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Contactors

Power Contactors

- | | | | |
|---------------|------------------|---|---------------|
| 1 Pole | 2 Pole | 3 Pole | 4 Pole |
| • MR | • MNX • MU-2P | • MO • MNX • MI • MX Power • ML • MDX (DC Control) • MVO (Vacuum) | • MCX |

Control Relays (Auxiliary Contactors)

- MX0 (Mini) AC/DC
- MO0 AC
- MN0 DC

Capacitor Duty Contactors

- MO C

Definite Purpose Contactors

- MK1
- MU

MI Contactors 6-150A, AC-3 Rating

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- Spares available for entire range
- Optimised for AC1/AC3 applications

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- VFD, Soft Starters applications
- UPS
- Solar and Wind inverters
- Resistive loads
- Battery charging

For more details please contact nearest branch.

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3 Pole Power Contactors - Type MNX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A – 650A AC-3
- Click fit type construction up to 40A
- Coil on top design in 95A and above
- Spares available for entire range



MNX 22



MNX 40



MNX 80



MNX 140



MNX 250



MNX 650

| 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 | 1 NO | CS94106 | 765 | 10 |
| | | | | 1 NC | CS94107 | 765 | 10 |
| | 12 | 30 | MNX 12 | 1 NO | CS94108 | 885 | 10 |
| | | | | 1 NC | CS94109 | 885 | 10 |
| | 18 | 30 | MNX 18 | 1 NO | CS94100 | 1025 | 10 |
| | | | | 1 NC | CS94101 | 1025 | 10 |
| 22 | 32 | MNX 22 | 1 NO | CS94980 | 1200 | 10 | |
| | | | 1 NC | CS94981 | 1200 | 10 | |
| Fr 2 | 25 | 45 | MNX 25 | # | CS94110 | 1235 | 10 |
| | 32 | 55 | MNX 32 | # | CS94111 | 2700 | 10 |
| | 40 | 55 | MNX 40 | # | CS94190 | 4155 | 10 |
| Fr 3 | 50 | 85 | MNX 50 | # | CS97075 | 5475 | 1 |
| | 70 | 100 | MNX 70 | # | CS97076 | 7360 | 1 |
| | 80 | 100 | MNX 80 | # | CS97077 | 9360 | 1 |
| Fr 4 | 95 | 160 | MNX 95 | 2 NO + 2 NC | CS94136 | 12710 | 1 |
| | 110 | 160 | MNX 110 | 2 NO + 2 NC | CS94137 | 15315 | 1 |
| | 140 | 160 | MNX 140 | 2 NO + 2 NC | CS94138 | 20210 | 1 |
| | 185 | 250 | MNX 185 | 2 NO + 2 NC | CS94139 | 24315 | 1 |
| Fr 5 | 225 | 300 | MNX 225 | 2 NO + 2 NC | CS94140 | 26770 | 1 |
| | 250 | 300 | MNX 250 | 2 NO + 2 NC | CS94141 | 30195 | 1 |
| | 300 | 400 | MNX 300 | 2 NO + 2 NC | CS90280 | 36405 | 1 |
| Fr 6 | 400 | 425 | MNX 400 | 2 NO + 2 NC | CS94144 | 44580 | 1 |
| | 550 | 650 | MNX 550 | 2 NO + 2 NC | CS94145 | 66390 | 1 |
| | 650 | 800 | MNX 650 | 2 NO + 2 NC | CS96327 | 99345 | 1 |

Notes:

- 1) # Add-on blocks can be ordered separately
- 2) For ordering MNX/MO/MVO add-on aux contact blocks, please refer page No. 8
- 3) For ordering MNX surge suppressor and MNX/MO MIL kit, please refer page No. 9
- 4) For ordering Suffix, please refer page No. 10
- 5) Standard coil voltage: MNX/MO - 110V, 220V, 240V and 415V, 50Hz.

▲ If using 16 sq mm cable for MO 45 use of spreader link kit is mandatory

▲ For ordering spreader link kit for MO 45, Please refer page No. 9

* Universal AC/DC electronic coil version

3 Pole Power Contactors - Type MO

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A - 300A AC-3
- Range 140A-300A available with conventional / universal AC/DC electronic coil version
- Built in surge suppressor
- Common coil for 50 & 60Hz application
- Low pick-up VA consumption
- Standardized accessories for 9A-110A and 140A-300A range
- Compact dimensions saving panel space
- Suitable for Lug as well as Lugless termination
- RoHS compliant



MO 18



MO 45



MO 70



MO 110



MO 140



MO 300

| Size | AC3 Rating (A) | AC1 Rating (A) | Type | Aux. Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------|----------------|----------------|--------|---------------|----------|---------------------|------------------|
| Fr 0 | 9 | 30 | MO 9 | 1 NO + 1 NC | CS94833 | 1125 | 10 |
| | 12 | 32 | MO 12 | 1 NO + 1 NC | CS94834 | 1275 | 10 |
| | 18 | 32 | MO 18 | 1 NO + 1 NC | CS94835 | 1460 | 10 |
| Fr 1 | 25 | 45 | MO 25 | # | CS94567 | 1550 | 10 |
| | 32 | 50 | MO 32 | # | CS94568 | 3315 | 10 |
| | 40 | 50 | MO 40 | # | CS94569 | 4930 | 10 |
| | 45 | 50 | MO 45▲ | # | CS94570 | 6325 | 10 |
| Fr 2 | 50 | 100 | MO 50 | # | CS94572 | 6500 | 1 |
| | 60 | 100 | MO 60 | # | CS94573 | 7620 | 1 |
| | 70 | 100 | MO 70 | # | CS94574 | 8740 | 1 |
| Fr 3 | 80 | 125 | MO 80 | # | CS94576 | 11115 | 1 |
| | 95 | 125 | MO 95 | # | CS94577 | 11855 | 1 |
| | 110 | 140 | MO 110 | # | CS94578 | 14370 | 1 |
| Fr 4 | 140 | 250 | MO 140 | 2 NO + 2 NC | CS95000 | 19560 | 1 |
| | 185 | 275 | MO 185 | 2 NO + 2 NC | CS95001 | 23530 | 1 |
| | 225 | 275 | MO 225 | 2 NO + 2 NC | CS95002 | 25900 | 1 |
| Fr 4* (Electronic coil) AC/DC | 140 | 250 | MO 140 | 2 NO + 2 NC | CS95042 | 22490 | 1 |
| | 185 | 275 | MO 185 | 2 NO + 2 NC | CS95047 | 27060 | 1 |
| | 225 | 275 | MO 225 | 2 NO + 2 NC | CS95052 | 29785 | 1 |
| Fr 5 | 250 | 400 | MO 250 | 2 NO + 2 NC | CS94441 | 29215 | 1 |
| | 300 | 500 | MO 300 | 2 NO + 2 NC | CS94440 | 35230 | 1 |
| | 250 | 400 | MO 250 | 2 NO + 2 NC | CS94456 | 33600 | 1 |
| Fr 5* (Electronic coil) AC/DC | 300 | 500 | MO 300 | 2 NO + 2 NC | CS94464 | 40515 | 1 |

Note: For ordering Electronic Coil Suffix : 110-240 V : BOOO
240-415 V : DOOO

Vacuum Contactors [8536]

3 Pole Vacuum Contactors - Type MVO

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 400 – 820A AC-3
- With contact erosion indicator
- Wide band potted coil with built-in surge suppressor
- Coil on top design
- RoHS compliant



MVO 820

| AC3 Rating (A) | AC1 Rating (A) | Type | Aux. Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------|----------------|---------|---------------|----------|---------------------|------------------|
| 400 | 630 | MVO 400 | 2 NO + 2 NC | CS90097 | 138300 | 1 |
| 500 | 630 | MVO 500 | 2 NO + 2 NC | CS90098 | 179500 | 1 |
| 630 | 820 | MVO 630 | 2 NO + 2 NC | CS90099 | 228100 | 1 |
| 820 | 1000 | MVO 820 | 2 NO + 2 NC | CS90077 | 345200 | 1 |

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 | 600 | 10 |
| | 12 | 30 | MNX 12-2P | 1 NO | CS90234 | 645 | 10 |
| | 18 | 30 | MNX 18-2P | 1 NO | CS90236 | 760 | 10 |
| | 22 | 32 | MNX 22-2P | 1 NO | CS90238 | 920 | 10 |
| Fr 2 | 25 | 45 | MNX 25-2P | # | CS90240 | 965 | 10 |
| | 32 | 55 | MNX 32-2P | # | CS90241 | 2120 | 10 |
| | 40 | 55 | MNX 40-2P | # | CS90242 | 3255 | 10 |
| Fr 3 | 50 | 85 | MNX 50-2P | # | CS94061 | 4410 | 1 |
| | 70 | 100 | MNX 70-2P | # | CS94062 | 5980 | 1 |
| | 80 | 100 | MNX 80-2P | # | CS94063 | 7370 | 1 |
| Fr 4 | 95 | 160 | MNX 95-2P | 2 NO + 2 NC | CS94064 | 9970 | 1 |
| | 110 | 160 | MNX 110-2P | 2 NO + 2 NC | CS94065 | 10865 | 1 |
| | 140 | 160 | MNX 140-2P | 2 NO + 2 NC | CS94066 | 14535 | 1 |
| Fr 5 | 185 | 250 | MNX 185-2P | 2 NO + 2 NC | CS94978 | 18740 | 1 |
| | 225 | 300 | MNX 225-2P | 2 NO + 2 NC | CS94979 | 19865 | 1 |
| | 250 | 300 | MNX 250-2P | 2 NO + 2 NC | CS90301 | 21980 | 1 |
| Fr 6 | 300 | 400 | MNX 300-2P | 2 NO + 2 NC | CS90346 | 26725 | 1 |
| | 400 | 425 | MNX 400-2P | 2 NO + 2 NC | CS94069 | 33375 | 1 |
| | 550 | 650 | MNX 550-2P | 2 NO + 2 NC | CS90243 | 54490 | 1 |
| | 650 | 800 | MNX 650-2P | 2 NO + 2 NC | CS90578 | 76120 | 1 |

3 Pole Power Contactors - Type MDX (DC Control)

Features

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Range from 9 - 110A AC-3
- Built in surge suppressor for MDX 9 - 38
- IP20 connection security for MDX 9 - 38



MDX 25



MDX 38



MDX 110

| Size | AC3 Rating (A) | AC1 Rating (A) | Type | Aux. Contacts | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|----------------|----------------|---------|---------------|----------|---------------------|------------------|
| Fr 1 | 9 | 25 | MDX 9 | 1 NO | CS96564 | 1380 | 1 |
| | 12 | 28 | MDX 12 | 1 NO | CS96565 | 1545 | 1 |
| | 18 | 32 | MDX 18 | 1 NO | CS96566 | 1745 | 1 |
| | 25 | 32 | MDX 25 | 1 NO | CS96567 | 2800 | 1 |
| Fr 2 | 32 | 56 | MDX 32 | # | CS96552 | 5245 | 1 |
| | 38 | 56 | MDX 38 | # | CS96553 | 6070 | 1 |
| Fr 3 | 50 | 90 | MDX 50 | # | CS96554 | 8505 | 1 |
| | 65 | 110 | MDX 65 | # | CS96555 | 9685 | 1 |
| | 80 | 125 | MDX 80 | # | CS96556 | 11775 | 1 |
| | 95 | 125 | MDX 95 | # | CS96557 | 14895 | 1 |
| | 110 | 125 | MDX 110 | # | CS96558 | 15590 | 1 |

- 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 MDX/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, 110V 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 - 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 | 950 | 10 |
| 6A | 20A | MX 06 | 1 NC | CS94013 | 950 | 10 |
| 9A | 20A | MX 09 | 1 NO | CS94014 | 980 | 10 |
| 9A | 20A | MX 09 | 1 NC | CS94015 | 980 | 10 |
| 12A | 20A | MX 12 | 1 NO | CS94016 | 1050 | 10 |
| 12A | 20A | MX 12 | 1 NC | CS94017 | 1050 | 10 |
| For DC control (Std. Coil Voltage - 24, 110, 220V) | | | | | | |
| 6A | 20A | MX 06 | 1 NO | CS94021 | 1330 | 10 |
| 6A | 20A | MX 06 | 1 NC | CS94022 | 1330 | 10 |
| 9A | 20A | MX 09 | 1 NO | CS94023 | 1340 | 10 |
| 9A | 20A | MX 09 | 1 NC | CS94024 | 1340 | 10 |
| 12A | 20A | MX 12 | 1 NO | CS94025 | 1420 | 10 |
| 12A | 20A | MX 12 | 1 NC | CS94026 | 1420 | 10 |

3 Pole Power Contactors - Type ML

Features

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



ML 1.5



ML 3



ML 6



ML 12

| 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 | 2830 | 1 |
| Fr 2 | 32 | 40 | ML 2 | 2 NO + 2 NC | SS90701 | 5255 | 1 |
| | 40 | 45 | ML 3 | 2 NO + 2 NC | SS90721 | 7755 | 1 |
| Fr 3 | 70 | 100 | ML 4 | 2 NO + 2 NC | SS90910 | 12685 | 1 |
| | 110 | 125 | ML 6 | 2 NO + 2 NC | SS90921 | 20020 | 1 |
| Fr 4 | 300 | 400 | ML 12 | 2 NO + 2 NC | SS91010 | 45345 | 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 - Type MCX

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 16A – 800A AC-1
- Wide operating band up to 130A AC-1



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 | 16 | MCX 01 | # | CS97009 | 965 | 10 |
| | 25 | MCX 02 | # | CS97010 | 1050 | 10 |
| | 32 | MCX 03 | # | CS97011 | 1105 | 10 |
| | 40 | MCX 04 | # | CS97012 | 1720 | 10 |
| Fr 2 | 50 | MCX 11 | # | CS97013 | 2275 | 1 |
| | 63 | MCX 12 | # | CS97014 | 4340 | 1 |
| | 80 | MCX 13 | # | CS97015 | 5835 | 1 |
| Fr 3 | 100 | MCX 22 | # | CS97017 | 7780 | 1 |
| | 130 | MCX 23 | # | CS97018 | 9010 | 1 |
| Fr 4 | 160 | MCX 32 | 2 NO + 2 NC | CS97020 | 15110 | 1 |
| | 200 | MCX 33 | 2 NO + 2 NC | CS97021 | 18950 | 1 |
| | 255 | MCX 34 | 2 NO + 2 NC | CS97022 | 20295 | 1 |
| Fr 5 | 325 | MCX 41 | 2 NO + 2 NC | CS97023 | 37720 | 1 |
| | 360 | MCX 42 | 2 NO + 2 NC | CS97024 | 40915 | 1 |
| | 400 | MCX 43 | 2 NO + 2 NC | CS97025 | 48355 | 1 |
| | 500 | MCX 44 | 2 NO + 2 NC | CS97026 | 60680 | 1 |
| | 600 | MCX 45 | 2 NO + 2 NC | CS97027 | 69510 | 1 |
| | 700 | MCX 46 | 2 NO + 2 NC | CS97028 | 85660 | 1 |
| | 800 | MCX 47 | 2 NO + 2 NC | CS94291 | 105165 | 1 |

Automatic Transfer Controllers (ATC)



AuXC-2000 Controller

| Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------|-------------|---------------------|------------------|
| AuXC-2000 Controller | ATC20000000 | 20300 | 1 |

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

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



Notes:

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

Control Relays (Auxiliary Contactors) [8536]

Type MX0



MX0 40E

Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Available with AC or DC control in 45mm width
- 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 | 1010 | 10 |
| | MX0 31E (3 NO + 1 NC) | CS94019 | 1010 | 10 |
| | MX0 22E (2 NO + 2 NC) | CS94020 | 1010 | 10 |
| | MX0 13E (1 NO + 3 NC) | CS94041 | 1010 | 10 |
| | MX0 04E (4 NC) | CS94042 | 1010 | 10 |
| For DC control std. Coil Voltage - 24, 110, 220V | | | | |
| AC-15 4A at 415V | MX0 40E (4 NO) | CS94027 | 1350 | 10 |
| | MX0 31E (3 NO + 1 NC) | CS94028 | 1350 | 10 |
| | MX0 22E (2 NO + 2 NC) | CS94029 | 1350 | 10 |
| | MX0 13E (1 NO + 3 NC) | CS94043 | 1350 | 10 |
| | MX0 04E (4 NC) | CS94044 | 1350 | 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. For Example, In MX0 DC control Contactors, 4NO + 4NC combination can be achieved with 2NO + 2NC aux contactor and 2NO + 2NC add on block and not with 4NO standalone contactor and 4NC add on block
- 4) For ordering add-on aux contact blocks, please refer page No. 8

AC Control Contactor - MO0



MO0 AC

Features

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

| 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 | MO0 40E (4NO) | CS91623 | 760 | 10 |
| | MO0 31E (3NO + 1NC) | CS91624 | 760 | 10 |
| | MO0 22E (2NO + 2NC) | CS91625 | 760 | 10 |

- Note: 1) 6NC & above combination is not recommended for MO0
 2) For ordering add-on aux contact blocks, please refer page No. 8
 3) Other combinations available on request



MN0 DC 22E

DC Control Contactor - MN0

| 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 | MN0 40E (4 NO) | SS94665 | 1500 | 10 |
| | MN0 31E (3 NO + 1 NC) | SS94666 | 1500 | 10 |
| | MN0 22E (2 NO + 2 NC) | SS94667 | 1500 | 10 |
| | MN0 13E (1 NO + 3 NC) | SS94668 | 1500 | 10 |
| | MN0 04E (4 NC) | SS94669 | 1500 | 10 |

For ordering add-on aux contact blocks, please refer page No. 8

Capacitor Duty Contactors [8536]

Capacitor Duty Contactors - Type MO C



MO C25



MO C50



MO C100

| Size | kVA 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 | 1470 | 1 |
| | 5 | MO C5 | 1NO | CS96127 | 1540 | 1 |
| | 8.5 | MO C8.5 | 1NO | CS96320 | 1775 | 1 |
| | 10 | MO C10 | 1NO | CS96156 | 1925 | 1 |
| | 12.5 | MO C12.5 | 1NO | CS96321 | 1980 | 1 |
| | 15 | MO C15 | 1NO | CS90019 | 2760 | 1 |
| | 20 | MO C20 | 1NO | CS90021 | 3155 | 1 |
| | 25 | MO C25▲ | 1NO | CS96322 | 3580 | 1 |
| Fr 2 | 30 | MO C30 [§] | 1NO | CS96148 | 5470 | 1 |
| | 40 | MO C40 | 1NO | CS96147 | 9010 | 1 |
| | 50 | MO C50 | 1NO | CS96324 | 10235 | 1 |
| Fr 3 | 60 | MO C60 [§] | 1NO | CS96149 | 11650 | 1 |
| | 75 | MO C75 | 1NO | CS96150 | 14115 | 1 |
| | 85 | MO C85 | 1NO | CS96157 | 14810 | 1 |
| | 100 | MO C100 [§] | 1NO | CS96158 | 15000 | 1 |

Features

- MO C Range available from 3 - 100 kVA, AC-6b
- Delatching type early make contacts
- Separate termination for damping resistors
- Encapsulated damping resistor assembly
- Built in surge suppressor
- 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. 64-69

Note :

- 1) For ordering add-on aux. contact block, please refer page No. 8
- 2) For ordering suffix, please refer page No.10
- 3) For ordering spare coils, please refer page No. 11
- 4) Standard coil voltage : 240V, 50/60 Hz

▲ 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]

Single Pole Contactors - Type MR

Features

- Wide and chatter free operating band
- High AC-1 rating for single phase applications



MR 11W
(Wide band coil)



MR 13



MR 11NW
SPN (Wide band coil)

| AC3 Rating (A) | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------|---------|----------|---------------------|------------------|
| 25A | MR 11W | CS94176 | 720 | 10 |
| 25A | MR 11NW | CS94178 | 770 | 10 |
| 40A | MR 13 | CS94992 | 790 | 40 |

Note: 1) Ordering Suffix B000 - 240V, 50Hz

2) For ordering add-on aux. contact block, please refer page No. 9

Two Pole Contactors - Type MU-2P



MU 16-2P

Features

- Wide band potted coil
- Neutral isolation

| AC3 Rating (A) | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------|---------|----------|---------------------|------------------|
| 16A | MU16-2P | CS90117 | 595 | 10 |
| 25A | MU25-2P | CS90118 | 775 | 10 |
| 40A | MU40-2P | CS90119 | 1015 | 10 |

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 NOOO

3) For ordering add-on aux. contact block, please refer page No. 8

Type MK1 & MK2



MK 1



MK 2

| Type | AC3 Rating (A) | Motor Output 3 Phase 415V, 50Hz | | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|----------------|---------------------------------|-----|----------|---------------------|------------------|
| | | HP | KW | | | |
| MK 1 | 15A | 7.5 | 5.5 | SS95200 | 1110 | 10 |
| MK 2 | 25A | 7.5 | 5.5 | CS90945 | 1195 | 10 |

For Overload Relays type MK1 & MK2, please refer page No. 14

For Ordering Suffix, please refer page No. 10
(For 360V wide band, Ordering Suffix - S000)

Type MU



MU 1



MU 1H



MU 2



MU 3

| AC3 Rating (A) | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------|-------|----------|---------------------|------------------|
| 16A | MU 1 | CS94007 | 1775 | 10 |
| 20A | MU1 H | CS90623 | 1935 | 10 |
| 25A | MU 2 | CS94008 | 2410 | 10 |
| 32A | MU 3 | CS90609 | 2905 | 10 |

Note: 1) For Overload Relays type MU refer page No.14

2) For Ordering Suffix please refer page No.10

3) For ordering add-on aux. contact block, please refer page No. 9

Accessories - Add-on Auxiliary Contact Blocks [8538]

| | MNX 9-80 | MNX 95-650 | MO 9-110 | MO 140-300 | ML | MX | MDX 9-110 | MCX 01-23 | MCX 32-47 | MX0 | MN0 | MO0 | MO C | MR | MU |
|-----------------------|----------|------------|----------|------------|-----|-----|-----------|-----------|-----------|-----|-----|-----|------|-----|-----|
| Front add-on possible | Yes | No | Yes | No | No | Yes | Yes | Yes | No | Yes | Yes | Yes | No | Yes | No |
| Side add-on possible | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | No | No | No | Yes | No | Yes |

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



MN0 Front
Add-on
aux. contact Block

| Front Mounting | Suitable for | | | | | | | | | | | |
|----------------|----------------------|---------------------|-----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| | MNX 9-80 / MCX 01-23 | M.R.P. (₹) Per Unit | MO 9-110 / MO0 | M.R.P. (₹) Per Unit | MDX# 9-110 | M.R.P. (₹) Per Unit | MX 0/6/9/12 | M.R.P. (₹) Per Unit | MU-2P | M.R.P. (₹) Per Unit | MN0 DC | M.R.P. (₹) Per Unit |
| 4 NO | CS94112 [^] | 450 | CS94594 [^] | 450 | - | - | CS94033 [^] | 390 | - | - | SS94083 [^] | 410 |
| 3 NO + 1 NC | CS94113 [^] | 450 | CS94595 [^] | 450 | - | - | CS94034 [^] | 390 | - | - | SS94084 [^] | 410 |
| 2 NO + 2 NC | CS94114 [^] | 450 | CS94596 [^] | 450 | CS96569 [~] | 525 | CS94035 [^] | 390 | - | - | SS94085 [^] | 410 |
| 1 NO + 3 NC | CS94115 [^] | 450 | CS94597 [^] | 450 | CS90906 [~] | 525 | CS94036 [^] | 390 | - | - | SS94086 [^] | 410 |
| 4 NC | CS94116 [^] | 450 | CS94598 [^] | 450 | - | - | CS94037 [^] | 390 | - | - | SS94087 [^] | 410 |
| 2 NO | CS94117 [^] | 300 | CS94591 ^{^^} | 300 | - | - | CS94030 [^] | 250 | CS90692 [^] | 290 | SS94080 [^] | 280 |
| 1 NO + 1 NC | CS94118 [^] | 300 | CS94592 ^{^^} | 300 | CS96568 [~] | 305 | CS94031 [^] | 250 | CS90693 [^] | 290 | SS94081 [^] | 280 |
| 2 NC | CS94119 [^] | 300 | CS94593 ^{^^} | 300 | - | - | CS94032 [^] | 250 | CS90694 [^] | 290 | SS94082 [^] | 280 |
| 1 NO | CS94120 [^] | 150 | CS94585 ^{^^} | 150 | CS96586 [~] | 170 | - | - | CS90695 [^] | 150 | SS94715 [^] | 140 |
| 1 NC | CS94121 [^] | 150 | CS94586 ^{^^} | 150 | - | - | - | - | CS90696 [^] | 150 | SS94716 [^] | 140 |

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

Side Mounting Add-on aux. Contact Block



MNX/MCX
Side Add-on aux. contact Block



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

| Side Mounting | Suitable for | | | | | | | | |
|---------------|--------------|----------------------|---------------------|----------------------|---------------------|-----------------------|---------------------|-----------------------|---------------------|
| | Aux Contact | MNX 9-40 / MCX 01-04 | M.R.P. (₹) Per Unit | MCX 11-13 | M.R.P. (₹) Per Unit | MNX 50-80 / MCX 22-23 | M.R.P. (₹) Per Unit | MO 9-110 / MO C 3-100 | M.R.P. (₹) Per Unit |
| First left | 1 NO + 1 NC | CS94220 [^] | 450 | CS94201 [^] | 480 | CS94201 [^] | 480 | CS94580 [^] | 450 |
| First Right | 1 NO + 1 NC | CS94221 [^] | 450 | CS94202 [^] | 480 | CS94202 [^] | 480 | CS94581 [^] | 450 |
| Second Left | 1 NO + 1 NC | - | - | - | - | CS94203 [^] | 480 | CS94582 [^] | 450 |
| Second right | 1 NO + 1 NC | - | - | - | - | CS94204 [^] | 480 | CS94583 [^] | 450 |

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



MO
Left Add-on aux. contact Block



MDX
Side Add-on aux. contact Block

| Side Mounting | Suitable for | | | | | | | | |
|---------------|--------------|------------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| | Aux Contact | MNX 95-650 / MCX 32-47 | M.R.P. (₹) Per Unit | MO 140-300 | M.R.P. (₹) Per Unit | MVO 400-820 | M.R.P. (₹) Per Unit | MDX# 9-110 | M.R.P. (₹) Per Unit |
| First left | 1 NO + 1 NC | CS94205 [^] | 550 | CS95033 [^] | 550 | CS91208 [^] | 550 | ST94985 [^] | 630 |
| First Right | 1 NO + 1 NC | CS94206 [^] | 550 | CS95034 [^] | 550 | CS91209 [^] | 550 | | |
| Second Left | 1 NO + 1 NC | CS94207 [^] | 550 | CS95035 [^] | 550 | CS95035 [^] | 550 | - | - |
| Second right | 1 NO + 1 NC | CS94208 [^] | 550 | CS95036 [^] | 550 | CS95036 [^] | 550 | - | - |

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

~ Standard Packing is 1 ^Standard Packing is 10 ^^Standard Packing is 20

Accessories - Add-on Auxiliary Contact Blocks [8538]

Side Mounting Add-on aux. Contact Block - ML



ML Add-on aux. contact Block

| Side Mounting | Aux Contact | Suitable for | | | |
|---------------|-------------|----------------------|---------------------|----------------------|---------------------|
| | | ML 4/6 | M.R.P. (₹) Per Unit | ML 12 | M.R.P. (₹) Per Unit |
| Left | 1 NO + 1 NC | SS91494 ^A | 625 | - | - |
| Right | 1 NO + 1 NC | - | - | SS91474 ^A | 660 |

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

Add-on aux. Contact Block - MR & MU



MR 1NO

| Description | For Contactor | Contacts Type | Cat. No. | M.R.P. (₹) Per Unit |
|--------------------------------------|---------------|---------------|----------------------|---------------------|
| Top add-on single pole | MR | 1 NO | CS94179 ^A | 190 |
| Side mounted auxiliary contact block | MU 1/MU 2 | 1 NO + 1 NC | SS94072 [~] | 160 |
| | | 1NC | SS94074 [~] | 145 |

~ Standard Packing is 1 ^AStandard Packing is 10 ^{^^}Standard Packing is 20

Accessories - Surge Suppressors [8538]

For MX, MNX, MDX & MCX



MNX S1

MNX S3

MNX S4

MX - S1

| For Contactor | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------|-----------------------|---------------------|------------------|
| MX 06 to MX 12 / MX 0 AC (S1) | CS94039 [*] | 365 | 10 |
| MNX 9 - 40 / MCX 01 - 04 (S1) | CS94166 [*] | 370 | 10 |
| MNX 50 - 80 / MCX 11 - 23 (S3) | CS94163 [*] | 405 | 10 |
| MNX 95 - 250 / MCX 32 - 34 (S4) | CS94164 [#] | 1340 | 10 |
| MNX 300 - 400 / MCX 41 - 44 (S6) | CS94165 [#] | 1810 | 10 |
| MDX 50 - 110 | CS96571 ^{**} | 345 | 10 |

Ordering Suffix * 110-240V: B000, 415V: D000 ** : OOOO
110V: A000, 220-240V: B000, 360-525V: D000

MO, MO C, MOO, MVO, MDX 9-38, MNX 550-650, MCX 45-47, MX DC & MX0 DC have built in surge suppressor

For MNO



MN - S1

| Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--------|----------|---------------------|------------------|
| MNO DC | SS94781 | 405 | 10 |

Ordering Suffix: 24-48VDC : 5000
110-220VDC : 2000

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

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



MNX M1 (MNX 9-40)

MCX M3 (MCX 22)

MO MI Kit (MO 9-110)

MX-M1 (MX0 / MX06-MX09)

| For Contactor | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------|----------|---------------------|------------------|
| MX 06 to MX 12 / MX 0 | CS94038 | 355 | 10 |
| MO 9 - 110 [*] | CS94584 | 470 | 10 |
| MDX 9 - 38 | CS96572 | 380 | 1 |
| MDX 50 - 110 | CS96573 | 1170 | 1 |
| MNX 9 - 40 | CS94126 | 380 | 10 |
| MNX 50 - 80 | CS94197 | 1725 | 1 |
| MNX 95 - 140 | CS94198 | 2685 | 1 |
| MNX 185 - 250 | CS94199 | 3060 | 1 |
| MNX 300 - 650 | CS94200 | 3470 | 1 |
| MCX 01 - 04 | CS94126 | 380 | 10 |
| MCX 11 - 13 | ST50540 | 720 | 10 |
| MCX 22 - 23 | CS93095 | 2605 | 1 |
| MCX 32 - 34 | SS94992 | 2695 | 1 |
| MCX 41 - 47 | CS94301 | 4445 | 1 |

Note: 1) Ordering Suffix for Mechanical Interlock Kits : OOOO

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 | 350 | 10 |
| MO 50 - 70 / MOC 40 - 60 | CS94093 | 550 | 10 |
| MO 80 - 110 / MOC 75 - 100 | CS94094 | 800 | 1 |
| MO 140 - 225 | CS91057 | 1500 | 1 |
| MO 250 - 300 | CS90940 | 2200 | 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

3) In MO C 30, MO C 60 & MO C 100 spreader link is included in packing

4) Ordering Suffix: OOOO

Accessories - Connecting Links [8538]

DOL Starter - Link



DOL Starter



Contactor MPCB Link

| Suitable For | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------|-----------|---------------------|------------------|
| MOG H1/S1 with MO 9-18 | CS90396 # | 285 | 10 |
| MOG H1/S1 with MO 25-45 | CS90391 # | 285 | 10 |

Reversing DOL Starter - Link



RDOL Starter



Reversing Starter



Paralleling Link



Contactor MPCB Link

| Suitable For | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------|-----------|---------------------|------------------|
| MOG H1/S1 with MO 9-18 | CS90548 # | 715 | 10 |
| MOG H1/S1 with MO 25-45 | CS90546 # | 715 | 10 |

Star Delta Starter - Link



Star Delta Starter



Reversing / star delta Link



Paralleling Link



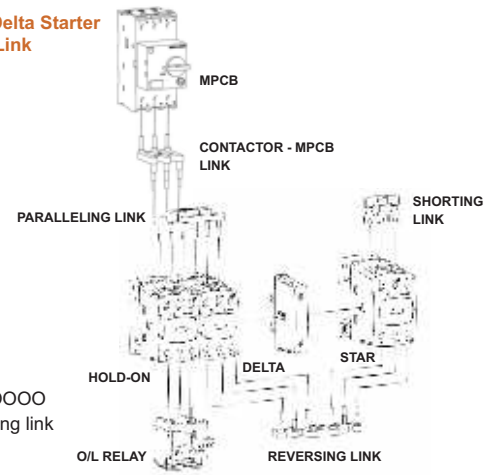
Contactor MPCB Link



Shorting Link

| Suitable For | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------|-----------|---------------------|------------------|
| MOG H1/S1 with MO 9-18 | CS90549 # | 860 | 10 |
| MOG H1/S1 with MO 25-45 | CS90547 # | 860 | 10 |

Example of Star Delta Starter Connection with Link



Ordering Suffix OOOO
For MPCB paralleling link refer page no.17

Accessories - Mechanical Latch [8538]

Mechanical Latch



| Suitable For | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------|------------------|----------|---------------------|------------------|
| MO 9-70A, MO 0 control | Mechanical Latch | CS90136 | 1905 | 10 |

Features

- Keeps contactor in closed condition even after removal of coil supply
- Ideal for logical operations
- Suitable for sites where voltage fluctuation is frequent
- Saves energy as coil supply can be removed once contactor is picked up

For Ordering Suffix refer below table
Standard Coil Voltage of Mechanical Latch is 24V AC, 110V AC & 240V AC

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 | | |

Note:

- 1) * For MX DC, MDX, MX0 DC & MN0 DC
- 2) For other coil voltages please contact nearest branch office
- 3) Ordering suffix for electronic coil : B000 for 110-240 V
D000 for 240-415 V

