-B52211 | *                         |                     |
| xS3000,550A,M:200-525VAC,C:110/220VAC | XS3000-0550-B52211 | *                         |                     |
| xS3000,580A,M:200-525VAC,C:110/220VAC | XS3000-0580-B52211 | *                         |                     |

## xS4000 Soft Starters

Range: 24A to 1250A



- › Built in bypass contactor
- › Compact & Flexible Design
- › Screw-less design for easy and fast servicing
- › USB port for easy and fast commissioning and data extraction
- › Full graphical display with multi-languages support
- › Real time graphs of motor operating performance
- › 384 event logs with time stamping
- › Advanced protection system
- › Communication options available
- › Smart card for level controlled pump activation and pump protection
- › Under Voltage / Over Voltage protection available
- › Fire Mode Function
- › Starts per hour count
- › Power through function available
- › Scheduling based on RTC

| Description                            | Cat. No.           | M.R.P.<br>(₹)<br>Per Unit | Bypass<br>Contactor                                                                                            |
|----------------------------------------|--------------------|---------------------------|----------------------------------------------------------------------------------------------------------------|
| xS4000,24A,M:200-525VAC,C:110/220VAC   | XS4000-0024-B52211 | *                         | Built - In                                                                                                     |
| xS4000,42A,M:200-525VAC,C:110/220VAC   | XS4000-0042-B52211 | *                         |                                                                                                                |
| xS4000,52A,M:200-525VAC,C:110/220VAC   | XS4000-0052-B52211 | *                         |                                                                                                                |
| xS4000,64A,M:200-525VAC,C:110/220VAC   | XS4000-0064-B52211 | *                         |                                                                                                                |
| xS4000,69A,M:200-525VAC,C:110/220VAC   | XS4000-0069-B52211 | *                         |                                                                                                                |
| xS4000,105A,M:200-525VAC,C:110/220VAC  | XS4000-0105-B52211 | *                         |                                                                                                                |
| xS4000,115A,M:200-525VAC,C:110/220VAC  | XS4000-0115-B52211 | *                         |                                                                                                                |
| xS4000,135A,M:200-525VAC,C:110/220VAC  | XS4000-0135-B52211 | *                         |                                                                                                                |
| xS4000,184A,M:200-525VAC,C:110/220VAC  | XS4000-0184-B52211 | *                         |                                                                                                                |
| xS4000,200A,M:200-525VAC,C:110/220VAC  | XS4000-0200-B52211 | *                         |                                                                                                                |
| xS4000,229A,M:200-525VAC,C:110/220VAC  | XS4000-0229-B52211 | *                         |                                                                                                                |
| xS4000,250A,M:200-525VAC,C:110/220VAC  | XS4000-0250-B52211 | *                         |                                                                                                                |
| xS4000,352A,M:200-525VAC,C:110/220VAC  | XS4000-0352-B52211 | *                         |                                                                                                                |
| xS4000,397A,M:200-525VAC,C:110/220VAC  | XS4000-0397-B52211 | *                         |                                                                                                                |
| xS4000,410A,M:200-525VAC,C:110/220VAC  | XS4000-0410-B52211 | *                         |                                                                                                                |
| xS4000,550A,M:200-525VAC,C:110/220VAC  | XS4000-0550-B52211 | *                         |                                                                                                                |
| xS4000,580A,M:200-525VAC,C:110/220VAC  | XS4000-0580-B52211 | *                         |                                                                                                                |
| xS4000,835A,M:200-525VAC,C:110/220VAC  | XS4000-0835-B52211 | *                         | External bypass<br>contactor<br>(AC1 rating)<br>All protections<br>remain active<br>during bypass<br>operation |
| xS4000,940A,M:200-525VAC,C:110/220VAC  | XS4000-0940-B52211 | *                         |                                                                                                                |
| xS4000,1070A,M:200-525VAC,C:110/220VAC | XS4000-1070-B52211 | *                         |                                                                                                                |
| xS4000,1230A,M:200-525VAC,C:110/220VAC | XS4000-1230-B52211 | *                         |                                                                                                                |
| xS4000,1250A,M:200-525VAC,C:110/220VAC | XS4000-1250-B52211 | *                         |                                                                                                                |
| xS4000,735A,M:200-525VAC,C:110/220VAC  | XS4000-0735-C52211 | *                         |                                                                                                                |
| xS4000,830A,M:200-525VAC,C:110/220VAC  | XS4000-0830-C52211 | *                         |                                                                                                                |
| xS4000,1025A,M:200-525VAC,C:110/220VAC | XS4000-1025-C52211 | *                         |                                                                                                                |
| xS4000,1170A,M:200-525VAC,C:110/220VAC | XS4000-1170-C52211 | *                         |                                                                                                                |
| xS4000,1220A,M:200-525VAC,C:110/220VAC | XS4000-1220-C52211 | *                         |                                                                                                                |

### Note:

\* For prices please contact nearest branch office  
Prices for 1000V and External Bypass soft starter below 735A available on request Soft Starters are covered under HSN code 8504 40 90 and are charged at 18% GST.

We recommend the use of:

1. Line Contactor : This will isolate and protect the soft starter SCR's from any voltage transient while it's not in operation.
2. Semiconductor fuses : This will protect the starter SCR's during starting and stopping states from current transient's and excess I<sup>2</sup>T.
3. Bypass Contactor (For models without built-in bypass) : This will bypass and protect the soft starter SCR's while in running state from Current and Voltage transient's.

|      |                             |   |      |   |   |   |   |   |   |   |
|------|-----------------------------|---|------|---|---|---|---|---|---|---|
| xS   | nnnn                        | - | 1234 | - | B | V | C | D | F | F |
| xS   | Soft starters               |   |      |   |   |   |   |   |   |   |
| nnnn | Soft starter Name           |   |      |   |   |   |   |   |   |   |
|      | 3000 xS3000                 |   |      |   |   |   |   |   |   |   |
| 1234 | Current Rating              |   |      |   |   |   |   |   |   |   |
|      | 1234 Nominal Current Rating |   |      |   |   |   |   |   |   |   |
| B    | Bypass Type                 |   |      |   |   |   |   |   |   |   |
|      | B Internal Bypass           |   |      |   |   |   |   |   |   |   |
| V    | Mains Voltage               |   |      |   |   |   |   |   |   |   |
|      | 5 3Ph, 200-525VAC           |   |      |   |   |   |   |   |   |   |
|      | 6 3Ph, 380-600VAC           |   |      |   |   |   |   |   |   |   |
|      | 7 3Ph, 380-690VAC           |   |      |   |   |   |   |   |   |   |

|   |                           |
|---|---------------------------|
| C | Control Voltage           |
|   | 1 24V AC/DC               |
|   | 2 110-120/220-240V AC     |
| D | Graphical Display         |
|   | 2 Fixed Graphical Display |
| F | Future Use                |
|   | 1 Future Use              |
| F | Future Use                |
|   | 1 Future Use              |



## Optional Modules/Cards for xS Series

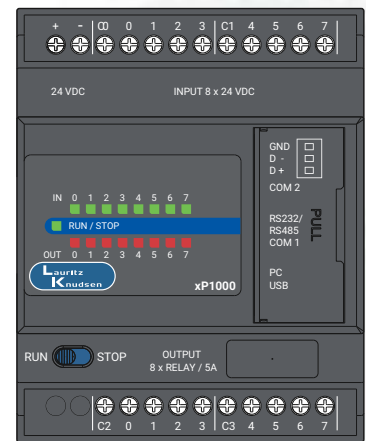
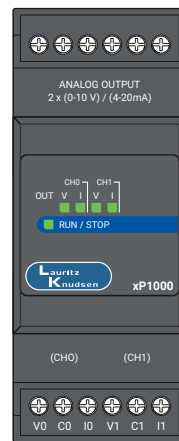
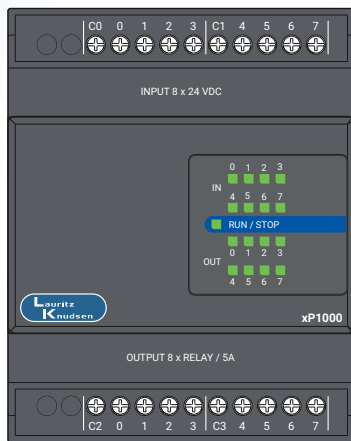
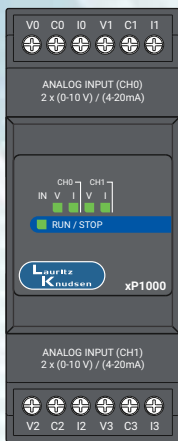


| Description                               | Cat. No.     | M.R.P.<br>(₹)<br>Per Unit |
|-------------------------------------------|--------------|---------------------------|
| xS1000 & xS2000 Modbus RTU Card           | XSCI-RTU-121 | *                         |
| xS1000 & xS2000 Modbus TCP Card           | XSCI-TCP-123 | *                         |
| xS1000 & xS2000 Profibus Card             | XSCI-PDP-121 | *                         |
| xS1000 & xS2000 Profinet Card             | XSCI-PFN-122 | *                         |
| xS1000 & xS2000 Ethernet Card             | XSCI-ETH-122 | *                         |
| xS1000 & xS2000 DeviceNet Card            | XSCI-DEN-121 | *                         |
| xS1000 & xS2000 USB Interface Card        | XSCI-USB-121 | *                         |
| xS1000 & xS2000 Operator interface Card   | XSOP-DOC-100 | *                         |
| xS1000 & xS2000 Digital Operator Kit      | XSOP-DOK-100 | *                         |
| xS3000 and xS4000 Modbus RTU Card         | XSCI-RTU-341 | *                         |
| xS3000 and xS4000 Modbus RTU + GF Card    | XSCI-RTU-342 | *                         |
| xS3000 and xS4000 Modbus TCP + GF Card    | XSCI-TCP-343 | *                         |
| xS3000 and xS4000 Profibus Card           | XSCI-PDP-341 | *                         |
| xS3000 and xS4000 Profinet + GF Card      | XSCI-PFN-343 | *                         |
| xS3000 and xS4000 Ethernet + GF Card      | XSCI-ETH-343 | *                         |
| xS3000 and xS4000 DeviceNet Card          | XSCI-DEN-341 | *                         |
| xS3000 and xS4000 Operator & Cable        | XSOP-DOP-200 | *                         |
| xS3000 and xS4000 Operator Interface Card | XSOP-DOC-200 | *                         |
| xS3000 and xS4000 Digital Operator Kit    | XSOP-DOK-200 | *                         |
| xS3000 and xS4000 Pumping Smart Card      | XSSC-PSC-341 | *                         |

**Note:**

\* For prices please contact nearest branch office  
Soft Starters are covered under HSN code 8504 40 90 and are charged at 18% GST.





## xP1000 PLC Features:

### Main CPU

- › 8 Digital Inputs
- › 24 V DC Power Supply
- › 8 Digital Outputs (Relay Output) 5 A (Res.) @ 230 VAC / 30 VDC
- › 2 Serial Communication Ports (COM1 - RS232/RS485, COM2 - RS485)
- › 256KB User Program Memory, 8KB User Data Memory.
- › Operating Temperature : 0°C to 55°C, Storage Temperature: - 40°C to 70°C

### Expansion Modules:

#### Digital I/Os

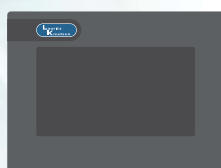
- › Extension with 8 Digital Inputs and 8 Relay Outputs, Relay Load 5 A (Res.) @ 230 VAC / 30 VDC
- › 24 V DC Power Supply

#### Analog Inputs

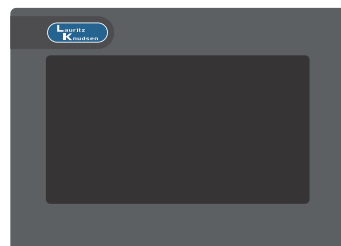
- › Extension with 4 Analog Inputs (0-10V / 4-20mA)
- › 24 V DC Power Supply

#### Analog Outputs

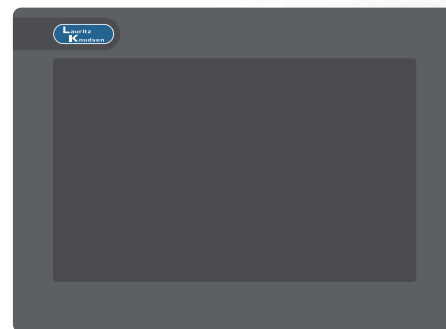
- › Extension with 2 Analog Outputs (0-10V / 4-20mA)
- › 24 V DC Power Supply



4.3 inch



7 inch



10.1 inch

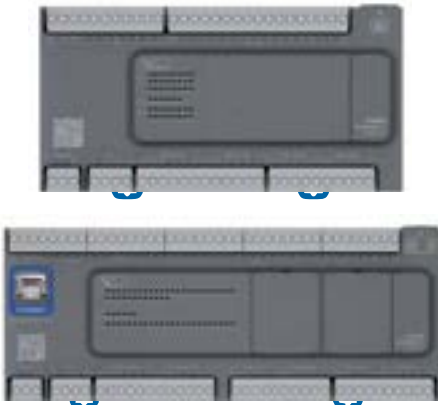
## xT1000 HMI Features:

- › **HMI Size**  
4.3", 7" & 10.1" with colour TFT display options with & without Ethernet model
- › **Touch Screen**  
Higher brightness level up to 440 cd/m2 & long backlight life up to 50000 hours for display
- › **Protection**  
Shock & Vibration protection as per IEC Standard
- › **CPU**  
Equipped with powerful CPU Cortex-M7 (600MHz)
- › **Data Logging**  
Equipped with powerful CPU Cortex-M7 (600MHz)
- › **Operating Temperature**  
Operation temperature range: 0 to 50 °C
- › **Memory**  
RAM - 32 MB for all Models
- › **Password Management**  
User access levels & application password management
- › **Safety Standards**  
CE, RoHS Compliant, IP 65 protection for front panel with Class 2 Pollution Degree.
- › **Memory**  
ROM - 32 MB for Serial models & 64 MB for with Ethernet model, ROM Expandable up to 4 GB via USB Stick/SD card
- › **Picture Library**  
Inbuilt picture library with high resolution images