Spare Contact Kit and Spare Coil



| Spare Contact kit | | | Spare Coil | |
|-------------------|-----------|---------------------|------------|---------------------|
| Type | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| MU 1 | CS94010~~ | 625 | CS94009 ^ | 475 |
| MU 1H | CS90624~~ | 825 | | |
| MU 2 | CS94011~~ | 1115 | | |
| MU 3 | CS90612~~ | 1415 | | |
| ML 1.5 | SS95305^ | 1530 | SS90873 ^ | 635 |
| ML 2 | SS95307^ | 2490 | SS90545 ^ | 1060 |
| ML 3 | SS95309^ | 4190 | | |
| ML 4 | SS95311^ | 6530 | SS91258 ~ | 2025 |
| ML 6 | SS95313^ | 11500 | | |
| ML 10 | SS95315~ | 23420 | SS91011 ~ | 4560 |
| ML 12 | SS95317~ | 26880 | | |
| MR | - | - | CS94102 ^ | 400 |
| MU16-2P | CS90217^ | 210 | CS90793 ^ | 260 |
| MU25-2P | CS90218^ | 275 | | |
| MU40-2P | CS90219^ | 405 | | |
| MO 0 AC | - | - | | |
| MN 0 AC | - | - | SS94191 ^ | 505 |
| MN 0 DC | - | - | SS94651 ~ | 935 |

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 NOOO

| MO C Spare Coils | | |
|------------------|----------|---------------------|
| Type | Cat. No. | M.R.P. (₹) Per Unit |
| MO C3 - 30 | CS96317^ | 475 |
| MO C40 - 60 | CS96318^ | 1500 |
| MO C75 - 100 | CS96319^ | 2550 |

Front housing & 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~ | 460 |
| ML 2/ ML 3 | ST23866~ | 630 |
| ML 4/ ML 6 | ST28735~ | 1145 |
| Combination coil with timer | | |
| Type | Cat. No. | M.R.P. (₹) Per Unit |
| ML 2 | SS90650~ | 2165 |

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

~ Standard Packing is 1
 ^ Standard Packing is 5
 ^ Standard Packing is 10
 ~ Standard Packing is 50

Spare Contact Kit and Spare Coil



| | 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 + 1 NC) | CS94843^ | 530 | CS94841^ | 475 | |
| | MO 12 (1 NO + 1 NC) | CS94844^ | 685 | | | |
| | MO 18 (1 NO + 1 NC) | CS94845^ | 750 | | | |
| | | MO 9 | CS96380^~ | 530 | CS96317^ | 475 |
| | | MO 12 | CS96381^~ | 685 | | |
| | | MO 18 | CS96382^~ | 750 | | |
| | | MO 25 | CS96383^~ | 860 | | |
| | | MO 32 | CS96384^~ | 1605 | | |
| | | MO 40 | CS96385^~ | 2555 | | |
| | | MO 45 | CS96386^~ | 2965 | | |
| | | MO 50 | CS96387^~ | 3030 | | |
| | | MO 60 | CS96388^~ | 3740 | | |
| | | MO 70 | CS96389^~ | 4360 | | |
| | | MO 80 | CS96390^~ | 5880 | CS96318^ | 1500 |
| | | MO 95 | CS96391^~ | 6685 | | |
| | | MO 110 | CS96392^~ | 8575 | CS96319^ | 2550 |
| | | MO 140 | CS90357~ | 12110 | | |
| | | MO 185 | CS90358~ | 13185 | CS90356~ | 5335 |
| | | MO 225 | CS90359~ | 14975 | | |
| | | MO 250 | CS94444~ | 18000 | CS94442~ | 7970 |
| | | MO 300 | CS94443~ | 21075 | | |
| | | MO 140 (electronic coil) | CS90357~ | 12110 | CS90855~ | 6135 |
| | | MO 185 (electronic coil) | CS90358~ | 13185 | | |
| | | MO 225 (electronic coil) | CS90359~ | 14975 | | |
| | | MO 250 (electronic coil) | CS94444~ | 18000 | CS90738~ | 9165 |
| | | MO 300 (electronic coil) | CS94443~ | 21075 | | |
| | | MVO | - | - | CS90174~ | 15845 |
| | MNX Contactors | MNX 9 | CS94123^ | 530 | CS94105^ | 475 |
| | | MNX 12 | CS94124^ | 685 | | |
| | | MNX 18 | CS94125^ | 750 | | |
| MNX 22 | | CS94269^ | 770 | | | |
| MNX 25 | | CS94127^ | 860 | | | |
| | | MNX 32 | CS94128^ | 1605 | CS94192^ | 1500 |
| | | MNX 40 | CS94147^ | 2555 | | |
| | | MNX 50 | CS94150^ | 3030 | | |
| | | MNX 70 | CS94151^ | 4360 | | |
| | | MNX 80 | CS94152^ | 5880 | | |
| | | MNX 95 | CS94153~ | 6685 | CS94196~ | 2550 |
| | | MNX 110 | CS94154~ | 8575 | | |
| | | MNX 140 | CS94155~ | 12110 | CS94194~ | 4590 |
| | | MNX 185 | CS94156~ | 13185 | | |
| | | MNX 225 | CS94157~ | 14975 | | |
| | | MNX 250 | CS90310~ | 18000 | | |
| | | MNX 300 | CS90283~ | 21075 | | |
| | | MNX 400 | CS94161~ | 28995 | CS94195~ | 5345 |
| | | MNX 550 | CS94162~ | 38230 | | |
| | | MNX 650 | CS96336~ | 56355 | CS94193~ | 15845 |
| MCX Contactors | MCX 01-04 | - | - | CS94105^ | 475 | |
| | MCX 11 | CS94077^ | 1715 | CS94009^ | 475 | |
| | MCX 12 | CS94078^ | 2825 | | | |
| | MCX 13 | CS90307^ | 3945 | | | |
| | | MCX 22 | CS94331~ | 4890 | ST91291^~ | 1500 |
| | | MCX 23 | CS90078~ | 5995 | | |
| | | MCX 32 | CS94082^ | 9025 | CS94196~ | 2550 |
| | | MCX 33 | CS94083^ | 11345 | | |
| | | MCX 34 | CS94084^ | 12420 | | |
| | | MCX 41 | CS94295~ | 21675 | CS94195~ | 5345 |
| | | MCX 42 | CS94296~ | 27505 | | |
| | | MCX 43 | CS94297~ | 30850 | | |
| | | MCX 44 | CS94298~ | 37790 | | |
| | | MCX 45 | CS94299~ | 40740 | | |
| | | MCX 46 | CS94300~ | 46875 | CS94193~ | 15845 |
| | MCX 47 | CS90308~ | 60430 | | | |

* Ordering Suffix for 240V AC - FOOO, 415V AC - ROOO

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



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 | SS941410OEO | 1230 | 10 |
| | 0.3 - 0.5 | SS941410OGO | 1230 | 10 |
| | 0.45 - 0.75 | SS941410OJO | 1230 | 10 |
| | 0.6 - 1 | SS941410OKO | 1230 | 10 |
| | 0.9 - 1.5 | SS941410OMO | 1240 | 10 |
| | 1.4 - 2.3 | SS941410OPO | 1240 | 10 |
| | 2 - 3.3 | SS941410OQO | 1240 | 10 |
| | 3 - 5 | SS941410OSO | 1240 | 10 |
| | 4.5 - 7.5 | SS941410OUO | 1240 | 10 |
| | 6 - 10 | SS941420OVO | 1240 | 10 |
| | 9 - 15 | SS941420OBO | 1270 | 10 |
| | 14 - 23 | SS941440ODO | 1395 | 10 |
| | 20 - 33 | SS941450OEO | 2020 | 10 |
| 24 - 40 | SS941450OFO | 2175 | 10 | |
| MN 5 (Directly Operated) | Direct Mounting on MNX 50 - 80 | | | |
| | 9 - 15 | SS941350OBO | 2510 | 10 |
| | 14 - 23 | SS941350ODO | 2510 | 10 |
| | 20 - 33 | SS941360OEO | 2530 | 10 |
| | 30 - 50 | SS941360OGO | 2805 | 10 |
| | 36 - 60 | SS941360OTO | 3260 | 10 |
| MN 12 (CT Operated) | Separate Mounting | | | |
| | 28 - 46.5 | SB942110OGO | 6210 | 1 |
| | 42 - 69 | SS941380OHO | 6210 | 1 |
| | 60 - 100 | SS941380OKO | 6210 | 1 |
| | 90 - 150 | SS941380OMO | 6210 | 1 |
| | 135 - 225 | SS941380OPO | 7620 | 1 |
| MN 12L # (CT Operated) | Separate Mounting | | | |
| | 42 - 69 | SS941270OHO | 11315 | 1 |
| | 60 - 100 | SS941270OKO | 11315 | 1 |
| | 90 - 150 | SS941270OMO | 11315 | 1 |
| | 135 - 225 | SS941270OPO | 11315 | 1 |
| | 180 - 300 | SS941270OQO | 11315 | 1 |
| 340 - 570 | SS941270OSO | 11315 | 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



RTO 1

RTO 2

RTO 3

RTO 4

| 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 | CS963550OFO | 1500 | 10 |
| | 0.31 - 0.55 | CS963550OGO | 1500 | 10 |
| | 0.55 - 0.85 | CS963550OJO | 1500 | 10 |
| | 0.78 - 1.2 | CS963550OLO | 1500 | 10 |
| | 1.2 - 2.0 | CS963550ONO | 1500 | 10 |
| | 1.9 - 2.8 | CS963550OPO | 1510 | 10 |
| | 2.4 - 3.6 | CS963550OQO | 1510 | 10 |
| | 3.5 - 5.2 | CS963550OSO | 1510 | 10 |
| | 4.6 - 6.7 | CS963550OTO | 1510 | 10 |
| | 6.7 - 9.7 | CS963550OVO | 1510 | 10 |
| | 8.5 - 12.5 | CS963550OAO | 1550 | 10 |
| | 12.5 - 18.5 | CS963560OCO | 1550 | 10 |
| | 17 - 25.5 | CS963560ODO | 1745 | 10 |
| 25 - 37 | CS963560OEO | 2635 | 10 | |
| 35 - 45 | CS963560OGO | 2715 | 10 | |
| RTO - 2 (Directly Operated) | Direct Mounting on MO 50 - 70 | | | |
| | 5 - 7.5 | CS963660OUO | 3070 | 1 |
| | 7 - 11 | CS963660OVO | 3070 | 1 |
| | 10.5 - 16 | CS963660OBO | 3070 | 1 |
| | 15 - 21 | CS963660OCO | 3070 | 1 |
| | 20 - 31 | CS963660OEO | 3110 | 1 |
| | 30 - 43 | CS963660OFO | 3350 | 1 |
| RTO - 3 (Directly Operated) | Direct Mounting on MO 80 - 110 | | | |
| | 23 - 30 | CS908730OEO | 4995 | 1 |
| | 29 - 38 | CS963030OQO | 4995 | 1 |
| | 37 - 49 | CS963040OGO | 5350 | 1 |
| RTO - 4 (CT Operated) | Separate Mounting | | | |
| | 47 - 62 | CS963120OTO | 5350 | 1 |
| | 60 - 78 | CS963130OJO | 6185 | 1 |
| | 75 - 110 | CS963140OKO | 7155 | 1 |
| | 23.4 - 36 | CS970960OGO | 7845 | 1 |
| | 36 - 60 | CS970960OJO | 7845 | 1 |
| 57 - 84 | CS970960OKO | 7845 | 1 | |
| 72 - 108 | CS970960OLO | 7845 | 1 | |
| 105 - 156 | CS970960OMO | 7845 | 1 | |
| 138 - 201 | CS970960ONO | 9630 | 1 | |
| 201 - 291 | CS970960OQO | 9930 | 1 | |
| 255 - 375 | CS970960ORO | 12035 | 1 | |

Electronic Motor Protection Relay [8536]

New Type REO - Direct Mounting on MO Contactor



Features

- Protections:
 - Overload
 - Single Phasing, Phase unbalance
 - Locked Rotor
 - Earth Fault in REO 1.1G
- Trip indication
- Selectable Trip class - 10A, 10, 20, 30 as per IEC 947-4-1

| Type of Mounting | Relay Range (A) | REO 1.1 | | REO 1.1G (With in built earth fault protection) | | Std. Pkg. (Nos.) |
|----------------------------|-----------------|-------------|---------------------|---|---------------------|------------------|
| | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit | |
| Direct Mounting on MO 9-45 | 0.15 - 0.75 | CS904180OJO | 3600 | CS904230OJO | 7300 | 10 |
| | 0.6 - 3 | CS904180OQO | 3600 | CS904230OQO | 7300 | 10 |
| | 2.4 - 12 | CS904180OLO | 3600 | CS904230OLO | 7300 | 10 |
| | 9 - 45 | CS904180OGO | 4050 | CS904230OGO | 7550 | 10 |

MPR200nX - Motor Protection Relay



Features

- Protections:
 - Overload
 - Locked Rotor
 - Single Phasing, Current Unbalance, Phase Sequence Reversal
 - Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1

| Model | O/L Range (A) | Device Code | Aux. Supply: 240 V AC | | Aux. Supply: 110 V AC | |
|----------|---------------|-------------------|-----------------------|---------------------|-----------------------|---------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| MPR200nX | 1 - 2.75 | 49, 51LR, 37, 46, | MPR200BE010 | 2800 | MPR200BB010 | 2800 |
| | 2 - 5.5 | | MPR201BE020 | 2800 | MPR201BB020 | 2800 |
| | 4 - 11 | | MPR202BE040 | 3300 | MPR202BB040 | 3300 |
| | 8 - 22 | | MPR203BE080 | 3300 | MPR203BB080 | 3300 |
| | 16 - 44 | | MPR204BE160 | 3800 | MPR204BB160 | 3800 |
| | 32 - 88 | | MPR205BE320 | 3800 | MPR205BB320 | 3800 |

Note : MPR200nX/ MPR300 must sense Line current in case of Star-Delta Starter. Please refer page 71 for wiring dia. of Star-Delta and Reversible starters.

MPR300 - Motor Protection Relay

With in-built earth fault protection



Features

- Protections:
 - Overload
 - Earth Fault
 - Locked Rotor
 - Single Phasing, Current Unbalance, Phase Sequence Reversal
 - Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1

| Model | O/L Range | Aux. Supply: 240 V AC | | Aux. Supply: 110 V AC | |
|--------|-----------|-----------------------|---------------------|-----------------------|---------------------|
| | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| MPR300 | 1-2.75 | MPR300BE010 | 6000 | MPR300BB010 | 6000 |
| | 2-5.5 | MPR301BE020 | 6000 | MPR301BB020 | 6000 |
| | 4-11 | MPR302BE040 | 6500 | MPR302BB040 | 6500 |
| | 8-22 | MPR303BE080 | 6500 | MPR303BB080 | 6500 |
| | 16-44 | MPR304BE160 | 7000 | MPR304BB160 | 7000 |
| | 32-88 | MPR305BE320 | 7000 | MPR305BB320 | 7000 |

Note : For comprehensive Relays portfolio kindly refer page No. 70

Thermal Overload Relays [8536]

Type RX



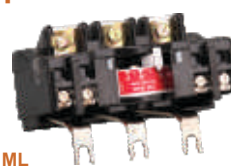
RX

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 | CS963570OFO | 840 | 10 |
| | 0.45-0.78 | CS963570OJO | 840 | 10 |
| | 0.78-1.2 | CS963570OLO | 840 | 10 |
| | 1.2-1.9 | CS963570ONO | 840 | 10 |
| | 1.8-2.8 | CS963570OPO | 840 | 10 |
| Direct Mounting on MX Contactors | 2.6-3.6 | CS963570OQO | 840 | 10 |
| | 3.6-5.2 | CS963570OSO | 840 | 10 |
| | 4.8-7 | CS963570OTO | 840 | 10 |
| | 6.4-9.7 | CS963570OVO | 840 | 10 |
| | 8.2-12.1 | CS963570OAO | 840 | 10 |

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 | SS918580ODO | 1990 | 10 | |
| | 0.25 - 0.4 | SS918580OFO | 1990 | 10 | |
| | 0.4 - 0.65 | SS918580OHO | 1990 | 10 | |
| | 0.6 - 1 | SS918580OKO | 1990 | 10 | |
| | 1 - 1.6 | SS918580OMO | 1990 | 10 | |
| | 1.5 - 2.5 | SS918580OPO | 1990 | 10 | |
| | 2.5 - 4 | SS918580ORO | 1990 | 10 | |
| | 4 - 6.5 | SS918580OTO | 1990 | 10 | |
| | 6 - 10 | SS918580OVO | 1990 | 10 | |
| | 10 - 16 | SS918580OBO | 1990 | 10 | |
| | ML 2 / ML 3 (Directly Operated) | Direct Mounting on ML 2/3 Contactors | | | |
| | | 9 - 14 | SS918590OAO | 2940 | 10 |
| 13 - 21 | | SS918590OCO | 2940 | 10 | |
| 20 - 32 | | SS918590OEO | 2940 | 10 | |
| | 28 - 42 | SS918590OFO | 2940 | 10 | |

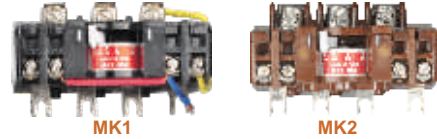
Thermal Overload Relays [8536]

Type MU (3 Pole) & MU-2P (2 Pole)



| Type of Mounting (Operation) | Relay Range (A) | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|-----------------------|-------------|---------------------|------------------|
| (Directly Operated) | MU1 (3 Pole) | | | |
| | 4 - 6.5 | SS96557OOTO | 980 | 1 |
| | 6 - 10 | SS96557OOVO | 980 | 1 |
| | MU2 (3 Pole) | | | |
| | 9 - 14 | SS95979OOAO | 1070 | 1 |
| | 13 - 21 | SS95979OOCO | 1135 | 1 |
| | 15 - 25 | SS95979OODO | 1240 | 1 |
| | 20 - 32 | SS95979OOEO | 1385 | 1 |
| | 24 - 38 | SS95979OOGO | 1520 | 1 |
| | 28 - 42 | SS95979OOF0 | 1645 | 1 |
| Direct Mounting on MU Contactor | MU 2P (2 Pole) | | | |
| | 1 - 1.6A | CS90207OOMO | 470 | 1 |
| | 1.5 - 2.5A | CS90207OOPO | 470 | 1 |
| | 2.5 - 4A | CS90207OORO | 470 | 1 |
| | 4 - 6.5A | CS90207OOTO | 470 | 1 |
| | 6 - 10A | CS90207OOVO | 470 | 1 |
| | 9 - 14A | CS90207OOAO | 470 | 1 |
| | 11 - 18A | CS90207OOCO | 540 | 1 |
| | 13 - 22A | CS90207OODO | 540 | 1 |
| | 16 - 26A | CS90207OOBO | 540 | 1 |
| 20 - 32A | CS90207OOEO | 680 | 1 | |
| 26 - 40A | CS90207OOF0 | 680 | 1 | |

Type MK1 & MK2



| Type of Mounting (Operation) | Relay Range (A) | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------|------------------|-------------|---------------------|------------------|
| (Directly Operated) | MK1 Relay | | | |
| | 0.6 - 1 | SS90035OOKO | 720 | 10 |
| | 1 - 1.6 | SS90035OOMO | 720 | 10 |
| | 1.5 - 2.5 | SS90035OOPO | 720 | 10 |
| | 2.5 - 4 | SS90035OORO | 720 | 10 |
| | 4 - 6.5 | SS90035OOTO | 720 | 10 |
| | 6 - 10 | SS90035OOVO | 720 | 10 |
| | 9 - 14 | SS90035OOAO | 720 | 10 |
| | 11 - 18 | SS90036OOCO | 750 | 10 |
| | 13 - 22 | SS91888OODO | 820 | 10 |
| Direct Mounting on MK Contactors | MK2 Relay | | | |
| | 13 - 22 | CS90946OODO | 880 | 10 |
| | 20 - 32 | CS90946OOEO | 880 | 10 |

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 | SS94968O000 | 45 | 100 |
| Kit for Mounting MN 2 Relay on ML 1.5 contactor | SS94701O000 | 155 | 50 |
| Kit for Mounting MN 2 Relay separately (Direct Mounting Type) | SS94700O000 | 155 | 50 |
| Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor | SS94638O000 | 240 | 20 |
| Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor | SS94151O000 | 165 | 20 |
| Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor | SS94152O000 | 220 | 20 |
| DIN Rail Mounting Kit Relay on MN 2 Relay | SS91887O000 | 120 | 50 |

Relay Reset Cord for MN Relay



| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------|-------------|---------------------|------------------|
| MN Relay reset cord - 400mm | SB94207O000 | 540 | 1 |
| MN Relay reset cord - 650mm | SB94208O000 | 565 | 1 |
| MN Relay reset cord - 900mm | SB94209O000 | 620 | 1 |
| MN Relay reset cord - 1200mm | SB94210O000 | 695 | 1 |

Separate Mounting Kit for RTO & REO Relay



| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------------|-------------|---------------------|------------------|
| REO/RTO-1 Relay Separate Mounting Kit | CS96335O000 | 210 | 1 |
| RTO-2 Relay Separate Mounting Kit | CS96306O000 | 475 | 1 |
| RTO-3 Relay Separate Mounting Kit | CS96307O000 | 715 | 1 |

Relay Reset Cord for RTO & REO Relay

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-------------------------------|-------------|---------------------|------------------|
| RTO Relay reset cord - 400mm | CS90941O000 | 540 | 1 |
| RTO Relay reset cord - 650mm | CS90942O000 | 565 | 1 |
| RTO Relay reset cord - 900mm | CS90943O000 | 620 | 1 |
| RTO Relay reset cord - 1200mm | CS90944O000 | 695 | 1 |
| REO Relay Reset Cord - 400mm | CS90425O000 | 540 | 1 |



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Rocker Type

- MOG-S1: upto 32A
- Short circuit + Overload protection
- Icu=100kA upto 10A, Icu=50kA for 13A & Icu=25kA for 16-32A

Rotary Type

- MOG-H1M: upto 32A
- MOG-H2M: 32A-63A
- Short circuit protection
- Icu=100kA upto 13A & Icu=50kA from 16A-63A

Rotary Type

- MOG-H1: upto 32A
- MOG-H2: 32A-63A
- Short circuit + Overload protection
- Icu=100kA upto 13A & Icu=50kA from 16A-63A

✓ Short circuit protection

✓ Over current protection

Circuit Breaker


✓ Overload protection

✓ Phase loss protection

✓ Wide range of current adjustment dial

✓ Ambient temperature compensation

Thermal Overload Relay



MPCB

✓ Compact

✓ High breaking capacity

✓ Short circuit protective coordination

✓ Reduction in wiring work

✓ High switching durability

✓ Padlocking feature available even without extended rotary handle

✓ Stand alone motor protection

✓ Common accessories



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 | 1995 | 1 |
| 0.25 | 0.06 | 0.16 - 0.25 | 3.3 | ST418900000 | 1995 | 1 |
| 0.40 | 0.09 | 0.25 - 0.40 | 5.2 | ST418910000 | 1995 | 1 |
| 0.63 | 0.12 | 0.40 - 0.63 | 8.2 | ST418920000 | 2210 | 1 |
| 1.00 | 0.25 | 0.63 - 1.00 | 13 | ST418930000 | 2210 | 1 |
| 1.60 | 0.55 | 1.00 - 1.60 | 20.8 | ST418940000 | 2220 | 1 |
| 2.50 | 0.75 | 1.60 - 2.50 | 32.5 | ST418950000 | 2220 | 1 |
| 4.00 | 1.50 | 2.50 - 4.00 | 52 | ST418960000 | 2290 | 1 |
| 6.30 | 2.20 | 4.00 - 6.30 | 81.9 | ST418970000 | 2290 | 1 |
| 10.00 | 4.00 | 6.30 - 10.00 | 130 | ST418980000 | 2360 | 1 |
| 13.00 | 5.40 | 9.00 - 13.00 | 169 | ST418990000 | 2705 | 1 |
| 16.00 | 7.50 | 11.00 - 16.00 | 208 | ST419000000 | 2905 | 1 |
| 20.00 | 9.00 | 14.00 - 20.00 | 260 | ST419010000 | 3110 | 1 |
| 25.00 | 12.50 | 19.00 - 25.00 | 325 | ST419020000 | 3275 | 1 |
| 32.00 | 15.00 | 24.00 - 32.00 | 416 | ST419030000 | 5710 | 1 |

Breaking capacity: Icu = 100kA upto 10A, Icu = 50kA for 13A & Icu = 25kA for 16-32A

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 | 2555 | 1 |
| 0.25 | 0.06 | 0.16 - 0.25 | 3.3 | ST419050000 | 2555 | 1 |
| 0.40 | 0.09 | 0.25 - 0.40 | 5.2 | ST419060000 | 2555 | 1 |
| 0.63 | 0.12 | 0.40 - 0.63 | 8.2 | ST419070000 | 2975 | 1 |
| 1.00 | 0.25 | 0.63 - 1.00 | 13 | ST419080000 | 2975 | 1 |
| 1.60 | 0.55 | 1.00 - 1.60 | 20.8 | ST419090000 | 2975 | 1 |
| 2.50 | 0.75 | 1.60 - 2.50 | 32.5 | ST419100000 | 2975 | 1 |
| 4.00 | 1.50 | 2.50 - 4.00 | 52 | ST419110000 | 3035 | 1 |
| 6.30 | 2.20 | 4.00 - 6.30 | 81.9 | ST419120000 | 3035 | 1 |
| 10.00 | 4.00 | 6.30 - 10.00 | 130 | ST419130000 | 3200 | 1 |
| 13.00 | 5.40 | 9.00 - 13.00 | 169 | ST419140000 | 3515 | 1 |
| 16.00 | 7.50 | 11.00 - 16.00 | 208 | ST419150000 | 3955 | 1 |
| 20.00 | 9.00 | 14.00 - 20.00 | 260 | ST419160000 | 4280 | 1 |
| 25.00 | 12.50 | 19.00 - 25.00 | 325 | ST419170000 | 4280 | 1 |
| 32.00 | 15.00 | 24.00 - 32.00 | 416 | ST419180000 | 7300 | 1 |

Breaking capacity: Icu = 100kA upto 13A & Icu = 50kA from 16A - 32A

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

Motor Protection Circuit Breakers [8536]

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 | 2175 | 1 |
| 0.25 | 0.06 | 3.3 | ST419240000 | 2175 | 1 |
| 0.40 | 0.09 | 5.2 | ST419250000 | 2175 | 1 |
| 0.63 | 0.12 | 8.2 | ST419260000 | 2905 | 1 |
| 1.00 | 0.25 | 13 | ST419270000 | 2905 | 1 |
| 1.60 | 0.55 | 20.8 | ST419280000 | 2905 | 1 |
| 2.50 | 0.75 | 32.5 | ST419290000 | 2905 | 1 |
| 4.00 | 1.50 | 52 | ST419300000 | 2905 | 1 |
| 6.30 | 2.20 | 81.9 | ST419310000 | 2905 | 1 |
| 10.00 | 4.00 | 130 | ST419320000 | 2910 | 1 |
| 13.00 | 5.40 | 169 | ST419330000 | 2910 | 1 |
| 16.00 | 7.50 | 208 | ST419340000 | 2915 | 1 |
| 20.00 | 9.00 | 260 | ST419350000 | 3090 | 1 |
| 25.00 | 12.50 | 325 | ST419360000 | 3735 | 1 |
| 32.00 | 15.00 | 416 | ST419370000 | 5635 | 1 |

Breaking capacity: Icu = 100kA upto 13A & Icu = 50kA from 16A - 32A

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 | 8475 | 1 |
| 40.00 | 20.00 | 28.00 - 40.00 | 520 | ST419200000 | 9010 | 1 |
| 50.00 | 25.00 | 35.00 - 50.00 | 650 | ST419210000 | 11030 | 1 |
| 63.00 | 34.00 | 45.00 - 63.00 | 819 | ST419220000 | 11545 | 1 |

Breaking capacity: Icu = 50kA from 32A - 63A

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 | 7710 | 1 |
| 40.00 | 20.00 | 520 | ST419390000 | 7710 | 1 |
| 50.00 | 25.00 | 650 | ST419400000 | 8035 | 1 |
| 63.00 | 34.00 | 819 | ST419410000 | 8035 | 1 |

Breaking capacity: Icu = 50kA from 32A - 63A

Accessories for MOG [8538]



Short Circuit Alarm



Auxiliary + Alarm



Extended Rotary Handle



Shunt Trip



MPCBs with bus bar connection



Connecting Busbar link



3 Phase Feed in terminal

| Mounting Position * | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------|--|-------------|---------------------|------------------|
| F1/F2 | Auxiliary Contact Front mtg. 1NO | ST419420000 | 410 | 10 |
| F1/F2 | Auxiliary Contact Front mtg. 1NC | ST419430000 | 410 | 10 |
| L | Auxiliary Contact Left side mtg. 2NO | ST419440000 | 505 | 1 |
| L | Auxiliary Contact Left side mtg. 1NO + 1NC | ST419450000 | 505 | 1 |
| L | Auxiliary Contact Left side mtg. 2NC | ST419460000 | 505 | 1 |
| F2 | Trip Alarm Contact Front mtg. 1NO | ST419470000 | 650 | 10 |
| F2 | Trip Alarm Contact Front mtg. 1NC | ST419480000 | 650 | 10 |
| L | Auxiliary + Alarm Left side mtg. 2NO | ST419490000 | 695 | 1 |
| L | Short circuit alarm Left side mtg. 1NO + 1NC | ST419500000 | 695 | 1 |
| R | Shunt trip 24V DC | ST419510000 | 1305 | 1 |
| R | Shunt trip 110V, 50Hz | ST419520000 | 1375 | 1 |
| R | Shunt trip 230V, 50Hz | ST429520000 | 1375 | 1 |
| R | Under Voltage release, 110V, 50Hz | ST419530000 | 1375 | 1 |
| R | Under Voltage release, 415V, 50Hz | ST419540000 | 1375 | 1 |
| - | External operating handle, (Black) Frame 1 | ST419550000 | 895 | 1 |
| - | External operating handle, (Black) Frame 2 | ST419560000 | 895 | 1 |

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

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---|-------------|---------------------|------------------|
| Connecting Busbar link | | | |
| 2 MPCB 45 mm width w/o acc | ST419570000 | 505 | 5 |
| 3 MPCB 45 mm width w/o acc | ST419580000 | 555 | 5 |
| 4 MPCB 45 mm width w/o acc | ST419590000 | 600 | 5 |
| 5 MPCB 45 mm width w/o acc | ST419600000 | 650 | 5 |
| 2 MPCB 45 mm width with one acc 9 mm | ST419610000 | 590 | 5 |
| 3 MPCB 45 mm width with one acc 9 mm | ST419620000 | 640 | 5 |
| 4 MPCB 45 mm width with one acc 9 mm | ST419630000 | 685 | 5 |
| 5 MPCB 45 mm width with one acc 9 mm | ST419640000 | 735 | 5 |
| 2 MPCB 55 mm width w/o acc | ST419660000 | 920 | 1 |
| 3 MPCB 55 mm width w/o acc | ST419670000 | 1050 | 1 |
| 4 MPCB 55 mm width w/o acc | ST419680000 | 1260 | 1 |
| 2 MPCB 55 mm width with one acc 9 mm | ST419690000 | 1005 | 1 |
| 3 MPCB 55 mm width with one acc 9 mm | ST419700000 | 1135 | 1 |
| 4 MPCB 55 mm width with one acc 9 mm | ST419710000 | 1345 | 1 |
| 2 MPCB 55 mm width with two acc 18 mm | ST419720000 | 1175 | 1 |
| 4 MPCB 55 mm width with two acc 18 mm | ST419730000 | 1305 | 1 |
| Feed in terminal for 45 mm width Busbar | ST419650000 | 590 | 1 |
| Feed in terminal for 55 mm width Busbar | ST419740000 | 1020 | 1 |
| Bus bar safety cover 45 mm width Busbar | ST419750000 | 255 | 10 |
| Bus bar safety cover 55 mm width Busbar | ST419760000 | 275 | 10 |

acc: Accessories

LTLK MCBs with K-Curve Exclusively for Agricultural Pumps



- Range available from 6A to 125A - 3 Pole and 6A to 50A - 2 Pole
- Specially designed MCBs with K-Curve for Short circuit tripping band suitable for agricultural pumps

Customer Interaction Centre (CIC)

BSNL/MTNL (Toll free): 1800 233 5858 Reliance (Toll free): 1800 200 5858

Tel: +91 22 6774 5858 E-mail: cic@lntebg.com

Direct-on-Line Starters

in Sheet-Steel Enclosure Type MF, MK, MU & MB
(Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)



MK1 MK2 MU 1H MU 3

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 7.5 | 5.5 | 9 - 15 | MF1 | SS97210 | 1190 | 1 |
| 7.5 | 5.5 | 9 - 14 | MK1 DOL | SS96210 | 1950 | 1 |
| 7.5 | 5.5 | 11 - 18 | MK1 DOL | SS96211 | 2000 | 1 |
| 7.5 | 5.5 | 13 - 22 | MK1 DOL | SS96228 | 2050 | 1 |
| New 7.5 | 5.5 | 20 - 32 | MK2 DOL | CS90947 | 2220 | 1 |
| 10.0 | 7.5 | 15 - 25 | MU1 DOL # | SS95647 | 3350 | 1 |
| 10.0 | 7.5 | 14 - 23 | MB1 DOL # | SS95649 | 3510 | 1 |
| 12.5 | 9.3 | 20 - 32 | MU1H DOL # | CS90622 | 3660 | 1 |
| 15.0 | 11.0 | 24 - 38 | MU2 DOL # | SS95648 | 4450 | 1 |
| 15.0 | 11.0 | 20 - 33 | MB2 DOL # | SS95650 | 4715 | 1 |
| 17.5 | 13 | 28 - 42 | MU3 DOL # | CS90613 | 4850 | 1 |

For lower relay ranges, please refer Rural Electrical Products' price list.

Single Phase Starters



MF1 1-Ph MU-2P DOL

| Max. Motor Output at 230V, 1-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|-----|----------------------|-------------|-------------|---------------------|------------------|
| HP | kW | | | | | |
| 2.0 | 1.5 | 10.5 - 17.5 | MF1 | SS97227O0BO | 890 | 1 |
| 3.0 | 2.2 | 12 - 20 | MF1 | SS97227O0CO | 890 | 1 |
| 2 | 1.5 | 9 - 14 | MU-2P | CS90319KOAO | 1430 | 1 |
| 2 | 1.5 | 11 - 18 | MU-2P | CS90319KOCO | 1470 | 1 |
| 3 | 2.2 | 13 - 22 | MU-2P | CS90319KODO | 1515 | 1 |

Semi-Automatic Star-Delta Starters

in Sheet-Steel Enclosure Type MK, MU & MB
(Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)



MK 1S MU 1S MB 2S

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 12.5 | 9.3 | 9 - 14 | MK1 SASD | SS96255 | 6295 | 1 |
| 15.0 | 11.0 | 11 - 18 | MK1 SASD | SS96258 | 6345 | 1 |
| 15.0 | 11.0 | 13 - 22 | MK1 SASD | SS96260 | 6425 | 1 |
| 15.0 | 11.0 | 13 - 21 | MU1 SASD # | SS95891 | 8310 | 1 |
| 15.0 | 11.0 | 14 - 23 | MB1 SASD # | SS95895 | 9780 | 1 |
| 30.0 | 22.5 | 20 - 32 | MU2 SASD # | SS95893 | 10400 | 1 |
| 30.0 | 22.5 | 20 - 33 | MB2 SASD # | SS95897 | 11530 | 1 |

For lower relay ranges, please refer Rural Electrical Products' price list.

Direct-on-Line Starters

in Sheet-Steel Enclosure Type MN with Single Phase Protection feature
(Motor Rating AC-3 Duty, 415V, 50Hz, 3-Ph)



MN 16 MN 45

| 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 | 3150 | 1 |
| 15.0 | 11.0 | 14 - 23 | MN 25 DOL | SS94352 | 4820 | 1 |
| 20.0 | 15.0 | 20 - 33 | MN 32 DOL | SS94353 | 7775 | 1 |
| 30.0 | 22.5 | 30 - 50 | MN 45 DOL | SS94017 | 13300 | 1 |
| 45.0 | 33.5 | 45 - 75 | MN 65 DOL | SS94018 | 18210 | 1 |

Direct-on-Line Starters

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



ML 1.5 ML 2 ML 3

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 15.0 | 11.0 | 20 - 32 | ML 1.5 DOL | SS91854 | 5710 | 1 |
| 20.0 | 15.0 | 20 - 32 | ML 2 DOL | SS90702 | 9515 | 1 |
| 30.0 | 22.5 | 28 - 42 | ML 3 DOL | SS90722 | 16345 | 1 |

Semi-Automatic Star-Delta Starters

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



ML 1.5S ML 2S

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 25.0 | 18.5 | 13 - 21 | ML1.5 SASD | SS91856 | 13145 | 1 |
| 35.0 | 26.0 | 20 - 32 | ML2 SASD | SS90707 | 22980 | 1 |

Note:

- 1) # Type MU range consists of type MU Relay + MU contactors
Type MB range consists of type MN Relay + MU contactors
- 2) For Ordering Suffix please refer page No. 21

Fully Automatic Star-Delta Starters [8536]



MN 16F

in Sheet-Steel Enclosure Type MN
with Single Phase Protection feature
(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 | 10615 | 1 |
| 30.0 | 22.5 | 14 - 23 | MN 25 FASD | SS94364 | 11870 | 1 |
| 40.0 | 30.0 | 20 - 33 | MN 32 FASD | SS94366 | 19530 | 1 |
| 50.0 | 37.5 | 30 - 50 | MN 45 FASD | SS94021 | 31360 | 1 |
| 75.0 | 55.0 | 45 - 75 | MN 65 FASD | SS94022 | 51970 | 1 |
| 90.0 | 67.5 | 45 - 75 | MN 80 FASD | SS94705 | 56810 | 1 |
| 150.0 | 110.0 | 66 - 110 | MN 110 FASD | SS94706 | 74355 | 1 |
| 180.0 | 132.0 | 90 - 150 | MN 140 FASD | SS94707 | 77835 | 1 |

Fully-Automatic Star-Delta Starters [8536]

in Sheet-Steel Enclosure
Type MK, ML, MU & MB
(Motor Rating AC-3 Duty, 415V, 50Hz, 3Ph)



MK 1F



MB 1F



MU 2F

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 12.5 | 9.3 | 9 - 14 | MK1 FASD | SS96254 | 7020 | 1 |
| 15.0 | 11.0 | 11 - 18 | MK1 FASD | SS96257 | 7070 | 1 |
| 15.0 | 11.0 | 13 - 22 | MK1 FASD | SS96259 | 7115 | 1 |
| 15.0 | 11.0 | 13 - 21 | MU1 FASD # | SS95890 | 9665 | 1 |
| 15.0 | 11.0 | 14 - 23 | MB1 FASD # | SS95894 | 10330 | 1 |
| 30.0 | 22.5 | 20 - 32 | MU2 FASD # | SS95892 | 11420 | 1 |
| 30.0 | 22.5 | 20 - 33 | MB2 FASD # | SS95896 | 12635 | 1 |

For lower relay ranges, please refer Rural Electrical Products' price list.



ML 2F



ML 1.5F

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|-------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 25.0 | 18.5 | 13 - 21 | ML1.5 FASD* | SS91855 | 14920 | 1 |
| 35.0 | 26.0 | 20 - 32 | ML2 FASD | SS90705 | 23695 | 1 |
| 50.0 | 37.5 | 28 - 42 | ML3 FASD | SS90730 | 39400 | 1 |
| 75.0 | 55.0 | 45 - 75 | ML4 FASD | SS90913 | 67520 | 1 |
| 125.0 | 90.0 | 66 - 110 | ML6 FASD | SS90923 | 110705 | 1 |

Note: 1) # Type MU range consists of type MU Relay + MU contactors
Type MB range consists of type MN Relay + MU contactors
2) For Ordering Suffix please refer page No. 21

Spares for MK1 & MK2 Starters [8538]



Aux contact block



Spare coil



Combination coil



Push button unit

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---|----------|---------------------|------------------|
| Single Moving Contact for MK1 | SS91009 | 40 | 10 |
| Single Moving Contact for MK2 | CS90951 | 50 | 10 |
| Std. Operating Coils for MK1 & MK2 | | | |
| 400 / 440V, 50Hz | SS90047 | 155 | 10 |
| 360V, 50Hz | SS90165 | 155 | 10 |
| 230V, 50Hz | SS90045 | 155 | 10 |
| 220V, 50Hz | SS90044 | 155 | 10 |
| 110V, 50Hz | SS90043 | 155 | 10 |
| Auxiliary contact block: 1 NO + 1 NC | SS90120 | 205 | 50 |
| Spare kit with hardware for MK1 | CS90983 | 395 | 50 |
| Spare kit with hardware for MK2 | CS90956 | 525 | 50 |
| Thermal timer without combination coil | SS90224 | 570 | 1 |
| Combination Coils for MK1 | | | |
| Combination coils for 400 / 440V, 50Hz | SS90443 | 375 | 10 |
| Combination coils for 230V, 50Hz | SS90444 | 375 | 10 |
| Combination coils for 380V, 50Hz | SS90445 | 375 | 10 |
| Combination coils for 360V, 50Hz | SS90446 | 375 | 10 |
| Push Button Unit for MK1 & MK2 | SS90004 | 90 | 1 |
| Arc Shield for MK1 | SS50004 | 95 | 1 |
| Arc Shield for MK2 | CS91013 | 100 | 1 |
| Contact bridge without Contacts for MK1 | SS50005 | 90 | 1 |
| Contact bridge without Contacts for MK2 | CS91014 | 95 | 1 |

Spares for MN Starters [8538]

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--|-------------|---------------------|------------------|
| Bracket for Mounting cont. MNX 25 - 32 | SS940300000 | 100 | 20 |
| MN DOL/FASD Push Button | SS939410000 | 165 | 10 |

Electronic Timers Type ST 100 [9107]



ST 100

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std Pkg. (Nos.) |
|-----------------------------------|-------------|---------------------|-----------------|
| 240 / 360 / 415V, 50Hz for | | | |
| 3 - 30 secs. | ST803280000 | 1375 | 1 |
| 12 - 120 secs. | ST803290000 | 1375 | 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.

Submersible Pump Controllers

Submersible Pump Controller [8536]

In Sheet Enclosure Type MU - G
(Motor Rating AC-3 Duty, 415V, 50Hz, 3 phase)



MU - G6



MU - G10

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|-----|----------------------|------------------------------------|----------|---------------------|------------------|
| HP | kW | | | | | |
| 6 | 4.5 | 9 - 14 | MU - G6 DOL Starter [§] | SS97756 | 5800 | 1 |
| 10 | 7.5 | 13 - 21 | MU - G10 DOL Starter [§] | SS95983 | 6825 | 1 |
| 10 | 7.5 | 28 - 42 | MU - G10H DOL Starter [§] | SS95974 | 7915 | 1 |

§ For lower relay ranges, please refer Rural Electrical Products' price list.

Submersible Pump Controller [8536]

In Sheet Steel Enclosure Type MR-G, MF-G

With MU-2P Contactor & MU-2P Relay



MR-G2



MR-G3



MF-G1

| Max. Motor Output at 230V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|---|----------|---------------------|------------------|
| HP | kW | | | | | |
| 0.5 | 0.37 | 6 - 10 | Type MR-G2 [§] For Single Phase Motors (Only Ammeter Version) | SS96988 | 3255 | 1 |
| 1.0 | 0.75 | 9 - 14 | | SS96560 | 3550 | 1 |
| 1.5 | 1.1 | 11 - 18 | | SS96989 | 3870 | 1 |
| 2.0 | 1.5 | 13 - 22 | | SS96990 | 4045 | 1 |
| 3.0 | 2.2 | 16 - 26 | | CS96461 | 4435 | 1 |
| 5.0 | 3.7 | 20 - 32 | Type MR-G3 [§] | CS96167 | 6260 | 1 |
| 0.5 | 0.37 | 6.5 - 11 | Type MF-G1 [§] For Single Phase Motors (Only Ammeter Version) | SS97734 | 2180 | 1 |
| 1.0 | 0.75 | 12 - 20 | | SS97736 | 2280 | 1 |
| 1.5 | 1.1 | 12 - 20 | | SS97737 | 2360 | 1 |
| 2.0 | 1.5 | 12 - 20 | | SS97738 | 2400 | 1 |

§ For lower relay ranges & dual meter version, please refer Rural Electrical Products' price list.

Submersible Pump Controller [8536]

In Sheet Enclosure Type MU-G
(Motor Rating AC-3 Duty, 415V, 50 Hz, 3 phase)



MU-G15



MU-G20



MU-G50



MU-G75

| Max. Motor Output at 415V, 3-Ph | | Relay Max. Range (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------------------------|------|----------------------|---|----------|---------------------|------------------|
| HP | kW | | | | | |
| 15 | 11 | 13 - 22 | MU-G15 Fully Automatic Star - Delta Starter [§] | CS94091 | 11095 | 1 |
| 20 | 15 | 13 - 21 | MU-G20 Fully Automatic Star - Delta Starter [§] | SS95984 | 12985 | 1 |
| 20 | 15 | 28 - 42 | MU-G20H Fully Automatic Star - Delta Starter [§] | SS95975 | 15890 | 1 |
| 30 | 22.5 | 30 - 50 | MU-G30 Fully Automatic Star - Delta Starter [§] | CS96008 | 26480 | 1 |
| 40 | 30 | 36 - 60 | MU-G40 Fully Automatic Star - Delta Starter [§] | CS90908 | 30845 | 1 |
| 50 | 37.5 | 45 - 75 | MU-G50 Fully Automatic Star - Delta Starter [§] | CS96009 | 42305 | 1 |
| 75 | 56 | 66 - 110 | MU-G75 Fully Automatic Star - Delta Starter [§] | CS96451 | 57865 | 1 |

§ For lower relay ranges, please refer Rural Electrical Products' price list.

M-POWER + Module for Mobile Starter [8538]



| Description | IVRS Languages | Suitable Region | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--|--|-----------------|-------------|---------------------|------------------|
| M-POWER + Module for Mobile Starter - 1P/3P 3 Wire | English, Hindi, Marathi, Punjabi, Gujarati | North & West | GSM0301OONO | 6150 | 1 |
| | English, Hindi, Kannada, Telugu, Tamil | South | GSM0301OOSO | 6150 | 1 |
| | English, Hindi, Bengali, Odiya, Assamese | East | GSM0301OOEO | 6150 | 1 |

Salient Features and Benefits of Submersible Pump Controller

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Protections Offered - Overload, Single Phasing, Phase reversal, Phase imbalance
- Auto Restart Feature
- Vibration proof enclosure with IP54 protection class
- Indications Offered - ON/OFF, Voltage and Ampere
- Compatible with M-POWER+

Ordering Suffix for MK1/MU/MB/ML & MN Starters

| Coil Voltages | Relay Range (A) | | | | |
|---------------|-----------------|-------------|-------------|---------------|---------------|
| | MK1 | MU | MB | ML | MN |
| B - 240 V | A : 9 - 14 | A : 9 - 14 | B : 9 - 15 | A : 9 - 14 | B : 9 - 15 |
| C - 360 V | C : 11 - 18 | C : 13 - 21 | D : 14 - 23 | B : 10 - 16 | D : 14 - 23 |
| D - 415 V | D : 13 - 22 | D : 15 - 25 | E : 20 - 33 | C : 13 - 21 | E : 20 - 33 |
| P - 440 V | M : 1 - 1.6 | E : 20 - 32 | | E : 20 - 32 | G : 30 - 50 |
| | P : 1.5 - 2.5 | G : 24 - 38 | | F : 28 - 42 | J : 45 - 75 |
| | R : 2.5 - 4 | F : 28 - 42 | | G : 30 - 50 | K : 66 - 110 |
| | T : 4 - 6.5 | | | J : 45 - 75 | Q : 2 - 3.3 |
| | V : 6 - 10 | | | K : 66 - 110 | S : 3 - 5 |
| | | | | M : 90 - 150 | T : 36 - 60 |
| | | | | P : 135 - 225 | U : 4.5 - 7.5 |
| | | | | Q : 180 - 310 | V : 6 - 10 |
| | | | | R : 2.5 - 4 | M : 90 - 150 |
| | | | | T : 13 - 21 | |

MCBs exclusively for Agricultural Pumps

- Range available from 6A to 125A - 3 Pole and 6A to 50A - 2 Pole
- Specially designed MCBs with K-Curve
 - Short circuit tripping band suitable for submersible pumps
 - Offers effective short circuit protection
- Rated Voltage: 240V / 415V AC
- Breaking Capacity :
 - 10kA as per IEC 60947-2 up to 63A
 - 15kA as per IEC 60947-2 for 100A-125A

| Description | Rating | Modules 1 Mod = 17.5mm | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.)* |
|-------------|--------|------------------------------|----------|---------------------------|-------------------------|
| 2 Pole | 6A | 2 | LK20060K | 445 | 6 |
| | 10A | 2 | LK20100K | 445 | 6 |
| | 16A | 2 | LK20160K | 445 | 6 |
| | 20A | 2 | LK20200K | 445 | 6 |
| | 25A | 2 | LK20250K | 445 | 6 |
| | 32A | 2 | LK20320K | 445 | 6 |
| | 50A | 2 | LK20500K | 720 | 6 |

* Includes DIN channel & hardware for individual MCB up to 63A.



| Description | Rating | Modules 1 Mod = 17.5mm | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.)* |
|-------------|--------|------------------------------|----------|---------------------------|-------------------------|
| 3 Pole | 6A | 3 | LK30060K | 725 | 4 |
| | 10A | 3 | LK30100K | 725 | 4 |
| | 16A | 3 | LK30160K | 725 | 4 |
| | 20A | 3 | LK30200K | 725 | 4 |
| | 25A | 3 | LK30250K | 725 | 4 |
| | 32A | 3 | LK30320K | 725 | 4 |
| | 40A | 3 | LK30400K | 1120 | 4 |
| | 50A | 3 | LK30500K | 1120 | 4 |
| | 63A | 3 | LK30630K | 1120 | 4 |
| | 100A | 4.5 | LK31000K | 4640 | 1 |
| 125A | 4.5 | LK31250K | 5145 | 1 | |

i-PROTECTOR [8536]

SPPR range with Dry Run Protection



- Micro-controller based protection design
- Digital Ammeter and Voltmeter in select variants
- Auto/Manual/Bypass Mode available
- Suitable for all starters - upto 40A
- Protections available - Voltage Single Phasing, Current Single Phasing, Voltage unbalance fault from supply side, Current unbalance fault from motor side, Phase reversal fault, Under voltage fault, Over voltage fault
- Dry-run fault (Adjustable current setting and adjustable reset time)

| Description | Rating | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---------------|--|----------------------|---------------------------|------------------------|
| <i>i-AD</i> | Dry run protection relay (current based) | CS90861 [#] | 830 | 1 |
| <i>i-AD</i> | Dry run protection relay (current based) | CS90861 [*] | 850 | 1 |
| <i>i-ADS</i> | Single phasing preventer & dry run protection relay (current based) | CS90862 [*] | 1650 | 1 |
| <i>i-ADSM</i> | Single phasing preventer & dry run protection relay + VI meter (current based) | CS90863 [*] | 2095 | 1 |
| <i>i-VDS</i> | Single phasing preventer & dry run protection relay (voltage based) | CS90866 [*] | 1480 | 1 |
| <i>i-VDSM</i> | Single phasing preventer & dry run protection relay + VI meter (voltage based) | CS90875 [*] | 2095 | 1 |

BOOO : 240V

* COOO : 360V, LOOO : 380V, DOOO : 415V

Water Level Controller (WLC) [9032]



| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---|-------------|---------------------------|------------------------|
| Water Level Controller (240V) (Double Tank Draining & Filling Application) | XM810520000 | 1140 | 1 |
| Water Level Controller (415V) (Double Tank Draining & Filling Application) | XM810530000 | 1140 | 1 |
| Water Level Controller (110V) (Double Tank Draining & Filling Application) | XM810540000 | 1140 | 1 |
| Water Level Controller (240V) (Single Tank Filling Application) | XM810550000 | 1085 | 1 |
| Water Level Controller (415V) (Single Tank Filling Application) | XM810560000 | 1085 | 1 |
| Water Level Controller (110V) (Single Tank Filling Application) | XM810570000 | 1085 | 1 |
| WLC probes (set of 3 nos.) | XM810510000 | 370 | 1 |
| WLC probes (set of 6 nos.) | XM810760000 | 745 | 1 |

Single Phase Preventer Relay [9032]



With Settable time
ON Delay
30sec - 5min

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---|-------------|---------------------------|------------------------|
| SPPR type S5z (7 Wire), 380V | ST921660000 | 625 | 1 |
| SPPR type S5z (6 Wire), 360V (For MU-G10/10H) | CS94824COOO | 625 | 1 |
| SPPR type S5z (6 Wire), 380V (For MU-G6) | CS94824LOOO | 625 | 1 |
| SPPR type S5z (6 Wire), 415V (For MU-G10/10H) | CS94824DOOO | 625 | 1 |
| SPPR type SDz5, 360V (For MU-G20/20H) | XM818080000 | 1225 | 1 |
| SPPR type SDz5, 380V (For MU-G30/40/50/75) | XM818070000 | 1225 | 1 |
| SPPR type SDz5, 415V (For MU-G15/20/20H) | XM818090000 | 1225 | 1 |

Enclosed Automatic Transfer Switch

Automatic Solution | Pre-wired | Flexible Settings



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

New

| Description | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|-----------------------------|------|--------------------|---------------------------|------------------------|
| Enclosed ATS, Frame 2, 125A | 125A | CK90161BSOO | 58000 | 1 |
| Enclosed ATS, Frame 2, 160A | 160A | CK90162BSOO | 62810 | 1 |
| Enclosed ATS, Frame 2, 200A | 200A | CK90163BSOO | 63750 | 1 |
| Enclosed ATS, Frame 3, 250A | 250A | CK90164BSOO | 79880 | 1 |
| Enclosed ATS, Frame 3, 315A | 315A | CK90165BSOO | 81550 | 1 |
| Enclosed ATS, Frame 4, 400A | 400A | CK90166BSOO | 95400 | 1 |
| Enclosed ATS, Frame 4, 630A | 630A | CK90167BSOO | 102930 | 1 |

Chapter ID [8537]

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



Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

On Load Changeover Switch - Disconnectors [8536]

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
- Site convertible fuse version for open execution
- Site convertible dual shaft position
- SS enclosure version does not require separate cable gland box
- Staggered terminals



Open execution



SS enclosure



Motorised Changeover

Features offered by Motorised Changeover

- Range 125 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

Inbuilt 2 C/O Auxiliary Contact across the range

| 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 | 63 | CO1-63 | CO106300000 | 4500 | CO106300S00 | 6400 | - | - | 1 |
| | 63 | CO1-63 | CO10630000D ▲ | 4210 | | | | | |
| | 100 | CO1-100 | CO110000000 | 5930 | CO110000S00 | 8170 | - | - | 1 |
| | 100 | CO1-100 | CO11000000D ▲ | 5480 | | | | | |
| Fr 2 | 125 | CO1-125 | CO112500000 | 7400 | CO112500S00 | 10500 | - | - | 1 |
| | 125 | CO2-125 | CO212500000 | 8930 | CO212500S00 | 12140 | CK90161B000 | 28560 | 1 |
| | 160 | CO2-160 | CO216000000 | 9750 | CO216000S00 | 13280 | CK90162B000 | 32650 | 1 |
| Fr 3 | 200 | CO2-200 | CO22000000A | 11610 | CO220000S00 | 15360 | CK90163B000 | 33970 | 1 |
| | 250 | CO3-250 | CO325000000 | 17040 | CO325000S00 | 21350 | CK90164B000 | 42040 | 1 |
| Fr 4 | 315 | CO3-315 | CO331500000 | 17950 | CO331500S00 | 22380 | CK90165B000 | 42790 | 1 |
| | 400 | CO4-400 | CO440000000 | 26200 | CO440000S00 | 32620 | CK90166B000 | 53890 | 1 |
| Fr 5 | 630 | CO4-630 | CO463000000 | 30860 | CO463000S00 | 37810 | CK90167B000 | 59040 | 1 |
| | 630 | CO5-630 ^α | CO563000000 ^α | 32060 | - | - | CK90168B000 | 62460 | 1 |
| | 800 | CO5-800 | CO580000000 | 45880 | CO580000S00 | 55840 | CK90169B000 | 88130 | 1 |
| Fr 6 | 1000 | CO5-1000 | CO510000000 | 78470 | CO510000S00 | 99060 | CK90170B000 | 114550 | 1 |
| | 1250 | CO6-1250 | CO612500000 | 102730 | - | - | CK90081B000 | 141520 | 1 |
| | 1600 | CO6-1600 | CO616000000 | 120250 | - | - | CK90082B000 | 166170 | 1 |
| | 2000 | CO6-2000 | CO620000000 | 145030 | - | - | CK90083B000 | 191490 | 1 |

▲ Direct handle version # Sheet Steel Enclosure version is with CO with extended handle
^α Fuse mounting kit CX563000000 is suitable for mounting on CO5-630 Changeover Switch

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 | 280 | 1 |
| | CO2-(125-200A) | CX200020000 | 565 | 1 |
| | CO3-(250-315A) | CX300020000 | 820 | 1 |
| | CO4-(400-630A) | CX400020000 | 870 | 1 |
| | CO5-(630-1000A) | CX500020000 | 990 | 1 |
| | CO6-(1250-2000A) | CX600020000 | 1055 | 1 |
| Operating Handle | CO1-(63-125A) | CX100010000 | 500 | 1 |
| Operating Handle Kit (handle + shaft + center bush + bush clip) | CO2-(125-200A) | CX300010000 | 865 | 1 |
| | CO3-(250-315A) | CK903920000 | 1145 | 1 |
| | CO4-(400-630A) | CX400010000 | 1145 | 1 |
| | CO5-(630-1000A) | CX500010000 | 1250 | 1 |
| Operating Handle | CO6-(1250-2000A) | CX600010000 | 1360 | 1 |
| Castell Type Lock [§] | CO-(125-1000A) | CX400040000 | 1600 | 1 |
| | CO6-(1250-2000A) | CX600040000 | 1600 | 1 |
| Output shorting link | CO1-(63-125A) Top Side | CX10005000T | 515 | 1 |
| | CO1-(63-125A) Bottom Side | CX10005000B | 515 | 1 |
| Operating Handle for Motorised Changeover | C/O Frame 2 & 3 (125-315A) | CK903740000 | 845 | 1 |
| | C/O Frame 4 & 5 (400-1000A) | CK903780000 | 1115 | 1 |
| | C/O Frame 6 (1250-2000A) | CK906450000 | 1325 | 1 |

§ Chapter ID [8301]

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 | 14155 | 1 |
| | AuXC - 2000 Controller with wire harness | AuXC - 2000 ^β wire harness | ATC20000000 | 20300 |
| Control Accessories | Illuminated Push Button assembly with Wire harness | CK900990000 | 2595 | 1 |
| | | CK901950000 | 2325 | 1 |

^β Chapter ID [9032]

Fuse Mountable Kit [8538]

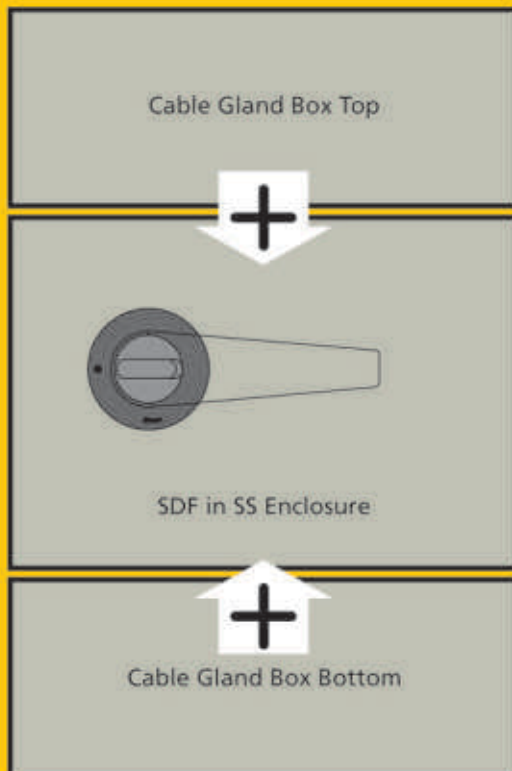


| Description | Suitable fuse-link | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--------------------|--------------------|---------|-------------|---------------------|------------------|
| Fuse Mountable Kit | HF 14x51 | CO1-63 | CX106300OCO | 1225 | 1 |
| | HN Size 000 | CO2-125 | CX212500ODO | 2985 | 1 |
| | HN Size 00 | CO2-160 | CX216000ODO | 3960 | 1 |
| | HN Size 1 | CO3-250 | CX325000ODO | 5425 | 1 |
| | HN Size 1 | CO3-315 | CX331500ODO | 5675 | 1 |
| | HN Size 2 | CO4-400 | CX440000ODO | 8280 | 1 |
| | HN Size 3 | CO5-630 | CX563000ODO | 17885 | 1 |
| | HN Size 3 | CO5-800 | CX580000ODO | 19980 | 1 |

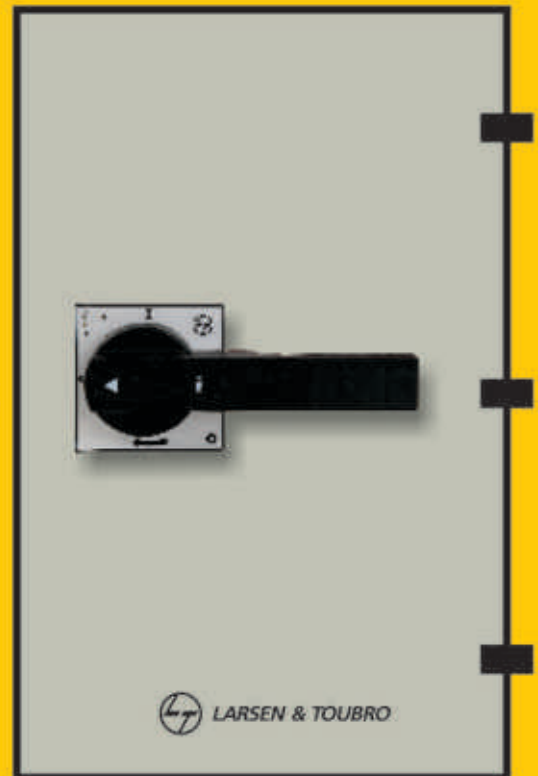
FN TPN SDF and C-line Manual Changeover in Sheet Steel Enclosure

Separate cable gland boxes are not required for SDF and Changeover in spacious enclosures...

Get the benefits of **3**



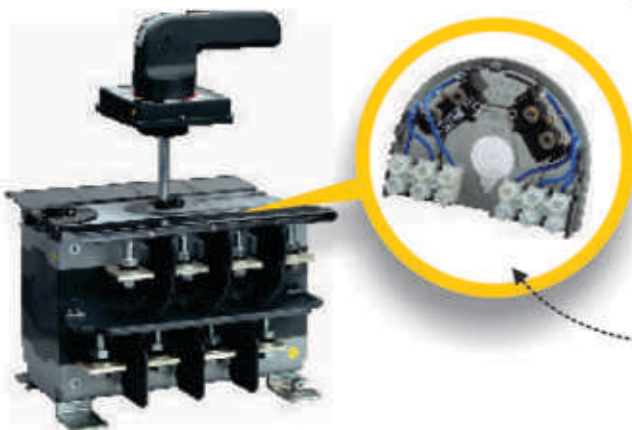
in **1** by choosing FN & C-line



See. Assure. Act Inbuilt Aux. Contacts for CO Switch Status

Safeguard the continuity of power supply in your premises by knowing the actual position of the Changeover Switch

Open Execution Manual Changeover Switches have inbuilt 2 sets of auxiliary changeover contacts (One for each position) throughout the range, 63A to 2000A.



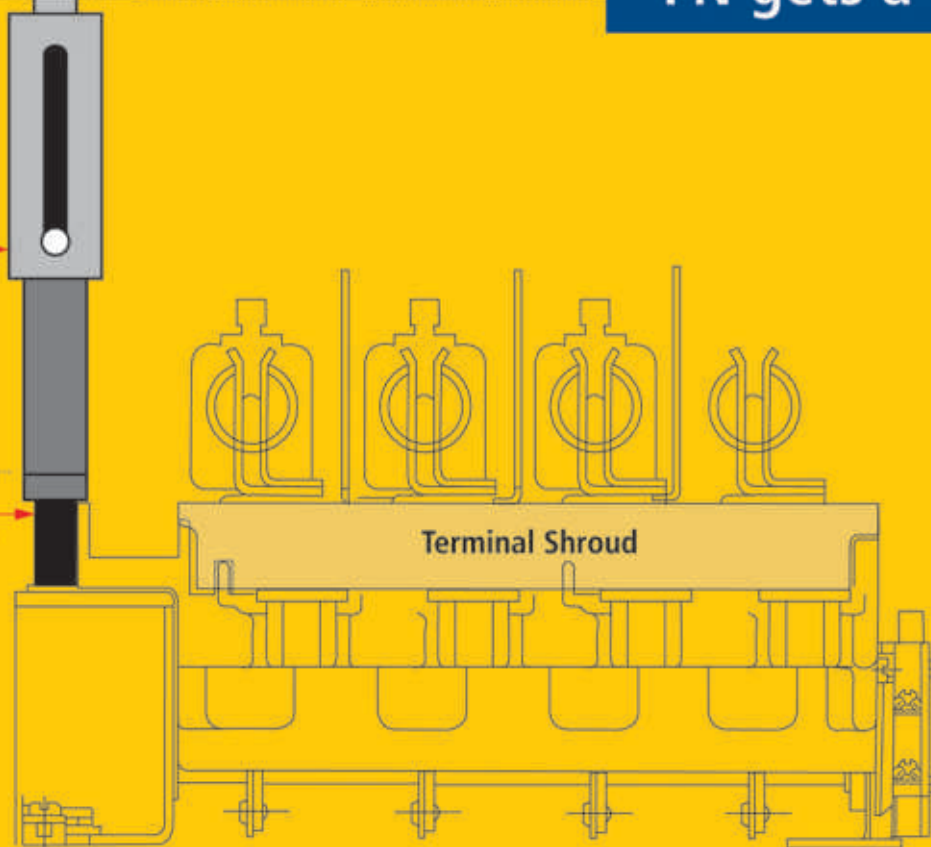


FN gets a Facelift!

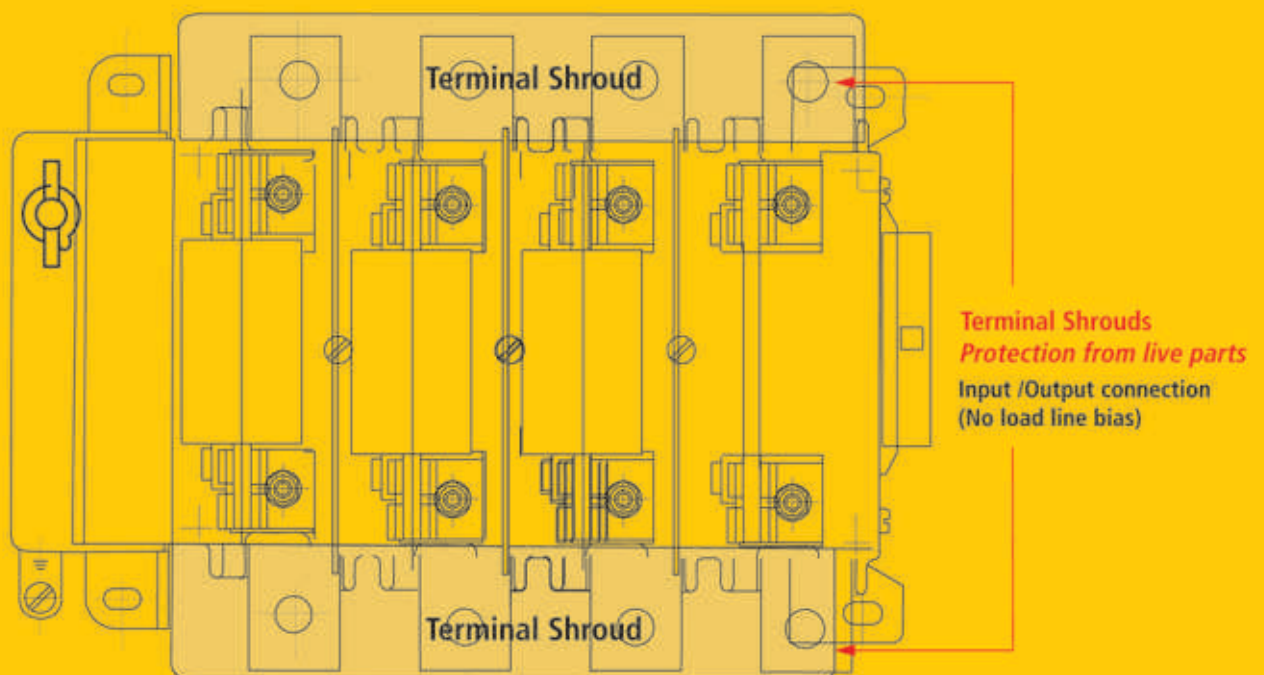
Telescopic Shafts :
Flexibility for fine
adjustment in depth

Slide

Adjustable telescopic shaft



Why compromise with your safety, when it comes at no extra cost...