## xP Series



- › AC / DC power supply
- › Supports Upto 196 I/Os, Relay and transistor outputs
- › Flexible I/Os, 2 cartridges, and up to 4 expansions
- › Ethernet and Serial line ports
- › Micro-SD card slot and USB port
- › 2 High speed counters, 2@100KHz
- › 2 Pulse Outputs at 100kHz\*2



## xP Expansion Modules Features:

- › Digital Input Modules: 16 / 32 channel options
- › Digital Output Modules: 8/16 / 32 channel options
- › Analog Input Modules: 8 channels
  - › Voltage: 0–10 V
  - › Current: 4–20 mA
- › Analog Output Modules: 4/8 channels
  - › Voltage: 0–10 V
  - › Current: 4–20 mA
- › Mixed I/O Modules: Combined analog input and output channels (e.g., 4 AI + 2 AO).

| Category                 | Description                             | Cat. No.           | M.R.P. (₹) Per Unit |
|--------------------------|-----------------------------------------|--------------------|---------------------|
| CPU                      | xP1000 CPU, 8 DI, 8 RO, 2 Serial Port.  | xP1000-MM1DR16AA11 | *                   |
|                          | Expansion 8 DI/ 8 RO                    | xPEXPN-ME4DR16AA11 | *                   |
|                          | Expansion 4 AI                          | xPEXPN-ME2AX04AA11 | *                   |
|                          | Extension with 2 Analog Outputs         | xPEXPN-ME3AY02AA11 | *                   |
|                          | xP3000 CPU, AC220, 09DI, 07DO RY        | xP3000-M1DR16AA11  | *                   |
|                          | xP3000 CPU, AC220, 14DI, 10DO RY        | xP3000-M1DR24AA11  | *                   |
|                          | xP3000 CPU AC220 18DI 14DO RY           | xP3000-M1DR32AA11  | *                   |
|                          | xP3000 CPU, AC220, 24DI, 16DO RY        | xP3000-M1DR40AA11  | *                   |
|                          | xP5000 CPU DC24 10DI 09DO TP            | xP5000-M1DT16AA11  | *                   |
|                          | xP5000 CPU DC24 10DI 09DO TN            | xP5000-M1DU16AA11  | *                   |
|                          | xP5000 CPU AC220 14DI 09DO RY           | xP5000-M1DR16AA11  | *                   |
|                          | xP5000 CPU DC24 14DI 10DO TN            | xP5000-M1DU24AA11  | *                   |
|                          | xP5000 CPU DC24 14DI 10DO TP            | xP5000-M1DT24AA11  | *                   |
|                          | xP5000 CPU AC220 14DI 10DO RY           | xP5000-M1DR24AA11  | *                   |
|                          | xP5000 CPU DC24 14DI 10DO TP Eth.       | xP5000-M1DT24EA11  | *                   |
|                          | xP5000 CPU, DC24, 14DI, 10DO TN Eth.    | xP5000-M1DU24EA11  | *                   |
|                          | xP5000 CPU AC220 14DI 10DO RY Eth       | xP5000-M1DR24EA11  | *                   |
|                          | xP5000 CPU, DC24, 20DI, 12DO TN         | xP5000-M1DU32AA11  | *                   |
|                          | xP5000 CPU DC24 20DI12DO TP             | xP5000-M1DT32AA11  | *                   |
|                          | xP5000 CPU AC220 18DI 14DO RY           | xP5000-M1DR32AA11  | *                   |
|                          | xP5000 CPU AC220 18DI 14DO RY Eth.      | xP5000-M1DR32EA11  | *                   |
|                          | xP5000,CPU, DC24, 24DI, 16DO TN         | xP5000-M1DU40AA11  | *                   |
|                          | xP5000 CPU DC24 24DI 16DO TP            | xP5000-M1DT40AA11  | *                   |
|                          | xP5000 CPU, AC220, 24DI, 16DO RY,       | xP5000-M1DR40AA11  | *                   |
|                          | xP5000 CPU DC24 24DI 16DO TP Eth.       | xP5000-M1DT40EA11  | *                   |
|                          | xP5000 CPU, DC24, 24DI, 16DO TN, Eth.   | xP5000-M1DU40EA11  | *                   |
|                          | xP5000 CPU AC220 24DI 16DO RY Eth       | xP5000-M1DR40EA11  | *                   |
|                          | xP5000 CPU AC220 36DI 24DO RY           | xP5000-M1DR60AA11  | *                   |
|                          | xP5000 CPU, AC220, 36DI, 24DO RY, 1 Eth | xP5000-M1DR60EA11  | *                   |
| xP5000 Expansion Modules | xPEXPN, 8 OUT RY                        | xPEXPN-XLE3DR08AA1 | *                   |
|                          | xPEXPN, 8DC inputs ,8 relay outputs     | xPEXPN-XLE4DR16AA1 | *                   |
|                          | xPEXPN, 16 INPUTS                       | xPEXPN-XLE2DX16AA1 | *                   |
|                          | xPEXPN, 16 OUT TR.NPN                   | xPEXPN-XLE3DU16AA1 | *                   |
|                          | xPEXPN, 16 OUT RY                       | xPEXPN-XLE3DR16AA1 | *                   |
|                          | xPEXPN, 16 OUT TR.PNP                   | xPEXPN-XLE3DT16AA1 | *                   |
|                          | xPEXPN, 16DC inputs ,16 relay outputs   | xPEXPN-XLE4DR32AA1 | *                   |
|                          | xPEXPN, 32 INPUTS                       | xPEXPN-XLE2DX32AA1 | *                   |
|                          | xPEXPN, 32 OUT TR.PNP                   | xPEXPN-XLE3DT32AA1 | *                   |
|                          | xPEXPN, 32 OUT TR.NPN                   | xPEXPN-XLE3DU32AA1 | *                   |
|                          | xPEXPN, 8 ANALOG INPUTS                 | xPEXPN-XLE2AI08AA1 | *                   |
|                          | xPEXPN, 4 ANALOG OUTPUTS                | xPEXPN-XLE3XQ04AA1 | *                   |
|                          | xPEXPN, 4 AI 2 AO                       | xPEXPN-XLE4AQ06AA1 | *                   |
|                          | xPCTRG, 1 isolated serial line RS485    | xPCTRG-XLO5CS01AB1 | *                   |
|                          | xPCTRG, 2 analog input ,1 analog output | xPCTRG-XLO4AH03AA1 | *                   |

Note: \* For prices please contact nearest branch office



**xT Series**

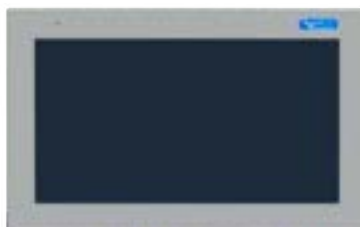
- › Wide Range upto 15" in size
- › Application Memory: FLASH EPROM / Screen area: 64MB/User font area 8 MB / Logic program area: 132KB
- › Backup Memory: Screen Area: SRAM 320KB, Variable Area: SRAM 64KB
- › Various Communication Interface: Ethernet / RS-232C / RS-422/485
- › USB host and device
- › SD memory card interface
- › Certificates: CE, RoHS

| Category |         | Description                                        | Cat. No.                 | M.R.P. (₹) Per Unit |
|----------|---------|----------------------------------------------------|--------------------------|---------------------|
| HMI      | xT1000  | xT1000 series, 4" TFT, Serial, 2 Port              | <b>xT1000-E104SDAAA1</b> | *                   |
|          |         | xT1000 series, 4" TFT, Serial, 2 Port, 1 Eth Port  | <b>xT1000-E104EDAAA1</b> | *                   |
|          |         | xT1000 series, 7" TFT, Serial, 2 Port              | <b>xT1000-E107SDAAA1</b> | *                   |
|          |         | xT1000 series, 7" TFT, Serial, 2 Port, 1 Eth Port  | <b>xT1000-E107EDAAA1</b> | *                   |
|          |         | xT1000 series, 10" TFT, Serial, 2 Port             | <b>xT1000-E110SDAAA1</b> | *                   |
|          |         | xT1000 series, 10" TFT, Serial, 2 Port, 1 Eth Port | <b>xT1000-E110EDAAA1</b> | *                   |
|          | xTE6000 | xTE6000 Series 7" HMI, DC 24V, Eth.                | <b>xTE6000-07EDAA1</b>   | *                   |
|          |         | xTE6000 Series 10" HMI, DC 24V, Eth.               | <b>xTE6000-10EDAA1</b>   | *                   |
|          |         | xTE6000 Series 12" HMI, DC 24V, Eth.               | <b>xTE6000-12EDAA1</b>   | *                   |
|          |         | xTE6000 Series 15" HMI, DC 24V, Eth.               | <b>xTE6000-15EDAA1</b>   | *                   |
|          | xTS6000 | xTS6000 Series 04" Advance HMI, DC 24V, Eth.       | <b>xTS6000-04EDAA1</b>   | *                   |
|          |         | xTS6000 Series 07" Advance HMI, DC 24V, Eth.       | <b>xTS6000-07EDAA1</b>   | *                   |
|          |         | xTS6000 Series 10" Advance HMI, DC 24V, Eth.       | <b>xTS6000-10EDAA1</b>   | *                   |
|          |         | xTS6000 Series 12" Advance HMI, DC 24V, Eth.       | <b>xTS6000-12EDAA1</b>   | *                   |
|          |         | xTS6000 Series 15" Advance HMI, DC 24V, Eth.       | <b>xTS6000-15EDAA1</b>   | *                   |

**Note:** \* For prices please contact nearest branch office



xTE6000\_10inch



xTE6000\_15inch



xTS6000\_15inch

**xTE6000**

- › Wide TFT Color Display (16 Million Colors)
- › Resistive Touch Panel
- › 24V DC Power Supply
- › Compatible with GP-Pro EX Software
- › Panel Mount Design
- › Industrial Grade Construction

**xTS6000**

- › Wide TFT Color LCD Display (16 Million Colors)
- › Projected Capacitive Multi-Touch Panel
- › High-Performance CPU for Faster Screen Processing
- › Dual Ethernet Ports (on selected models)
- › 24V DC Power Supply
- › Compatible with GP-Pro EX Software
- › Panel Mount Design
- › Industrial Grade Construction (IP65 Front Protection)



# Experience the robust performance of our ACCL

## Single Phase ACCL



Mains rating : 30A

Genset rating : 1A to 30A

## Three Phase ACCL With MCX contactors inside

Range : 32A to 125A



Settable overload  
current limit at DG side



Separate power consumption  
monitoring for Mains & Genset



Settable TPN / SPN mode  
for three phase and single phase  
DG supply



To Experience Scan or Click



## Miniature Circuit Breaker (MCB) [8536]

### Range Highlights

- › True contact indication for individual pole
- › Label holder facility for all configurations
- › Conforms to IS/IEC 60898 - 10kA
- › Conforms to IS/IEC 60947 - 2
  - » 15kA C-curve till 40 A
  - » 10kA C-curve for 50A, 63A
- › Available in B, C & D curves
- › Low watt loss - almost 50% of the values prescribed by IS/IEC 60898
- › Trip free mechanism
- › Design based on advanced current limiting hammer trip mechanism
- › No Line-Load bias
- › Bi connect feature on both sides
- › Suitable for accessory fitment

| Rating           | Modules<br>1 Mod =<br>17.5 mm | B-Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit | C-Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit | D-Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit |
|------------------|-------------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|
| Single Pole (SP) |                               |                     |                        |                     |                        |                     |                        |
| 0.5A             | 1                             | -                   | -                      | BB10E50C            | 610                    | BB10E50D            | 635                    |
| 1A               | 1                             | -                   | -                      | BB10010C            | 610                    | BB10010D            | 635                    |
| 2A               | 1                             | -                   | -                      | BB10020C            | 610                    | BB10020D            | 635                    |
| 3A               | 1                             | -                   | -                      | BB10030C            | 610                    | BB10030D            | 635                    |
| 4A               | 1                             | -                   | -                      | BB10040C            | 610                    | BB10040D            | 635                    |
| 6A               | 1                             | BB10060B            | 359                    | BB10060C            | 359                    | BB10060D            | 530                    |
| 10A              | 1                             | BB10100B            | 359                    | BB10100C            | 359                    | BB10100D            | 530                    |
| 16A              | 1                             | BB10160B            | 359                    | BB10160C            | 359                    | BB10160D            | 530                    |
| 20A              | 1                             | BB10200B            | 359                    | BB10200C            | 359                    | BB10200D            | 530                    |
| 25A              | 1                             | BB10250B            | 359                    | BB10250C            | 359                    | BB10250D            | 530                    |
| 32A              | 1                             | BB10320B            | 359                    | BB10320C            | 359                    | BB10320D            | 530                    |
| 40A              | 1                             | BB10400B            | 855                    | BB10400C            | 855                    | BB10400D            | 930                    |
| 50A              | 1                             | BB10500B            | 855                    | BB10500C            | 855                    | BB10500D*           | 930                    |
| 63A              | 1                             | BB10630B            | 855                    | BB10630C            | 855                    | BB10630D*           | 930                    |
| Double Pole (DP) |                               |                     |                        |                     |                        |                     |                        |
| 0.5A             | 2                             | -                   | -                      | BB20E50C            | 1765                   | BB20E50D            | 1795                   |
| 1A               | 2                             | -                   | -                      | BB20010C            | 1765                   | BB20010D            | 1795                   |
| 2A               | 2                             | -                   | -                      | BB20020C            | 1765                   | BB20020D            | 1795                   |
| 3A               | 2                             | -                   | -                      | BB20030C            | 1765                   | BB20030D            | 1795                   |
| 4A               | 2                             | -                   | -                      | BB20040C            | 1765                   | BB20040D            | 1795                   |
| 6A               | 2                             | BB20060B            | 1230                   | BB20060C            | 1230                   | BB20060D            | 1305                   |
| 10A              | 2                             | BB20100B            | 1230                   | BB20100C            | 1230                   | BB20100D            | 1305                   |
| 16A              | 2                             | BB20160B            | 1230                   | BB20160C            | 1230                   | BB20160D            | 1305                   |
| 20A              | 2                             | BB20200B            | 1230                   | BB20200C            | 1230                   | BB20200D            | 1305                   |
| 25A              | 2                             | BB20250B            | 1230                   | BB20250C            | 1230                   | BB20250D            | 1305                   |
| 32A              | 2                             | BB20320B            | 1230                   | BB20320C            | 1230                   | BB20320D            | 1305                   |
| 40A              | 2                             | BB20400B            | 2005                   | BB20400C            | 2005                   | BB20400D            | 2130                   |
| 50A              | 2                             | BB20500B            | 2005                   | BB20500C            | 2005                   | BB20500D*           | 2130                   |
| 63A              | 2                             | BB20630B            | 2005                   | BB20630C            | 2005                   | BB20630D*           | 2130                   |
| Three Pole (TP)  |                               |                     |                        |                     |                        |                     |                        |
| 0.5A             | 3                             | -                   | -                      | BB30E50C            | 2570                   | BB30E50D            | 2610                   |
| 1A               | 3                             | -                   | -                      | BB30010C            | 2570                   | BB30010D            | 2610                   |
| 2A               | 3                             | -                   | -                      | BB30020C            | 2570                   | BB30020D            | 2610                   |
| 3A               | 3                             | -                   | -                      | BB30030C            | 2570                   | BB30030D            | 2610                   |
| 4A               | 3                             | -                   | -                      | BB30040C            | 2570                   | BB30040D            | 2610                   |
| 6A               | 3                             | BB30060B            | 1940                   | BB30060C            | 1940                   | BB30060D            | 2080                   |
| 10A              | 3                             | BB30100B            | 1940                   | BB30100C            | 1940                   | BB30100D            | 2080                   |
| 16A              | 3                             | BB30160B            | 1940                   | BB30160C            | 1940                   | BB30160D            | 2080                   |
| 20A              | 3                             | BB30200B            | 1940                   | BB30200C            | 1940                   | BB30200D            | 2080                   |
| 25A              | 3                             | BB30250B            | 1940                   | BB30250C            | 1940                   | BB30250D            | 2080                   |
| 32A              | 3                             | BB30320B            | 1940                   | BB30320C            | 1940                   | BB30320D            | 2080                   |
| 40A              | 3                             | BB30400B            | 3020                   | BB30400C            | 3020                   | BB30400D            | 3220                   |
| 50A              | 3                             | BB30500B            | 3020                   | BB30500C            | 3020                   | BB30500D*           | 3220                   |
| 63A              | 3                             | BB30630B            | 3020                   | BB30630C            | 3020                   | BB30630D*           | 3220                   |

**Note:** Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

\*For details, please contact nearest branch office





## Miniature Circuit Breaker (MCB) [8536]



| Rating                | Modules<br>1 Mod =<br>17.5 mm | B-Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit | C-Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit | D-Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit |
|-----------------------|-------------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|------------------------|
| <b>Four Pole (FP)</b> |                               |                     |                        |                     |                        |                     |                        |
| 0.5A                  | 4                             | -                   | -                      | BB40E50C            | 3265                   | BB40E50D            | 3270                   |
| 1A                    | 4                             | -                   | -                      | BB40010C            | 3265                   | BB40010D            | 3270                   |
| 2A                    | 4                             | -                   | -                      | BB40020C            | 3265                   | BB40020D            | 3270                   |
| 3A                    | 4                             | -                   | -                      | BB40030C            | 3265                   | BB40030D            | 3270                   |
| 4A                    | 4                             | -                   | -                      | BB40040C            | 3265                   | BB40040D            | 3270                   |
| 6A                    | 4                             | BB40060B            | 2710                   | BB40060C            | 2710                   | BB40060D            | 2830                   |
| 10A                   | 4                             | BB40100B            | 2710                   | BB40100C            | 2710                   | BB40100D            | 2830                   |
| 16A                   | 4                             | BB40160B            | 2710                   | BB40160C            | 2710                   | BB40160D            | 2830                   |
| 20A                   | 4                             | BB40200B            | 2710                   | BB40200C            | 2710                   | BB40200D            | 2830                   |
| 25A                   | 4                             | BB40250B            | 2710                   | BB40250C            | 2710                   | BB40250D            | 2830                   |
| 32A                   | 4                             | BB40320B            | 2710                   | BB40320C            | 2710                   | BB40320D            | 2830                   |
| 40A                   | 4                             | BB40400B            | 3800                   | BB40400C            | 3800                   | BB40400D            | 4185                   |
| 50A                   | 4                             | BB40500B            | 3800                   | BB40500C            | 3800                   | BB40500D*           | 4185                   |
| 63A                   | 4                             | BB40630B            | 3800                   | BB40630C            | 3800                   | BB40630D*           | 4185                   |

**Note:** Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

\*For details, please contact nearest branch office

## MCBs (Miniature Circuit Breakers) : 80A-125A [8536]

### Range Highlights

- › Short circuit Breaking Capacity - 15kA (IS/IEC 60947-2, EN 60947-2)
- › C & D Characteristics
- › Available in SP, DP, TP and FP
- › Suitable for Isolation
- › Protection Degree - IP 20
- › Availability of wide Range of Site Mountable Accessories

| Rating                  | Modules<br>1 Mod = 17.5 mm | C Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit | D Curve<br>Cat. No. | M.R.P. (₹)<br>Per Unit |
|-------------------------|----------------------------|---------------------|------------------------|---------------------|------------------------|
| <b>Single Pole (SP)</b> |                            |                     |                        |                     |                        |
| 80A                     | 1.5                        | AU15S10803C         | 3685                   | AU15S10803D         | 4195                   |
| 100A                    | 1.5                        | AU15S11003C         | 4130                   | AU15S11003D         | 4690                   |
| 125A                    | 1.5                        | AU15S11253C         | 4445                   | AU15S11253D         | 5070                   |
| <b>Double Pole (DP)</b> |                            |                     |                        |                     |                        |
| 80A                     | 3                          | AU15S20803C         | 8160                   | AU15S20803D         | 9290                   |
| 100A                    | 3                          | AU15S21003C         | 8705                   | AU15S21003D         | 9900                   |
| 125A                    | 3                          | AU15S21253C         | 9580                   | AU15S21253D         | 10890                  |
| <b>Three Pole (TP)</b>  |                            |                     |                        |                     |                        |
| 80A                     | 4.5                        | AU15S30803C         | 12875                  | AU15S30803D         | 14660                  |
| 100A                    | 4.5                        | AU15S31003C         | 13735                  | AU15S31003D         | 15610                  |
| 125A                    | 4.5                        | AU15S31253C         | 15240                  | AU15S31253D         | 17320                  |
| <b>Four Pole (FP)</b>   |                            |                     |                        |                     |                        |
| 80A                     | 6                          | AU15S40803C         | 16820                  | AU15S40803D         | 19100                  |
| 100A                    | 6                          | AU15S41003C         | 17495                  | AU15S41003D         | 19905                  |
| 125A                    | 6                          | AU15S41253C         | 19815                  | AU15S41253D         | 22520                  |

**CERTIFIED TO LEAD,  
TRUSTED FOR SAFETY.**

BIS-Certified HR MCBs Range - 80A, 100A & 125A



(AC MCB + DC MCB)



AC MCB<sup>^</sup> with C-Curve

| Description                                             | Modules<br>1 Mod = 17.5mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|---------------------------------------------------------|---------------------------|----------|------------------------|
| 1 AC 16A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB     | 2+2                       | SC221616 | 2015                   |
| New 1 AC 20A DP MCB <sup>^</sup> + 1 DC 20A DP 500V MCB | 2+2                       | SC222020 | 2015                   |
| New 1 AC 20A DP MCB <sup>^</sup> + 1 DC 25A DP 500V MCB | 2+2                       | SC222025 | 2015                   |
| New 1 AC 20A DP MCB <sup>^</sup> + 1 DC 32A DP 500V MCB | 2+2                       | SC222032 | 2015                   |
| 1 AC 25A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB     | 2+2                       | SC222516 | 2015                   |
| New 1 AC 25A DP MCB <sup>^</sup> + 1 DC 25A DP 500V MCB | 2+2                       | SC222525 | 2015                   |
| 1 AC 32A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB     | 2+2                       | SC223216 | 2015                   |
| New 1 AC 32A DP MCB <sup>^</sup> + 1 DC 25A DP 500V MCB | 2+2                       | SC223225 | 2015                   |
| 1 AC 32A DP MCB <sup>^</sup> + 1 DC 32A DP 500V MCB     | 2+2                       | SC223232 | 2015                   |

# Double the Protection, Twice the Power!

Complete Protection for  
Solar Rooftop Installations

DC MCB:  
10kA as per IEC 60947-2  
AC MCB:  
10kA as per IS/IEC 60898-1



## Miniature Circuit Breaker (MCB) [8536]

### DC MCBs as per IEC 60947-2 [8536]

Rated Voltage:  
Breaking capacity of 6 kA - BB Series DC MCBs

#### 130V DC SP MCB

| Rating           | Modules<br>1 Mod =<br>17.5mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|------------------|------------------------------|----------|------------------------|
| Single Pole (SP) |                              |          |                        |
| 0.5A             | 1                            | BB10E5DC | 860                    |
| 1A               | 1                            | BB1001DC | 860                    |
| 2A               | 1                            | BB1002DC | 860                    |
| 3A               | 1                            | BB1003DC | 860                    |
| 4A               | 1                            | BB1004DC | 860                    |
| 6A               | 1                            | BB1006DC | 745                    |
| 10A              | 1                            | BB1010DC | 745                    |
| 16A              | 1                            | BB1016DC | 745                    |
| 20A              | 1                            | BB1020DC | 745                    |
| 25A              | 1                            | BB1025DC | 745                    |
| 32A              | 1                            | BB1032DC | 745                    |
| 40A              | 1                            | BB1040DC | 980                    |
| 50A              | 1                            | BB1050DC | 980                    |
| 63A              | 1                            | BB1063DC | 980                    |



Rated Voltage:  
Breaking capacity of BJ Series DC MCBs  
» 10kA till 40 A  
» 6kA for 50A, 63A

#### 250V DC SP MCB

| Rating           | Modules<br>1 Mod =<br>17.5mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|------------------|------------------------------|----------|------------------------|
| Single Pole (SP) |                              |          |                        |
| 0.5A             | 1                            | BJ10E5DC | 1010                   |
| 1A               | 1                            | BJ1001DC | 1010                   |
| 2A               | 1                            | BJ1002DC | 1010                   |
| 3A               | 1                            | BJ1003DC | 1010                   |
| 4A               | 1                            | BJ1004DC | 1010                   |
| 6A               | 1                            | BJ1006DC | 825                    |
| 10A              | 1                            | BJ1010DC | 825                    |
| 16A              | 1                            | BJ1016DC | 825                    |
| 20A              | 1                            | BJ1020DC | 825                    |
| 25A              | 1                            | BJ1025DC | 825                    |
| 32A              | 1                            | BJ1032DC | 825                    |
| 40A              | 1                            | BJ1040DC | 1140                   |
| 50A              | 1                            | BJ1050DC | 1140                   |
| 63A              | 1                            | BJ1063DC | 1140                   |

New

#### 250V DC DP MCB

| Rating | Modules<br>1 Mod =<br>17.5mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|--------|------------------------------|----------|------------------------|
| 0.5A   | 2                            | BB20E5DC | 1840                   |
| 1A     | 2                            | BB2001DC | 1840                   |
| 2A     | 2                            | BB2002DC | 1840                   |
| 3A     | 2                            | BB2003DC | 1840                   |
| 4A     | 2                            | BB2004DC | 1840                   |
| 6A     | 2                            | BB2006DC | 1620                   |
| 10A    | 2                            | BB2010DC | 1620                   |
| 16A    | 2                            | BB2016DC | 1620                   |
| 20A    | 2                            | BB2020DC | 1620                   |
| 25A    | 2                            | BB2025DC | 1620                   |
| 32A    | 2                            | BB2032DC | 1620                   |
| 40A    | 2                            | BB2040DC | 2190                   |
| 50A    | 2                            | BB2050DC | 2190                   |
| 63A    | 2                            | BB2063DC | 2190                   |



#### 500V DC DP MCB

| Rating | Modules<br>1 Mod =<br>17.5mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|--------|------------------------------|----------|------------------------|
| 0.5A   | 2                            | BJ20E5DC | 2105                   |
| 1A     | 2                            | BJ2001DC | 2105                   |
| 2A     | 2                            | BJ2002DC | 2105                   |
| 3A     | 2                            | BJ2003DC | 2105                   |
| 4A     | 2                            | BJ2004DC | 2105                   |
| 6A     | 2                            | BJ2006DC | 1780                   |
| 10A    | 2                            | BJ2010DC | 1780                   |
| 16A    | 2                            | BJ2016DC | 1780                   |
| 20A    | 2                            | BJ2020DC | 1780                   |
| 25A    | 2                            | BJ2025DC | 1780                   |
| 32A    | 2                            | BJ2032DC | 1780                   |
| 40A    | 2                            | BJ2040DC | 2265                   |
| 50A    | 2                            | BJ2050DC | 2265                   |
| 63A    | 2                            | BJ2063DC | 2265                   |

New

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos.