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

Features offered by FN S-D-F

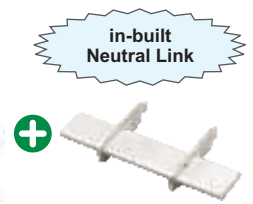
- Range 32A to 800A, 415V, AC 23A
- Suitable for Cylindrical / DIN fuse-link
- Conforms to IEC 60947-3, IS/IEC 60947-3
- **Telescopic shaft for depth adjustment**
- Door interlock & padlock facility
- **FN 4-Pole with in-built Neutral Link**
- **Terminal shrouds on both sides**



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



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



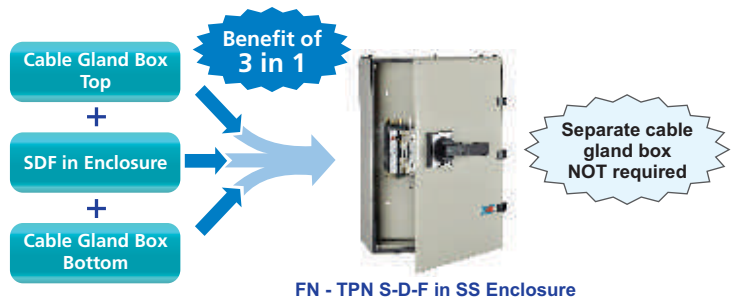
| Size | Rated Current (A) | Suitable HRC fuse-link | | Open Execution Type FN (TPN) S-D-F suitable for DIN fuse-link | | | Std. Pkg. (Nos.) | Open Execution Type FN S-D-F suitable for DIN fuse-link (4P) | | | Std. Pkg. (Nos.) |
|------|-------------------|------------------------|------------|---|----------|---------------------|------------------|--|----------|---------------------|------------------|
| | | Type | Range (A) | Type | Cat. No. | M.R.P. (₹) Per Unit | | Type | Cat. No. | M.R.P. (₹) Per Unit | |
| Fr 1 | 32 | HF | 2 to 32 | FN 32 TPN / FP | SK95518 | 1865 | 1 | FN 32 TPN/FP | SK95518 | 1865 | 1 |
| | 32 | HF | 2 to 32 | FN 32 TPN / FP CE* | SK95703* | 1680 | 1 | FN 32 TPN/FP CE* | SK95703 | 1680 | 1 |
| | 63 | HF | 2 to 63 | FN 63 TPN / FP | SK95421 | 2580 | 1 | FN 63 TPN/FP | SK95421 | 2580 | 1 |
| | 63 | HF | 2 to 63 | FN 63 TPN / FP CE* | SK95704* | 2330 | 1 | FN 63 TPN/FP CE* | SK95704 | 2330 | 1 |
| Fr 2 | 100 | HN Size 000/00 | 63 to 100 | FN 100 TPN | SK95568 | 5320 | 1 | FN 100 FP | SK90496 | 6390 | 1 |
| | 125 | HN Size 000/00 | 63 to 125 | FN 125 TPN | SK95001 | 6995 | 1 | FN 125 FP | SK90497 | 8270 | 1 |
| | 160 | HN Size 000/00 | 63 to 160 | FN 160 TPN | SK95713 | 7585 | 1 | FN 160 FP | SK90498 | 9140 | 1 |
| Fr 3 | 200 | HN Size 0 | 80 to 200 | FN 200 TPN | SK95418 | 9925 | 1 | FN 200 FP | SK90471 | 10995 | 1 |
| | 250 | HN Size 1 | 125 to 250 | FN 250 TPN | SK95642 | 11780 | 1 | FN 250 FP | SK90472 | 12730 | 1 |
| Fr 4 | 315 | HN Size 1 | 125 to 315 | FN 315 TPN | SK95461 | 14565 | 1 | FN 315 FP | SK90473 | 15570 | 1 |
| | 400 | HN Size 2 | 200 to 400 | FN 400 TPN | SK95481 | 17545 | 1 | FN 400 FP | SK90480 | 18460 | 1 |
| Fr 5 | 630 | HN Size 3 | 315 to 630 | FN 630 TPN | SK95521 | 28225 | 1 | FN 630 FP | SK90481 | 29570 | 1 |
| | 800 | HN Size 3 | 315 to 800 | FN 800 TPN | SK95679 | 30630 | 1 | FN 800 FP | SK90482 | 31995 | 1 |

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

FN- TPN S-D-F in SS Enclosure

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

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



| 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 | 2 to 32 | FN 32 TPN / FP CE* | SK90483* | 4335 | 1 |
| | 63 | HF | 2 to 63 | FN 63 TPN / FP CE* | SK90484* | 5075 | 1 |
| Fr 2 | 100 | HN Size 000/00 | 63 to 100 | FN 100 TPN | SK90485 | 8660 | 1 |
| | 125 | HN Size 000/00 | 63 to 125 | FN 125 TPN | SK90486 | 10260 | 1 |
| | 160 | HN Size 000/00 | 63 to 160 | FN 160 TPN | SK90487 | 10985 | 1 |
| Fr 3 | 200 | HN Size 0 | 80 to 200 | FN 200 TPN | SK90488 | 14595 | 1 |
| | 250 | HN Size 1 | 125 to 250 | FN 250 TPN | SK90489 | 16820 | 1 |
| Fr 4 | 315 | HN Size 1 | 125 to 315 | FN 315 TPN | SK90490 | 19945 | 1 |
| | 400 | HN Size 2 | 200 to 400 | FN 400 TPN | SK90491 | 23270 | 1 |
| Fr 5 | 630 | HN Size 3 | 315 to 630 | FN 630 TPN | SK90492 | 37300 | 1 |
| | 800 | HN Size 3 | 315 to 800 | FN 800 TPN | SK90493 | 40025 | 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 Pg. 31 for Switch-Disconnectors

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

Also for 220Vdc & 240Vac application

Features offered by FN S-D-F

- Range 32A to 630A, 415V, AC 23A
- Suitable for Cylindrical / DIN fuse-link
- Conforms to IEC 60947-3, IS/IEC 60947-3
- **Telescopic shaft for depth adjustment**
- Door interlock & padlock facility
- **Terminal shrouds on both sides**



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 14x51 | FN 32 2P | SK95594 | 1515 | 1 |
| | 63 | HF 14x51 | FN 63 2P | SK95595 | 2090 | 1 |
| Fr 2 | 100 | HN Size 000/00 | FN 100 2P | ST35086 | 4245 | 1 |
| | 125 | HN Size 000/00 | FN 125 2P | ST35087 | 5410 | 1 |
| | 160 | HN Size 000/00 | FN 160 2P | ST35088 | 5790 | 1 |
| Fr 3 | 200 | HN Size 0 | FN 200 2P | ST35089 | 7250 | 1 |
| | 250 | HN Size 1 | FN 250 2P | ST31674 | 8715 | 1 |
| Fr 4 | 315 | HN Size 1 | FN 315 2P | ST38930 | 11385 | 1 |
| | 400 | HN Size 2 | FN 400 2P | ST31676 | 13590 | 1 |
| Fr 5 | 630 | HN Size 3 | FN 630 2P | ST35090 | 21930 | 1 |

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
- Suitable for Bolted fuse-link
- Conforms to IEC 60947-3, IS/IEC 60947-3
- **Telescopic shaft for depth adjustment**
- Door interlock & padlock facility
- **Terminal shrouds on both sides**



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 | 1740 | 1 |
| | 63 | A1L | FN 63 TPN | SK95651 | 2480 | 1 |
| Fr 2 | 100 | A4 | FN 100 TPN | SK95570 | 4950 | 1 |
| | 125 | A4 | FN 125 TPN | SK95009 | 6500 | 1 |
| | 160 | A4 | FN 160 TPN | SK95714 | 7070 | 1 |
| Fr 3 | 200 | B1 / B2 | FN 200 TPN | SK95588 | 8890 | 1 |
| | 250 | B2 / B3 | FN 250 TPN | SK95682 | 11160 | 1 |
| Fr 4 | 315 | B3 | FN 315 TPN | SK95590 | 13810 | 1 |
| | 400 | B4 | FN 400 TPN | SK95591 | 16230 | 1 |
| Fr 5 | 630 | C2 | FN 630 TPN | SK95592 | 26680 | 1 |

Type FNX S-D-F suitable for DIN fuse-link in open execution

Features offered by FNX S-D-F

- Range 32A to 800A, 415V, AC 23A
- TPN and 4P version
- Suitable for Cylindrical / DIN fuse-link
- Telescopic shaft for depth adjustment
- DIN rail mounting up to 100A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility
- **FNX 4-Pole with in-built Neutral Link**



FNX TPN S-D-F



FNX 4P S-D-F



| Size | Rated Current (A) | Suitable fuse-link type | Range (A) | Open Execution Type FNX (TPN) S-D-F suitable for DIN fuse-link | | | | Open Execution Type FNX (4P) S-D-F suitable for DIN fuse-link | | | | Std. Pkg. (Nos.) |
|------|-------------------|-------------------------|------------|--|----------|---------------------|------------------|---|----------|---------------------|------------------|------------------|
| | | | | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) | |
| Fr 1 | 32 | HF | 2 to 32 | FNX 32 TPN / FP | SK96903 | * | 1 | FNX 32 TPN / FP | SK96903 | * | 1 | |
| | 63 | HF | 2 to 63 | FNX 63 TPN / FP | SK96904 | * | 1 | FNX 63 TPN / FP | SK96904 | * | 1 | |
| Fr 2 | 100 | HN Size 000 | 63 to 100 | FNX 100 TPN / FP | SK96906 | * | 1 | FNX 100 TPN / FP | SK96906 | * | 1 | |
| Fr 3 | 125 | HN Size 000/00 | 63 to 125 | FNX 125 TPN | SK95806 | * | 1 | FNX 125 FP | SK95814 | * | 1 | |
| | 160 | HN Size 000/00 | 63 to 160 | FNX 160 TPN | SK95807 | * | 1 | FNX 160 FP | SK95815 | * | 1 | |
| Fr 4 | 200 | HN Size 0 | 80 to 200 | FNX 200 TPN | SK95808 | * | 1 | FNX 200 FP | SK95816 | * | 1 | |
| | 250 | HN Size 1 | 125 to 250 | FNX 250 TPN | SK95809 | * | 1 | FNX 250 FP | SK95817 | * | 1 | |
| Fr 5 | 315 | HN Size 1 | 125 to 315 | FNX 315 TPN | SK95810 | * | 1 | FNX 315 FP | SK95818 | * | 1 | |
| | 400 | HN Size 2 | 200 to 400 | FNX 400 TPN | SK95811 | * | 1 | FNX 400 FP | SK95819 | * | 1 | |
| Fr 6 | 630 | HN Size 3 | 315 to 630 | FNX 630 TPN | SK95812 | * | 1 | FNX 630 FP | SK95820 | * | 1 | |
| | 800 | HN Size 3 | 315 to 800 | FNX 800 TPN | SK95813 | * | 1 | FNX 800 FP | SK95821 | * | 1 | |

* Available on request

Notes : 1) For 690V AC application, please contact nearest branch office.
2) The prices for S-D-F range are without HRC fuses

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



| 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 / FNX 32 / 63 S-D-F & for HCO 32 Fuse base | SF90144 | 100 | 30 |
| | 4 | | SF90145 | 100 | 30 |
| | 6 | | SF90146 | 100 | 30 |
| | 8 | | SF90147 | 100 | 30 |
| | 10 | | SF90148 | 100 | 30 |
| | 16 | | SF90150 | 100 | 30 |
| | 20 | | SF90151 | 100 | 30 |
| | 25 | | SF90152 | 100 | 30 |
| | 32 | | SF90142 | 100 | 30 |
| | 40 | | SF90143 | 110 | 30 |
| | 50 | | SF90158 | 236 | 30 |
| | 63 | | SF90159 | 296 | 30 |

DIN Type Fuse Links Type HN



| Size | Rated Current (A) | Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------|-------------------|---|----------|---------------------|------------------|
| 000 | 63 | Suitable for Type FN 100/125/160 / FNX 100/125/160 S-D-F & for HB 160 Fuse base | SF94940 | 310 | 3 |
| | 80 | | SF94941 | 330 | 3 |
| | 100 | | SF94942 | 330 | 3 |
| | 125 | | SF94946 | 390 | 3 |
| 00 | 63 | Suitable for Type FN 100/125/160 / FNX 125/160 S-D-F & for HB 160 Fuse base | SF94027 | 420 | 3 |
| | 80 | | SF94028 | 420 | 3 |
| | 100 | | SF94029 | 420 | 3 |
| | 125 | | SF94030 | 435 | 3 |
| | 160 | | SF94939 | 435 | 3 |
| 0 | 80 | Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base | SF94128 | 560 | 3 |
| | 100 | | SF94129 | 560 | 3 |
| | 125 | | SF94130 | 560 | 3 |
| | 160 | | SF94131 | 570 | 3 |
| | 200 | | SF94132 | 570 | 3 |
| 1 | 125 | Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base | SF94230 | 590 | 3 |
| | 160 | | SF94231 | 620 | 3 |
| | 200 | | SF94232 | 625 | 3 |
| | 250 | | SF94233 | 685 | 3 |
| | 315 | | SF94234 | 810 | 3 |
| 2 | 200 | Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base | SF94332 | 850 | 3 |
| | 250 | | SF94333 | 885 | 3 |
| | 315 | | SF94334 | 890 | 3 |
| | 400 | | SF94335 | 895 | 3 |
| 3 | 315 | Suitable for Type FN 630/800 / FNX 630/800 S-D-F & for HB 800 Fuse base | SF94434 | 1260 | 1 |
| | 400 | | SF94435 | 1260 | 1 |
| | 500 | | SF94436 | 1420 | 1 |
| | 630 | | SF94437 | 1445 | 1 |
| | 800 | SF94938 | 1760 | 1 | |

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



| 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 | 190 | 10 |
| 63 | HC 63 | Fuse holder | HF | 2-63 | SK91043 | 210 | 10 |
| 160 | HB 160 | Fuse base | HN-Size 000 & 00 | 63-160 | SK90405 | 330 | 12 |
| 250 | HB 250 | Fuse base | HN-Size 0 & 1 | 80-250 | SK90406 | 695 | 3 |
| 800 | HB 800 | Fuse base | HN-Size 2 & 3 | 200-800 | SK91051 | 1325 | 3 |

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 | 46 | 24 | |
| | | | 4 | | ST30726 | 46 | 24 | |
| | | | 6 | | ST30727 | 46 | 24 | |
| | | | 10 | | ST30728 | 46 | 24 | |
| | | | 16 | | ST30729 | 46 | 24 | |
| | | | 20 | | ST30730 | 54 | 24 | |
| | | | 25 | | ST30731 | 54 | 24 | |
| | | | 32 | | ST30732 | 54 | 24 | |
| HQ | Offset | A1L | 20 | Suitable for type FN 32/63 S-D-F | ST34527 | 86 | 15 | |
| | | | 25 | | ST34528 | 86 | 15 | |
| | | | 32 | | ST34529 | 88 | 15 | |
| | | | 50 | | ST35827 | 92 | 15 | |
| | | | 63 | | ST35828 | 92 | 15 | |
| | | A2 | Suitable for type HK 32H/32B fuse base | 4 | ST30747 | 74 | 12 | |
| | | | | 6 | ST30748 | 74 | 12 | |
| | | | | 10 | ST30749 | 76 | 12 | |
| | | | | 16 | ST30750 | 76 | 12 | |
| | | | | 20 | ST30751 | 76 | 12 | |
| | | | | 25 | ST30752 | 76 | 12 | |
| | | | | 32 | ST30753 | 76 | 12 | |
| | A3 | Suitable for type HK 63B/63H Fuse base | 35 | ST30759 | 110 | 12 | | |
| | | | 50 | ST30760 | 110 | 12 | | |
| | | | 63 | ST30761 | 110 | 12 | | |
| | A4 | Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base | 80 | ST30767 | 205 | 12 | | |
| | | | 100 | ST30768 | 210 | 12 | | |
| | | | 125 | ST30769 | 250 | 12 | | |
| | | | 160 | ST35829 | 270 | 12 | | |
| | Centre Tag, 2 holes | B1 | 80 | Suitable for type FN 200 S-D-F | ST30774 | 235 | 12 | |
| | | | | | 100 | ST30775 | 235 | 12 |
| | | | | | 125 | ST30776 | 295 | 12 |
| | | B2 | 125 | | ST30777 | 325 | 3 | |
| | | | | | 160 | ST30778 | 340 | 3 |
| 200 | | | | | ST30779 | 345 | 3 | |
| B3 | | 250 | Suitable for type FN 250/315 S-D-F | | ST30781 | 490 | 3 | |
| | | | | | 315 | ST30782 | 505 | 3 |
| | | | | | 355 | ST30783 | 765 | 3 |
| B4 | | 400 | Suitable for type FN 400 S-D-F | | ST30784 | 795 | 3 | |
| | | | | | 400 | ST30785 | 1445 | 1 |
| | | | | | 500 | ST30786 | 1525 | 1 |
| Centre Tag, 4 holes | C2 | 630 | Suitable for type FN 630 S-D-F | ST30787 | 1705 | 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 | 120 | 12 |
| | HD 20P | Both side busbar (Back) | F1 | 2-20 | ST30773 | 165 | 12 |
| | HD 20B | Top busbar & bottom cable | F1 | 2-20 | ST30766 | 140 | 12 |
| 32 | HD 32H | Both side cable (Front) | F1 | 2-32 | ST30733 | 130 | 12 |
| | HD 32P | Both side busbar (Back) | F1 | 2-32 | ST30734 | 180 | 12 |
| | HD 32B | Top busbar & bottom cable | F1 | 2-32 | ST30735 | 160 | 12 |
| | HK 32H | Both side cable (Front) | A2 | 4-32 | ST30754 | 225 | 12 |
| | HK 32B | Top busbar & bottom cable | A2 | 4-32 | ST30755 | 260 | 12 |
| | 63 | HK 63H | Both side cable (Front) | A3 | 35-63 | ST30762 | 295 |
| HK 63B | | Top busbar & bottom cable | A3 | 35-63 | ST30763 | 365 | 6 |
| 125 | HK 125H | Both side cable (Front) | A4 | 80-125 | ST30770 | 875 | 3 |
| | HK 125B | Top busbar & bottom cable | A4 | 80-125 | ST30771 | 1045 | 3 |

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
- Terminal shrouds on both sides

| 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 | 1360 | 1 | FN 32 TPN / 4P | SK955410000 | 1925 | 1 |
| | 63 | FN 63 2P | SK904190000 | 1850 | 1 | FN 63 TPN / 4P | SK955400000 | 2695 | 1 |
| Fr 2 | 100 | FN 100 2P | SK904200000 | 3775 | 1 | FN 100 TPN | SK955710000 | 4805 | 1 |
| | 125 | FN 125 2P | SK904210000 | 4815 | 1 | FN 125 TPN | SK954050000 | 5980 | 1 |
| Fr 3 | 200 | FN 200 2P | SK904500000 | 6460 | 1 | FN 200 TPN | SK956070000 | 8165 | 1 |
| | 250 | FN 250 2P | SK904540000 | 7760 | 1 | FN 250 TPN | SK956830000 | 10390 | 1 |
| Fr 4 | 315 | FN 315 2P | SK904650000 | 9860 | 1 | FN 315 TPN | SK956090000 | 11545 | 1 |
| | 400 | FN 400 2P | SK904660000 | 11775 | 1 | FN 400 TPN | SK956100000 | 15320 | 1 |
| Fr 5 | 630 | FN 630 2P | SK904670000 | 18990 | 1 | FN 630 TPN | SK956110000 | 22350 | 1 |
| | 800 | FN 800 2P | SK904680000 | 19915 | 1 | FN 800 TPN | SK955510000 | 25020 | 1 |
| | 1000 | FN 1000 2P | SK904690000 | 25585 | 1 | FN 1000 TPN | SK957100000 | 32960 | 1 |
| Fr 6 | 1000 | - | - | - | - | C-Line SD 1000 4P | COS10000040 | 38260 | 1 |
| | 1250 | - | - | - | - | C-Line SD 1250 4P | COS12500040 | 42910 | 1 |
| | 1600 | - | - | - | - | C-Line SD 1600 4P | COS16000040 | 59590 | 1 |
| | 2000 | - | - | - | - | C-Line SD 2000 4P | COS20000040 | 74010 | 1 |

Spares & Accessories for type FN [8538]

Spares & Accessories for type FN [8538]



Castell Type Lock



DIN Rail Assembly



Auxiliary Contact Kit



Handle Assembly



Terminal Shroud Kit



Handle Assembly



Earthing Link



Auxiliary Contact Kit



Castell Type Lock

| Description | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|------------------------------------|---------------------------|----------|---------------------|------------------|
| Auxiliary Contact Kit (1NO + 1 NC) | FNX 32 / 63 | SK91537 | * | 1 |
| | FNX 100 | SK91538 | * | 1 |
| | FNX 125 / 160 | SK91539 | * | 1 |
| | FNX 200 / 250 | SK91540 | * | 1 |
| | FNX 315 / 400 / 630 / 800 | SK91541 | * | 1 |
| Handle Assembly | FNX 32 / 63 / 100 | SK91524 | * | 1 |
| | FNX 125 / 160 / 200 / 250 | SK91525 | * | 1 |
| Castell Type Lock [§] | FNX 32 / 63 / 100 | SK91530 | * | 1 |
| | FNX 125 / 160 / 200 / 250 | SK91531 | * | 1 |
| | FNX 315 / 400 / 630 / 800 | SK91531 | * | 1 |
| DIN Rail Assembly | FNX 32 / 63 / 100 | SK91617 | * | 1 |

* Available on request

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 | 125 | 1 |
| Insulated fuse pulling handle for Type HN fuse-link from 63A-800A | SF90126 | 465 | 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 | 600 | 1 |
| Operating Handle | CXS6001 | 1360 | 1 |
| Castell Type Lock [§] | CX60004 | 1600 | 1 |

| Description | Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) | |
|--|--------------------------------|----------------------|----------------------|------------------|---|
| Auxiliary Contact Kit (1NO + 1 NC) | FN 32 / 63 | SK91302 | 415 | 1 | |
| | FN 100 / 125 / 160 | SK91328 | 480 | 1 | |
| | FN 200 / 250 | SK91329 | 580 | 1 | |
| | FN 315 / 400 / 630 / 800 | SK91330 [#] | 640 | 1 | |
| 2 nd Aux. Contact (1NO + 1NC) | FN 32 / 63 | SK90670 | 415 | 1 | |
| | FN 100 to FN 1000 | SK90696 | 480 | 1 | |
| Earthing Link | FN 32 to FN 1000 [@] | CK90396 | 250 | 1 | |
| | | | | | |
| Terminal Shroud Kit | FN 32 / 63 | SK91190 | 110 | 1 | |
| | FN 100 / 125 / 160 | SK91137 | 145 | 1 | |
| | FN 200 / 250 | SK91335 | 255 | 1 | |
| | FN 315 / 400 | SK91346 | 265 | 1 | |
| | FN 630 / 800 | SK91347 [#] | 280 | 1 | |
| Handle Assembly - A | FN 32 / 63 | SK91257 | 290 | 1 | |
| | FN 100 / 125 / 160 | SK91258 | 630 | 1 | |
| | FN 200 / 250 | SK91258 | 630 | 1 | |
| Handle Assembly - B | FN 315 / 400 / 630 / 800 | SK91259 [#] | 700 | 1 | |
| | FN 32 / 63 | SK91277 | 290 | 1 | |
| | FN 100 / 125 / 160 | SK91278 | 630 | 1 | |
| Handle Assembly - CE | FN 200 / 250 | SK91278 | 630 | 1 | |
| | FN 315 / 400 / 630 / 800 | SK91279 [#] | 700 | 1 | |
| | FN 32 / 63 | SK91337 | 170 | 1 | |
| Interphase Barrier Kit | FN 200 | SK91343 | 210 | 1 | |
| | FN 315 / 400 | SK91344 | 220 | 1 | |
| Castell Type Lock [§] | FN 630 / 800 | SK91345 [#] | 230 | 1 | |
| | FN 100 / 125 / 160 / 200 / 250 | A | SK00333 | 1705 | 1 |
| | | B | SK00334 | 1705 | 1 |
| | | C | SK00335 | 1705 | 1 |
| | | D | SK00336 | 1705 | 1 |
| | FN 315 / 400 / 630 / 800 | A | SK00345 [#] | 1705 | 1 |
| | | B | SK00346 [#] | 1705 | 1 |
| | | C | SK00347 [#] | 1705 | 1 |
| | | D | SK00348 [#] | 1705 | 1 |

@ Earthing link is suitable for terminating earth busbar upto 25mm width.
Order qty 1 for 10 earthing links.
Switched Neutral Kit for FN TPN SDFs available only till stocks last

§ Chapter ID [8301]

Also suitable for Switch-Disconnecter FN 1000

Communication
Total Selectivity
Advanced Protections
Energy Metering

Choose the superhero. Choose **d sine** MCCB

d sine MCCBs



Features

Range: 20A to 1250A
Breaking capacity: 25/36/50/70/100kA
Variants: 3P/4P

Our new advanced MTX3.0 release fosters Energy Management along with most advanced protections. It also enables communication of various parameters for this automation era.

d sine range can now make Total Selectivity possible for uninterrupted healthy power network.

d sine -DZ MCCBs



Features

Range: 16A to 160A
Breaking capacity: 36/50kA
Variants: 3P/4P

Our new **d sine** -DZ range offers wide range of adjustable overload and short circuit settings with wide range of internal and external accessories.

Why wait? Contact us today.

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Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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 | | | | | | | | | | DU125D | | | | | |
| 18 | DU100D | | | | | | | | DU125D | | | | | | | |
| 25 | DU250C | | | | | | | | | | | | | | | |
| 30 | DU100H | | | | | | | | DU125H | | | | | | | |
| 36 | DU250 | | | | | | | | | | | | | | | |
| 50 | DU400N | | | | | | | | | | | | | | | |

DY125U FTFM 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 DC : 5kA @ 250V DC (2P in series) | EM90982O0B0 | 1220 | AC : 10kA @ 415V AC, 50 Hz/60 Hz DC : 5kA @ 250V DC (3P in series) | EM90983O0B0 | 1680 | EM90984O0B0 | 2150 | 1 |
| | 20 | | EM90982O0C0 | 1220 | | EM90983O0C0 | 1680 | EM90984O0C0 | 2150 | 1 |
| | 25 | | EM90982O0D0 | 1220 | | EM90983O0D0 | 1680 | EM90984O0D0 | 2150 | 1 |
| | 32 | | EM90982O0E0 | 1220 | | EM90983O0E0 | 1680 | EM90984O0E0 | 2150 | 1 |
| | 40 | | EM90982O0F0 | 1220 | | EM90983O0F0 | 1680 | EM90984O0F0 | 2150 | 1 |
| | 50 | | EM90982O0G0 | 1220 | | EM90983O0G0 | 1680 | EM90984O0G0 | 2150 | 1 |
| | 63 | | EM90982O0H0 | 1220 | | EM90983O0H0 | 1680 | EM90984O0H0 | 2150 | 1 |
| | 80 | | EM90982O0J0▲ | 1330 | | EM90983O0J0▲ | 1840 | EM90984O0J0▲ | 2470 | 1 |
| | | | EM90812O0J0 | 1220 | | EM90813O0J0 | 1680 | EM90814O0J0 | 2150 | 1 |
| | 100 | | EM90982O0K0▲ | 1330 | | EM90983O0K0▲ | 1840 | EM90984O0K0▲ | 2470 | 1 |
| | | | EM90812O0K0 | 1220 | | EM90813O0K0 | 1680 | EM90814O0K0 | 2150 | 1 |
| | 125 | | EM90982O0L0▲ | 1890 | | EM90983O0L0▲ | 2680 | EM90984O0L0▲ | 3420 | 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.) |
| Auxiliary/Trip Alarm Contact | | | |
| 1C/O | EM90966O000 | 510 | 1 |
| Shunt Release | | | |
| Short Rated 110/240/415V AC | EM90520OM00 | 585 | 1 |

| Description | External | | |
|------------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals | | | |
| 2 Pole (upto 100A) | CM97785O002 | 170 | Set of 4 |
| 3 Pole (upto 100A) | CM97785O000 | 240 | Set of 6 |
| 4 Pole (upto 100A) | CM97921O000 | 405 | Set of 8 |
| Rotary Handle | | | |
| Direct ROM | EM90969O000 | 765 | 1 |
| Extended ROM | EM90970O000 | 1445 | 1 |
| SS Enclosure | | | |
| Size I Enclosure for 3P & 4P | CM90996O000 | 1500 | 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

Kindly refer page no. 45 for cost effective MCCB for motor starter application

| 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 | CM905170OCO | 3860 | CM905180OCO | 4930 | 1 |
| | 20-25 | | CM905170ODO | 3860 | CM905180ODO | 4930 | 1 |
| | 25-32 | | CM905170OEO | 3860 | CM905180OEO | 4930 | 1 |
| | 32-40 | | CM905170OFO | 3860 | CM905180OFO | 4930 | 1 |
| | 40-50 | | CM905170OGO | 3860 | CM905180OGO | 4930 | 1 |
| | 50-63 | | CM905170OHO | 3860 | CM905180OHO | 4930 | 1 |
| | 63-80 | | CM905170OJO | 3860 | CM905180OJO | 4930 | 1 |
| | 80-100 | | CM905170OKO | 3860 | CM905180OKO | 4930 | 1 |
| DU125D | 100-125 | | CM90676OOLO | 4240 | CM90677OOLO | 5510 | 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

For DC application please refer catalogue

| 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 | CM97898OOC2 | 3110 | 30 | CM97894OOC2 | 4440 | CM97933OOC2 | 5880 | 1 |
| | 20-25 | | CM97898OOD2 | 3110 | | CM97894OOD2 | 4440 | CM97933OOD2 | 5880 | 1 |
| | 25-32 | | CM97898OEE2 | 3110 | | CM97894OEE2 | 4440 | CM97933OEE2 | 5880 | 1 |
| | 32-40 | | CM97898OOF2 | 3110 | | CM97894OOF2 | 4440 | CM97933OOF2 | 5880 | 1 |
| | 40-50 | DC : 15kA @ 250V DC, (2P in Series) L/R < 15 msec. | CM97898OOG2 | 3110 | | CM97894OOG2 | 4440 | CM97933OOG2 | 5880 | 1 |
| | 50-63 | | CM97898OOH2 | 3110 | | CM97894OOH2 | 4440 | CM97933OOH2 | 5880 | 1 |
| | 63-80 | | CM97898OOJ2 | 3110 | | CM97894OOJ2 | 4440 | CM97933OOJ2 | 5880 | 1 |
| | 80-100 | | CM97898OOK2 | 3110 | | CM97894OOK2 | 4440 | CM97933OOK2 | 5880 | 1 |
| DU125H | 100-125 | | CM91198OOLO | 4010 | | CM90678OOLO | 4850 | CM90679OOLO | 6470 | 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.) |
| Auxiliary Contact | | | |
| 1 C/O - Right | CM97886OOOO | 710 | 1 |
| 2 C/O - Right | CM97887OOOO | 1335 | 1 |
| Trip Alarm Contact | | | |
| 1 C/O - Right | CM97888OOOO | 710 | 1 |
| 2 C/O - Right | CM97889OOOO | 1335 | 1 |
| Auxiliary + Trip Alarm Contact | | | |
| 1 C/O + 1C/O - Right | CM97890OOOO | 1250 | 1 |
| Shunt Release | | | |
| 24V DC - Left | CM91402O4OO | 1240 | 1 |
| 110V AC - Left | CM97883OAOO | 1240 | 1 |
| 240/415V AC - Left | CM97883OMOO | 1240 | 1 |
| Under Voltage Release | | | |
| 240V AC - Left | CM97892BOOO | 1665 | 1 |

| Description | External | | |
|-----------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals | | | |
| DU100H - 2 Pole | CM97785OOO2 | 170 | Set of 4 |
| DU125H - 2 Pole | CM91199OOLO | 220 | Set of 4 |
| DU100D/DU100H - 3 Pole | CM97785OOOO | 240 | Set of 6 |
| DU125D/DU125H - 3 Pole | CM90687OOLO | 340 | Set of 6 |
| DU100D/DU100H - 4 Pole | CM97921OOOO | 405 | Set of 8 |
| DU125D/DU125H - 4 Pole | CM90688OOLO | 475 | Set of 8 |
| Rotary Handle | | | |
| DU100D/DU125D/ | Direct ROM | CM97895OOOO | 895 |
| DU100H/DU125H | | | |
| DIN rail kit | | | |
| DU100D/DU125D/DU100H/DU125H | CM90944OOOO | 70 | 1 |
| SS Enclosure | | | |
| Size I Enclosure | CM90996OOOO | 1500 | 1 |

Note: Phase Barriers are supplied along with all MCCBs

DU MCCB Range [8536]