### 1000V DC MCBs [8536]

Rated Voltage: 1000V DC  
with breaking capacity of 6 kA - BK Series DC MCBs

| Description             | Modules<br>1 Mod = 17.5mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|-------------------------|---------------------------|----------|------------------------|
| DP 6A 1000V DC 6kA MCB  | 4                         | BK2006DC | 2710                   |
| DP 10A 1000V DC 6kA MCB | 4                         | BK2010DC | 2710                   |
| DP 16A 1000V DC 6kA MCB | 4                         | BK2016DC | 2710                   |
| DP 20A 1000V DC 6kA MCB | 4                         | BK2020DC | 2710                   |
| DP 25A 1000V DC 6kA MCB | 4                         | BK2025DC | 2710                   |
| DP 32A 1000V DC 6kA MCB | 4                         | BK2032DC | 2710                   |
| DP 40A 1000V DC 6kA MCB | 4                         | BK2040DC | 3295                   |
| DP 50A 1000V DC 6kA MCB | 4                         | BK2050DC | 3295                   |
| DP 63A 1000V DC 6kA MCB | 4                         | BK2063DC | 3295                   |

New



## Isolators [8536]



### Range Highlights

- › Conforms to IEC 60947-3
- › Utilization category AC-22A
- › Available in DP, TP and FP versions in 40A, 63A, 80A & 100A ratings

| Rating           | Modules<br>1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹)<br>Per Unit | Modules<br>1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹)<br>Per Unit | Modules<br>1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|------------------|----------------------------|----------|------------------------|----------------------------|----------|------------------------|----------------------------|----------|------------------------|
| Double Pole (DP) |                            |          |                        | Three Pole (TP)            |          | Four Pole (FP)         |                            |          |                        |
| 40A              | 2                          | BF204000 | 830                    | 3                          | BF304000 | 1440                   | 4                          | BF404000 | 1845                   |
| 63A              | 2                          | BF206300 | 1055                   | 3                          | BF306300 | 1660                   | 4                          | BF406300 | 1930                   |
| 80A              | 2                          | BF208000 | 1345                   | 3                          | BF308000 | 1820                   | 4                          | BF408000 | 2160                   |
| 100A             | 2                          | BF210000 | 1410                   | 3                          | BF310000 | 1940                   | 4                          | BF410000 | 2335                   |

**Note:** Standard Pack Quantity for Isolator : DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

## RCCB (Residual Current Circuit Breaker ) [8536]

### Range Highlights

- › Conforms to IS 12640 (Part 1) / IEC 61008-1
- › RCCBs are available in DP and FP versions from 25 to 100A ratings with 30 mA, 100 mA and 300mA sensitivity



- › Truly current operated - operation even at nominal Voltage
- › Operates on Core Balance Current Transformer (CBCT) principle
- › Advanced neutral mechanism

| Rating           | Sensitivity | Modules<br>1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|------------------|-------------|----------------------------|----------|------------------------|
| Double Pole (DP) |             |                            |          |                        |
| 25A              | 30 mA       | 2                          | BG202503 | 3980                   |
|                  | 100 mA      | 2                          | BG202510 | 4380                   |
|                  | 300 mA      | 2                          | BG202530 | 4380                   |
| 32A              | 30 mA       | 2                          | BG203203 | 4550                   |
|                  | 100 mA      | 2                          | BG203210 | 5005                   |
|                  | 300 mA      | 2                          | BG203230 | 5005                   |
| 40A              | 30 mA       | 2                          | BG204003 | 4550                   |
|                  | 100 mA      | 2                          | BG204010 | 5005                   |
|                  | 300 mA      | 2                          | BG204030 | 5005                   |
| 63A              | 30 mA       | 2                          | BG206303 | 5675                   |
|                  | 100 mA      | 2                          | BG206310 | 6035                   |
|                  | 300 mA      | 2                          | BG206330 | 6035                   |
| 100A             | 30 mA       | 2                          | BG210003 | 10195                  |
|                  | 100 mA      | 2                          | BG210010 | 10510                  |
|                  | 300 mA      | 2                          | BG210030 | 10510                  |

| Rating         | Sensitivity | Modules<br>1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹)<br>Per Unit |
|----------------|-------------|----------------------------|----------|------------------------|
| Four Pole (FP) |             |                            |          |                        |
| 25A            | 30 mA       | 4                          | BG402503 | 5450                   |
|                | 100 mA      | 4                          | BG402510 | 5705                   |
|                | 300 mA      | 4                          | BG402530 | 5705                   |
| 32A            | 30 mA       | 4                          | BG403203 | 5505                   |
|                | 100 mA      | 4                          | BG403210 | 5805                   |
|                | 300 mA      | 4                          | BG403230 | 5805                   |
| 40A            | 30 mA       | 4                          | BG404003 | 5505                   |
|                | 100 mA      | 4                          | BG404010 | 5805                   |
|                | 300 mA      | 4                          | BG404030 | 5805                   |
| 63A            | 30 mA       | 4                          | BG406303 | 6225                   |
|                | 100 mA      | 4                          | BG406310 | 6655                   |
|                | 300 mA      | 4                          | BG406330 | 6655                   |
| 100A           | 30 mA       | 4                          | BG410003 | 10850                  |
|                | 100 mA      | 4                          | BG410010 | 11250                  |
|                | 300 mA      | 4                          | BG410030 | 11250                  |

## RCCBs (Residual Current Circuit Breakers) : Type-Adi (with Added immunity) [8536]



### Range Highlights

- › Wide Range of Current Ratings - 25A to 100A
- › Precise Sensitivities for variety of applications - from 30mA to 300mA
- › 2P & 4P versions
- › Suitable for Isolation
- › Protection Degree - IP 20
- › Availability of wide Range of Site Mountable Accessories
- › Type Adi: Suitable for AC + Pulsating DC (Type A) + Harmonics

| Rating | Sensitivity | Modules<br>1 Mod = 17.5 mm | CAT Nos.    | M.R.P. (₹)<br>Per Unit |
|--------|-------------|----------------------------|-------------|------------------------|
| 2P Adi |             |                            |             |                        |
| 25A    | 30mA        | 2                          | AURAD202503 | 7355                   |
|        | 100mA       | 2                          | AURAD202510 | 7695                   |
|        | 300mA       | 2                          | AURAD202530 | 7695                   |
| 40A    | 30mA        | 2                          | AURAD204003 | 7805                   |
|        | 100mA       | 2                          | AURAD204010 | 7930                   |
|        | 300mA       | 2                          | AURAD204030 | 7930                   |
| 63A    | 30mA        | 2                          | AURAD206303 | 9130                   |
|        | 100mA       | 2                          | AURAD206310 | 9305                   |
|        | 300mA       | 2                          | AURAD206330 | 9305                   |
| 100A   | 30mA        | 2                          | AURAD210003 | 13490                  |

| Rating | Sensitivity | Modules<br>1 Mod = 17.5 mm | CAT Nos.    | M.R.P. (₹)<br>Per Unit |
|--------|-------------|----------------------------|-------------|------------------------|
| 4P Adi |             |                            |             |                        |
| 25A    | 30mA        | 4                          | AURAD402503 | 8895                   |
|        | 100mA       | 4                          | AURAD402510 | 9060                   |
|        | 300mA       | 4                          | AURAD402530 | 9060                   |
| 40A    | 30mA        | 4                          | AURAD404003 | 9235                   |
|        | 100mA       | 4                          | AURAD404010 | 9380                   |
|        | 300mA       | 4                          | AURAD404030 | 9380                   |
| 63A    | 30mA        | 4                          | AURAD406303 | 10055                  |
|        | 100mA       | 4                          | AURAD406310 | 10265                  |
|        | 300mA       | 4                          | AURAD406330 | 10265                  |
| 100A   | 30mA        | 4                          | AURAD410003 | 16020                  |
|        | 300mA       | 4                          | AURAD410030 | 16020                  |





# All-Rounder RCDs (RCCB & RCBO)

Specially designed Adi RCDs ensure Safe and Reliable protection  
for All Applications in AC networks with Pulsating DC along with Harmonics



## RCBOs (Residual Current Breaker with Overcurrent Protection) [8536]

### Range Highlights\*

- › Conforms to IEC 61009-1, IS 12640-2, EN 61009-1
- › Short circuit Breaking Capacity - 10kA
- › Precise Sensitivities for a variety of applications
  - » from 10mA to 300mA
- › Suitable for Isolation

### Type-AC

| Rating        | Sensitivity | Modules<br>1 Mod = 17.5 mm | CAT Nos.    | M.R.P. (₹)<br>Per Unit |
|---------------|-------------|----------------------------|-------------|------------------------|
| <b>2P AC*</b> |             |                            |             |                        |
| 6A            | 10mA        | 2                          | AUF3C200601 | 6710                   |
|               | 30mA        | 2                          | AUF3C200603 | 6710                   |
|               | 100mA       | 2                          | AUF3C200610 | 6850                   |
|               | 300mA       | 2                          | AUF3C200630 | 6930                   |
| 10A           | 10mA        | 2                          | AUF3C201001 | 6710                   |
|               | 30mA        | 2                          | AUF3C201003 | 6710                   |
|               | 100mA       | 2                          | AUF3C201010 | 6850                   |
|               | 300mA       | 2                          | AUF3C201030 | 6930                   |
| 16A           | 10mA        | 2                          | AUF3C201601 | 6710                   |
|               | 30mA        | 2                          | AUF3C201603 | 6710                   |
|               | 100mA       | 2                          | AUF3C201610 | 6850                   |
|               | 300mA       | 2                          | AUF3C201630 | 6930                   |
| 20A           | 30mA        | 2                          | AUF3C202003 | 6710                   |
|               | 100mA       | 2                          | AUF3C202010 | 6850                   |
|               | 300mA       | 2                          | AUF3C202030 | 6930                   |
| 25A           | 30mA        | 2                          | AUF3C202503 | 6710                   |
|               | 100mA       | 2                          | AUF3C202510 | 6850                   |
|               | 300mA       | 2                          | AUF3C202530 | 6930                   |
| 32A           | 30mA        | 2                          | AUF3C203203 | 6710                   |
|               | 100mA       | 2                          | AUF3C203210 | 6850                   |
|               | 300mA       | 2                          | AUF3C203230 | 6930                   |
| 40A           | 30mA        | 2                          | AUF3C204003 | 6710                   |
|               | 100mA       | 2                          | AUF3C204010 | 6850                   |
|               | 300mA       | 2                          | AUF3C204030 | 6930                   |
| 63A           | 30mA        | 4                          | AUF3C206303 | 7970                   |
|               | 100mA       | 4                          | AUF3C206310 | 8455                   |
|               | 300mA       | 4                          | AUF3C206330 | 8520                   |
| <b>4P AC</b>  |             |                            |             |                        |
| 16A           | 30mA        | 7.5                        | AUF3C401603 | 7205                   |
|               | 100mA       | 7.5                        | AUF3C401610 | 8020                   |
|               | 300mA       | 7.5                        | AUF3C401630 | 8180                   |
| 20A           | 30mA        | 7.5                        | AUF3C402003 | 7205                   |
|               | 100mA       | 7.5                        | AUF3C402010 | 8020                   |
|               | 300mA       | 7.5                        | AUF3C402030 | 8180                   |
| 25A           | 30mA        | 7.5                        | AUF3C402503 | 7205                   |
|               | 100mA       | 7.5                        | AUF3C402510 | 8020                   |
|               | 300mA       | 7.5                        | AUF3C402530 | 8180                   |
| 32A           | 30mA        | 7.5                        | AUF3C403203 | 7440                   |
|               | 100mA       | 7.5                        | AUF3C403210 | 8025                   |
|               | 300mA       | 7.5                        | AUF3C403230 | 8205                   |
| 40A           | 30mA        | 7.5                        | AUF3C404003 | 7555                   |
|               | 100mA       | 7.5                        | AUF3C404010 | 8025                   |
|               | 300mA       | 7.5                        | AUF3C404030 | 8230                   |
| 63A           | 30mA        | 7.5                        | AUF3C406303 | 9055                   |
|               | 100mA       | 7.5                        | AUF3C406310 | 9225                   |
|               | 300mA       | 7.5                        | AUF3C406330 | 9225                   |
| 80A           | 30mA        | 12                         | AUF3C408003 | 35090                  |
|               | 100mA       | 12                         | AUF3C408010 | 35875                  |
|               | 300mA       | 12                         | AUF3C408030 | 35875                  |
| 100A          | 30mA        | 12                         | AUF3C410003 | 37515                  |
|               | 100mA       | 12                         | AUF3C410010 | 38410                  |
|               | 300mA       | 12                         | AUF3C410030 | 38410                  |

\*For 2P AC/Adi D Curve RCBO, please contact nearest branch office



- › Availability of wide Range of Site Mountable Accessories
- › Available in
  - » Type AC: For standard AC installations
  - » Type Adi: Suitable for AC + Pulsating DC (Type A) + Harmonics

### Type-Adi

| Rating        | Sensitivity | Modules<br>1 Mod = 17.5 mm | CAT Nos.    | M.R.P. (₹)<br>Per Unit |
|---------------|-------------|----------------------------|-------------|------------------------|
| <b>2P Adi</b> |             |                            |             |                        |
| 6A            | 30mA        | 2                          | AUF3D200603 | 9055                   |
|               | 100mA       | 2                          | AUF3D200610 | 9975                   |
|               | 300mA       | 2                          | AUF3D200630 | 10350                  |
| 10A           | 30mA        | 2                          | AUF3D201003 | 9055                   |
|               | 100mA       | 2                          | AUF3D201010 | 9975                   |
|               | 300mA       | 2                          | AUF3D201030 | 10350                  |
| 16A           | 30mA        | 2                          | AUF3D201603 | 9055                   |
|               | 100mA       | 2                          | AUF3D201610 | 9975                   |
|               | 300mA       | 2                          | AUF3D201630 | 10350                  |
| 20A           | 30mA        | 2                          | AUF3D202003 | 9055                   |
|               | 100mA       | 2                          | AUF3D202010 | 9975                   |
|               | 300mA       | 2                          | AUF3D202030 | 10350                  |
| 25A           | 30mA        | 2                          | AUF3D202503 | 9055                   |
|               | 100mA       | 2                          | AUF3D202510 | 9975                   |
|               | 300mA       | 2                          | AUF3D202530 | 10350                  |
| 32A           | 30mA        | 2                          | AUF3D203203 | 9055                   |
|               | 100mA       | 2                          | AUF3D203210 | 9975                   |
|               | 300mA       | 2                          | AUF3D203230 | 10350                  |
| 40A           | 30mA        | 2                          | AUF3D204003 | 9055                   |
|               | 100mA       | 2                          | AUF3D204010 | 9975                   |
|               | 300mA       | 2                          | AUF3D204030 | 10350                  |
| 63A           | 30mA        | 4                          | AUF3D206303 | 10475                  |
|               | 100mA       | 4                          | AUF3D206310 | 11080                  |
|               | 300mA       | 4                          | AUF3D206330 | 11180                  |
| <b>4P Adi</b> |             |                            |             |                        |
| 16A           | 30mA        | 7.5                        | AUF3D401603 | 9465                   |
|               | 100mA       | 7.5                        | AUF3D401610 | 10525                  |
|               | 300mA       | 7.5                        | AUF3D401630 | 10740                  |
| 20A           | 30mA        | 7.5                        | AUF3D402003 | 9465                   |
|               | 100mA       | 7.5                        | AUF3D402010 | 10525                  |
|               | 300mA       | 7.5                        | AUF3D402030 | 10740                  |
| 25A           | 30mA        | 7.5                        | AUF3D402503 | 9465                   |
|               | 100mA       | 7.5                        | AUF3D402510 | 10525                  |
|               | 300mA       | 7.5                        | AUF3D402530 | 10740                  |
| 32A           | 30mA        | 7.5                        | AUF3D403203 | 9765                   |
|               | 100mA       | 7.5                        | AUF3D403210 | 10535                  |
|               | 300mA       | 7.5                        | AUF3D403230 | 10755                  |
| 40A           | 30mA        | 7.5                        | AUF3D404003 | 9915                   |
|               | 100mA       | 7.5                        | AUF3D404010 | 10535                  |
|               | 300mA       | 7.5                        | AUF3D404030 | 10800                  |
| 63A           | 30mA        | 7.5                        | AUF3D406303 | 11880                  |
|               | 100mA       | 7.5                        | AUF3D406310 | 12120                  |
|               | 300mA       | 7.5                        | AUF3D406330 | 12120                  |
| 80A           | 30mA        | 12                         | AUF3D408003 | 35090                  |
|               | 100mA       | 12                         | AUF3D408010 | 35875                  |
|               | 300mA       | 12                         | AUF3D408030 | 35875                  |
| 100A          | 30mA        | 12                         | AUF3D410003 | 37515                  |
|               | 100mA       | 12                         | AUF3D410010 | 38410                  |
|               | 300mA       | 12                         | AUF3D410030 | 38410                  |

\*For technical details, please contact nearest branch office



## SPDs (Surge Protection Devices) [8536]



**New**

### Range Highlights

- › Conforms to IEC 61643-11
- › Available in Type 2 and Type 1+2
- › Type 2 : Protection against indirect lightning and switching surges
  - » Maximum Discharge Current - I<sub>max</sub> up to 70kA
- › Type 1+2 : Protection against direct and indirect lightning surges
  - » Maximum Discharge Current - I<sub>max</sub> up to 100kA

## 800V Solar Application

| Description                          | Configuration | Modules<br>1 Mod =<br>17.5 mm | Voltage<br>(Uc) | Cat. No.        | M.R.P.<br>(₹)<br>Per Unit |
|--------------------------------------|---------------|-------------------------------|-----------------|-----------------|---------------------------|
| Type 2,<br>I <sub>max</sub> 40kA     | 3P            | 4                             | 1500            | AUSP023P40-1500 | 17250                     |
| Type 1+2,<br>I <sub>imp</sub> 12.5kA | 3P            | 5                             | 1360            | AUSP123P50-1360 | 51750                     |
| Type 1+2,<br>I <sub>imp</sub> 12.5kA | 3P            | 4                             | 880             | AUSP123P50-880  | 35500                     |

## 440V Application (Common + Differential Mode)

| Description                          | I <sub>max</sub> | Configuration | Modules<br>1 Mod =<br>17.5 mm | Cat. No.      | M.R.P. (₹)<br>Per Unit |
|--------------------------------------|------------------|---------------|-------------------------------|---------------|------------------------|
| Type 1+2,<br>I <sub>imp</sub> 12.5kA | 50kA             | 1P+N          | 2                             | AUSP121PN50D  | 13750                  |
|                                      |                  | 3P+N          | 4                             | AUSP123PN50D  | 26335                  |
| Type 2                               | 40kA             | 1P+N          | 1                             | AUSP021PN40D  | 8595                   |
|                                      |                  | 3P+N          | 2                             | AUSP023PN40D  | 17175                  |
| Type 2                               | 15kA             | 1P+N          | 1                             | AUSP021PN15D  | 6875                   |
|                                      |                  | 3P+N          | 2                             | AUSP023PN15D  | 13525                  |
| Type 1+2,<br>I <sub>imp</sub> 8kA    | 100kA            | 1P+N          | 2                             | AUSP121PN100D | 12360                  |
|                                      |                  | 3P+N          | 4                             | AUSP123PN100D | 24290                  |
| Type 2                               | 70kA             | 1P+N          | 2                             | AUSP021PN70D  | 13500                  |
|                                      |                  | 3P+N          | 4                             | AUSP023PN70D  | 22485                  |

## SPD Cartridges

| Description                                 | Cat. No.      | M.R.P. (₹)<br>Per Unit |
|---------------------------------------------|---------------|------------------------|
| Cartridge for AUSP021PN15D                  | AUSC021PN15D  | 3380                   |
| Cartridge for AUSP021PN40D                  | AUSC021PN40D  | 4210                   |
| Cartridge for AUSP021PN70D / AUSP023PN70D   | AUSC021PN70D  | 4500                   |
| Cartridge for AUSP023PN15D <sup>#</sup>     | AUSC023PN15D  | 4420                   |
| Cartridge for AUSP023PN40D <sup>#</sup>     | AUSC023PN40D  | 5620                   |
| Cartridge for AUSP121PN100D / AUSP123PN100D | AUSC121PN100D | 6745                   |
| Cartridge for AUSP121PN50D / AUSP123PN50D   | AUSC121PN50D  | 7280                   |
| Cartridge for AUSP023PN15D <sup>#</sup>     | AUSC023PN15DG | 4900                   |
| Cartridge for AUSP023PN40D <sup>#</sup>     | AUSC023PN40DG | 5115                   |

<sup>#</sup>For technical details, please contact nearest branch office

## ACCL (Automatic Changeover with Current Limiter) [8536]

### Single Phase ACCL



### Range Highlights

- › Conforms to IEC 60947-6, IEC 60947-3
- › Wide Range of Current Ratings
  - » (Generator side) - 1A to 30A
  - » (Electricity Board side) - 30A
- › RoHS compliant

| Description<br>EB/DG | Modules<br>1 Mod = 17.5 mm | CAT Nos.      | M.R.P. (₹)<br>Per Unit |
|----------------------|----------------------------|---------------|------------------------|
| 30A/1A               | 4                          | AUCL01030001  | 3045                   |
| 30A/1.5A             | 4                          | AUCL010301E5  | 3045                   |
| 30A/2A               | 4                          | AUCL01030002  | 3045                   |
| 30A/2.5A             | 4                          | AUCL010302E5  | 3045                   |
| 30A/3A               | 4                          | AUCL01030003  | 3045                   |
| 30A/4A               | 4                          | AUCL01030004  | 3045                   |
| 30A/5A               | 4                          | AUCL01030005  | 3045                   |
| 30A/6A               | 4                          | AUCL01030006  | 3045                   |
| 30A/8A               | 4                          | AUCL01030008  | 3045                   |
| 30A/10A              | 4                          | AUCL01030010  | 3045                   |
| 30A/12A              | 4                          | AUCL01030012  | 3045                   |
| 30A/15A              | 4                          | AUCL01030015  | 3045                   |
| 30A/20A              | 4                          | AUCL01030020  | 3045                   |
| 30A/30A              | 4                          | AUCL01030030* | 3045                   |

\*Non-current limiting variant

### Three Phase ACCL



### Range Highlights

- › Settable overload current limit at DG side
- › Separate power consumption monitoring for Mains & Genset
- › Settable overvoltage & undervoltage protection
- › Settable TPN or SPN mode at DG side
- › Protection against single phasing

| Description (AC-1)<br>EB/DG | Cat. No.     | M.R.P. (₹)<br>Per Unit |
|-----------------------------|--------------|------------------------|
| 32A / 32A                   | AUCL03032032 | 18415                  |
| 40A / 32A                   | AUCL03040032 | 18975                  |
| 40A / 40A                   | AUCL03040040 | 20540                  |
| 50A / 50A                   | AUCL03050050 | 29275                  |
| 63A / 50A                   | AUCL03063050 | 32300                  |
| 63A / 63A                   | AUCL03063063 | 36590                  |
| 80A / 80A                   | AUCL03080080 | 55765                  |
| 125A / 125A                 | AUCL03125125 | 93870                  |

For 3 Phase ACCL programming video  
please scan the QR code or click here



## Changeover Switches [8536]



### Range Highlights

- › Conforms to IEC 60947-3 and IS/IEC 60947-3
- › Available in 3 positions (I-O-II) with centre off position
- › Utilization category AC-22A

| Rating             | Modules<br>1 Mod = 17.5 mm | Cat. No.    | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------------------|-------------|------------------------|
| <b>Double Pole</b> |                            |             |                        |
| 25A                | 2                          | AUC00202500 | 2270                   |
| 40A                | 2                          | AUC00204000 | 3475                   |
| 63A                | 3                          | AUC00206300 | 4040                   |
| <b>Four Pole</b>   |                            |             |                        |
| 40A                | 4                          | AUC00404000 | 5985                   |
| 63A                | 6                          | AUC00406300 | 6785                   |

## Accessories

### Accessories [8538]



All Half Module and One Module Accessories are common for AU MCBs, RCCBs and RCBs

| Description                                        | Configuration                                                               | Modules<br>1 Mod = 17.5 mm | Voltage         | CAT Nos.    | M.R.P. (₹)<br>Per Unit |
|----------------------------------------------------|-----------------------------------------------------------------------------|----------------------------|-----------------|-------------|------------------------|
| Auxiliary Contact                                  | 1NO+1NC                                                                     | 0.5                        | 240V AC, 24V DC | AUAXAC240   | 1255                   |
| AUX/TAC*                                           | 1NO+1NC                                                                     | 0.5                        | 240V AC, 24V DC | AUATAC240   | 1470                   |
| HR AUX/TAC*                                        | 1NO+1NC                                                                     | 0.5                        | 240V AC, 24V DC | AUATAC240HR | 1470                   |
| Undervoltage Release                               | -                                                                           | 1                          | 240V AC         | AUUVAC240   | 2965                   |
| Release                                            | -                                                                           | 1                          | 24V DC          | AUUVDC024   | 2965                   |
| Overvoltage Release                                | -                                                                           | 1                          | 240V AC         | AUOVAC240   | 3665                   |
| Shunt Release                                      | -                                                                           | 1                          | 240V AC         | AUSRAC240   | 3400                   |
|                                                    | -                                                                           | 1                          | 24V DC          | AUSRDC024   | 3400                   |
| Padlock-Suitable for Lock Hasp 3.5 - 5 mm dia. max | Suitable for 1Pole=1Mod devices: RCCBs, RCBs, Changeover Switches up to 40A |                            |                 | AUPD01      | 670                    |
|                                                    | Suitable for 1Pole-1.5Mod devices: MCBs 80A-125A, Changeover Switch 63A     |                            |                 | AUPD02      | 755                    |

**Note:** Standard Pack Quantity for Padlock - 2 Nos.

\*For 80A-125A MCBs please contact nearest branch office

## Control & Monitoring Devices

### Modular Contactors [8536]



### Range Highlights

- › Wide Range of Current Ratings:
  - › 25A, 40A and 63A
- › Conforms to :
  - › IEC 61095, EN 61095
  - › IEC 60947-4-1, EN 60947-4-1
  - › IEC 60947-5-1
- › Protection Degree IP 20

| Description (AC-1) | Modules<br>1 Mod = 17.5 mm | Cat. No.    | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------------------|-------------|------------------------|
| 25A-1NO            | 1                          | AUMC1002501 | 2545                   |
| 25A-2NO            | 1                          | AUMC2002501 | 3195                   |
| 40A-2NO            | 3                          | AUMC2004003 | 5465                   |
| 40A-3NO            | 3                          | AUMC3004003 | 7830                   |
| 40A-4NO            | 3                          | AUMC4004003 | 9185                   |
| 63A-2NO+2NC        | 3                          | AUMC2206303 | 9710                   |
| 63A-3NO            | 3                          | AUMC3006303 | 9950                   |
| 63A-4NO            | 3                          | AUMC4006303 | 10955                  |

### Accessory [8538]

|                        |     |            |      |
|------------------------|-----|------------|------|
| Auxiliary Contact, 2NO | 0.5 | AUMCAUX240 | 2380 |
|------------------------|-----|------------|------|

### Energy Meters [9030]



### Range Highlights

- › DIN mounting whole current operated meter
- › Accuracy Class 1.0
- › Inbuilt RS485 option
- › **Parameters :** Voltage, Current, kW, kWh, kVA, kVAh, RPM, Load hours, Interruptions

| Description                | Modules<br>1 Mod = 17.5 mm | Cat. No.     | M.R.P. (₹)<br>Per Unit |
|----------------------------|----------------------------|--------------|------------------------|
| Single Phase - 60A         | 2                          | WD4010100000 | 3580                   |
| Three Phase - 80A          | 5                          | WD4020100000 | 7755                   |
| Single Phase - 60A (RS485) | 2                          | WD4010110000 | 5295                   |
| Three Phase - 80A (RS485)  | 5                          | WD4020110000 | 11700                  |