2 Pole / 3 Pole / 4 Pole MCCBs

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 In

Kindly refer page no. 45 for cost effective MCCB for motor starter application

| 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 | |
| DU250C | 125-160 | - | - | - | 25 | CM90631OOMO | 6310 | CM90634OOMO | 8370 | 1 |
| | 160-200 | | | | | CM90631OONO | 7420 | CM90634OONO | 9440 | 1 |
| | 200-250 | | | | | CM90631OPO | 8440 | CM90634OPO | 11110 | 1 |
| DU250 | 125-160 | AC : 65kA @ 240V AC, 50Hz DC : 15kA for DU250 @250V DC & 25kA for DU400N @ 250V DC, (2P in Series) L/R < 15 msec. | CM90905OOMO | 4730 | 36 | CM98062O000 | 8110 | CM98065OOMO | 9860 | 1 |
| | 160-200 | | CM90905OONO | 5460 | | CM98061O000 | 10500 | CM98065OONO | 13550 | 1 |
| | 200-250 | | CM90905OPO | 6120 | | CM98060O000 | 12070 | CM98065OPO | 15530 | 1 |
| DU400N | 250-320 | | CM90886O0QO | 10670 | 50 | CM98402O0QO | 15930 | CM98404O0QO | 19700 | 1 |
| | 320-400 | | CM90886OORO | 10900 | | CM98402OORO | 16020 | CM98404OORO | 20030 | 1 |

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

Accessories for DU250/DU250C MCCBs [8538]



Auxiliary Contact ATAC Shunt Release UV Release

| Description | Internal | | |
|---------------------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary Contact | | | |
| 1 C/O - Right | CM97886O000 | 710 | 1 |
| 2 C/O - Right | CM97887O000 | 1335 | 1 |
| Trip Alarm Contact | | | |
| 1 C/O - Right | CM97888O000 | 710 | 1 |
| 2 C/O - Right | CM97889O000 | 1335 | 1 |
| Auxiliary + Trip Alarm Contact | | | |
| 1 C/O + 1C/O - Right | CM97890O000 | 1250 | 1 |
| Shunt Release | | | |
| 24V DC - Left | CM91402O400 | 1240 | 1 |
| 110V AC - Left | CM97883OAOO | 1240 | 1 |
| 240/415V AC - Left | CM97883OMOO | 1240 | 1 |
| Under Voltage Release | | | |
| 240V AC - Left | CM97892BOOO | 1665 | 1 |



Spreader Terminals Direct ROM Extended ROM

| Description | External | | | |
|---------------------------|--------------|---------------------|------------------|---|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) | |
| Spreader Terminals | | | | |
| DU250 - 2 Pole | CM90960O000 | 895 | Set of 4 | |
| DU250C/DU250 - 3 Pole | ST98053O000 | 1190 | Set of 6 | |
| DU250C/DU250 - 4 Pole | CM92007O000 | 1505 | Set of 8 | |
| Rotary Handle | | | | |
| DU250C/DU250 | Direct ROM | CM98040O000 | 945 | 1 |
| | Extended ROM | CM98041O000 | 1500 | 1 |
| SS Enclosure | | | | |
| Size II Enclosure | CM91003O000 | 3450 | 1 | |

Note: Phase Barriers are supplied along with all MCCBs

Accessories for DU400N MCCBs [8538]



Auxiliary Contact TAC Shunt Release UV Release

| Description | Internal | | |
|---------------------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary Contact | | | |
| 1 C/O | CM99801O000 | 820 | 1 |
| 2 C/O | CM99802O000 | 1545 | 1 |
| Trip Alarm Contact | | | |
| 1 C/O - Right | CM99803O000 | 835 | 1 |
| Auxiliary + Trip Alarm Contact | | | |
| 1 C/O + 1C/O - Right | CM99804O000 | 1550 | 1 |
| Shunt Release | | | |
| 110/240/415V AC, 110/220V DC | CM99805O000 | 2015@ | 1 |
| 24V DC | CM98976O400 | 2015@ | 1 |
| Under Voltage Release | | | |
| 240V AC - Left | CM99986BOOO | 2535 | 1 |



Spreader Terminals Direct ROM Extended ROM

| Description | External | | |
|---------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals | | | |
| 2 Pole | CM90964O000 | 1405 | Set of 4 |
| 3 Pole | ST98065O000 | 2155 | Set of 6 |
| 4 Pole | ST98066O000 | 3090 | Set of 8 |
| Rotary Handle | | | |
| Direct ROM | CM99860O000 | 1500 | 1 |
| Extended ROM | CM99861O000 | 2500 | 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

DTH With Thermal - Magnetic Release :

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Suitable for distribution & induction furnace application
- Rugged construction
- Adjustable thermal setting : 600 - 800A
- Adjustable magnetic setting : 2600 - 6400A



| 3 Pole (for Distribution Application) | | | | | |
|---------------------------------------|---------------------------|--|-------------|---------------------|------------------|
| Type | Thermal Release Range (A) | Breaking Capacity Icu at 415V, 50Hz (kA) | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| DTH800 | 600-800 | 50 | SL944720000 | 43180 | 1 |

| 3 Pole (for Induction Furnace Application) | | | | | | |
|--|--------------------|---------------------------|--|-------------|---------------------|------------------|
| Type | Current Rating (A) | Instantaneous Setting (A) | Breaking Capacity Icu at 415V, 50Hz (kA) | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| DTH800 - Instantaneous | 250 | 360 | 50 | SB950520000 | 43180 | 1 |
| | 400 | 550 | 50 | SB950530000 | 43180 | 1 |
| | 630 | 850 | 50 | SB950540000 | 43180 | 1 |
| | 800 | 1050 | 50 | SB950550000 | 43180 | 1 |

\$ Available till stocks last

Accessories for DTH 800 MCCBs [₹] [8538]



UV Release



Shunt Release



Auxiliary Contact



Extended ROM

| Description | Internal | | |
|------------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary Contact | | | |
| 2 C/O | SL942170000 | 1630 | 1 |
| Shunt Release | | | |
| 415V AC, 220V DC - Right | SL985260000 | 2040 | 1 |
| 240V AC, 110V DC - Right | SL985340000 | 2040 | 1 |
| Under Voltage Release | | | |
| 415V AC - Left | SL985480000 | 2040 | 1 |
| 240V AC - Left | SL985450000 | 2040 | 1 |
| 110V AC - Left | SL985430000 | 2040 | 1 |

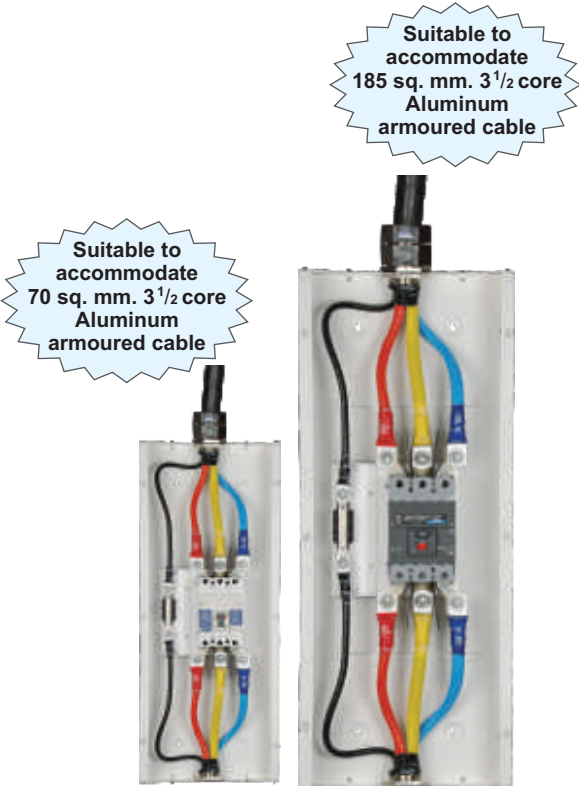
| Description | External | | |
|-----------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Extension Link | | | |
| 3 Pole | ST306580000 | 2930 | Set of 6 |
| Rotary Handle | | | |
| Extended ROM | CM998980000 | 2500 | 1 |

\$ Available till stocks last

SS Enclosure for MCCBs [8538]

Perfect home for your MCCB

Separate cable gland box NOT required



Size I & Size II Enclosures

- 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



| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--|-------------|---------------------|------------------|
| Size I Enclosure for DU100H/DU125H/ DU100D/DU125D/DN0/DY125U | CM909960000 | 1500 | 1 |
| Size II Enclosure for DU250C/DU250/DN1 | CM910030000 | 3450 | 1 |

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



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 | 6170 | Built in CBCT | 1 |
| GF2 | 200 - 400A | ST277460000 | 8985 | Built in CBCT | 1 |
| GF11 | up to 800A | ST285940000 | 5670 # | External CT required | 1 |

External CTs of 5P10 class with secondary rating of 1A or 5A

| | | | | | | | | | | |
|-------------------|--|----|----|----|----|----|----|-----|-----|-----|
| Rating (A) | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 100 | 125 | 160 |
| Icu (kA) | | | | | | | | | | |
| 36 | DZ1-160D New | | | | | | | | | |
| 50 | DZ1-160N New | | | | | | | | | |

d sine **DZ1 with Thermal - Magnetic Release** New



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 160A, 3P & 4P
- Suitable for isolation
- Ics=100% of Icu
- Adjustable overload setting: 0.67 - 1.0 x In
- Adjustable short circuit setting: 6 - 12 x In*
- Wide range of internal and external accessories
- Transparent release cover

DZ1 Thermal Release

| Type | Rated current (A) Max | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole | | 4 Pole | |
|----------|-----------------------|--|---------------|---------------------|---------------|---------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| DZ1-160D | 16 | 36 | DZ1T0016DXC1A | 7730 | DZ1F0016DXC1A | 9620 |
| | 20 | | DZ1T0020DXC1A | 7730 | DZ1F0020DXC1A | 9620 |
| | 25 | | DZ1T0025DXC1A | 7730 | DZ1F0025DXC1A | 9620 |
| | 32 | | DZ1T0032DXC1A | 7730 | DZ1F0032DXC1A | 9620 |
| | 40 | | DZ1T0040DXC1A | 7730 | DZ1F0040DXC1A | 9620 |
| | 50 | | DZ1T0050DXC1A | 7730 | DZ1F0050DXC1A | 9620 |
| | 63 | | DZ1T0063DXD1A | 7730 | DZ1F0063DXD1A | 9620 |
| | 80 | | DZ1T0080DXD1A | 7730 | DZ1F0080DXD1A | 9620 |
| | 100 | | DZ1T0100DXD1A | 7730 | DZ1F0100DXD1A | 9620 |
| | 125 | | DZ1T0125DXD1A | 8880 | DZ1F0125DXD1A | 10920 |
| | 160 | | DZ1T0160DXD1A | 11810 | DZ1F0160DXD1A | 14030 |
| DZ1-160N | 16 | 50 | DZ1T0016NXC1A | 9920 | DZ1F0016NXC1A | 12310 |
| | 20 | | DZ1T0020NXC1A | 9920 | DZ1F0020NXC1A | 12310 |
| | 25 | | DZ1T0025NXC1A | 9920 | DZ1F0025NXC1A | 12310 |
| | 32 | | DZ1T0032NXC1A | 9920 | DZ1F0032NXC1A | 12310 |
| | 40 | | DZ1T0040NXC1A | 9920 | DZ1F0040NXC1A | 12310 |
| | 50 | | DZ1T0050NXC1A | 9920 | DZ1F0050NXC1A | 12310 |
| | 63 | | DZ1T0063NXD1A | 9920 | DZ1F0063NXD1A | 12310 |
| | 80 | | DZ1T0080NXD1A | 9920 | DZ1F0080NXD1A | 12310 |
| | 100 | | DZ1T0100NXD1A | 9920 | DZ1F0100NXD1A | 12310 |
| | 125 | | DZ1T0125NXD1A | 12510 | DZ1F0125NXD1A | 15020 |
| | 160 | | DZ1T0160NXD1A | 14510 | DZ1F0160NXD1A | 16850 |

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

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

d sine **DZ1 with iTRP1 Release** **New**



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 160A, 3P & 4P
- Ics=100% of Icu
- Wide range of adjustable overload setting from 0.25 - 1.0 x In
- Adjustable short circuit setting from 1.5 - 12 x Ir
OR Instantaneous setting from 1.5 - 12 x In
- Neutral Overload protection
- Compact size
- Suitable for isolation
- Provision of thermal memory ON/OFF
- Variable trip class
- Wide range of internal and external accessories
- Transparent release cover

DZ1 iTRP1 Release

| Type | Rated current (A) Max | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole | | 4 Pole | |
|----------|-----------------------|--|---------------|---------------------|---------------|---------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| DZ1-160D | 40 | 36 | DZ1T0040DXF1A | 13240 | DZ1F0040DXF1A | 16960 |
| | 63 | | DZ1T0063DXF1A | 13240 | DZ1F0063DXF1A | 16960 |
| | 100 | | DZ1T0100DXF1A | 13240 | DZ1F0100DXF1A | 16960 |
| | 160 | | DZ1T0160DXF1A | 16910 | DZ1F0160DXF1A | 23500 |
| DZ1-160N | 40 | 50 | DZ1T0040NXF1A | 15780 | DZ1F0040NXF1A | 21670 |
| | 63 | | DZ1T0063NXF1A | 15780 | DZ1F0063NXF1A | 21670 |
| | 100 | | DZ1T0100NXF1A | 15780 | DZ1F0100NXF1A | 21670 |
| | 160 | | DZ1T0160NXF1A | 20070 | DZ1F0160NXF1A | 26030 |

* For 25A with iTRP1 Release, please contact nearest branch office

Accessories for d sine **DZ1 MCCBs** [8538]



Aux/TAC



Shunt Release



Under Voltage (UV)



Spreader Terminals



Direct ROM



Extended ROM

| Description | Internal | | |
|-------------------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary/Trip Alarm Contact | | | |
| 1C/O | EM901100000 | 730 | 1 |
| Shunt release | | | |
| 240V AC ^{\$} | EM900320BOO | 1800 | 1 |
| Under voltage release | | | |
| 240V AC ^{\$} | EM90031BOOO | 2100 | 1 |

| Description | External | | |
|---------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals | | | |
| 3 Pole | EM906090000 | 1190 | Set of 6 |
| 4 Pole | EM906100000 | 1340 | Set of 8 |
| Rotary Handles | | | |
| Direct ROM | EM902070000 | 1010 | 1 |
| Extended ROM | EM902090000 | 1505 | 1 |

^{\$} For other voltages, please contact nearest branch office

* For Type-2 Chart with DZ1 MCCBs, please contact nearest branch office

* For Additional Accessories of DZ1 MCCBs, please contact nearest branch office

d sine With Thermal - Magnetic Release :

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



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 20A to 630A, 3P & 4P
- Choice of 25kA / 36kA / 50kA / 70kA breaking capacities
- Ics = 100% Icu*
- Suitable for Isolation
- Adjustable Over Load setting: 0.8 - 1.0 x In
- Adjustable Short Circuit setting: 6 - 10 x In**
- Manual, Rotary or Motorised versions available @
- Wide Range of snap fit Internal and External Accessories

Kindly refer page no. 45 for cost effective MCCB for motor starter application

| 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 | CM978930OC2OG | 5800 | CM979190OC2OG | 8050 | 1 |
| | 20-25 | | CM978930OD2OG | 5800 | CM979190OD2OG | 8050 | 1 |
| | 25-32 | | CM978930OE2OG | 5800 | CM979190OE2OG | 8050 | 1 |
| | 32-40 | | CM978930OF2OG | 5800 | CM979190OF2OG | 8050 | 1 |
| | 40-50 | | CM978930OG2OG | 5800 | CM979190OG2OG | 8050 | 1 |
| | 50-63 | | CM978930OH2OG | 5800 | CM979190OH2OG | 8050 | 1 |
| | 63-80 | | CM978930OJ2OG | 5800 | CM979190OJ2OG | 8050 | 1 |
| | 80-100 | | CM978930OK2OG | 5800 | CM979190OK2OG | 8050 | 1 |
| DN0-125D* | 100-125 | | CM906800OLOOG | 6570 | CM906810OLOOG | 8750 | 1 |
| DN0-100C | 16-20 | 25 | CM916120OCCOOG | 5990 | CM917120OCCOOG | 8290 | 1 |
| | 20-25 | | CM916120ODDOOG | 5990 | CM917120ODDOOG | 8290 | 1 |
| | 25-32 | | CM916120OEOOG | 5990 | CM917120OEOOG | 8290 | 1 |
| | 32-40 | | CM916120OFOOG | 5990 | CM917120OFOOG | 8290 | 1 |
| | 40-50 | | CM916120OGOOG | 5990 | CM917120OGOOG | 8290 | 1 |
| | 50-63 | | CM916120OHOOG | 5990 | CM917120OHOOG | 8290 | 1 |
| | 63-80 | | CM916120OJOOG | 5990 | CM917120OJOOG | 8290 | 1 |
| | 80-100 | | CM916120OKOOG | 5990 | CM917120OKOOG | 8290 | 1 |
| DN1-250C | 100-125 | | CM906380OLO | 8660 | CM906420OLO | 10490 | 1 |
| | 125-160 | | CM906380OMO | 11240 | CM906420OMO | 13330 | 1 |
| | 160-200 | | CM906380ONO | 14550 | CM906420ONO | 18490 | 1 |
| | 200-250 | | CM906380OPO | 16930 | CM906420OPO | 21030 | 1 |

Note:

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

@ Motorised version available for DN2 and DN3 frames (please refer page No. 46)

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

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

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

d sine With Thermal - Magnetic Release :



For DC application please refer catalogue

| 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 | CM92008OOL1OG | 9770 | CM92108OOL1OG | 12010 | 1 | |
| | 125-160 | | CM92008OOM1OG | 12990 | CM92108OOM1OG | 15430 | 1 | |
| | 160-200 | | CM92009OON1OG | 17160 | CM92109OON1OG | 21320 | 1 | |
| | 200-250 | | CM92009OOP1OG | 18800 | CM92109OOP1OG | 22970 | 1 | |
| DN3B-400D | 250-320 | | CM98401OOQOOG | 21910 | CM98403OOQOOG | 26710 | 1 | |
| | 320-400 | | CM98401OOROOG | 21930 | CM98403OOROOG | 27150 | 1 | |
| DN3-400D | 250-320 | | CM94005OOQ1OG | * | CM94105OOQ1OG | * | 1 | |
| | 320-400 | | CM94005OOR1OG | * | CM94105OOR1OG | * | 1 | |
| DN3-630D | 400-500 | | CM94006OOS1OG | 26660 | CM94106OOS1OG | 33300 | 1 | |
| | 500-630 | | CM94006OOT1OG | 29310 | CM94106OOT1OG | 36180 | 1 | |
| DN2-250N | 100-125 | | 50 | CM92005OOL1OG | 13760 | CM92105OOL1OG | 16520 | 1 |
| | 125-160 | | | CM92005OOM1OG | 15960 | CM92105OOM1OG | 18540 | 1 |
| | 160-200 | CM92006OON1OG | | 19200 | CM92106OON1OG | 24000 | 1 | |
| | 200-250 | CM92006OOP1OG | | 20770 | CM92106OOP1OG | 25490 | 1 | |
| DN3-400N | 250-320 | CM94003OOQ1OG | | 24550 | CM94103OOQ1OG | 30340 | 1 | |
| | 320-400 | CM94003OOR1OG | | 24630 | CM94103OOR1OG | 30760 | 1 | |
| DN3-630N | 400-500 | CM94004OOS1OG | | 28970 | CM94104OOS1OG | 36580 | 1 | |
| | 500-630 | CM94004OOT1OG | | 30610 | CM94104OOT1OG | 39000 | 1 | |
| DN2-250S | 100-125 | 70 | | CM92002OOL1OG | 20160 | CM92102OOL1OG | 22310 | 1 |
| | 125-160 | | | CM92002OOM1OG | 22480 | CM92102OOM1OG | 25430 | 1 |
| | 160-200 | | | CM92003OON1OG | 24570 | CM92103OON1OG | 30250 | 1 |
| | 200-250 | | | CM92003OOP1OG | 26260 | CM92103OOP1OG | 31910 | 1 |
| DN3-400S | 250-320 | | CM94001OOQ1OG | 28910 | CM94101OOQ1OG | 33550 | 1 | |
| | 320-400 | | CM94001OOR1OG | 29190 | CM94101OOR1OG | 33660 | 1 | |
| DN3-630S | 400-500 | | CM94002OOS1OG | 37050 | CM94102OOS1OG | 45170 | 1 | |
| | 500-630 | | CM94002OOT1OG | 37690 | CM94102OOT1OG | 47040 | 1 | |

Kindly refer page no. 45 for cost effective MCCB for motor starter application

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

* Price on request

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/DU MCCBs with TM release can be used for DC application (2P/3P/4P)
- dsine/DU MCCBs can be used for Capacitor back-up protection
- For Motor back-up protection, use 'M' series of MCCBs such as DN0-M, DN1-M, DN2-M, DN3-M
- For isolator applications, use SD version (without protection release)

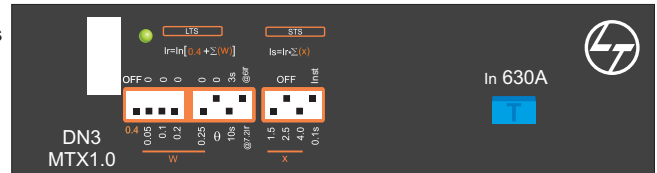
d sine With Microprocessor Release :

| | | | | | | | | | | | | | | | | | |
|------------------------|-----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|--|
| Rating (A) Icu (kA) | 40 | 50 | 63 | 80 | 100 | 125 | 160 | 200 | 250 | 320 | 400 | 500 | 630 | 800 | 1000 | 1250 | |
| 36/50/70/100 | DN2 | | | | | | | DN3 | | | | | DN4 | | | | |
| 50/70/100 | | | | | | | | | | | | | | | | | |

d sine With Microprocessor Release MTX1.0 :



- 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
- Inbuilt Instantaneous Protection
- Provision of Thermal Memory : ON/OFF
- Variable trip class at 7.2 Ir & 6 Ir
- Front LED indication of Over Load (Ready, Over load pre-alarm & Overload)
- Manual, Rotary or Motorised versions available @
- Wide Range of snap fit Internal and External Accessories



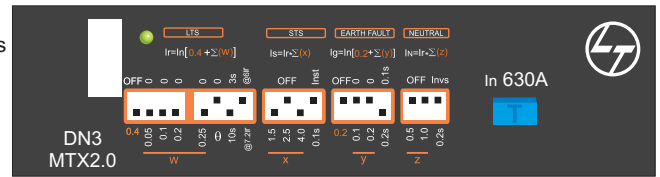
| Type | Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole | | 4 Pole | | Std. Pkg. (Nos.) |
|-----------|-------------------|--|---------------|---------------------|---------------|---------------------|------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit | |
| DN2-250D | 16 - 40 | 36 | CM920630000X1 | 14560 | CM921550000X1 | 18660 | 1 |
| | 25 - 63 | | CM920710000X1 | 14560 | CM921540000X1 | 18660 | 1 |
| | 40 - 100 | | CM920510000X1 | 14560 | CM921530000X1 | 18660 | 1 |
| | 63 - 160 | | CM920740000X1 | 18600 | CM921520000X1 | 25850 | 1 |
| | 100 - 250 | | CM920540000X1 | 23330 | CM921510000X1 | 30430 | 1 |
| DN3-400D | 160 - 400 | | CM930010000X1 | 27530 | CM930030000X1 | 33990 | 1 |
| DN3-630D | 250 - 630 | | CM930050000X1 | 29630 | CM930070000X1 | 40070 | 1 |
| DN2-250N | 16 - 40 | 50 | CM920640000X1 | 17360 | CM921600000X1 | 23840 | 1 |
| | 25 - 63 | | CM920720000X1 | 17360 | CM921590000X1 | 23840 | 1 |
| | 40 - 100 | | CM920520000X1 | 17360 | CM921580000X1 | 23840 | 1 |
| | 63 - 160 | | CM920750000X1 | 22080 | CM921570000X1 | 28630 | 1 |
| | 100 - 250 | | CM920550000X1 | 26190 | CM921560000X1 | 33850 | 1 |
| DN3-400N | 160 - 400 | | CM930020000X1 | 30250 | CM930040000X1 | 38640 | 1 |
| DN3-630N | 250 - 630 | | CM930060000X1 | 32880 | CM930080000X1 | 42920 | 1 |
| DN4-1250N | 320 - 800 | 70 | CM960210000X1 | 48090 | CM961110000X1 | 58040 | 1 |
| | 400 - 1000 | | CM960220000X1 | 74160 | CM961120000X1 | 105230 | 1 |
| | 500 - 1250 | | CM960230000X1 | 90740 | CM961130000X1 | 132910 | 1 |
| DN2-250S | 16 - 40 | 70 | CM920650000X1 | 18860 | CM921650000X1 | 24010 | 1 |
| | 25 - 63 | | CM920730000X1 | 18860 | CM921640000X1 | 24010 | 1 |
| | 40 - 100 | | CM920590000X1 | 18860 | CM921630000X1 | 24010 | 1 |
| | 63 - 160 | | CM920760000X1 | 25420 | CM921620000X1 | 32450 | 1 |
| | 100 - 250 | | CM920560000X1 | 30520 | CM921610000X1 | 36790 | 1 |
| DN3-400S | 160 - 400 | | CM940530000X1 | 36520 | CM941530000X1 | 46130 | 1 |
| DN3-630S | 250 - 630 | | CM940790000X1 | 40660 | CM941790000X1 | 53040 | 1 |
| DN4-1250S | 320 - 800 | 70 | CM960250000X1 | 65660 | CM961150000X1 | 81620 | 1 |
| | 400 - 1000 | | CM960260000X1 | 93360 | CM961160000X1 | 133410 | 1 |
| | 500 - 1250 | | CM960270000X1 | 113130 | CM961170000X1 | 156980 | 1 |

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.
 @ Motorised version available for DN2 and DN3 frames (please refer page No. 46)

d sine With Microprocessor Release MTX2.0 :



- 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
- Inbuilt Instantaneous Protection
- Inbuilt ground fault protection from 20% - 50% of In
- Adjustable neutral overload protection available : 50% to 150% of Ir
- Provision of Thermal Memory : ON/OFF
- Variable trip class at 7.2 Ir & 6 Ir
- Front LED indication of Over Load, short circuit & earth fault
- Panel mounted display available for Current metering & trip record
- Manual, Rotary or Motorised versions available @
- For 3 phase 4 wire system, External neutral CTs available for 3P MCCBs
- Wide Range of snap fit Internal and External Accessories



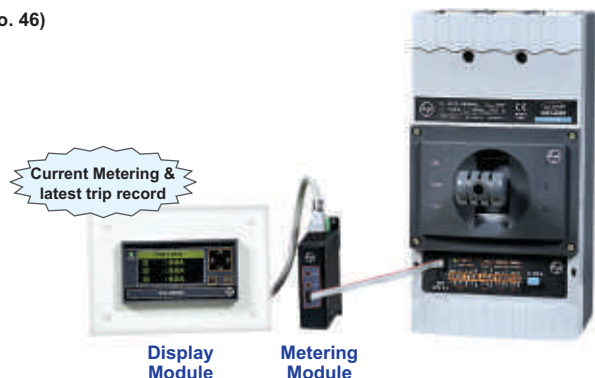
| Type | Release Range (A) | Breaking Capacity Icu at 415V AC, 50Hz. (kA) | 3 Pole | | 4 Pole | | Std. Pkg. (Nos.) |
|-----------|-------------------|--|---------------|---------------------|---------------|---------------------|------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit | |
| DN2-250D | 16 - 40 | 36 | CM920630000AG | 23020 | CM921550000AG | 26730 | 1 |
| | 25 - 63 | | CM920710000AG | 23020 | CM921540000AG | 26730 | 1 |
| | 40 - 100 | | CM920510000AG | 23020 | CM921530000AG | 26730 | 1 |
| | 63 - 160 | | CM920740000AG | 26360 | CM921520000AG | 32680 | 1 |
| | 100 - 250 | | CM920540000AG | 31160 | CM921510000AG | 38350 | 1 |
| DN3-400D | 160 - 400 | | CM930010000AG | 37420 | CM930030000AG | 43750 | 1 |
| DN3-630D | 250 - 630 | | CM930050000AG | 40320 | CM930070000AG | 49890 | 1 |
| DN2-250N | 16 - 40 | 50 | CM920640000AG | 25240 | CM921600000AG | 30110 | 1 |
| | 25 - 63 | | CM920720000AG | 25240 | CM921590000AG | 30110 | 1 |
| | 40 - 100 | | CM920520000AG | 25240 | CM921580000AG | 30110 | 1 |
| | 63 - 160 | | CM920750000AG | 29850 | CM921570000AG | 35570 | 1 |
| | 100 - 250 | | CM920550000AG | 32960 | CM921560000AG | 39730 | 1 |
| DN3-400N | 160 - 400 | | CM930020000AG | 38880 | CM930040000AG | 46380 | 1 |
| DN3-630N | 250 - 630 | | CM930060000AG | 43010 | CM930080000AG | 55600 | 1 |
| DN4-1250N | 320 - 800 | | CM960210000AG | 74160 | CM961110000AG | 85910 | 1 |
| | 400 - 1000 | | CM960220000AG | 91660 | CM961120000AG | 122650 | 1 |
| | 500 - 1250 | | CM960230000AG | 107350 | CM961130000AG | 153620 | 1 |
| DN2-250S | 16 - 40 | 70 | CM920650000AG | 29870 | CM921650000AG | 34580 | 1 |
| | 25 - 63 | | CM920730000AG | 29870 | CM921640000AG | 34580 | 1 |
| | 40 - 100 | | CM920590000AG | 29870 | CM921630000AG | 34580 | 1 |
| | 63 - 160 | | CM920760000AG | 37500 | CM921620000AG | 45530 | 1 |
| | 100 - 250 | | CM920560000AG | 40460 | CM921610000AG | 50510 | 1 |
| DN3-400S | 160 - 400 | | CM940530000AG | 48570 | CM941530000AG | 59600 | 1 |
| DN3-630S | 250 - 630 | | CM940790000AG | 55060 | CM941790000AG | 75650 | 1 |
| DN4-1250S | 320 - 800 | | CM960250000AG | 84060 | CM961150000AG | 99650 | 1 |
| | 400 - 1000 | | CM960260000AG | 113290 | CM961160000AG | 153100 | 1 |
| | 500 - 1250 | | CM960270000AG | 131900 | CM961170000AG | 179930 | 1 |

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.
 @ Motorised version available for DN2 and DN3 frames (please refer page No. 46)

Accessories for MTX2.0 [8538]

| Modules for MTX2.0 release | Cat. No. | M.R.P. (₹) Per Unit |
|---|-------------|---------------------|
| Current Metering Module (Display & Metering Module) | CM956980000 | 9020 |
| Cable (2m length) | CM011960000 | 1050 |
| Power Supply Module | CL907220000 | * |
| UNCO Module for Status Indication & Control through communication | CL908520000 | 8570 |

* Price on request

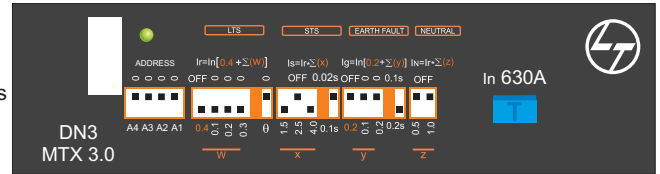


MTX2.0 with current metering module

d sine With Microprocessor Release 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 or Motorised 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 | | 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 | | CM930020000BG | | CM930040000BG | | 1 |
| DN3-630N | 250 - 630 | | CM930060000BG | | CM930080000BG | | 1 |
| DN4-1250N | 320 - 800 | | 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 | | CM940530000BG | | CM941530000BG | | 1 |
| DN3-630S | 250 - 630 | | CM940790000BG | | CM941790000BG | | 1 |
| DN4-1250S | 320 - 800 | | CM960250000BG | | CM961150000BG | | 1 |
| | 400 - 1000 | | CM960260000BG | | CM961160000BG | | 1 |
| | 500 - 1250 | | CM960270000BG | | CM961170000BG | | 1 |

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.
 @ Motorised version available for DN2 and DN3 frame.