### Indicating Lights [8531]



| Description     | Modules<br>1 Mod = 17.5 mm | Cat. No.    | M.R.P. (₹)<br>Per Unit |
|-----------------|----------------------------|-------------|------------------------|
| RED             | 1                          | AUIL01RED00 | 1465                   |
| YELLOW          | 1                          | AUIL01YEL00 | 1465                   |
| BLUE            | 1                          | AUIL01BLU00 | 1465                   |
| GREEN           | 1                          | AUIL01GRE00 | 1465                   |
| RED-YELLOW-BLUE | 1                          | AUIL01RYB00 | 1780                   |

### Auxiliary & Accessories for Exora MCBs [8538]



| Description                                          | Cat. No. | M.R.P. (₹) Per Unit |
|------------------------------------------------------|----------|---------------------|
| Auxiliary Contact - 6A , 240V AC, (1NO+1NC), 0.5 Mod | BZA11006 | 1205                |
| Shunt Release - 240V AC, 1 Mod                       | BZS00240 | 3295                |
| Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod | BZT11006 | 1405                |





## Plugs



## Highlights

- › Conforms to IEC 60309 -1&2
- › Mechanical Impact - IK08
- › Ingress Protection - IP44 & IP67
- › Fire Resistance - 850°C as per IEC 60695-2-11
- › Easy Screw connection with same orientation of clamp screws

| Description        | Cat NO     | M.R.P. (₹)<br>Per Unit |
|--------------------|------------|------------------------|
| <b>Plug - IP44</b> |            |                        |
| 16A, 2P+E          | PSKPM30164 | 700                    |
| 32A, 2P+E          | PSKPM30324 | 1105                   |
| 16A, 3P+E          | PSKPM40164 | 895                    |
| 32A, 3P+E          | PSKPM40324 | 1305                   |
| 16A, 3P+N+E        | PSKPM50164 | 945                    |
| 32A, 3P+N+E        | PSKPM50324 | 1260                   |
| <b>Plug - IP67</b> |            |                        |
| 16A, 2P + E        | PSKPM30167 | 1560                   |
| 32A, 2P + E        | PSKPM30327 | 2200                   |
| 63A, 2P + E        | PSKPM30637 | 6250                   |
| 16A, 3P + E        | PSKPM40167 | 1760                   |
| 32A, 3P + E        | PSKPM40327 | 2785                   |
| 63A, 3P + E        | PSKPM40637 | 5950                   |
| 16A, 3P + N + F    | PSKPM50167 | 1885                   |
| 32A, 3P + N + E    | PSKPM50327 | 2400                   |
| 63A, 3P + N + E    | PSKPM50637 | 5965                   |
| 125A, 3P + N + E   | PSKPM51257 | 18215                  |

## Socket



## Highlights

- › Conforms to IEC 60309 -1&2
- › Mechanical Impact - IK08
- › Ingress Protection - IP44 & IP67
- › Fire Resistance - 850°C as per IEC 60695-2-11
- › Easy Screw connection with same orientation of clamp screws

| Description          | Cat NO     | M.R.P. (₹)<br>Per Unit |
|----------------------|------------|------------------------|
| <b>Socket - IP44</b> |            |                        |
| 16A, 2P+E            | PSKSM30164 | 970                    |
| 32A, 2P+E            | PSKSM30324 | 1355                   |
| 16A, 3P+E            | PSKSM40164 | 1140                   |
| 16A, 3P + N + E      | PSKSM50164 | 1240                   |
| 32A, 3P + N + E      | PSKSM50324 | 1660                   |
| <b>Socket - IP67</b> |            |                        |
| 16A, 2P+E            | PSKSM30167 | 1830                   |
| 32A, 2P+E            | PSKSM30327 | 2515                   |
| 63A, 2P+E            | PSKSM30637 | 6800                   |
| 16A, 3P+E            | PSKSM40167 | 2295                   |
| 63A, 3P+E            | PSKSM40637 | 6865                   |
| 16A, 3P + N + E      | PSKSM50167 | 2400                   |
| 32A, 3P + N + E      | PSKSM50327 | 2805                   |
| 63A, 3P + N + E      | PSKSM50637 | 6975                   |
| 125A, 3P + N + E     | PSKSM51257 | 21895                  |

## Socket Angled



## Highlights

- › Conforms to IEC 60309 -1&2
- › Mechanical Impact - IK08
- › Ingress Protection - IP44 & IP67
- › Fire Resistance - 850°C as per IEC 60695-2-11
- › Easy Screw connection with same orientation of clamp screws

| Description                 | Cat NO     | M.R.P. (₹)<br>Per Unit |
|-----------------------------|------------|------------------------|
| <b>Socket Angled - IP44</b> |            |                        |
| 16A, 2P+E                   | PSKSA30164 | 755                    |
| 32A, 2P+E                   | PSKSA30324 | 1335                   |
| 16A, 3P+E                   | PSKSA40164 | 1140                   |
| 32A, 3P+E                   | PSKSA40324 | 1575                   |
| 16A, 3P+N+E                 | PSKSA50164 | 1215                   |
| 32A, 3P+N+E                 | PSKSA50324 | 1540                   |
| <b>Socket Angled - IP67</b> |            |                        |
| 16A, 2P+E                   | PSKSA30167 | 1440                   |
| 32A, 2P+E                   | PSKSA30327 | 1875                   |
| 63A, 2P+E                   | PSKSA30637 | 6140                   |
| 32A, 3P+E                   | PSKSA40327 | 2785                   |
| 63A, 3P+E                   | PSKSA40637 | 6150                   |
| 32A, 3P+N+E                 | PSKSA50327 | 2220                   |
| 63A, 3P+N+E                 | PSKSA50637 | 6275                   |
| 125A, 3P+N+E                | PSKSA51257 | 20820                  |

## Socket Straight



## Highlights

- › Conforms to IEC 60309 -1&2
- › Mechanical Impact - IK08
- › Ingress Protection - IP44 & IP67
- › Fire Resistance - 850°C as per IEC 60695-2-11
- › Easy Screw connection with same orientation of clamp screws

| Description                  | Cat NO     | M.R.P. (₹)<br>Per Unit |
|------------------------------|------------|------------------------|
| <b>Socket Straight- IP44</b> |            |                        |
| 16A, 2P+E                    | PSKSS30164 | 860                    |
| 32A, 2P+E                    | PSKSS30324 | 1370                   |
| 32A, 3P+N+E                  | PSKSS50324 | 1715                   |
| <b>Socket Straight- IP67</b> |            |                        |
| 16A, 2P+E                    | PSKSS30167 | 1450                   |
| 63A, 2P+E                    | PSKSS30637 | 7435                   |
| 63A, 3P+E                    | PSKSS40637 | 6210                   |
| 63A, 3P+N+E                  | PSKSS50637 | 6210                   |
| 125A, 3P+N+E                 | PSKSS51257 | 20820                  |



# Distribution Board suitable for Aluminum shuttering (Mivan) Construction



## DBs suitable for Aluminum Shuttering Construction [8537]

### SPN DBs

#### Highlights

- Available in CRCA sheet steel, RAL9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bar | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification label
- With provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing

| Description        | No. of Modules     |    | Cat. Nos. | M.R.P. (₹ )<br>Per Unit |
|--------------------|--------------------|----|-----------|-------------------------|
|                    | Incomer + Outgoing |    |           |                         |
| IP 43 - Metal Door |                    |    |           |                         |
| 4 way              | 2                  | 2  | LTSD04M   | *                       |
| 6 way              | 2                  | 4  | LTSD06M   | *                       |
| 8 way              | 2                  | 6  | LTSD08M   | *                       |
| 12 way             | 2                  | 10 | LTSD12M   | *                       |
| 16 way             | 2                  | 14 | LTSD16M   | *                       |

### TPN DBs

#### Highlights

- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing

| Description        | No. of Modules     |       | Cat. Nos. | M.R.P. (₹)<br>Per Unit |
|--------------------|--------------------|-------|-----------|------------------------|
|                    | Incomer + Outgoing |       |           |                        |
| IP 43 - Metal Door |                    |       |           |                        |
| 4 way              | 8                  | 4+4+4 | LTTD04M   | *                      |
| 6 way              | 8                  | 6+6+6 | LTTD06M   | *                      |
| 8 way              | 8                  | 8+8+8 | LTTD08M   | *                      |

\* For details, please contact nearest branch office



# DESIGN OR SAFETY?

OBVIOUSLY BOTH. OBVIOUSLY EXORA.N DB.

#ExoraHaiTohSafeHai



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**Highlights**

- › Conforms to IEC 61439-1 & 3
- › IK 08-for single door DBs, IK 09-for double door DBs
- › Available in CRCA sheet steel, RAL9003, powder coated
- › Ready to use DBs - Provided with 100A insulated phase bus-bar | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification label
- › With provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing



| Description         | No. of Modules     |    | Cat. Nos.   | M.R.P. (₹ )<br>Per Unit |
|---------------------|--------------------|----|-------------|-------------------------|
|                     | Incomer + Outgoing |    |             |                         |
| IP 30 - Single Door |                    |    |             |                         |
| 4 way               | 2                  | 2  | DESPN004SDS | 2060                    |
| 6 way               | 2                  | 4  | DESPN006SDS | 2155                    |
| 8 way               | 2                  | 6  | DESPN008SDS | 2485                    |
| 12 way              | 2                  | 10 | DESPN012SDS | 2950                    |
| 16 way              | 2                  | 14 | DESPN016SDS | 3610                    |
| 18 way              | 2                  | 16 | DESPN018SDS | 4200                    |
| IP 43 - Metal Door  |                    |    |             |                         |
| 4 way               | 2                  | 2  | DESPN004DDS | 2680                    |
| 6 way               | 2                  | 4  | DESPN006DDS | 3090                    |
| 8 way               | 2                  | 6  | DESPN008DDS | 3305                    |
| 12 way              | 2                  | 10 | DESPN012DDS | 3965                    |
| 16 way              | 2                  | 14 | DESPN016DDS | 5015                    |
| 18 way              | 2                  | 16 | DESPN018DDS | 5250                    |
| IP 43 - Glazed Door |                    |    |             |                         |
| 4 way               | 2                  | 2  | DESPN004GDS | 3590                    |
| 6 way               | 2                  | 4  | DESPN006GDS | 3820                    |
| 8 way               | 2                  | 6  | DESPN008GDS | 4150                    |
| 12 way              | 2                  | 10 | DESPN012GDS | 5055                    |
| 16 way              | 2                  | 14 | DESPN016GDS | 6280                    |
| 18 way              | 2                  | 16 | DESPN018GDS | 6645                    |
| IP 54 - Metal Door  |                    |    |             |                         |
| 4 way               | 2                  | 2  | DESPN00454S | 9355                    |
| 6 way               | 2                  | 4  | DESPN00654S | 10430                   |
| 8 way               | 2                  | 6  | DESPN00854S | 11090                   |
| 12 way              | 2                  | 10 | DESPN01254S | 12735                   |
| 16 way              | 2                  | 14 | DESPN01654S | 14180                   |
| 18 way              | 2                  | 16 | DESPN01854S | 14495                   |

**Highlights**

- › Conforms to IEC 61439-1 & 3
- › IK 08-for single door DBs, IK 09-for double door DBs
- › Available in CRCA sheet steel, RAL 9003, powder coated
- › Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- › With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SPMCBs as outgoing



| Description         | No. of Modules |          | Cat. Nos.   | M.R.P. (₹)<br>Per Unit |
|---------------------|----------------|----------|-------------|------------------------|
|                     | Incomer        | Outgoing |             |                        |
| IP 30 - Single Door |                |          |             |                        |
| 4 way               | 4              | 4+4+4    | DETPE004SDS | 5360                   |
| 6 way               | 4              | 6+6+6    | DETPE006SDS | 6580                   |
| 4 way               | 8              | 4+4+4    | DETPN004SDS | 5645                   |
| 6 way               | 8              | 6+6+6    | DETPN006SDS | 6990                   |
| 8 way               | 8              | 8+8+8    | DETPN008SDS | 8245                   |
| 12 way              | 8              | 12+12+12 | DETPN012SDS | 11880                  |
| 16 way              | 8              | 16+16+16 | DETPN016SDS | 14485                  |
| IP 43 - Metal Door  |                |          |             |                        |
| 4 way               | 4              | 4+4+4    | DETPE004DDS | 6300                   |
| 6 way               | 4              | 6+6+6    | DETPE006DDS | 7830                   |
| 4 way               | 8              | 4+4+4    | DETPN004DDS | 6590                   |
| 6 way               | 8              | 6+6+6    | DETPN006DDS | 8210                   |
| 8 way               | 8              | 8+8+8    | DETPN008DDS | 9855                   |
| 12 way              | 8              | 12+12+12 | DETPN012DDS | 14695                  |
| 16 way              | 8              | 16+16+16 | DETPN016DDS | 18240                  |
| IP 43 - Glazed Door |                |          |             |                        |
| 4 way               | 4              | 4+4+4    | DETPE004GDS | 8555                   |
| 6 way               | 4              | 6+6+6    | DETPE006GDS | 10285                  |
| 4 way               | 8              | 4+4+4    | DETPN004GDS | 8905                   |
| 6 way               | 8              | 6+6+6    | DETPN006GDS | 10840                  |
| 8 way               | 8              | 8+8+8    | DETPN008GDS | 12850                  |
| 12 way              | 8              | 12+12+12 | DETPN012GDS | 19715                  |
| 16 way              | 8              | 16+16+16 | DETPN016GDS | 23695                  |
| IP 54 - Metal Door  |                |          |             |                        |
| 4 way               | 4              | 4+4+4    | DETPE00454S | 21375                  |
| 6 way               | 4              | 6+6+6    | DETPE00654S | 24980                  |
| 4 way               | 8              | 4+4+4    | DETPN00454S | 22590                  |
| 6 way               | 8              | 6+6+6    | DETPN00654S | 27205                  |
| 8 way               | 8              | 8+8+8    | DETPN00854S | 29740                  |
| 12 way              | 8              | 12+12+12 | DETPN01254S | 41920                  |
| 16 way              | 8              | 16+16+16 | DETPN01654S | 50305                  |

For ordering old DBs, replace Cat no with "DB" instead of "DE".

Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.



### Highlights

- › Conforms to IEC 61439-1 & 3
- › IK 09-for double door DBs
- › Available in CRCA sheet steel, RAL 9003, powder coated
- › Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- › With provision for FP MCB / Isolator / RCCB / RCBO as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing



**Horizontal PPI DBs**

**IP 43 - Metal Door**

| Description        | No. of Modules |             |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|-------------|----------|------------|------------------------|
|                    | Incomer        | Sub-Incomer | Outgoing |            |                        |
| IP 43 - Metal Door |                |             |          |            |                        |
| 4 way              | 8              | 2+2+2       | 4+4+4    | DEHPI004DD | 11720                  |
| 6 way              | 8              | 2+2+2       | 6+6+6    | DEHPI006DD | 13875                  |
| 8 way              | 8              | 2+2+2       | 8+8+8    | DEHPI008DD | 16640                  |
| 12 way             | 8              | 2+2+2       | 12+12+12 | DEHPI012DD | 22930                  |
| 16 way             | 8              | 2+2+2       | 16+16+16 | DEHPI016DD | 27510                  |

### Highlights

- › Conforms to IEC 61439-1 & 3
- › IK 09-for double door DBs
- › Available in CRCA sheet steel, RAL 9003, powder coated
- › Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- › With provision for
  - » Modular Incomer - FP MCB/Isolator/RCCB/RCBO as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing
  - » MCCB Incomer - MCCB\* as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing



**With Modular Incomer**

| Description        | No. of Modules |             |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|-------------|----------|------------|------------------------|
|                    | Incomer        | Sub-Incomer | Outgoing |            |                        |
| IP 43 - Metal Door |                |             |          |            |                        |
| 4 way              | 8              | 4+4+4       | 4+4+4    | DEPSG004DD | 17210                  |
| 6 way              | 8              | 4+4+4       | 6+6+6    | DEPSG006DD | 19405                  |
| 8 way              | 8              | 4+4+4       | 8+8+8    | DEPSG008DD | 21650                  |
| 12 way             | 8              | 4+4+4       | 12+12+12 | DEPSG012DD | 26860                  |



**Tier PPI DBs**

| Description        | No. of Modules |             |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|-------------|----------|------------|------------------------|
|                    | Incomer        | Sub-Incomer | Outgoing |            |                        |
| IP 43 - Metal Door |                |             |          |            |                        |
| 6 way              | 8              | 2+2+2       | 6+6+6    | DETP1006DD | 14360                  |
| 8 way              | 8              | 2+2+2       | 8+8+8    | DETP1008DD | 18005                  |
| 10 way             | 8              | 2+2+2       | 10+10+10 | DETP1010DD | 18870                  |
| 12 way             | 8              | 2+2+2       | 12+12+12 | DETP1012DD | 19995                  |
| 16 way             | 8              | 2+2+2       | 16+16+16 | DETP1016DD | 22795                  |
| 12 way             | MCCB*          | 2+2+2       | 12+12+12 | DETPL012DD | 21385                  |

\*Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer



**With MCCB Incomer**

| Description        | No. of Modules |             |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|-------------|----------|------------|------------------------|
|                    | Incomer*       | Sub-Incomer | Outgoing |            |                        |
| IP 43 - Metal Door |                |             |          |            |                        |
| 4 way              | MCCB           | 4+4+4       | 4+4+4    | DEPGL004DD | 23675                  |
| 6 way              | MCCB           | 4+4+4       | 6+6+6    | DEPGL006DD | 27070                  |
| 8 way              | MCCB           | 4+4+4       | 8+8+8    | DEPGL008DD | 31310                  |
| 12 way             | MCCB           | 4+4+4       | 12+12+12 | DEPGL012DD | 35310                  |

\*Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer



## Vertical TPN DB with MCCB Incomer [8537]



### Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door DBs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with insulated vertical phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for 3 pole and 4 Pole MCCB\* as incomer and SP/TP MCBs as outgoing



### Up to 125A MCCB Incomer

| Description        | No. of Modules |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|----------|------------|------------------------|
|                    | Incomer*       | Outgoing |            |                        |
| IP 43 - Metal Door |                |          |            |                        |
| 4 way              | MCCB           | 4+4+4    | DEVTL004DD | 19205                  |
| 6 way              | MCCB           | 6+6+6    | DEVTL006DD | 21825                  |
| 8 way              | MCCB           | 8+8+8    | DEVTL008DD | 24030                  |
| 12 way             | MCCB           | 12+12+12 | DEVTL012DD | 32690                  |
| 16 way             | MCCB           | 16+16+16 | DEVTL016DD | 38995                  |
| IP 54 - Metal Door |                |          |            |                        |
| 4 way              | MCCB           | 4+4+4    | DEVTL00454 | 39780                  |
| 6 way              | MCCB           | 6+6+6    | DEVTL00654 | 45360                  |
| 8 way              | MCCB           | 8+8+8    | DEVTL00854 | 49105                  |

\*Suitable for 3 Pole & 4 Pole DZO MCCB as incomer.  
In case of any other MCCB frame requirement please contact nearest branch.

## Vertical TPN DB with Modular Incomer [8537]



### Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door DBs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with insulated vertical phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP/ TP MCBs as outgoing



| Description        | No. of Modules |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|----------|------------|------------------------|
|                    | Incomer        | Outgoing |            |                        |
| IP 43 - Metal Door |                |          |            |                        |
| 4 way              | 8              | 4+4+4    | DEVTM004DD | 16240                  |
| 6 way              | 8              | 6+6+6    | DEVTM006DD | 18090                  |
| 8 way              | 8              | 8+8+8    | DEVTM008DD | 21000                  |
| 12 way             | 8              | 12+12+12 | DEVTM012DD | 28325                  |
| 16 way             | 8              | 16+16+16 | DEVTM016DD | 33795                  |
| IP 54 - Metal Door |                |          |            |                        |
| 4 way              | 8              | 4+4+4    | DEVTM00454 | 34330                  |
| 6 way              | 8              | 6+6+6    | DEVTM00654 | 37450                  |
| 8 way              | 8              | 8+8+8    | DEVTM00854 | 41355                  |

## Vertical TPN DB with MCCB Incomer [8537]



### Up to 250A MCCB Incomer

| Description        | No. of Modules |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|----------|------------|------------------------|
|                    | Incomer*       | Outgoing |            |                        |
| IP 43 - Metal Door |                |          |            |                        |
| 4 way              | MCCB           | 4+4+4    | DEVTH004DD | 24955                  |
| 6 way              | MCCB           | 6+6+6    | DEVTH006DD | 27945                  |
| 8 way              | MCCB           | 8+8+8    | DEVTH008DD | 30735                  |
| 12 way             | MCCB           | 12+12+12 | DEVTH012DD | 37195                  |
| 16 way             | MCCB           | 16+16+16 | DEVTH016DD | 49985                  |
| IP 54 - Metal Door |                |          |            |                        |
| 4 way              | MCCB           | 4+4+4    | DEVTH00454 | 45655                  |
| 6 way              | MCCB           | 6+6+6    | DEVTH00654 | 49845                  |
| 8 way              | MCCB           | 8+8+8    | DEVTH00854 | 51555                  |

\*Suitable for 3 pole and 4 pole DU250, DU250C & DN1 MCCB as incomer

## Flexi/Row DB [8537]



### Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door DBs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | cable ties | circuit identification labels
- With provision to mount modular devices as per requirement



| Description               | No. of Modules Per Row | Cat. Nos.  | M.R.P. (₹) Per Unit |
|---------------------------|------------------------|------------|---------------------|
| <b>IP 43 - Metal Door</b> |                        |            |                     |
| 2 Row 28 Module           | 14                     | DEROW228DD | 8390                |
| 3 Row 42 Module           | 14                     | DEROW342DD | 10055               |
| 4 Row 56 Module           | 14                     | DEROW456DD | 10935               |
| 4 Row 64 Module           | 16                     | DEROW464DD | 12720               |

For ordering old DBs, replace Cat no with "DB" instead of "DE".

Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.



## TPN Phase Selector DB [8537]

New

### Highlights

- Conforms to IEC 61439-1 & 3
- IK 09-for double door DBs
- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 3 nos. of 63A E&A rotary switches | 3 nos. of rocker switches for phase identification | 100A insulated phase bus-bars | neutral bar/s with shroud/s | set | earth bar/s | sticking saddles | color-coded interconnecting wire cable ties | blanking plates and circuit identification labels
- With provision for - FP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing



| Description        | No. of Modules |          | Cat. Nos.  | M.R.P. (₹)<br>Per Unit |
|--------------------|----------------|----------|------------|------------------------|
|                    | Incomer        | Outgoing |            |                        |
| IP 43 - Metal Door |                |          |            |                        |
| 4 way              | 8              | 4+4+4    | DEPSR004DD | 21135                  |
| 6 way              | 8              | 6+6+6    | DEPSR006DD | 21475                  |
| 8 way              | 8              | 8+8+8    | DEPSR008DD | 23005                  |
| 10 way             | 8              | 10+10+10 | DEPSR010DD | 24580                  |
| 12 way             | 8              | 12+12+12 | DEPSR012DD | 25915                  |

## EV charging DB 8537]

New

### Highlights

- Engineered specifically Charging application - 3.3 kW
- Robust earth leakage, short circuit and overload protection with RCBO-
- Factory fitted RCBO, switch and socket



| Description | No. of Modules | Cat. Nos.  | M.R.P. (₹) Per Unit |
|-------------|----------------|------------|---------------------|
| 2 way EVDB  | 2              | DEEVC002LD | *                   |
| 4 way EVDB  | 4              | DEEVC004LD | *                   |

\* For details, please contact nearest branch office

## Enclosure [8537]

New

### Highlights

- Conforms to IEC 61439-1 & 3
- Suitable for Surface and Flush mounting
- Available in CRCA sheet steel, RAL9003, powder coated
- With provision to mount MCB/Isolator/RCCB/RCBO and other modular devices



### IP 30 - Metal Door

| Description               | No. of Modules | Cat. Nos.  | M.R.P. (₹) Per Unit |
|---------------------------|----------------|------------|---------------------|
| <b>IP 30 - Metal Door</b> |                |            |                     |
| 2 way                     | 2              | DEENC002SD | 1045                |
| 3 way                     | 3              | DEENC003SD | 1045                |
| 4 way                     | 4              | DEENC004SD | 1045                |
| 6 way                     | 6              | DEENC006SD | 1620                |

For ordering old DBs, replace Cat no with "DB" instead of "DE".

Eq. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.

## Plug & Socket DB [8537]

New

### Highlights

- Conforms to IEC 61439-1 & 3
- Suitable for Surface and Flush mounting
- Available in CRCA sheet steel, RAL9003, powder coated
- Loose Metal Plugs & Sockets conforms to IS 8804; available in Single Phase & Three Phase



### Metal Plug & Socket

### Plastic Plug & Socket

| Description                       | No. of Pins | No. of Modules | Cat. Nos.  | M.R.P. (₹) Per Unit |
|-----------------------------------|-------------|----------------|------------|---------------------|
| <b>Metal Plug &amp; Sockets</b>   |             |                |            |                     |
| 10 A, 2 Pin + SC^                 | P + N       | 1              | DEMPS110SD | 2595                |
| 20 A, 2 Pin + SC^                 | P + N       | 1              | DEMPS120SD | 2790                |
| 20 A, 2 Pin + SC^                 | P + N       | 2              | DEMPS220SD | 3025                |
| 20 A, 3 Pin + SC^                 | 3P          | 3              | DEMPS320SD | 5125                |
| 32 A, 3 Pin + SC^                 | 3P          | 3              | DEMPS332SD | 6065                |
| 32 A, 3 Pin + SC^                 | 3P          | 4              | DEMPS432SD | 6450                |
| 63 A, 5 Pin + SC^                 | 3P+N+E      | 4              | DEMPS463SD | 21860               |
| <b>Plastic Plug &amp; Sockets</b> |             |                |            |                     |
| 16 A, 3 Pin                       | P+N+E       | 2              | DEPPS316SD | 4245                |
| 32 A, 3 Pin                       | P+N+E       | 4              | DEPPS332SD | 4575                |
| 32 A, 5 Pin                       | 3P+N+E      | 8              | DEPPS532SD | 7645                |
| 63 A, 5 Pin                       | 3P+N+E      | 8              | DEPPS563SD | 19160               |

### Metal Plug [8536]



| Description       | No. of Pins | Cat. Nos. | M.R.P. (₹) Per Unit |
|-------------------|-------------|-----------|---------------------|
| 10 A, 2 Pin + SC^ | P + N       | MPS210P   | 320                 |
| 20 A, 2 Pin + SC^ | P + N       | MPS220P   | 340                 |
| 20 A, 3 Pin + SC^ | 3P          | MPS320P   | 450                 |
| 32 A, 3 Pin + SC^ | 3P          | MPS332P   | 855                 |

Note: Standard pack quantity - 20 nos.

### Metal Socket [8536]



| Description       | No. of Pins | Cat. Nos. | M.R.P. (₹) Per Unit |
|-------------------|-------------|-----------|---------------------|
| 10 A, 2 Pin + SC^ | P + N       | MPS210S   | 335                 |
| 20 A, 2 Pin + SC^ | P + N       | MPS220S   | 370                 |
| 20 A, 3 Pin + SC^ | 3P          | MPS320S   | 505                 |
| 32 A, 3 Pin + SC^ | 3P          | MPS332S   | 855                 |

^ SC-Scraping Earth

Note: Standard pack quantity - 20 nos.



## DBs with provision for TV / Telephone splitters [8537]

New

### Highlights

- › Distribution Boards equipped with provisions to mount TV / Telephone splitters
- › Available in SPN & TPN DBs
- › Communication DB equipped with provisions to mount 2 ONT, Spike guard, Data switch, TV / Telephone splitters



TV / Telephone



Communication DB

## Cable End Boxes [8537]

### Highlights

- › Available in CRCA sheet steel, RAL9003, powder coated
- › Can be either at the top or bottom of the distribution board

| Description                           | Cat. Nos.   | M.R.P. (₹) Per Unit |
|---------------------------------------|-------------|---------------------|
| <b>CEB for SPN DBs</b>                |             |                     |
| CEB-SPN Double Door, 4 way            | DESPN004CBS | 1145                |
| CEB-SPN Double Door, 6 way            | DESPN006CBS | 1235                |
| CEB-SPN Double Door, 8 way            | DESPN008CBS | 1380                |
| CEB-SPN Double Door, 12 way           | DESPN012CBS | 1535                |
| CEB-SPN Double Door, 16 way           | DESPN016CBS | 2160                |
| CEB-SPN Double Door, 18 way           | DESPN018CBS | 2230                |
| <b>CEB for TPN DBs</b>                |             |                     |
| CEB-TPE Double Door, 4 way            | DETPE004CBS | 1480                |
| CEB-TPE Double Door, 6 way            | DETPE006CBS | 2110                |
| CEB-TPN Double Door, 4 way            | DETPN004CBS | 1550                |
| CEB-TPN Double Door, 6 way            | DETPN006CBS | 2175                |
| CEB-TPN Double Door, 8 way            | DETPN008CBS | 2735                |
| CEB-TPN Double Door, 12 way           | DETPN012CBS | 4550                |
| CEB-TPN Double Door, 16 way           | DETPN016CBS | 4595                |
| <b>CEB for Horizontal PPI DBs</b>     |             |                     |
| CEB-Horz. PPI Double Door, 4 way      | DEHPI004CB  | 2295                |
| CEB-Horz. PPI Double Door, 6 way      | DEHPI006CB  | 2865                |
| CEB-Horz. PPI Double Door, 8 way      | DEHPI008CB  | 3595                |
| CEB-Horz. PPI Double Door, 12 way     | DEHPI012CB  | 4510                |
| CEB-Horz. PPI Double Door, 16 way     | DEHPI016CB  | 4905                |
| <b>CEB for VTPN DBs</b>               |             |                     |
| CEB-VTPN Double Door, Modular Incomer | DEVTMXXCB   | 1535                |
| CEB-VTPN Double Door, MCCB Incomer    | DEVTXXXXCB  | 5420                |
| <b>CEB for Phase Segregated DBs</b>   |             |                     |
| CEB-PSG Double Door, 4 way            | DEPSG004CB  | 4025                |
| CEB-PSG Double Door, 6 way            | DEPSG006CB  | 4795                |
| CEB-PSG Double Door, 8 way            | DEPSG008CB  | 5295                |
| CEB-PSG Double Door, 12 way           | DEPSG012CB  | 5895                |

| DB Type            | Description | No. of Modules     |       | Cat. Nos.    | M.R.P.<br>(₹)<br>Per Unit |
|--------------------|-------------|--------------------|-------|--------------|---------------------------|
|                    |             | Incomer + Outgoing |       |              |                           |
| IP 43 - Metal Door |             |                    |       |              |                           |
| SPN                | 6 way       | 2                  | 4     | DESPN006DDTV | 5835                      |
|                    | 8 way       | 2                  | 6     | DESPN008DDTV | 6275                      |
|                    | 12 way      | 2                  | 10    | DESPN012DDTV | 7720                      |
|                    | 16 way      | 2                  | 14    | DESPN016DDTV | 8960                      |
|                    | 18 way      | 2                  | 16    | DESPN018DDTV | 10595                     |
| TPN                | 4 way       | 8                  | 4+4+4 | DETPN004DDTV | 11470                     |
|                    | 6 way       | 8                  | 6+6+6 | DETPN006DDTV | 13255                     |
|                    | 8 way       | 8                  | 8+8+8 | DETPN008DDTV | 15800                     |
| Communication DB   |             |                    |       | DECOM01DD    | *                         |

\* For details, please contact nearest branch office

## DB Accessories

### Busbar - Fork Type [8538]

#### Highlights

- › Available in Single Pole, Double Pole, Three Pole and Four Pole versions
- › Material : Copper



| Description        | Cat. Nos.. | M.R.P. (₹) Per Unit | Std. Pack Qty. |
|--------------------|------------|---------------------|----------------|
| SP 13 Mod          | BSP13      | 510                 | 5              |
| SP 56 Mod          | BSP56      | 2095                | 5              |
| DP 12 Mod          | BDP12      | 910                 | 5              |
| TP 12 Mod          | BTP12      | 985                 | 5              |
| FP 12 Mod          | BFP12      | 1945                | 5              |
| End Caps for SP    | ECP01      | 35                  | 10             |
| End Caps for DP/TP | ECP03      | 70                  | 10             |
| End Caps for FP    | ECP04      | 115                 | 10             |



### Blanking Plates [8538]

#### Highlights

- › Available in One module and Half module

| Description | Cat. Nos. | M.R.P. (₹) Per Unit | Std. Pack Qty. |
|-------------|-----------|---------------------|----------------|
| One Module  | BKP10     | 35                  | 10             |
| Half Module | BKP05     | 35                  | 10             |



PDK02

### Padlock [8301]

#### Highlights

- › Version with standard lock and a common key

| Description      | Cat. Nos. | M.R.P. (₹) Per Unit | Std. Pack Qty. |
|------------------|-----------|---------------------|----------------|
| Lock and Key Kit | PDK02     | 890                 | 5              |

For ordering old DBs, replace Cat no with "DB" instead of "DE".

Eg. - New DB Cat no for SPN 12W DD - DESPN012DDS, Old DB Cat no for same will be DBSPN012DDS. Old DBs are available till stock last.





## Discontinued Products/Suggested Alternate Products

| Product Group    | Discontinued Products                                                      | Suggested Alternate Products                                                                                         |
|------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| ACB              | C-Power ACB with SR71 Release                                              | 1. OMEGA ACB with MTX 3.5 Release<br>2. C-Power Bus-Coupler ACB + numrAL FDR22 + Protection class CT + Shunt Release |
| MCCB             | DZ6-400Z 3P & 4P MCCBs 50/40kA (Icu/Ics)                                   | DZ6-400Z 3P & 4P MCCBs 50/50kA (Icu/Ics)                                                                             |
| MCCB             | DZ0 100A 3P Spreaders - EM992820000<br>DZ0 100A 4P Spreaders - EM992830000 | DN0 100A 3P Spreaders - CM977850000<br>DN0 100A 4P Spreaders - CM979210000                                           |
| Contactors       | MN0 control contactor, its spares and accessories                          | MO0 control contactor, its spares and accessories                                                                    |
| Contactors       | MR Contactors                                                              | MNX 2P/ MU-2P                                                                                                        |
| FDP              | Common Mode SPD                                                            | Common+ Differential Mode SPD                                                                                        |
| FDP              | AU-CON convertor module                                                    | TG1000 Gateway                                                                                                       |
| Soft Starters    | CSX                                                                        | xS1000                                                                                                               |
| Soft Starters    | CSXi                                                                       | xS2000                                                                                                               |
| Soft Starters    | EMX4e                                                                      | xS3000                                                                                                               |
| Soft Starters    | EMX4i                                                                      | xS4000                                                                                                               |
| AC Drives        | x2000 Series                                                               | xD Series                                                                                                            |
| Protection Relay | MC31/MC61                                                                  | FDR21/FDR22                                                                                                          |
| Protection Relay | TCS01NX                                                                    | TCS11                                                                                                                |
| Fusegear         | Fuse Mounting Kit                                                          |                                                                                                                      |
| Fusegear         | FNX Series                                                                 | FN Series                                                                                                            |



## General Terms

All prices are on Maximum retail price basis inclusive of all duties, GST & any other tax as applicable.

## Warranty Policy

All products listed in the price list are covered by a warranty against manufacturing defects for a period of 18\* months from the date of purchase. For Lauritz Knudsen MCBs & Isolators mounted inside Lauritz Knudsen Distribution Boards, an extended warranty of 5 years is provided.

In the event of a defect due to faulty workmanship or other associated reasons, we will, at our discretion, remedy the defect or replace the faulty parts or the entire product as soon as possible, free of cost.

However, the warranty is subject to proper usage, efficient maintenance, and does not cover defects arising from fire, accidents, inefficient maintenance, faulty operation, or deliberate or accidental damage. It also does not cover damage to power electronic components such as thyristors & IGBTs, which primarily fail due to overtemperature & over-voltage. Users need to take adequate precautions to eliminate these conditions. Manufacturer shall not be responsible & liable for any special, incidental, social or consequential (including lost profits) loss, consequential damages, injury or damages (punitive) of any kind solely attributable to defect or failure of its products. Manufacturer shall not be liable in any manner for the issue of or failure in the performance of other equipment the product is attached to.

## Comprehensive Service Support

Lauritz Knudsen Electrical & Automation has over seven decades of experience in providing after sales service for low voltage distribution system in every type of industry & commercial complex in India

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Tel: 9899020306 / 9720186726 / 9560845094  
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Switchgear Training Centre,  
2nd Floor, Block BN3, Sector V,  
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Tel: 7738717893 / 7797795567  
E-mail: STC-KOLKATA@LK-EA.com



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Tel: 0265 6147805 / 6147808  
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Lauritz Knudsen Electrical & Automation  
Switchgear Training Centre  
Ooty-Coonoor Main Road  
Yellanahalli P.O.,  
The Nilgiris - 643 243  
Tel: 0423 251 7107  
E-mail: STC-COONOOR@LK-EA.com

Customer Interaction Center (CIC)  
Phone no: 022 6932 7800  
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Tel: 022-6722 6300 | Fax: 022-6705 1112 | e-mail: CIC@LK-EA.com

## BRANCH OFFICES

Lauritz Knudsen Electrical & Automation  
C-201, The First Commercial Complex,  
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**Ahmedabad - 380 015**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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Plot No. 17, 2nd Cross, Near Old Income  
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**Hubballi - 580 021**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
No.10, Fortuna Towers, 2nd Floor,  
Rana Pratap Marg, Near NBRI,  
**Lucknow - 226 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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Grand Chandra Complex, Frazer Road  
**Patna - 800 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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**Bengaluru - 560 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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4th floor, 1405, Umanagar, Begumpet,  
**Hyderabad - 500 016**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
El Dorado Building, 3rd Floor, 6,  
Venkatraman Street, Chinna Chokkikulam,  
**Madurai - 625 002**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
UrbanWrk, 5th Floor, Sai Radhe,  
Raja Bahadur Mill Road, Behind Hotel  
Grand Sheraton, Sangamwadi  
**Pune - 411 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Work loop Unit-612, 6th Floor,  
Esplanade One, Rasulgarh,  
**Bhubaneswar - 751 010**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Workie, 214 - 2nd Floor,  
Apollo Premier, PU-4,  
Scheme No. 54, Vijay Nagar Square,  
**Indore - 452 010**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Bestech Business Park,  
Tower - A, 2nd floor, Sector - 66  
**Mohali - 160059**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Office No. 211 & 212, Pithalia Plaza,  
KK Road, Near Fafadih Chowk,  
**Raipur - 492 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
801 Word Level-8, No. 28,  
SIDCO Industrial Estate, Guindy,  
**Chennai - 600 032**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Office No. 430, 4th Floor,  
Jaipur Electronic Market, Riddhi Siddhi,  
Gopalpura Bypass,  
**Jaipur - 302 018**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
TC II, Tower B, PRIMA BAY Gate No. 5,  
Saki Vihar Road Powai,  
**Mumbai - 400 072**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

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**Rajkot - 360 001**  
Phone No: 022-6932 7800  
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Bistupur, Opposite St. Mary's Church,  
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Lauritz Knudsen Electrical & Automation  
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Phone No: 022-6932 7800  
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Lauritz Knudsen Electrical & Automation  
10th Floor, Titaanium Business,  
Bhimrad Road, Althan  
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Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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Main Chakrata Road, Opp. Anandam,  
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**Dehradun - 248 001**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Business Communication Centre  
2nd Floor, Chiramel Chambers,  
Kurusipally Road, Ravipuram,  
**Kochi - 682 015**  
Phone No: 022-6932 7800  
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Lauritz Knudsen Electrical & Automation  
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Himalaya Excellency,  
Plot No. C-47, Pratap Nagar Square,  
**Nagpur - 440 022**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
11th Floor, Block-D, Notus IT Park,  
Sarabhai Campus, Bhailal Amin Marg,  
**Vadodara - 390 023**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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Sector 2A, Bidhan Nagar,  
**Durgapur - 713 212**  
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e-mail: CIC@LK-EA.com

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Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
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Opposite Titan World,  
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e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
Qubexpro Business Centre,  
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Facor Layout, Waltair Uplands,  
**Visakhapatnam - 530 003**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
6th Floor, Exotica Greens, A Block, 191,  
R G Baruah Road, Guwahati Central,  
**Guwahati - 781 005**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
2nd Floor, BN3, Salt Lake, Sector-V,  
**Kolkata - 700 091**  
Phone No: 022-6932 7800  
e-mail: CIC@LK-EA.com

Lauritz Knudsen Electrical & Automation  
A-25, 1st Floor, Imperia Complex,  
Mohan Corporate Industrial Estate,  
Near Sarita Vihar Metro Station,  
Mathura Road,  
**New Delhi - 110 044**  
Phone no: 022-6932 7800  
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Product improvement is a continuous process. For the latest information and special application, please contact any of our offices listed here. Product photographs shown for representative purpose only.



### Lauritz Knudsen Electrical & Automation, Electrical Standard Product

A/600, Shil-Mahape Road, TTC Industrial Area, MIDC Thane, Navi Mumbai, 400 710, Maharashtra, Phone No: 022-6722 6300 | Web: www.LK-EA.com

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