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 | 8570 |

* Price on request

MCCB with MTX3.0 release



MTX3.0 with all modules

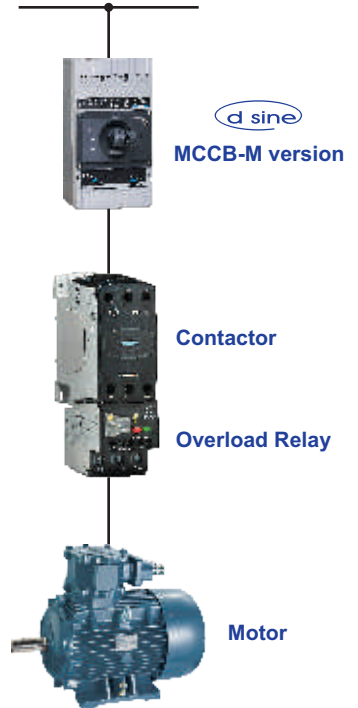
d sine MCCBs for Motor back-up Protection:



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

Cost effective solution for motor starter protection

| 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 | CM98944OOEO | 4270 | 1 |
| | 40 | | CM98944OOF0 | 4270 | 1 |
| | 50 | | CM98944OOGO | 4270 | 1 |
| | 63 | | CM98944OOHO | 4270 | 1 |
| | 80 | | CM98944OOJO | 4270 | 1 |
| | 100 | | CM98944OOKO | 4270 | 1 |
| DN1-160M | 100 | | CM90345OOKO | 7180 | 1 |
| | 125 | | CM90345OOL0 | 7300 | 1 |
| | 160 | | CM90345OOM0 | 8670 | 1 |
| DN2-250M | 200 | | CM921710ON0OG | 11800 | 1 |
| | 250 | | CM921710OP0OG | 15030 | 1 |
| DN3-400M | 320 | | CM945160OQ0OG | 17980 | 1 |
| | 400 | | CM945160OR0OG | 18870 | 1 |
| DN3-630M | 500 | | CM945150OS0OG | 21810 | 1 |
| | 630 | | CM945150OT0OG | 22180 | 1 |



Representative Application Image

Note: Please contact nearest branch office for fuseless type 2 co-ordination selection chart
 For lower HP motors, Please select MPCB. Details are given on page no. 16



Give your motor the right protection

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

Cost Effective

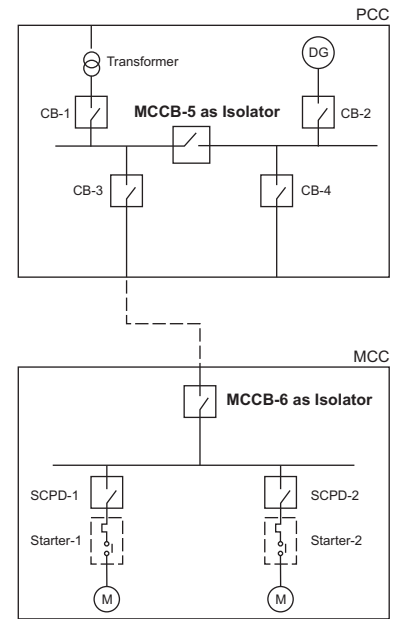
d sine
dsine-M range

d sine 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 | CM90716OOEO | 4460 | CM90717OOEO | 5800 | 1 |
| | 63 | CM90716OOHO | 4460 | CM90717OOHO | 5800 | 1 |
| | 100 | CM90716OOKO | 5230 | CM90717OOKO | 6680 | 1 |
| | 125 | CM90716OOL0 | 6010 | CM90717OOL0 | 7650 | 1 |
| | 160 | CM90716OOM0 | 6250 | CM90717OOM0 | 7910 | 1 |
| DN2-250SD | 200 | CM96814OONOOG | 12860 | CM96815OONOOG | 16230 | 1 |
| | 250 | CM96802OOP0OG | 13070 | CM96803OOP0OG | 17530 | 1 |
| DN3B-400SD | 320 | CM98410OOQ0OG | 16460 | CM98412OOQ0OG | 21810 | 1 |
| | 400 | CM98410OOROOG | 18700 | CM98412OOROOG | 23810 | 1 |
| DN3-630SD | 500 | CM96806OOSOOG | 21170 | CM96807OOSOOG | 28460 | 1 |
| | 630 | CM96806OOTOOG | 21390 | CM96807OOTOOG | 29540 | 1 |
| DN4-1250SD | 800 | CM93041OOU0 | 45720 | CM93042OOU0 | 57620 | 1 |
| | 1000 | CM93041OOV0 | 61770 | CM93042OOV0 | 80090 | 1 |
| | 1250 | CM93041OOA0 | 80980 | CM93042OOA0 | 106990 | 1 |



Representative Application Image

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



AuXC-2000

Automatic Transfer Controllers (ATC) [9032]

| Type | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------|-------------|---------------------|------------------|
| AuXC-2000 controller | ATC2000OO00 | 20300 | 1 |

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

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

For AuXC 2000 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 + 1 No. : MIL | 69015 | Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution. |
| DN3 | + 1 No. : AuXC2000 | 80655 | Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution. |

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

Accessories for MCCBs [8538]



Auxiliary Contact



TAC



Shunt Release



UV Release

| Description | Internal | | |
|--|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary Contact [8538] | | | |
| DN0, DN1 - 1 C/O - Right | CM978860000 | 710 | 1 |
| DN0, DN1 - 2 C/O - Right | CM978870000 | 1335 | 1 |
| DN2, DN3B, DN3, DN4 - 1 C/O | CM998010000 | 820 | 1 |
| DN2, DN3B, DN3, DN4 - 2 C/O | CM998020000 | 1545 | 1 |
| Trip Alarm Contact [8538] | | | |
| DN0, DN1 - 1 C/O - Right | CM978880000 | 710 | 1 |
| DN0, DN1 - 2 C/O - Right | CM978890000 | 1335 | 1 |
| DN2, DN3B, DN3, DN4 - 1 C/O - Right | CM998030000 | 835 | 1 |
| Auxiliary 1 C/O + TAC 1 C/O [8538] | | | |
| DN0, DN1 - Right | CM978900000 | 1250 | 1 |
| DN2, DN3B, DN3, DN4 - Right | CM998040000 | 1550 | 1 |
| Shunt Release [8538] | | | |
| DN0, DN1 - 24V DC - Left | CM914020400 | 1240 | 1 |
| DN0, DN1 - 110V AC - Left | CM978830A00 | 1240 | 1 |
| DN0, DN1 - 240/415V AC - Left | CM978830M00 | 1240 | 1 |
| DN2, DN3B, DN3, DN4 - 110/240/415V AC, 110/220V DC | CM998050000 | 2015@ | 1 |
| DN2, DN3B, DN3 - 24V DC | CM989760400 | 2015@ | 1 |
| Under Voltage Release [8538] | | | |
| DN0, DN1 - 240V AC - Left | CM97892B000 | 1665 | 1 |
| DN2, DN3B, DN3 - 240V AC - Left | CM99986B000 | 2535** | 1 |
| DN4 - 240V AC - Left | CM999060000 | 2755** | 1 |

@ - 'NO' of control contactor to be connected in series for DC control supply
 ** - Use these UV Cat. Nos. with Grey look MCCBs only



Neutral CT



Adaptor kit for NCT

| Description | External | | |
|---|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| External Neutral CT [8504] | | | |
| DN2 - 40A | CM999460000 | 1260 | 1 |
| DN2 - 63A | CM999470000 | 1260 | 1 |
| DN2 - 100A | CM999480000 | 1260 | 1 |
| DN2 - 160A | CM999490000 | 1810 | 1 |
| DN2 - 250A | CM999500000 | 1810 | 1 |
| DN3 - 400A | CM999540000 | 3380 | 1 |
| DN3 - 630A | CM999550000 | 3380 | 1 |
| DN4 - 800A | CM998890000 | 5185 | 1 |
| DN4 - 1000A | CM998900000 | 5185 | 1 |
| DN4 - 1250A | CM998910000 | 5505 | 1 |
| Adaptor kit for External Neutral CT [8538] | | | |
| DN2 - 250 | CM999940000 | 455 | Set of 2 |
| DN3 - 400 | CM999950000 | 955 | Set of 2 |
| DN3 - 630 | CM999970000 | 965 | Set of 2 |
| DN4 - 800 | CM999960000 | 1590 | Set of 2 |
| DN4 - 1000 | CM909660000 | 3510 | Set of 4 |
| DN4 - 1250 | CM999980000 | 5990 | Set of 2 |
| Stored Energy Electrical Operating Mechanism | | | |
| DN2 - 240V AC | * | | |
| DN3 - 240V AC | | | |

* Available on request



Direct ROM



Extended ROM



Key Lock

| Description | External | | |
|--|--------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Rotary Handle [8538] | | | |
| DN0 Direct ROM | CM978950000 | 895 | 1 |
| DN1 Direct ROM | CM980400000 | 945 | 1 |
| DN2 Direct ROM | CM998290000 | 1000 | 1 |
| DN3B, DN3 Direct ROM | CM998600000 | 1500 | 1 |
| DN0 Extended ROM | CM978960000 | 1290 | 1 |
| DN1 Extended ROM | CM980410000 | 1500 | 1 |
| DN2 Extended ROM | CM998300000 | 1575 | 1 |
| DN3B, DN3 Extended ROM | CM998610000 | 2500 | 1 |
| DN4 Extended ROM | CM998840000 | 3260 | 1 |
| Panel door mounted Key lock for Extended ROM # [8301] | | | |
| Type 1 | CM99958T0000 | 1505 | 1 |
| Type 2 | CM99958T000A | 1505 | 1 |
| Type 3 | CM99958T000B | 1505 | 1 |
| Type 12 | CM99958T000C | 1505 | 1 |
| Type 23 | CM99958T000D | 1505 | 1 |

- Can be used with dsine, DU, DH/DL, DTH new look extended ROM



Spreader Terminals



MIL Kit - Base Mounted

| Description | External | | |
|---|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals [8538] | | | |
| DN0-100 - 3 Pole | CM977850000 | 240 | Set of 6 |
| DN0-125D - 3 Pole | CM906870OLO | 340 | Set of 6 |
| DN1, DN2 - 250 - 3 Pole | ST980530000 | 1190 | Set of 6 |
| DN3B/DN3-400 - 3 Pole | ST980650000 | 2155 | Set of 6 |
| DN3-630 - 3 Pole | ST980540000 | 2425 | Set of 6 |
| DN4-800 - 3 Pole | CM911610OUO | 5060 | Set of 6 |
| DN4-1000 - 3 Pole | CM911610OVO | 10120 | Set of 12 |
| DN4-1250 - 3 Pole | CM911610OAO | 18290 | Set of 6 |
| DN0-100 - 4 Pole | CM979210000 | 405 | Set of 8 |
| DN0-125D - 4 Pole | CM906880OLO | 475 | Set of 8 |
| DN1, DN2 - 250 - 4 Pole | CM920070000 | 1505 | Set of 8 |
| DN3B/DN3-400 - 4 Pole | ST980660000 | 3090 | Set of 8 |
| DN3-630 - 4 Pole | CM920040000 | 3460 | Set of 8 |
| DN4-800 - 4 Pole | ST903620000 | 6450 | Set of 8 |
| DN4-1000 - 4 Pole | CM900640OVO | 12900 | Set of 16 |
| DN4-1250 - 4 Pole | ST980580000 | 23005 | Set of 8 |
| Mechanical Interlock Kit - Base Plate [8538] | | | |
| DN2-250 | CM997310000 | 3895 | 1 |
| DN3-400 | CM997320000 | 5975 | 1 |
| DN3-630 | CM998540000 | 5975 | 1 |
| DIN rail kit [8538] | | | |
| DN0 | CM909440000 | 70 | 1 |

Note: Phase Barriers are supplied along with MCCBs

DU MCCB Range\$ [8536]

DU With Thermal - Magnetic Release :

| | | | | | | | | | | |
|------------|-------|----|----|----|----|----|----|----|-----|--------|
| Rating (A) | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
| Icu (kA) | DU100 | | | | | | | | | DU125U |
| 10 | | | | | | | | | | |

2 Pole MCCBs\$

Available till stocks last, for alternate solution refer page no. 33

DU100/DU125U MCCBs\$



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 125A, 2P

3 Pole MCCBs\$

Available till stocks last, for alternate solution refer page no. 33

DU100/DU125U MCCBs\$



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 125A, 3P

| Type | Current Rating (A) | Breaking Capacity Icu (kA) | 2 Pole | | Std. Pkg. (Nos.) |
|--------|--------------------|--|-------------|---------------------|------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | |
| DU100 | 16 | AC : 25kA @ 240V AC, 50Hz DC : 10kA @ 125V DC, (2P in Series) L/R < 15 msec. | CM977950000 | 1220 | 1 |
| | 20 | | CM977960000 | 1220 | 1 |
| | 25 | | CM977970000 | 1220 | 1 |
| | 32 | | CM977980000 | 1220 | 1 |
| | 40 | | CM977990000 | 1220 | 1 |
| | 50 | | CM978000000 | 1220 | 1 |
| | 63 | | CM978010000 | 1220 | 1 |
| | 80 | | CM978020000 | 1330▲ | 1 |
| | 100 | | CM978030000 | 1330▲ | 1 |
| DU125U | 125 | CM909650000 | 1890▲ | 1 | |

| Type | Current Rating (A) | Breaking Capacity Icu at 415V AC 50Hz. (kA) | 3 Pole | | Std. Pkg. (Nos.) |
|--------|--------------------|---|-------------|---------------------|------------------|
| | | | Cat. No. | M.R.P. (₹) Per Unit | |
| DU100 | 16 | 10 | CM977510000 | 1680 | 1 |
| | 20 | | CM977520000 | 1680 | 1 |
| | 25 | | CM977530000 | 1680 | 1 |
| | 32 | | CM977540000 | 1680 | 5 |
| | 40 | | CM977550000 | 1680 | 1 |
| | 50 | | CM977560000 | 1680 | 1 |
| | 63 | | CM977570000 | 1680 | 5 |
| | 80 | | CM989210000 | 1840▲ | 1 |
| | 100 | | CM989220000 | 1840▲ | 5 |
| DU125U | 125 | CM903220000 | 2680▲ | 1 | |

▲- Spreader Terminals are included

Note:

2P in 3P frame size

DIN rail kit available as an accessory. Please refer DU100/DU125U accessories table

\$ Available till stocks last

Accessories for DU MCCBs\$ [8538]

Accessories for DU100/DU125U MCCBs\$



Auxiliary Contact



Shunt Release



Spreader Terminals



Direct ROM



Extended ROM



DU SS Enclosure

| Description | Internal | | |
|----------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary Contact | | | |
| 1 C/O - Right | CM977810000 | 455 | 1 |
| 1 C/O - Left | CM977820000 | 455 | 1 |
| Trip Alarm Contact | | | |
| 1 C/O - Right | SL970370000 | 670 | 1 |
| Shunt Release | | | |
| 240/415V AC, 110 DC - Left | CM977830000 | 585 | 1 |

Note: All internal accessories & ROMs are common for 2P MCCBs

\$ Available till stocks last

| Description | External | | |
|---------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals | | | |
| 2 Pole | CM977850002 | 170 | Set of 4 |
| 3 Pole | CM977850000 | 240 | Set of 6 |
| Rotary Handle | | | |
| Direct ROM | SL970440000 | 765 | 1 |
| Extended ROM | CM999180000 | 1445 | 1 |
| DIN rail kit | CM909440000 | 70 | 1 |
| SS Enclosure | ST980500000 | 800 | 1 |

Note: Phase Barriers are supplied along with all MCCBs

DH MCCB Range\$ [8536]

DH/DL With Thermal - Magnetic Release\$:

| Rating (A) Icu (kA) | 16 | 20 | 25 | 32 | 40 | 50 | 63 | 80 | 100 | 125 |
|------------------------|-------|----|----|----|----|----|----|----|-----|-----|
| 35 | DH125 | | | | | | | | | |
| 50 | DL100 | | | | | | | | | |



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 125A, 3P & 4P

Available till stocks last,
for alternate solution
refer page no. 38

| 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 | |
| DH125 | 12-16 | 35 | SL986440000 | 6280 | SL986110000 | 7430 | 1 |
| | 16-20 | | SL986450000 | 6280 | SL986120000 | 7430 | 1 |
| | 20-25 | | SL986460000 | 6280 | SL986130000 | 7430 | 1 |
| | 25-32 | | SL986470000 | 6280 | SL986140000 | 7430 | 1 |
| | 32-40 | | SL986480000 | 6280 | SL986150000 | 7430 | 1 |
| | 40-50 | | SL986490000 | 6280 | SL986160000 | 7430 | 1 |
| | 50-63 | | SL986500000 | 6280 | SL986170000 | 7430 | 1 |
| | 63-80 | | SL986510000 | 6280 | SL986180000 | 7430 | 1 |
| | 80-100 | | SL986520000 | 7010▲ | SL986190000 | 8310▲ | 1 |
| | 100-125 | | SL986530000 | 7140▲ | SL986070000 | 8540▲ | 1 |

▲ Spreader Terminals are included

\$ Available till stocks last

DL MCCB Range\$ [8536]



- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Range: 16A to 100A, 3P & 4P

Available till stocks last,
for alternate solution
refer page no. 38

| 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 | |
| DL100 | 12-16 | 50 | SL978010000 | 8540 | SL986200000 | 10380 | 1 |
| | 16-20 | | SL978020000 | 8540 | SL986210000 | 10380 | 1 |
| | 20-25 | | SL978030000 | 8540 | SL986220000 | 10380 | 1 |
| | 25-32 | | SL978040000 | 8540 | SL986230000 | 10380 | 1 |
| | 32-40 | | SL978050000 | 8540 | SL986240000 | 10380 | 1 |
| | 40-50 | | SL978060000 | 8540 | SL986250000 | 10380 | 1 |
| | 50-63 | | SL978070000 | 8540 | SL986260000 | 10380 | 1 |
| | 63-80 | | SL978080000 | 8540 | SL986270000 | 10380 | 1 |
| | 80-100 | | SL978090000 | 9450▲ | SL986280000 | 11460▲ | 1 |

▲ Spreader Terminals are included

\$ Available till stocks last

Accessories for DH125 & DL100 MCCBs\$ [8538]



Auxiliary Contact



TAC



Shunt Release



UV Release



Spreader Terminal



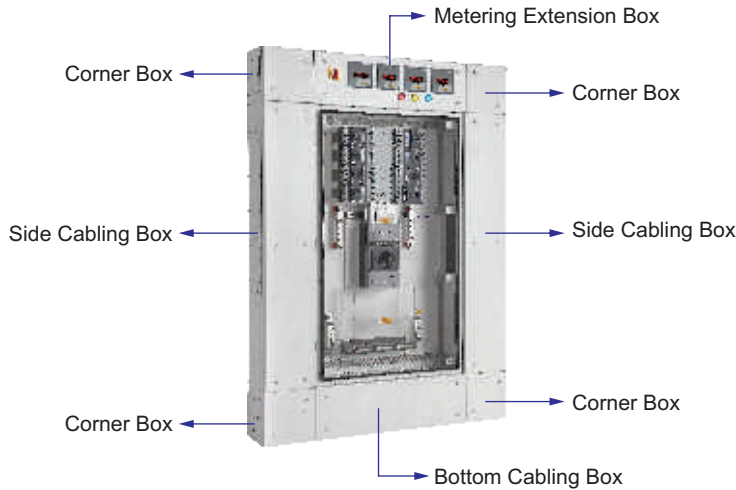
Extended ROM

| Description | Internal | | |
|------------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Auxiliary Contact | | | |
| 1 C/O - Right | SL972960000 | 705 | 1 |
| 1 C/O - Left | SL972970000 | 705 | 1 |
| Trip Alarm Contact | | | |
| 1 C/O - Right | SL972980000 | 705 | 1 |
| Shunt Release | | | |
| 110/240/415V AC - Left | SL972990M00 | 1060 | 1 |
| 24V DC - Left | SL972990400 | 1060 | 1 |
| Under Voltage Release | | | |
| 240V AC - Left | SL976110000 | 1400 | 1 |


| Description | External | | |
|---------------------------|-------------|---------------------|------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
| Spreader Terminals | | | |
| 3 Pole | ST980470000 | 385 | Set of 6 |
| 4 Pole | ST980600000 | 480 | Set of 8 |
| Rotary Handle | | | |
| Extended ROM | CM991030000 | 1425 | 1 |

Note: Phase Barriers are supplied along with MCCBs

\$ Available till stocks last.



Range Highlights

- Compliance with latest standard - 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  range of MCCBs
- Metering & cabling extensions are available as accessories

ENERSYS-S SMDB

| Description | Cat. No. | No of ways | | M.R.P. (₹) Per Unit | Height (H) (mm) | Width (W) (mm) | Depth (D) (mm) |
|----------------------------------|---------------|------------|------|---------------------|-----------------|----------------|----------------|
| | | 250A | 100A | | | | |
| SMDB - TN250D, O/G 100A 4 ways | DA20D1044CZZ0 | - | 4 | 39140 | 637 | 670 | 208.5 |
| SMDB - TN250D, O/G 100A 8 ways | DA20D1084CZZ0 | - | 8 | 47610 | 787 | 670 | 208.5 |
| SMDB - TN250D, O/G 100A 12 ways | DA20D1124CZZ0 | - | 12 | 59890 | 937 | 670 | 208.5 |
| SMDB - TN250D, O/G 100A 16 ways | DA20D1164CZZ0 | - | 16 | 70380 | 1087 | 670 | 208.5 |
| SMDB - TN400D, O/G 100A 4 ways | DA40D1044CZZ0 | - | 4 | 43860 | 937 | 670 | 208.5 |
| SMDB - TN400D, O/G 100A 8 ways | DA40D1084CZZ0 | - | 8 | 49980 | 1087 | 670 | 208.5 |
| SMDB - TN400D, O/G 100A 12 ways | DA40D1124CZZ0 | - | 12 | 64260 | 1237 | 670 | 208.5 |
| SMDB - TN400D, O/G 100A 16 ways | DA40D1164CZZ0 | - | 16 | 75750 | 1387 | 670 | 208.5 |
| SMDB - TN630D, O/G 100A 8 ways | DA60D1084CZZ0 | - | 8 | 78540 | 1287 | 870 | 208.5 |
| SMDB - TN630D, O/G 100A 12 ways | DA60D1124CZZ0 | - | 12 | 106080 | 1507 | 870 | 208.5 |
| SMDB - TN630D, O/G 100A 16 ways | DA60D1164CZZ0 | - | 16 | 116280 | 1507 | 870 | 208.5 |
| SMDB - TN630D, O/G 250A 4 ways | DA62D1044CZZ0 | 4 | - | 76500 | 1067 | 870 | 208.5 |
| SMDB - TN630D, O/G 250A 8 ways | DA62D1084CZZ0 | 8 | - | 85680 | 1287 | 870 | 208.5 |
| SMDB - TN630D, O/G 250A 12 ways | DA62D1124CZZ0 | 12 | - | 110160 | 1507 | 870 | 208.5 |
| SMDB - TN630D, O/G 250A 16 ways | DA62D1164CZZ0 | 16 | - | 123420 | 1727 | 870 | 208.5 |
| SMDB - TN630D, O/G COMBI 4 ways | DA6AD1044CZZ0 | 2 | 2 | 74970 | 1067 | 870 | 208.5 |
| SMDB - TN630D, O/G COMBI 8 ways | DA6AD1084CZZ0 | 2 | 6 | 81600 | 1287 | 870 | 208.5 |
| SMDB - TN630D, O/G COMBI 12 ways | DA6AD1124CZZ0 | 2 | 10 | 108120 | 1507 | 870 | 208.5 |
| SMDB - TN630D, O/G COMBI 16 ways | DA6AD1164CZZ0 | 2 | 14 | 119340 | 1507 | 870 | 208.5 |

| Incoming Device [8536] | | | |
|------------------------|-----------------------------|---------------|---------------------|
| SMDB Type | Description | Cat. No. | M.R.P. (₹) Per Unit |
| TN250D* | DN1-250N 3 Pole MCCB - 160A | CM98608OOMO | 13510 |
| | DN1-250N 3 Pole MCCB - 200A | CM98608OONO | 16320 |
| | DN1-250N 3 Pole MCCB - 250A | CM98608OPO | 19420 |
| TN400D | DN3-400D 3 Pole MCCB - 320A | CM94005OOQ1OG | 24120 |
| | DN3-400D 3 Pole MCCB - 400A | CM94005OOR1OG | 24330 |
| TN630D | DN3-630D 3 Pole MCCB - 500A | CM94006OOS1OG | 26660 |
| | DN3-630D 3 Pole MCCB - 630A | CM94006OOT1OG | 29310 |

| Outgoing Device [8536] | | | |
|------------------------------|------------------------------|------------------------------|---------------------|
| SMDB Type | Description | Cat. No. | M.R.P. (₹) Per Unit |
| TN250D, TN400D & TN630D | DN0-100D 3 Pole MCCB - 20 A | CM97893OOC2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 25 A | CM97893OOD2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 32 A | CM97893OOE2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 40 A | CM97893OOF2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 50 A | CM97893OOG2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 63 A | CM97893OOH2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 80 A | CM97893OOJ2OG | 5800 |
| | DN0-100D 3 Pole MCCB - 100 A | CM97893OOK2OG | 5800 |
| | TN630D | DN1-250N 3 Pole MCCB - 160 A | CM98608OOMO |
| DN1-250N 3 Pole MCCB - 200 A | | CM98608OONO | 16320 |
| DN1-250N 3 Pole MCCB - 250 A | | CM98608OPO | 19420 |

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, DU250 & DU250C MCCB as incomer.

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

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 | 6400 |
| | Bottom Cabling Box | CM904370000 | 6000 |
| TN630D | Metering Extension Box | CM9106400TO | 6800 |
| | Bottom Cabling Box | CM910620000 | 6400 |
| TN250D, TN400D & TN630D | Corner Box | CM910890000 | 2000 |
| | Mounting base | CM702600000 | 3000 |



Note:

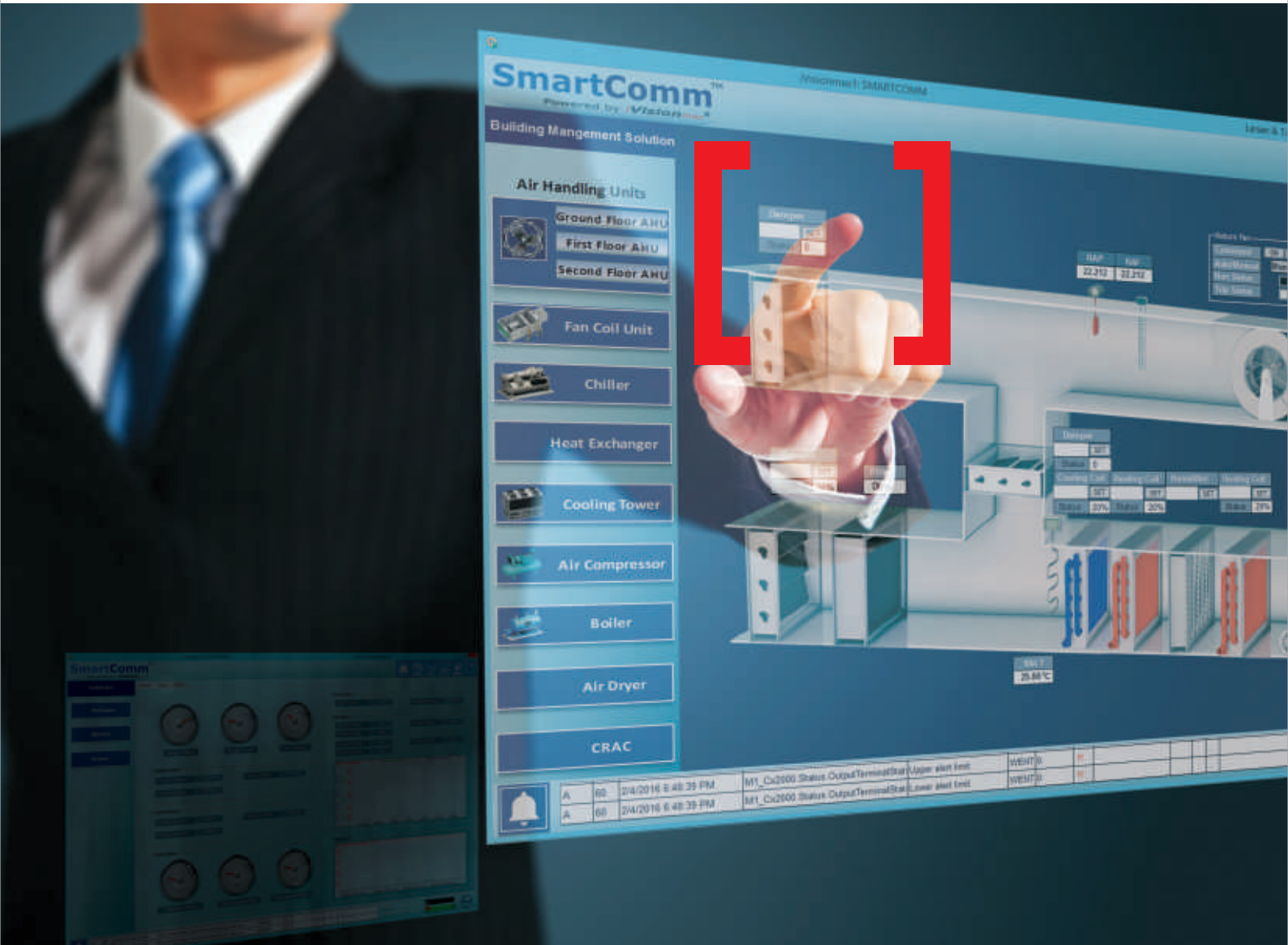
- Ammeter, voltmeter, selector switch and indicating lights have to be ordered separately.
- Mounting base to be used without bottom cabling box.

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 | 5800 | CM910860DOO | 5800 |
| | - | 8 | CM910850FOO | 7500 | CM910860FOO | 7500 |
| | - | 12 | CM910850HOO | 9000 | CM910860HOO | 9000 |
| | - | 16 | CM910850KOO | 10500 | CM910860KOO | 10500 |
| TN400D | - | 4 | CM910870DOO | 9000 | CM910880DOO | 9000 |
| | - | 8 | CM910870FOO | 10500 | CM910880FOO | 10500 |
| | - | 12 | CM910870HOO | 11500 | CM910880HOO | 11500 |
| | - | 16 | CM910870KOO | 13000 | CM910880KOO | 13000 |
| TN630D | - | 8 | CM911200OFO | 11500 | CM911210OFO | 11500 |
| | - | 12 | CM911200OHO | 13400 | CM911210OHO | 13400 |
| | - | 16 | | | | |
| | 4 | - | CM911200ODO | 10300 | CM911210ODO | 10300 |
| | 8 | - | CM911200OFO | 11500 | CM911210OFO | 11500 |
| | 12 | - | CM911200OHO | 13400 | CM911210OHO | 13400 |
| | 16 | - | CM911200OKO | 14600 | CM911210OKO | 14600 |
| | 2 | 2 | CM911200ODO | 10300 | CM911210ODO | 10300 |
| | 2 | 6 | CM911200OFO | 11500 | CM911210OFO | 11500 |
| | 2 | 10 | CM911200OHO | 13400 | CM911210OHO | 13400 |
| | 2 | 14 | | | | |



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SmartComm is an unified software platform for device communication, integration, data acquisition, data management, monitoring & control.

This single platform integrates complete E&A's communicable product offerings ranging from Digital Panel Meters through Circuit Breakers, Protection Relays, AC Drives, Soft Starters, Final Distribution Products and Building Automation devices.

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SmartComm



U-POWER

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
- 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 & MTX4.5
- Unique O-LED display for metering
- Touch screen technology in UW-MTX4.5
- Unique withdrawable Communication & Power metering modules
- Dual protection curve settings & Password protection
- Soft-rating plug for precise protection at lower load currents
- Provision for on-load self-diagnosis of Releases & modules
- Data communication on Modbus, Profibus & wireless Zigbee protocols
- Power & Harmonics measurement
- Temperature rise monitoring & protection
- Easy to integrate with HMI & PLC
- Add-on modules for advance protection
- Protection Releases conform to EMI/EMC standard



UW-MTX1.0

UW-MTX1G

UW-MTX1Gi

UW-MTX1.5G

UW-MTX1.5Gi



UW-MTX3.5/3.5EC/3.5H

UW-MTX4.5

Breaking Capacities Offered:

$I_{cu} = I_{cs} = I_{cw}$ 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 & 630A ACBs are also available on request.

OMEGA ACB ordering information:

UW 1 08 N X D 1 2 9 0 0⁽⁵⁾ OMEGA 800A Fr-1 50kA 3P EDO UW-MTX1.5G

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

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

| Selection for Breaking Capacity (Icu=Ics) ⁽¹⁾ | |
|--|---|
| 50kA (Fr-I upto 2000A & Fr-2 2500A) | N |
| 65kA (Fr-I & Fr-II) | S |
| 80kA (Fr-I, Fr-II & Fr-III) | H |
| 100kA (Fr-III) | V |

| Temperature Rise Monitoring ⁽³⁾ | |
|--|---|
| Not Required | 0 |
| Required | 1 |

| Selection for P&C Units | |
|----------------------------|----------|
| B/C (w/o protection) | 0 |
| UW - MTX1.0 | 7 |
| UW - MTX1G | 8 |
| UW - MTX1Gi | B |
| UW - MTX1.5G | 9 |
| UW - MTX1.5Gi | C |
| UW-MTX3.5 | 3 |
| UW-MTX3.5EC ⁽⁶⁾ | 4 |
| UW-MTX4.5 | 5 |
| UW-MTX3.5H | 6 |

| Type | |
|------------------------------|----------|
| Manually Operated | 1 |
| Electrically Operated | 2 |

| Selection for control voltage ⁽²⁾ | |
|--|----------|
| For Manually Operated | 0 |
| 240V AC ECD & CR & 240V AC SR | 1 |
| 240V AC ECD & CR & 24V DC SR | 2 |

| Version | |
|----------|---|
| Draw-out | D |
| Fixed | F |

| Selection for No. of Poles | |
|-------------------------------|----------|
| 3 Pole | X |
| 4 Pole 100% N | F |
| 4 Pole 50% N (in Fr-III only) | H |
| 4 Pole 200% N (upto 2500A) | D |

Please Note :

- ⁽¹⁾ For Icu values please refer product catalogue
- ⁽²⁾ Other options of control voltage are available as accessory
- ⁽³⁾ Temperature protection is available in UW-MTX3.5/3.5EC/3.5H/4.5
- ⁽⁴⁾ For Fr-1, 2500A selection, please contact the nearest branch office
- ⁽⁵⁾ Refer point 'C' of Omega ACBs standard features
- ⁽⁶⁾ For system requiring 690V metering, kindly order separate Power Metering module with MTX 3.5 (refer page 58)

OMEGA ACBs are offered with following standard features:

- Draw-out Version :** Omega ACBs with UW-MTX release will have inbuilt- Current Metering (MTX 1.5G/1.5Gi/3.5/3.5EC/3.5H/4.5), 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 ratings 4000A (Fr2 & Fr3) and 5000A (Fr3) replace 13th digit of ACB cat no. with (recommended for Buscoupler only)
 - X : For Top Horizontal (Long) & Bottom Vertical for Fr2 & Fr3
 - Y : For Top & Bottom Horizontal (Long) for Fr3. H-H termination not recommended for 4000A Fr2.
 - D) 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 (1.5G/1.5Gi/3.5/3.5EC/3.5H/4.5), 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.
- Electrically operated ACB includes ECD (240V AC), CR (240V AC) & SR (240V AC OR 24V DC).

3 Pole ACBs with UW-MTX1G (LSING - BCD Switches)



| Current Rating | Version | 3 Pole Manual Draw-out ACB with UW-MTX1G | | | | | | | |
|----------------|---------|--|---------------------|---------------|---------------------|---------------|---------------------|---------------|---------------------|
| | | N (50kA) | | S (65kA) | | H (80kA) | | V (100kA) | |
| | | 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 | UW108NXD01800 | * | UW108SXD01800 | * | UW108HXD01800 | * | UW308VXD01800 | * |
| 1000A | | UW110NXD01800 | | UW110SXD01800 | | UW110HXD01800 | | UW310VXD01800 | |
| 1250A | | UW112NXD01800 | | UW112SXD01800 | | UW112HXD01800 | | UW312VXD01800 | |
| 1600A | | UW116NXD01800 | | UW116SXD01800 | | UW116HXD01800 | | UW316VXD01800 | |
| 2000A | | UW120NXD01800 | | UW120SXD01800 | | UW120HXD01800 | | UW320VXD01800 | |
| 2500A | | UW225NXD01800 | | UW225SXD01800 | | UW225HXD01800 | | UW325VXD01800 | |
| 3200A | | UW232NXD01800 | | UW232SXD01800 | | UW232HXD01800 | | UW332VXD01800 | |
| 4000A | | - | | UW240SXD01800 | | UW240HXD01800 | | UW340VXD01800 | |
| 4000A | | - | | - | | UW340HXD01800 | | UW340VXD01800 | |
| 5000A | | - | | - | | UW350HXD01800 | | UW350VXD01800 | |
| 6300A | - | - | UW363HXD01800 | UW363VXD01800 | | | | | |

| Current Rating | Version | 3 Pole Manual Fixed ACB with UW-MTX1G | | | | | | | |
|----------------|---------|---------------------------------------|---------------------|---------------|---------------------|---------------|---------------------|---------------|---------------------|
| | | N (50kA) | | S (65kA) | | H (80kA) | | V (100kA) | |
| | | 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 | UW108NXF01800 | * | UW108SXF01800 | * | UW108HXF01800 | * | UW308VXF01800 | * |
| 1000A | | UW110NXF01800 | | UW110SXF01800 | | UW110HXF01800 | | UW310VXF01800 | |
| 1250A | | UW112NXF01800 | | UW112SXF01800 | | UW112HXF01800 | | UW312VXF01800 | |
| 1600A | | UW116NXF01800 | | UW116SXF01800 | | UW116HXF01800 | | UW316VXF01800 | |
| 2000A | | UW120NXF01800 | | UW120SXF01800 | | UW120HXF01800 | | UW320VXF01800 | |
| 2500A | | UW225NXF01800 | | UW225SXF01800 | | UW225HXF01800 | | UW325VXF01800 | |
| 3200A | | UW232NXF01800 | | UW232SXF01800 | | UW232HXF01800 | | UW332VXF01800 | |
| 4000A | | - | | UW240SXF01800 | | UW240HXF01800 | | UW340VXF01800 | |
| 4000A | | - | | - | | UW340HXF01800 | | UW340VXF01800 | |
| 5000A | | - | | - | | UW350HXF01800 | | UW350VXF01800 | |
| 6300A | - | - | UW363HXF01800 | UW363VXF01800 | | | | | |

| M.R.P. changes for product customization | M.R.P. (₹) Per Unit |
|--|---------------------|
| MDO to EDO or MF to EF conversion (Includes ECD 240V AC, CR 240V AC & SR 240V AC or 24V DC) | * |
| 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 + UW-PS Module) | |
| UW-PS (Auxiliary power supply module for display in No-load or OFF condition) [§] | |
| COM Module (MODBUS) for communication [§] | |
| PM Module for power metering [§] | |

* Available on request

§ Chapter ID [8538]

4 Pole ACBs with UW-MTX1G (LSING - BCD Switches)



| Current Rating | Version | 4 Pole Manual Draw-out ACB with UW-MTX1G | | | | | | | |
|----------------|---------|--|---------------------|---------------|---------------------|---------------|---------------------|---------------|---------------------|
| | | N (50kA) | | S (65kA) | | H (80kA) | | V (100kA) | |
| | | 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 | UW108NFD01800 | * | UW108SFD01800 | * | UW108HFD01800 | * | UW308VFD01800 | * |
| 1000A | | UW110NFD01800 | | UW110SFD01800 | | UW110HFD01800 | | UW310VFD01800 | |
| 1250A | | UW112NFD01800 | | UW112SFD01800 | | UW112HFD01800 | | UW312VFD01800 | |
| 1600A | | UW116NFD01800 | | UW116SFD01800 | | UW116HFD01800 | | UW316VFD01800 | |
| 2000A | | UW120NFD01800 | | UW120SFD01800 | | UW120HFD01800 | | UW320VFD01800 | |
| 2500A | | UW225NFD01800 | | UW225SFD01800 | | UW225HFD01800 | | UW325VFD01800 | |
| 3200A | | UW232NFD01800 | | 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 | UW108NFF01800 | * | UW108SFF01800 | * | UW108HFF01800 | * | UW308VFF01800 | * |
| 1000A | | UW110NFF01800 | | UW110SFF01800 | | UW110HFF01800 | | UW310VFF01800 | |
| 1250A | | UW112NFF01800 | | UW112SFF01800 | | UW112HFF01800 | | UW312VFF01800 | |
| 1600A | | UW116NFF01800 | | UW116SFF01800 | | UW116HFF01800 | | UW316VFF01800 | |
| 2000A | | UW120NFF01800 | | UW120SFF01800 | | UW120HFF01800 | | UW320VFF01800 | |
| 2500A | | UW225NFF01800 | | UW225SFF01800 | | UW225HFF01800 | | UW325VFF01800 | |
| 3200A | | UW232NFF01800 | | UW232SFF01800 | | UW232HFF01800 | | UW332VFF01800 | |
| 4000A | | - | | UW240SFF01800 | | UW240HFF01800 | | UW340VFF01800 | |
| 4000A | | - | | - | | UW340HFF01800 | | UW340VFF01800 | |
| 5000A | | - | | - | | UW350HFF01800 | | UW350VFF01800 | |
| 6300A | - | - | UW363HFF01800 | UW363VFF01800 | | | | | |

* Available on request

U-POWER
Accessories of OMEGA Air Circuit Breakers [8538]
Air Circuit Breakers



Draw-out ACBs Terminal Adaptors



Fix ACBs Terminal Adaptors

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|-------------|---------------------|
| Terminal Adaptor for Draw-out Omega ACBs | | |
| Frame-1 400-2000A N/S/H (Vertical / Horizontal) | CL609630000 | * |
| Frame-1 2500A S/H (Vertical) | CL609640000 | |
| Frame-2 400-3200A N/S/H (Vertical / Horizontal) | | |
| Frame-2 4000A S/H (Vertical) | CL609650000 | |
| Frame-2 4000A S/H (Horizontal) | CL603160000 | |
| Frame-3 400-4000A H/V (Vertical) # | CL601280000 | |
| Frame-3 400-4000A H/V (Horizontal-Long) | CL600730000 | |
| Frame-3 5000A H/V (Horizontal-Long) | CL609660000 | |
| Frame-3 5000A H/V (Vertical)# | CL600670000 | |
| Frame-3 6300A H/V (Vertical) # | CL609650000 | |

| Description | Cat. No. | M.R.P. (₹) 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-2 400-4000A H, 3200A N, 3200-4000A S(Vertical/Horizontal) | CL609770000 | |
| Frame-3 400-4000A H/V (Vertical / Horizontal) # | CL906680000 | |
| Frame-3 5000A H/V (Vertical / Horizontal) # | CL609820000 | |
| Frame-3 6300A H/V (Vertical) # | CL906690000 | |

: Please consider 4 terminal adaptors per phase.

: Please consider 4 terminal adaptors per phase.

Accessories of OMEGA Air Circuit Breakers



Operation Counter



Door Interlock



Closing Release



Shunt Release



UV Release

| Description | Cat. No. | M.R.P. (₹) 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 | |

[^] 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 |
|--|-------------|---------------------|
| Mechanical Interlock using Key & Lock[§] | | |
| 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]

| Description | Cat. No. | M.R.P. (₹) 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 & 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 | |



NCT

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|-------------|---------------------|
| External Neutral CT for UW-MTX Releases [8504] | | |
| 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 | 20300 | 1 |

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

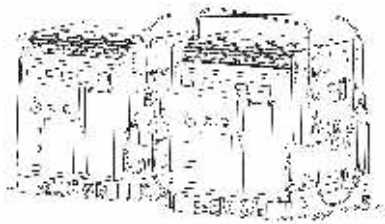


For AuXC 2000 programming videos and more details please scan the QR code or click here

U-POWER

Accessories of OMEGA Air Circuit Breakers

Air Circuit Breakers



Mechanical Interlock using Bowden Cable [8538]

| Description | Cat. No. | M.R.P. (₹) 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. (₹) Per Unit |
|---|-------------|---------------------|
| MATRIX Releases & Modules [8538] | | |
| UW-MTX1.0 | CL919660000 | * |
| UW-MTX1G | CL919710000 | |
| UW-MTX1Gi | CL905620000 | |
| UW-MTX1.5G | CL919650000 | |
| UW-MTX1.5Gi | CL905520000 | |
| UW-MTX3.5 | CL901130000 | |
| UW-MTX3.5EC | CL907000000 | |
| UW-MTX3.5H | CL919750000 | |
| UW-MTX4.5 | CL906110000 | |
| Power supply module | CL907220000 | |
| Relay Module | CL907160000 | |
| MODBUS Module | CL907090000 | |
| Profibus Module | CL907320000 | |
| Matrix Smart Card Module | CL907050000 | |
| Power Metering Module (415V) | CL907040000 | |
| Power Metering Module (690V) | CL900500000 | |
| 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

Upgrade to the new-age OMEGA ACB with Minimal Modifications



Pre-Engineered Retrofit Solution
Upgrade L&T CNCS ACB to OMEGA ACB



Presenting the pre-engineered L&T CNCS to OMEGA Retrofit kit

The L&T CNCS to OMEGA Retrofit kit is a pre-engineered solution which allows you to upgrade from the old CNCS ACB to the advanced L&T OMEGA ACB - with minimal modification. All installations are done by trained Engineers from the nearest L&T 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

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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

C-POWER Air Circuit Breakers

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 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 control through MODBUS protocol



C-POWER S1 ACB



C-POWER ACB

C-POWER Range of Air Circuit Breakers

- Conforms to IS/IEC 60947-2 & IEC 60947-2
- Current rating from 800A to 6300A
- 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 & SR71)
- 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 control through MODBUS protocol

C-POWER ACBs for DG Application

- G Range Air Circuit Breakers for DG protection
- 400A to 2000A in 3P Manual Fix version
- Choice of Thermo-Magnetic release-DN1 / Micro processor based release SR18G (LSING)
- $I_{cu}=I_{cs}=I_{cw}=50kA$ for 1 second across the entire range
- Compact and rugged design with inbuilt Under-voltage protection



C-POWER G Range

C-POWER HE ACBs for Harsh Environment

- Please contact the nearest branch office for Details & product Selection

Breaking Capacities Offered:

| | | I _{cu} = I _{cs} = I _{cw} 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 Icu=Ics=Icw (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. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| SL96041 | 134350 | SL96061 | 168790 |
| SL96051 | 165950 | SL96071 | 200390 |
| SL96042 | 134350 | SL96062 | 168790 |
| SL96052 | 165950 | SL96072 | 200390 |
| SL96043 | 140470 | SL96063 | 176650 |
| SL96053 | 172070 | SL96073 | 208250 |
| SL96044 | 156320 | SL96064 | 195610 |
| SL96054 | 187920 | SL96074 | 227210 |
| SL96045 | 178120 | SL96065 | 217260 |
| SL96055 | 209720 | SL96075 | 248860 |
| SL96046 | 216120 | SL96066 | 265900 |
| SL96056 | 247720 | SL96076 | 297500 |
| SL96047 | 260640 | SL96067 | 323700 |
| SL96057 | 292240 | SL96077 | 355300 |

| Thermal-Magnetic DN1 | | | |
|----------------------|---------------------------|----------|---------------------------|
| 3 Pole | | 4 Pole | |
| Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| SL95331 | 124850 | SL95351 | 159290 |
| SL95341 | 156450 | SL95361 | 190890 |
| SL95332 | 124850 | SL95352 | 159290 |
| SL95342 | 156450 | SL95362 | 190890 |
| SL95333 | 130970 | SL95353 | 167150 |
| SL95343 | 162570 | SL95363 | 198750 |
| SL95334 | 146820 | SL95354 | 186110 |
| SL95344 | 178420 | SL95364 | 217710 |
| SL95335 | 168620 | SL95355 | 207760 |
| SL95345 | 200220 | SL95365 | 239360 |
| SL95336 | 206620 | SL95356 | 256400 |
| SL95346 | 238220 | SL95366 | 288000 |
| SL95337 | 251140 | SL95357 | 314200 |
| SL95347 | 282740 | SL95367 | 345800 |

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

C-POWER S1 3 & 4 Pole Fixed ACBs

| Rating | Breaking Capacity Icu=Ics=Icw (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. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| SL95561 | 92660 | SL95581 | 115840 |
| SL95571 | 124260 | SL95591 | 147440 |
| SL95562 | 92660 | SL95582 | 115840 |
| SL95572 | 124260 | SL95592 | 147440 |
| SL95563 | 96600 | SL95583 | 120740 |
| SL95573 | 128200 | SL95593 | 152340 |
| SL95564 | 116520 | SL95584 | 145660 |
| SL95574 | 148120 | SL95594 | 177260 |
| SL95565 | 128040 | SL95585 | 160070 |
| SL95575 | 159640 | SL95595 | 191670 |

| Thermal-Magnetic DN1 | | | |
|----------------------|---------------------------|----------|---------------------------|
| 3 Pole | | 4 Pole | |
| Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| SL95481 | 83160 | SL95501 | 106340 |
| SL95491 | 114760 | SL95511 | 137940 |
| SL95482 | 83160 | SL95502 | 106340 |
| SL95492 | 114760 | SL95512 | 137940 |
| SL95483 | 87100 | SL95503 | 111240 |
| SL95493 | 118700 | SL95513 | 142840 |
| SL95484 | 107020 | SL95504 | 136160 |
| SL95494 | 138620 | SL95514 | 167760 |
| SL95485 | 118540 | SL95505 | 150570 |
| SL95495 | 150140 | SL95515 | 182170 |

Note : Add a Suffix "OOOO" 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 | 20000 |
| Microprocessor based SR18G+D (LSING + Current Metering) | Add | 6000 |
| Microprocessor based SR18Gi+D (LSING + Current metering + ZSI) | Add | 6500 |

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.

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 Icu=Ics=Icw (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. (₹) Per Unit |
| SL95721OOOO | 61440 |
| SL95722OOOO | 61980 |
| SL95723OOOO | 63800 |
| SL95724OOOO | 66050 |
| SL95725OOOO | 85720 |
| SL95726OOOO | 95470 |
| SL93297OOOO | 108510 |

G Range 3 Pole Manual Fixed for DG Application

(with in-built UV Protection & 2NO + 2NC Aux Contact Block)

| Thermal-Magnetic Release Type DN1 | |
|-----------------------------------|---------------------------|
| Cat. No. | M.R.P. (₹) Per Unit |
| SL91263OOOO | 69110 |
| SL91264OOOO | 69240 |
| SL91265OOOO | 69650 |
| SL91266OOOO | 72450 |
| SL91267OOOO | 90310 |
| SL91268OOOO | 99960 |
| SL91269OOOO | 117560 |

| Microprocessor Based SR18G | |
|----------------------------|---------------------------|
| Cat. No. | M.R.P. (₹) Per Unit |
| SL91320OOOO | 78610 |
| SL91321OOOO | 78740 |
| SL91322OOOO | 79150 |
| SL91323OOOO | 81950 |
| SL91324OOOO | 99810 |
| SL91325OOOO | 109460 |
| SL91326OOOO | 127060 |

C-POWER Air Circuit Breakers [8536]



C-POWER 3 & 4 Pole Draw-out ACBs

| Rating | Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1 sec) | Version | Type | Microprocessor Based SR18G | | | | Thermal-Magnetic DN1 | | | |
|--------|---|---------|------|----------------------------|---------------------------|----------|---------------------------|----------------------|---------------------------|----------|---------------------------|
| | | | | 3 Pole | | 4 Pole | | 3 Pole | | 4 Pole | |
| | | | | 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 | 65kA | MDO | H | SL95311 | 199120 | # | 248210 | # | 189620 | # | 238710 |
| | | EDO | H | SL95321 | 230720 | # | 279810 | # | 221220 | # | 270310 |
| 1000A | 65kA | MDO | H | SL95312 | 215190 | # | 263530 | # | 205690 | # | 254030 |
| | | EDO | H | SL95322 | 246790 | # | 295130 | # | 237290 | # | 285630 |
| 1250A | 65kA | MDO | H | SL95313 | 237500 | # | 288630 | # | 228000 | # | 279130 |
| | | EDO | H | SL95323 | 269100 | # | 320230 | # | 259600 | # | 310730 |
| 1600A | 65kA | MDO | H | SL95314 | 258290 | # | 323280 | # | 248790 | # | 313780 |
| | | EDO | H | SL95324 | 289890 | # | 354880 | # | 280390 | # | 345380 |
| 2000A | 75kA | MDO | H | SL95315 | 304000 | # | 381990 | # | 294500 | # | 372490 |
| | | EDO | H | SL95325 | 335600 | # | 413590 | # | 326100 | # | 404090 |
| 2500A | 75kA | MDO | H | SL95316 | 321790 | # | 395020 | # | 312290 | # | 385520 |
| | | EDO | H | SL95326 | 353390 | # | 426620 | # | 343890 | # | 417120 |
| 3200A | 75kA | MDO | H2 | SL94822 | 326220 | SL94826 | 400000 | SL94814 | 316720 | SL94818 | 390500 |
| | | EDO | H2 | SL94824 | 357820 | SL94828 | 431600 | SL94816 | 348320 | SL94820 | 422100 |
| 4000A | 75kA | MDO | H2 | SL94823 | 396220 | SL94827 | 513940 | SL94815 | 386720 | SL94819 | 504440 |
| | | EDO | H2 | SL94825 | 427820 | SL94829 | 545540 | SL94817 | 418320 | SL94821 | 536040 |
| 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 "OOOO" for all the above mentioned cat. nos.

C-POWER 3 & 4 Pole Manual Fixed ACBs

| Rating | Breaking Capacity I _{cu} =I _{cs} =I _{cw} (1 sec) | Version | Type | Microprocessor Based SR18G | | | | Thermal-Magnetic DN1 | | | |
|--------|---|---------|------|----------------------------|---------------------------|----------|---------------------------|----------------------|---------------------------|----------|---------------------------|
| | | | | 3 Pole | | 4 Pole | | 3 Pole | | 4 Pole | |
| | | | | 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 | 50kA | MF | C | * | | | | * | | | |
| 1000A | 50kA | | | * | | | | * | | | |
| 1250A | 50kA | | | * | | | | * | | | |
| 1600A | 50kA | | | * | | | | * | | | |
| 2000A | 55kA | | | * | | | | * | | | |
| 2500A | 60kA | | | * | | | | * | | | |
| | | | | SL97635 | 161920 | # | 210040 | SL93005 | 152420 | # | 200540 |
| | | | | SL97636 | 178420 | # | 240530 | SL93006 | 168920 | # | 231030 |

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

| M.R.P. changes for product customization w.r.t. SR18G M.R.P. | | M.R.P. (₹) Per Unit |
|---|-------------|---------------------------|
| Bus-Coupler (w/o protection) | Reduce | 20000 |
| Microprocessor based SR18G+D (LSING + Current Metering) | Add | 6000 |
| Microprocessor based SR18Gi+D (LSING + Current metering + ZSI) | Add | 6500 |
| Microprocessor based SR71 (LSING + Current metering + Advance protection + PS Module) | Add | * |
| Communication Module (MODBUS) for SR71 release (SR71 - COM) [§] | SL94698OOOO | |
| Power Metering Module for SR71 release (SR71 - PM) [§] | SL94699OOOO | |

[§] Chapter ID [8538]

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 of C-POWER Air Circuit Breakers

Accessories (Common for C-POWER Family)



AN1 Module



LTPB



LIP



Shunt Release



UV Release

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|-------------|---------------------|
| Lockable Trip Push Button (LTPB) [8301] | | |
| Type AA | SL93148000A | 2400 |
| Type BB | SL93148000B | 2400 |
| Type CC | SL93148000C | 2400 |
| Type DD | SL93148000D | 2400 |
| Lockable Trip Push Button kit (3 I/C & 2 B/C) | SL919360000 | 12000 |
| Locking of ACB in Isolated position (LIP) [8301] | | |
| Type A | SL93146000A | 2400 |
| Type B | SL93146000B | 2400 |
| Type C | SL93146000C | 2400 |
| Type D | SL93146000D | 2400 |
| Locking of ACB in Any position (LAP) [8301] | | |
| Type A | SL93147000A | 2400 |
| Type B | SL93147000B | 2400 |
| Type C | SL93147000C | 2400 |
| Type D | SL93147000D | 2400 |
| Racking Interlock [8301] | | |
| Type AA | SL93149000A | 4310 |
| Type BB | SL93149000B | 4310 |
| Type CC | SL93149000C | 4310 |
| Type DD | SL93149000D | 4310 |
| Padlock [8301] | | |
| Racking Padlock Assembly | CL900250000 | 1420 |
| Other Accessories [8538] | | |
| Door Interlock | SL931500000 | 2290 |
| Mechanical Operation Counter* | XM808370000 | 2370 |
| Mounting Kit for Front Mounted Counter | SL958820000 | 570 |

* For mounting the Operation counter, mounting kit "SL958820000" needs to be ordered separately.



Vertical Terminal Adaptor

| Description & Rating | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|---|-------------|---------------------|------------------|
| Vertical Terminal Adaptors for Draw out C-POWER ACB [8538] | | | |
| 400-1250 S1/800-1000 C | SL932810000 | 3070 | 1 |
| 1600-2000 S1/1250-1600 C/800-1600 H | SL932820000 | 3590 | 1 |
| 2000 C | SL932840000 | 4920 | 1 |
| 2000 H/2500 C/H | SL932850000 | 5330 | 1 |
| 2500 S1 | SL932890000 | 5330 | 1 |
| 3200 S1 | SL932860000 | 5900 | 1 |
| 3200H2/H1, 4000H2/H | SL932880000 | 14320 | 1 |

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|-------------|---------------------|
| Shunt Release (SR) [8538] | | |
| Type EA : 24/48V DC | SL927180400 | 2440 |
| Type EA : 110V DC | SL927180100 | 2440 |
| Type EA : 220V DC | SL927180200 | 2440 |
| Type EA1 : 110V AC | SL927180A00 | 2440 |
| Type EA1 : 240V AC | SL927180B00 | 2440 |
| Type EA1 : 415V AC | SL927180D00 | 2440 |
| Under Voltage Release (UVR) [8538] | | |
| Type MV : 24V DC | ST368770000 | 3530 |
| Type MV : 240V AC | SL92720B000 | 3530 |
| Type MV : 415V AC | SL92720D000 | 3530 |
| Earth Fault Release (for DN1) [8538] | | |
| Type EF1 (10%, 20% In) | SL913400000 | 2290 |
| Type EF2 (30%, 40%, 50% In) | SL913410000 | 2290 |
| Remote Fault Indication [8538] | | |
| AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC | SL946540000 | 7140 |
| Microswitches for Indication [8536] | | |
| Microswitch for Voltmetric Releases (2) each | SL927030000 | 1850 |
| Microswitch for Common Indication of O/L & S/C (3) each | SL927040000 | 1850 |
| Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release) | SL927050000 | 3090 |
| Service Position Microswitch - Right (2) | SL931420000 | 1250 |
| Service Position Microswitch - Left (2) | SL931430000 | 1250 |
| Test or Isolated Position Microswitch - Right (2) | SL931440000 | 1250 |
| Test or Isolated Position Microswitch - Left (2) | SL931450000 | 1250 |

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



UN-CO module [8538]

Features

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

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|----------------------------------|-------------|---------------------|------------------|
| UN-CO module for Breaker control | CL908520000 | 8570 | 1 |

Spares of C-POWER Air Circuit Breakers

Protection Releases



SR71



SR18G+D/SR18Gi+D



SR18G



DN1



Universal Test Kit



CT

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|------------------------------------|-------------------|---------------------|
| Protection Releases [8538] | | |
| Microprocessor based type SR71 | On Request | |
| Microprocessor based type SR18Gi+D | SL948130000 | 34410 |
| Microprocessor based type SR18G+D | SL948120000 | 33910 |
| Microprocessor based type SR18G | SL960300000 | 27910 |
| Thermal-Magnetic Release type DN1 | SL931520000 | 18410 |
| Universal Test Kit | CL904620000 | 61800 |

Universal Test Kit

Compatible with following L&T 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

Upgrade to high end communicable Release SR71

Retrofit kit solutions are available

For further details please contact the nearest branch office

| Description | Cat. No. | M.R.P. (₹) Per Unit | Std. Pkg. (Nos.) |
|--|-------------|---------------------|------------------|
| CTs for SR18G / SR18G+D / SR18Gi+D [8504] | | | |
| 400 S1 Fix & Draw-out | SL015230000 | 4170 | 1 |
| 630 S1 Fix & Draw-out | ST374950000 | 4170 | 1 |
| 800 C/H/S1 Fix & Draw-out | SL018570000 | 4170 | 1 |
| 1000 C/H/S1 Fix & Draw-out | SL018580000 | 4170 | 1 |
| 1250 C/H/S1 Fix & Draw-out | SL905710000 | 5080 | 1 |
| 1600 C/H/S1 Fix & Draw-out | SL905720000 | 5080 | 1 |
| 2000 C/H Fix & Draw-out | SL905650000 | 5440 | 1 |
| 2000 S1 Draw-out | SL932100000 | 5440 | 1 |
| 2500 C/H Fix & Draw-out | SL905660000 | 5440 | 1 |
| 2500 S1 Draw-out | | | |
| 3200 H2/H1 Draw-out | SL017400000 | 6580 | 1 |
| 4000 H2/H Draw-out | SL017390000 | 7440 | 1 |

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

Protect your equipment in Sulphur-rich environments



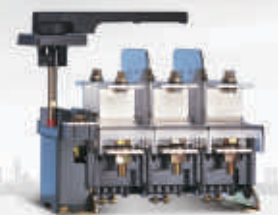
C-POWER HE Air Circuit Breaker

- 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



L&T's 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 environments.

For more details please scan the QR code or click here



Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@lntebg.com Web: www.lntebg.com

Upgrade to the Standard Duty **PRIME** Capacitor.

At L&T, we've taken our Standard Duty capacitor to the next level with the Standard Duty Prime Capacitor. It offers SMEs on the growth path upgraded specifications that let you manage your growing electrical loads more efficiently. So you can focus on your business, instead of your energy bills.



Upgraded specifications include:

- Longer, more productive life, thanks to:
 - Overcurrent withstand: 1.6 x In
 - Peak inrush current withstand: 200 x In
- Performs 6000 switching operations per year
- Operating life - 115000 hours

Let the Standard Duty Prime capacitor take the load off your shoulders.
To upgrade to the PRIME class, contact your nearest L&T Sales branch today.

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@lntebg.com Web: www.lntebg.com

Power Factor Correction Capacitors [8532]

| Parameters | Standard Duty | | New Standard Duty Prime | Heavy Duty | | New Super Heavy Duty | APP | LTXL Ultra Heavy Duty | |
|--|---------------|-------------|-----------------------------------|-------------|-------------|--------------------------------|-------------|-----------------------|-------------|
| | Box | Cylindrical | Cylindrical | Box | Cylindrical | Cylindrical | Box | Box | Cylindrical |
| Over current withstand capability | 1.5 x In | 1.5 x In | 1.6 x In | 1.8 x In | 1.8 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 | 0.45 W/kVAR | 0.35 W/kVAR | 0.35 W/kVAR | 0.45 W/kVAR | 0.5 W/kVAR | 0.35 W/kVAR | 0.45 W/kVAR |
| Peak Inrush current withstand capability | 200 x In | 200 x In | 200 x In | 300 x In | 250 x In | 350 x In | 200 x In | 500 x In | 500 x In |
| Number of switching operations per year | 5000 | 5000 | 6000 | 8000 | 8000 | 15000 | 10000 | 20000 | 20000 |
| Max. Ambient temp. | 55°C | 55°C | 55°C | 55°C | 55°C | 65°C | 55°C | 70°C | 65°C |
| Operating life | 100000 hrs. | 100000 hrs. | 115000 hrs. | 150000 hrs. | 150000 hrs. | 150000 hrs. | 200000 hrs. | 300000 hrs. | 300000 hrs. |

Standard Duty Capacitors



| Type | kVAR Rating | Voltage (V) | M.R.P. (₹) per kVAR |
|--|-------------|-------------|---------------------|
| Cylindrical 1 to 6 kVAR - Series : LTCCF 7.5 to 25 kVAR - Series : LTCCD | 1 to 25 | 440 V | 180 |
| Box 1 to 6 kVAR - Series : LTBCF 7.5 to 30 kVAR - Series : LTBCD | 1 to 30 | 440 V | 246 |

Heavy Duty Capacitors



| Type | kVAR Rating | Voltage (V) | M.R.P. (₹) per kVAR |
|--|-------------|-------------|---------------------|
| Cylindrical Series: LTCCH | 1 & 2 | 440 V | 350 |
| Cylindrical Series: LTCCN (Gas Filled) | 3 & 4 | 440 V | 350 |
| | 5 to 15 | | 312 |
| | 20 & 25 | | 303 |
| | 5 to 15 | 480 V | 328 |
| | 20 to 30 | | 318 |
| | 7.5 to 15 | 525 V | 334 |
| 20 to 30 | 324 | | |
| Box Series: LTBCH | 1 to 4 | 440 V | 454 |
| | 5 to 15 | | 385 |
| | 20 to 50 | 480 V | 376 |
| | 5.5 to 15 | | 404 |
| | 20 to 27.7 | | 395 |
| | 6.6 to 15 | 525 V | 412 |
| | 20 to 33.1 | | 402 |

Standard Duty Prime Capacitors



| Type | kVAR Rating | Voltage (V) | M.R.P. (₹) per kVAR |
|---------------------------|-------------|-------------|---------------------|
| Cylindrical Series: LTCCV | 5 to 25 | 440 V | 240 |

The 3-in-1 solution!



Introducing

The brand new Standard duty Box capacitor with inbuilt MCB and LED indication

- **Correction** of power factor by Standard duty capacitor
- **Indication** of capacitor health status by LED
- **Protection** and isolation by inbuilt MCB

| kVAR Rating | Voltage | Cat. No. | M.R.P. (₹) Per Unit |
|-------------|---------|-------------------|---------------------|
| 7.5 | 440 V | LTBCM307B2 | 3560 |
| 8.33 | | LTBCM308B2 | 3770 |
| 10 | | LTBCM310B2 | 4190 |
| 12.5 | | LTBCM312B2 | 4820 |
| 15 | | LTBCM315B2 | 5450 |
| 20 | | LTBCM320B2 | 7325 |
| 25 | | LTBCM325B2 | 8585 |

Super Heavy Duty Capacitors



| Type | kVAr Rating | Voltage (V) | M.R.P. (₹) per kVAr |
|---------------------------|-------------|-------------|---------------------|
| Cylindrical Series: LTCCR | 3 to 5 | 440 V | 362 |
| | 7.5 to 15 | | 332 |
| | 20 & 25 | | 324 |
| | 5.5 to 15 | 480 V | 349 |
| | 20 to 27.7 | | 340 |
| | 6.6 to 15 | 525 V | 355 |
| | 20 to 33.1 | | 347 |



APP Capacitors



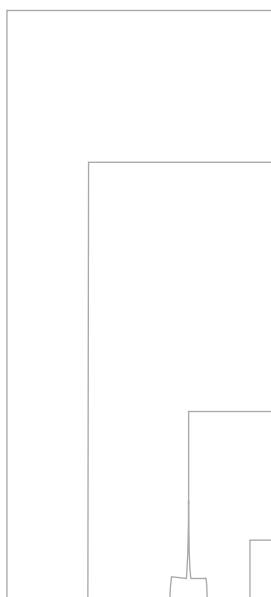
| Type | kVAr Rating | Voltage (V) | M.R.P. (₹) per kVAr |
|-------------------|--------------|-------------|---------------------|
| Box Series: LTBCP | 5 to 15 | 440 V | 590 |
| | 20 to 50 | | 570 |
| | 5.5 to 13.8 | 480 V | 620 |
| | 16.6 to 27.7 | | 599 |
| | 6.6 to 13.2 | 525 V | 631 |
| | 16.6 to 33.1 | | 610 |

LTXL - Ultra Heavy Duty Capacitors



| Type | kVAr Rating | Voltage (V) | M.R.P. (₹) per kVAr |
|----------------------------|-------------|-------------|---------------------|
| Cylindrical Series : LTCCU | 5 to 15 | 440V | 614 |
| | 20 & 25 | | 604 |
| | 7.5 to 15 | 480V | 645 |
| | 20 | | 634 |
| | 7.5 to 15 | 525V | 657 |
| 20 | 646 | | |
| Box Series: LTBCU | 5 to 15 | 440V | 771 |
| | 20 to 50 | | 756 |
| | 7.5 to 15 | 480V | 810 |
| | 20 to 30 | | 794 |
| | 7.5 to 15 | 525V | 825 |
| | 20 to 33.1 | | 809 |

Ordering Information for Capacitors



C - Cylindrical, B - Box

Duty: D/F - Standard**
V - Standard Prime
M - Standard duty Box with MCB and LED Indication
H - Heavy Box
N - Heavy Cylindrical Gas filled
R - Super Heavy
P - APP
U - Ultra Heavy

| kVAr Rating | Sample ratings |
|----------------|----------------|
| | 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

| | | | | |
|---|---|---|---|---|
| L | T | C | 3 | 2 |
|---|---|---|---|---|

Catalogue Number

| Capacitor Series | kVAr ratings | | |
|------------------|--|-----------------------------------|---------------------------------|
| | 440 V | 480 V | 525 V |
| LTCCF/LTBCF | 1, 2, 3, 4, 5, 6 | | |
| LTCCD/LTBCD | 7.5, 8.33, 10, 12.5, 15, 20, 25, 30** | | |
| LTBCM | 7.5, 8.33, 10, 12.5, 15, 20, 25 | | |
| LTCCV | 5, 6, 7.5, 8.33, 10, 12.5, 15, 20, 25 | | |
| LTCCN | 3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25 | 7.5, 12.5, 15, 20, 25, 30 | 7.5, 8.33, 12.5, 15, 20, 25, 30 |
| LTBCH | 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 |
| LTCCR | 3, 4, 5, 7.5, 8.33, 10, 12.5, 15, 20, 25 | 5.5, 11.1, 15, 20, 25, 27.7 | 6.6, 13.2, 15, 20, 25, 30, 33.1 |
| LTBCP | 5, 7.5, 10, 12.5, 15, 20, 25, 50 | 5.5, 11.1, 13.8, 16.6, 22.1, 27.7 | 6.6, 13.2, 16.6, 20, 26.5, 33.1 |
| LTCCU | 5, 7.5, 8.33, 10, 12.5, 15, 20, 25 | 7.5, 8.33, 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 30kVAr

Detuned Reactors, 440 V, 50 Hz [8504]

- Copper & Aluminium wound reactors
- Lower operating losses
- 180% linearity*
- Thermal cut off



| 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 |
| 5 | LTFR0705B2 | 7420 | LTAL0705B2 | 6350 | LTFR1405B2 | 14410 | LTAL1405B2 | 10625 |
| 10 | LTFR0710B2 | 11665 | LTAL0710B2 | 9015 | LTFR1410B2 | 22645 | LTAL1410B2 | 14875 |
| 12.5 | LTFR0712B2 | 12930 | LTAL0712B2 | 9890 | LTFR1412B2 | 25085 | LTAL1412B2 | 16320 |
| 15 | LTFR0715B2 | 14320 | LTAL0715B2 | 10580 | LTFR1415B2 | 27795 | LTAL1415B2 | 17455 |
| 20 | LTFR0720B2 | 16960 | LTAL0720B2 | 12605 | LTFR1420B2 | 32940 | LTAL1420B2 | 20795 |
| 25 | LTFR0725B2 | 18030 | LTAL0725B2 | 13340 | LTFR1425B2 | 35000 | LTAL1425B2 | 22010 |
| 50 | LTFR0750B2 | 28625 | LTAL0750B2 | 21160 | LTFR1450B2 | 55585 | LTAL1450B2 | 34915 |
| 75 | LTFR0775B2 | 42410 | LTAL0775B2 | 31465 | LTFR1475B2 | 82350 | LTAL1475B2 | 51915 |
| 100 | LTFR0700B2 | 58310 | LTAL0700B2 | 43240 | LTFR1400B2 | 113225 | LTAL1400B2 | 71345 |

* Prices of 200% linearity reactors are available on request. • For high V-THD applications, please contact your nearest sales office for customised solutions.

Selection of capacitors for detuned harmonic filter application

| Step size and reactor rating (440 V) | With 7% detuned reactor | | | With 14% detuned reactor | |
|--------------------------------------|------------------------------------|----------------------|----------------------|------------------------------------|-------------------|
| | Capacitor series | Capacitor (480 V) | Capacitor (525 V) | Capacitor series | Capacitor (525 V) |
| 5 kVAr | LTCCR, LT BCH, LTBCP | 5.5 kVAr | 6.6 kVAr | LTCCR, LT BCH, LTBCP | 6.6 kVAr |
| | LTCCN, LTCCU, LTBCU | 7.5 kVAr | 7.5 kVAr | LTCCN, LTCCU, LTBCU | 7.5 kVAr |
| 10 kVAr | LTCCR, LT BCH, LTBCP | 11.1 kVAr | 13.2 kVAr | LTCCR, LT BCH, LTBCP | 12.5 kVAr |
| | LTCCN, LTCCU, LTBCU | 12.5 kVAr | 12.5 kVAr | LTCCN, LTCCU, LTBCU | 12.5 kVAr |
| 12.5 kVAr | LTCCN, LTCCR, LT BCH, LTCCU, LTBCU | 15 kVAr | 15 kVAr | LTCCN, LTCCR, LT BCH | 15 kVAr |
| | LTBCP | 13.8 kVAr | 16.6 kVAr | LTCCU, LTBCU, LTBCP | |
| 15 kVAr | LTCCN, LTCCR, LT BCH, LTCCU, LTBCU | 20 kVAr | 20 kVAr | LTCCN, LTCCR, LT BCH, LTCCU, LTBCU | 20 kVAr |
| | LTBCP | 16.6 kVAr | | | |
| 20 kVAr | LTCCN, LTCCR, LT BCH, LTBCU | 25 kVAr | 25 kVAr | LTCCN, LTCCR, LT BCH, LTBCU, LTBCP | 25 kVAr |
| | LTBCP | 22.1 kVAr | 26.5 kVAr | LTCCU | |
| | LTCCU | 2 X 12.5 kVAr | 2 X 12.5 kVAr | 2 X 12.5 kVAr | |
| 25 kVAr | LTCCR, LT BCH, LTBCP | 27.7 kVAr | 33.1 kVAr | LTCCN, LTCCR, LT BCH, LTBCU, LTBCP | 30 kVAr |
| | LTCCN, LTBCU | 30 kVAr | 25 + 8.33 kVAr | LTCCU | |
| | LTCCU | 12.5 + 15 kVAr | 15 + 20 kVAr | 2 X 15 kVAr | |
| 50 kVAr | LTCCR, LT BCH, LTBCP | 2 x 27.7 kVAr | 2 x 33.1 kVAr | LTCCN, LTCCR, LT BCH, LTBCU, LTBCP | 2 x 30 kVAr |
| | LTCCN, LTBCU | 2 x 30 kVAr | 2 x (25 + 8.33) kVAr | LTCCU | |
| | LTCCU | 2 x (12.5 + 15) kVAr | 2 x (15 + 20) kVAr | 4 X 15 kVAr | |
| 100 kVAr | LTCCR, LT BCH, LTBCP | 4 x 27.7 kVAr | 4 x 33.1 kVAr | LTCCN, LTCCR, LT BCH, LTBCU, LTBCP | 4 x 30 kVAr |
| | LTCCN, LTBCU | 4 x 30 kVAr | 4 x (25 + 8.33) kVAr | LTCCU | |
| | LTCCU | 4 x (12.5 + 15) kVAr | 4 x (15 + 20) kVAr | 8 X 15 kVAr | |

* kVAr selection is based on minimum size required and higher standard rating available

Capacitor Duty Contactors - Type MO C [8536]



MO C25



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 | 1470 | 1 |
| | 5 | MO C5 | 1NO | CS96127 | 1540 | 1 |
| | 8.5 | MO C8.5 | 1NO | CS96320 | 1775 | 1 |
| | 10 | MO C10 | 1NO | CS96156 | 1925 | 1 |
| | 12.5 | MO C12.5 | 1NO | CS96321 | 1980 | 1 |
| | 15 | MO C15 | 1NO | CS90019 | 2760 | 1 |
| | 20 | MO C20 | 1NO | CS90021 | 3155 | 1 |
| | 25 | MO C25▲ | 1NO | CS96322 | 3580 | 1 |
| Fr 2 | 30 | MO C30§ | 1NO | CS96148 | 5470 | 1 |
| | 40 | MO C40 | 1NO | CS96147 | 9010 | 1 |
| | 50 | MO C50 | 1NO | CS96324 | 10235 | 1 |
| Fr 3 | 60 | MO C60§ | 1NO | CS96149 | 11650 | 1 |
| | 75 | MO C75 | 1NO | CS96150 | 14115 | 1 |
| | 85 | MO C85 | 1NO | CS96157 | 14810 | 1 |
| New | 100 | MO C100§ | 1NO | CS96158 | 15000 | 1 |

Thyristor Switching Module, 440V 50Hz [8538]

- High Peak Inverse Voltage (PIV) - 2.2 kV
- Lower operating losses
- Auto thermal cut off



| kVAr Rating | Cat. No. | M.R.P. (₹) Per Unit |
|-------------|-----------|---------------------|
| 10 | LTTSM10B2 | 17865 |
| 25 | LTTSM25B2 | 25485 |
| 50 | LTTSM50B2 | 29740 |

Note: Above prices include Quick Discharge Resistors (QDR)

Note :

- 1) For ordering add-on aux. contact block, please refer page No. 8
- 2) For ordering suffix, please refer page No.10
- 3) For ordering spare coils, please refer page No. 11
- 4) Standard coil voltage : 240V, 50/60 Hz

- ▲ 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

Please refer page No. 7 for further details.

APFC Controller [8536]

etaCON M - APFC Controller



Features:

- Modular and expandable steps
- CT secondary - 1 A / 5 A Site selectable
- Measurement of individual Current and Voltage harmonic (THD) up to 15th Order
- Available in combination of 3 to 14 steps for contactor controlled APFC panels
- Capacitor failure indication
- In-built temperature sensor
- Suitable for LV as well as HT side sensing
- Communicable on Modbus through RS485 Plug-in Module

etaCON M Selection Guidelines

| Steps | Steps Description | Size (W x H in mm) | Combination | Cat. No. Combination | M.R.P. (₹) Per Set |
|-------|-------------------|--------------------|--|---|--------------------|
| 3 | 2 + 1* | 96 x 96 | 3 Step APFC Controller | ETACONM003R | 9500 |
| 5 | 4 + 1* | 96 x 96 | 5 Step APFC Controller | ETACONM005R | 11000 |
| 6 | 5 + 1* | 96 x 96 | 3 Step APFC Controller + 3 Step Plug-in module | ETACONM003R + ETACONEXP3R | 11500 |
| 7 | 6 + 1* | 96 x 96 | 5 Step APFC Controller + 2 Step Plug-in module | ETACONM005R + ETACONEXP2R | 12400 |
| 8 | 7 + 1* | 96 x 96 | 5 Step APFC Controller + 3 Step Plug-in module | ETACONM005R + ETACONEXP3R | 13000 |
| 8 | 7 + 1* | 144 x 144 | 8 Step APFC Controller | ETACONM008R | 14000 |
| 10 | 9 + 1* | 144 x 144 | 8 Step Controller + 2 Step Plug-in module | ETACONM008R + ETACONEXP2R | 15400 |
| 11 | 10 + 1* | 144 x 144 | 8 Step Controller + 3 Step Plug-in module | ETACONM008R + ETACONEXP3R | 16000 |
| 12 | 11 + 1* | 144 x 144 | 8 Step APFC Controller + 2 Step Plug-in module + 2 Step Plug-in module | ETACONM008R + ETACONEXP2R + ETACONEXP2R | 16800 |
| 13 | 12 + 1* | 144 x 144 | 8 Step APFC Controller + 2 Step Plug-in module + 3 Step Plug-in module | ETACONM008R + ETACONEXP2R + ETACONEXP3R | 17400 |
| 14 | 13 + 1* | 144 x 144 | 8 Step APFC Controller + 3 Step Plug-in module + 3 Step Plug-in module | ETACONM008R + ETACONEXP3R + ETACONEXP3R | 18000 |

* Last Contact can be programmed for capacitor switching / Alarm function / Fan Control

etaCON M APFC Controller

| Model | Single CT input | Voltage input | Cat. No. | M.R.P. (₹) Per Unit |
|-----------------------------------|-----------------|---------------|-------------|---------------------|
| 3 Step APFC Controller (96 x96) | 1 A / 5 A | 415V / 110 V | ETACONM003R | 9500 |
| 5 Step APFC Controller (96 x96) | | | ETACONM005R | 11000 |
| 8 Step APFC Controller (144 x144) | | | ETACONM008R | 14000 |

etaCON M Optional Plug-in Modules

| Description | Model | Cat. No. | M.R.P. (₹) Per Unit |
|------------------------|----------------------|-------------|---------------------|
| 2 Steps Plug-in Module | 2 Relays NO | ETACONEXP2R | 1400 |
| 3 Steps Plug-in Module | 3 Relays NO | ETACONEXP3R | 2000 |
| RS485 Plug-in Module | RS485 Plug-in Module | ETACONRS485 | 7500 |

New

etaSMART - APFC Controller

Features:

- Simple and Smart Controller
- Available in 4 to 16 steps for contactor controlled APFC Panels
- Auto programming function available
- CT secondary - 1 / 5 Amp site selectable



| Steps | Size | Cat. No. | Single CT input | Voltage Input | M.R.P. (₹) Per Unit |
|-------|-----------|-------------|-----------------|---------------|---------------------|
| 4 | 96 x 96 | CS908840000 | 1/5 Amp | 415 V | 8000 |
| 6 | 96 x 96 | CS908850000 | | | 9000 |
| 8 | 96 x 96 | CS909020000 | | | 10000 |
| 12 | 144 x 144 | CS909030000 | | | 12500 |
| 14 | 144 x 144 | CS909040000 | | | 13500 |
| 16 | 144 x 144 | CS909050000 | | | 14500 |

Active Harmonic Filter (AHF) [8543]

- Reduces THD within IEEE limits
- Dynamic correction of THD
- Improves both distortion & displacement Power Factor
- Load balancing & Neutral current reduction (triplen harmonics) with 4 wire filter



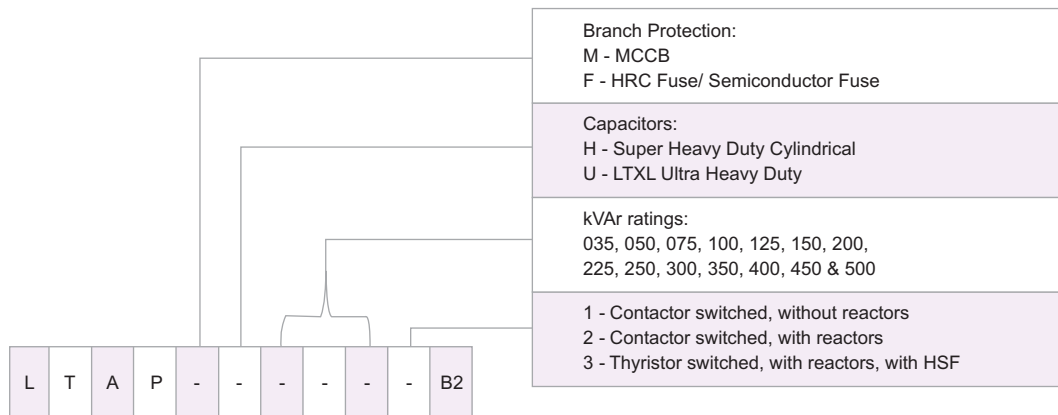
| Filter Rating (A) | 3 Phase 3 wire AHF | | 3 Phase 4 wire AHF | |
|-------------------|--------------------|---------------------|--------------------|---------------------|
| | Cat. No. | M.R.P. (₹) Per Unit | Cat. No. | M.R.P. (₹) Per Unit |
| 30 | AHF030331D2 | On Request | AHF030341D2 | On Request |
| 60 | AHF060331D2 | | AHF060341D2 | |
| 75 | AHF075331D2 | | AHF075341D2 | |
| 100 | AHF100331D2 | | AHF100341D2 | |
| 150 | AHF150331D2 | | AHF150341D2 | |
| 200 | AHF200331D2 | | AHF200341D2 | |
| 300 | AHF300331D2 | | AHF300341D2 | |
| 400 | AHF400331D2 | | | |
| 600 | AHF600331D2 | | - | |
| 800 | AHF800331D2 | | | |

Features

- Wide range of ratings (35 to 500 kVAr) covers the typical requirement of APFC panel ratings
- All the panels are with optimal number of steps and step sizes
 - Offers sufficient step resolution which would be suitable for all types of industries
 - Panel operation without hunting of capacitors
- Pre-selected switchgear with accurate ratings offers reliable operation, protection and isolation
- Accurate combination of capacitor and reactor offers better protection against harmonics
- IP 42 panels
- Auto and manual switching options



Ordering Information for APFC Panels



| Product | Description | kVAr ratings | Capacitors | Main Incomer | Branch Protection | Switching | Harmonic filter |
|----------------------|---|-----------------|---|---|--------------------|-------------------------------|-------------------|
| etaSYS – MH1 | Contactor switched standard APFC Panels | 35 to 500 kVAr | Super Heavy Duty cylindrical capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | MCCB | MO C Capacitor duty contactor | - |
| etaSYS – MH2 | Contactor switched standard APFC Panels with harmonic filters | 100 to 500 kVAr | Super Heavy Duty cylindrical capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | MCCB | MO C Capacitor duty contactor | 7% copper reactor |
| etaSYS - FH1 | Contactor switched standard APFC Panels | 35 to 500 kVAr | Super Heavy Duty cylindrical capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | HRC Fuse | MO C Capacitor duty contactor | - |
| etaSYS - FH2 | Contactor switched standard APFC Panels with harmonic filters | 100 to 500 kVAr | Super Heavy Duty cylindrical capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | HRC Fuse | MO C Capacitor duty contactor | 7% copper reactor |
| etaSYS - FH3 (RTPFC) | Thyristor switched standard APFC Panels with harmonic filters | 100 to 500 kVAr | Super Heavy Duty cylindrical capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | Semiconductor fuse | Thyristor switching modules | 7% copper reactor |
| etaSYS - MU1 | Contactor switched standard APFC Panels | 100 to 500 kVAr | LTXL - Ultra Heavy Duty capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | MCCB | MO C Capacitor duty contactor | - |
| etaSYS – MU2 | Contactor switched standard APFC Panels with harmonic filters | 100 to 500 kVAr | LTXL - Ultra Heavy Duty capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | MCCB | MO C Capacitor duty contactor | 7% copper reactor |
| etaSYS - FU1 | Contactor switched standard APFC Panels | 35 to 500 kVAr | LTXL - Ultra Heavy Duty capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | HRC Fuse | MO C Capacitor duty contactor | - |
| etaSYS - FU2 | Contactor switched standard APFC Panels with harmonic filters | 100 to 500 kVAr | LTXL - Ultra Heavy Duty capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | HRC Fuse | MO C Capacitor duty contactor | 7% copper reactor |
| etaSYS - FU3 (RTPFC) | Thyristor switched standard APFC Panels with harmonic filters | 100 to 500 kVAr | LTXL - Ultra Heavy Duty capacitors | MCCB - up to 350 kVAr; ACB - 400 to 500 kVAr | Semiconductor fuse | Thyristor switching modules | 7% copper reactor |

Note: Other ratings with customization are available on request

3 Phase Over Current + Earth Fault Relay

C.T. Rating 1A or 5A, Field Selectable



- IDMT & Definite time characteristics
- Last 30 trip data recording with date and time
- Password Protection

| Model | Aux. Supply (V) | Output Contacts | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|---------|------------------|-----------------|-------------|-------------|---------------------|
| MC31AnX | 24 - 240V AC/ DC | 2 NO + 2 NC | 51, 51N | MC31ANX2200 | 14500 |
| | | 4 NO | | MC31ANX4000 | |

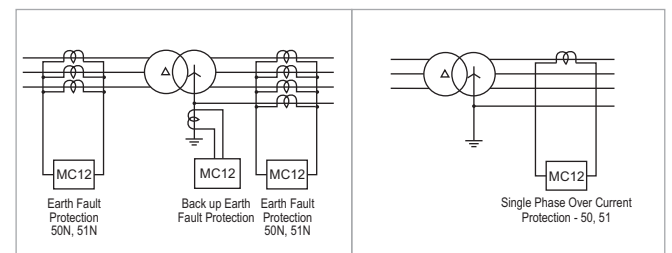
Single Pole Over Current or Earth Fault Relay

C.T. Rating 1A or 5A, Not Field Selectable



- IDMT and Definite time characteristics

| Model | Aux. Supply (V) | C.T. Secondary (A) | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|-------|-----------------|--------------------|--------------------|-------------|---------------------|
| MC12 | 20 - 110V AC/DC | 1A | 50, 51 or 50N, 51N | MC12AA10X00 | 10000 |
| | | 5A | | MC12AA50X00 | |
| | 88 - 264V AC/DC | 1A | | MC12AB10X00 | |
| | | 5A | | MC12AB50X00 | |



3 Phase Over Current + Earth Fault Relay with High Set

C.T. Rating 1A or 5A, Field Selectable



- IDMT & Definite time characteristics
- Last 30 trip data recording with date and time
- Password Protection

| Model | Aux. Supply (V) | Output Contacts | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|---------|------------------|-----------------|------------------|-------------|---------------------|
| MC61AnX | 24 - 240V AC/ DC | 2 NO + 2 NC | 51, 51N, 50, 50N | MC61ANX2200 | 16000 |
| | | 4 NO | | MC61ANX4000 | |

Reverse Power Relay

C.T. Rating 1A or 5A, Not Field Selectable



- System Voltage is site selectable - 110V / 415V AC

| Model | Aux Supply (V) | C.T. Secondary (A) | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|-------|-----------------|--------------------|-------------|-------------|---------------------|
| MRP11 | 20 - 110V AC/DC | 1A | 32 | MRP11A10X00 | 20000 |
| | | 5A | | MRP11A50X00 | |
| | 88 - 264V AC/DC | 1A | | MRP11B10X00 | |
| | | 5A | | MRP11B50X00 | |

3 Phase Over Current + Earth Fault Relay with High Set & RS - 485 Port

C.T. Rating 1A or 5A, Field Selectable



- IDMT & Definite time characteristics
- Last 30 trip data recording with date and time
- Password Protection

| Model | Aux. Supply (V) | Output Contacts | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|---------|------------------|-----------------|------------------|-------------|---------------------|
| MC61CnX | 24 - 240V AC/ DC | 4 NO | 51, 51N, 50, 50N | MC61CNX4000 | 21000 |

Trip Circuit Supervision Relay



- Static Relay.
- Monitors Trip Coil in Breaker ON & OFF condition
- Site selectable Trip Coil Voltage

| Model | Aux. Supply (V) | Cat. No. | M.R.P. (₹) Per Unit |
|---------|-------------------|-------------|---------------------|
| TCS01nX | 20 - 110 V AC/ DC | TCS01NXA000 | 7000 |
| | 88 - 264 V AC/ DC | TCS01NXB000 | |

MPR200nX Electronic Motor Protection Relay



- Protections:
 - Overload
 - Locked Rotor
 - Single Phasing, Current Unbalance, Phase Sequence Reversal
 - Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1

| Model | Aux. supply | Thermal O/L Range (A) | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|----------|-------------|-----------------------|-------------------|-------------|---------------------|
| MPR200nX | 240V AC | 1 - 2.75 | 49, 51LR, 37, 46, | MPR200BE010 | 2800 |
| | | 2 - 5.5 | | MPR201BE020 | 2800 |
| | | 4 - 11 | | MPR202BE040 | 3300 |
| | | 8 - 22 | | MPR203BE080 | 3300 |
| | | 16 - 44 | | MPR204BE160 | 3800 |
| | | 32 - 88 | | MPR205BE320 | 3800 |
| | 110V AC | 1 - 2.75 | | MPR200BB010 | 2800 |
| | | 2 - 5.5 | | MPR201BB020 | 2800 |
| | | 4 - 11 | | MPR202BB040 | 3300 |
| | | 8 - 22 | | MPR203BB080 | 3300 |
| | | 16 - 44 | | MPR204BB160 | 3800 |
| | | 32 - 88 | | MPR205BB320 | 3800 |

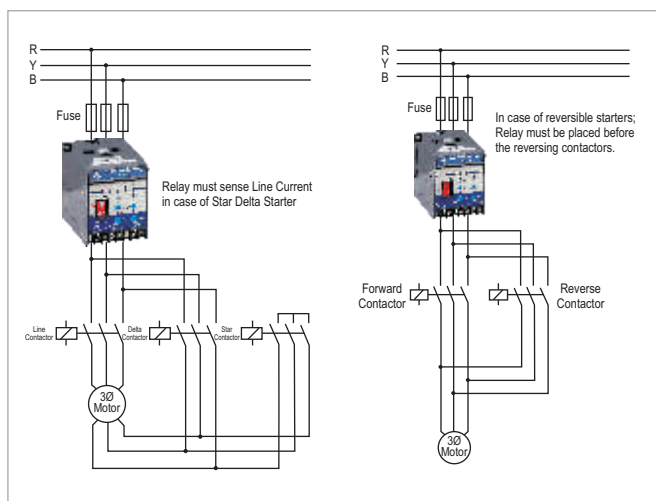
MPR300 Electronic Motor Protection Relay With in-built Earth Fault Protection



- Protections:
 - Overload
 - Earth Fault
 - Locked Rotor
 - Single Phasing, Current Unbalance, Phase Sequence Reversal
 - Under Current
- Inbuilt CT's (1 A to 88 A)
- Trip indication
- Test facility
- Selectable trip class - 10A, 10, 20 and 30 as per IEC 947-4-1

| Model | Aux. supply | Thermal O/L Range (A) | Device Code | Cat. No. | M.R.P. (₹) Per Unit |
|--------|-------------|-----------------------|-----------------------|-------------|---------------------|
| MPR300 | 240V AC | 1 - 2.75 | 49, 51LR, 64, 37, 46, | MPR300BE010 | 6000 |
| | | 2 - 5.5 | | MPR301BE020 | 6000 |
| | | 4 - 11 | | MPR302BE040 | 6500 |
| | | 8 - 22 | | MPR303BE080 | 6500 |
| | | 16 - 44 | | MPR304BE160 | 7000 |
| | | 32 - 88 | | MPR305BE320 | 7000 |
| | 110V AC | 1 - 2.75 | | MPR300BB010 | 6000 |
| | | 2 - 5.5 | | MPR301BB020 | 6000 |
| | | 4 - 11 | | MPR302BB040 | 6500 |
| | | 8 - 22 | | MPR303BB080 | 6500 |
| | | 16 - 44 | | MPR304BB160 | 7000 |
| | | 32 - 88 | | MPR305BB320 | 7000 |

MPR200nX / MPR300 Application Diagram



MPR200nX / MPR300 Trip Time Characteristics

| Trip class | Trip time delay | | |
|------------|-----------------|----------------|----------------|
| | I = 120% of Im | I = 150% of Im | I = 720% of Im |
| 10A | < 2 hours | < 2 min | 2 - 10 secs |
| 10 | < 2 hours | < 4 min | 4 - 10 secs |
| 20 | < 2 hours | < 6 min | 6 - 20 secs |
| 30 | < 2 hours | < 12 min | 9 - 30 secs |

Im - Motor Full Load Current
I - Actual current drawn by the Motor

Compact Motor Protection Relay - MM10

- 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

| 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 | 17000 |

Comprehensive Motor Protection Relay

MM30-743 with current based protections

MM30-W74* with current and voltage based protections



| Model | Aux. Supply | Device code | Cat. No. | M.R.P. (₹) Per Unit |
|------------|------------------|---------------------------------|-------------|---------------------|
| MM30 - 743 | 20 - 110V AC/ DC | 37,46,47,48, 49,50/51,51LR, | EMM30AXX00E | 95000 |
| | 88 - 240V AC/ DC | 64, 66,68,74 | EMM30BXX00E | |
| MM30 - W74 | 20 - 110V AC/DC | 12/14,27/59,37, 46,47,48,49, | EMM30WAX002 | 110000 |
| | 88 - 240V AC/DC | 50/51, 51LR,55, 64,66,68,74,81. | EMM30WBX002 | |

MCOMP - Intelligent Motor Control, Monitoring and Protection Relay

- Current & Voltage based metering and protection in a single compact unit
- In-built voltage module: enables power measurement
- 6 DI & 4 DO in base unit
- Universal auxiliary supply
- Communication capability: Modbus RTU, Modbus TCP / IP, Profibus
- Inbuilt Analog output & RTD / PTC inputs
- OLED Display: 170° viewing angle, brighter pixilation
- Conformal coating

Complete solution for Smart MCC



CT Unit



Main unit



Display unit

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|----------|---------------------|
| MCOMP Main Unit | * | * |
| MCOMP CT1 UNIT 0.5M CABLE; 0.675A to 2.025A | * | * |
| MCOMP CT2 UNIT 0.5M CABLE; 1.8A to 5.4A | * | * |
| MCOMP CT3 UNIT 0.5M CABLE; 4.5A to 13.5A | * | * |
| MCOMP CT4 UNIT 0.5M CABLE; 12.6A to 37.8A | * | * |
| MCOMP CT5 UNIT 0.5M CABLE; 36A to 81A | * | * |
| MCOMP USB DISPLAY UNIT- 2.0 M CABLE; 80-240 V AC/DC | * | * |

Note: For ordering information Contact nearest Branch office

* Available on request only

Single Phase Under Voltage or Over Voltage Relay



- System Voltage is site selectable - 110 / 240 / 415V AC

| Model | Aux. Supply (V) | Device code | Cat. No. | M.R.P. (₹) Per Unit |
|-------|-----------------|-------------|-------------|---------------------|
| MV12A | 20 - 110V AC/DC | 27 or 59 | MV12AA00X00 | 10000 |
| | 88 - 264V AC/DC | | MV12AB00X00 | |



UFD34 - Three phase Voltage and Frequency relay with df/dt and dv/dt protection

UM30 - Voltage Frequency and Zero Sequence Voltage Relay with Vector shift detection

| Model | Aux. supply | Device code | Cat. No. | M.R.P. (₹) Per Unit |
|-------|------------------|-----------------------------------|--------------|---------------------|
| UFD34 | 20 - 110V AC/ DC | 27, 59, 81, df/dt, dv/dt | EFD34A00000 | 150000 |
| | 88 - 240V AC/DC | | EFD34B00000 | |
| UM30 | 20 - 110V AC/ DC | 24, 27d/59d, 47, 59, 59Uo, 78, 81 | EUM30A00000* | 150000 |
| | 88 - 240V AC/DC | | EUM30B00000* | |

* available on request only

APFC Controller [8536]

etaCON M Series - 3 to 14 Relay Outputs for Contactor switching



Features:

- Modular and expandable steps
- CT secondary - 1 A / 5 A Site selectable
- Measurement of individual Current and Voltage harmonic (THD) up to 15th Order
- Available in combination of 3 to 14 steps for contactor controlled APFC panels
- Capacitor failure indication
- In-built temperature sensor
- Suitable for LV as well as HT side sensing
- Communicable on Modbus through RS485 Plug-in Module

etaCON M Selection Guidelines

| Steps | Steps Description | Size (W x H in mm) | Combination | Cat. No. Combination | M.R.P. (₹) Per Set |
|-------|-------------------|--------------------|--|---|--------------------|
| 3 | 2 + 1* | 96 x 96 | 3 Step APFC Controller | ETACONM003R | 9500 |
| 5 | 4 + 1* | 96 x 96 | 5 Step APFC Controller | ETACONM005R | 11000 |
| 6 | 5 + 1* | 96 x 96 | 3 Step APFC Controller + 3 Step Plug-in module | ETACONM003R + ETACONEXP3R | 11500 |
| 7 | 6 + 1* | 96 x 96 | 5 Step APFC Controller + 2 Step Plug-in module | ETACONM005R + ETACONEXP2R | 12400 |
| 8 | 7 + 1* | 96 x 96 | 5 Step APFC Controller + 3 Step Plug-in module | ETACONM005R + ETACONEXP3R | 13000 |
| 8 | 7 + 1* | 144 x 144 | 8 Step APFC Controller | ETACONM008R | 14000 |
| 10 | 9 + 1* | 144 x 144 | 8 Step Controller + 2 Step Plug-in module | ETACONM008R + ETACONEXP2R | 15400 |
| 11 | 10 + 1* | 144 x 144 | 8 Step Controller + 3 Step Plug-in module | ETACONM008R + ETACONEXP3R | 16000 |
| 12 | 11 + 1* | 144 x 144 | 8 Step APFC Controller + 2 Step Plug-in module + 2 Step Plug-in module | ETACONM008R + ETACONEXP2R + ETACONEXP2R | 16800 |
| 13 | 12 + 1* | 144 x 144 | 8 Step APFC Controller + 2 Step Plug-in module + 3 Step Plug-in module | ETACONM008R + ETACONEXP2R + ETACONEXP3R | 17400 |
| 14 | 13 + 1* | 144 x 144 | 8 Step APFC Controller + 3 Step Plug-in module + 3 Step Plug-in module | ETACONM008R + ETACONEXP3R + ETACONEXP3R | 18000 |

* Last Contact can be programmed for capacitor switching / Alarm function / Fan Control

etaCON M Controller

| Model | Single CT input | Voltage input | Cat. No. | M.R.P. (₹) Per Unit |
|-----------------------------------|-----------------|---------------|-------------|---------------------|
| 3 Step APFC Controller (96 x96) | 1 A / 5 A | 415V / 110 V | ETACONM003R | 9500 |
| 5 Step APFC Controller (96 x96) | | | ETACONM005R | 11000 |
| 8 Step APFC Controller (144 x144) | | | ETACONM008R | 14000 |

etaCON M Optional Plug-in Modules

| Description | Model | Cat. No. | M.R.P. (₹) Per Unit |
|------------------------|----------------------|-------------|---------------------|
| 2 Steps Plug-in Module | 2 Relays NO | ETACONEXP2R | 1400 |
| 3 Steps Plug-in Module | 3 Relays NO | ETACONEXP3R | 2000 |
| RS485 Plug-in Module | RS485 Plug-in Module | ETACONRS485 | 7500 |

New

etaSMART - APFC Controller [8536]

4 to 16 Relay Outputs for Contactor switching



Features:

- Simple and Smart Controller
- Available in 4 to 16 steps for contactor controlled APFC Panels
- Auto programming function available
- CT secondary - 1 / 5 Amp site selectable

| Steps | Size | Cat. No. | Single CT input | Voltage Input | M.R.P. (₹) Per Unit |
|-------|-----------|-------------|-----------------|---------------|---------------------|
| 4 | 96 x 96 | CS908840000 | 1/5 Amp | 415 V | 8000 |
| 6 | 96 x 96 | CS908850000 | | | 9000 |
| 8 | 96 x 96 | CS909020000 | | | 10000 |
| 12 | 144 x 144 | CS909030000 | | | 12500 |
| 14 | 144 x 144 | CS909040000 | | | 13500 |
| 16 | 144 x 144 | CS909050000 | | | 14500 |

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 | 1252 |
| 1P LCD Meter 5-30A with BOX | WM101BC5DL0BOX | 1676 |
| 1P LCD Meter 5-30A with OPTICAL PORT | WM101BC5DDH | 1720 |
| 1P LCD Meter 5-30A with Optical port + BOX | WM101BC5DDHBOX | 2143 |
| 1P LCD Meter 10-60A | WM101BC7DL0 | 1481 |
| 1P LCD Meter 10-60A with BOX | WM101BC7DL0BOX | 1868 |
| 1P LCD Meter 10-60A with Optical Port | WM101BC7DDH | 1894 |
| 1P LCD Meter 10-60A with Optical Port + BOX | WM101BC7DDHBOX | 2178 |

3 Phase 4 Wire kWh meter Counter type

Model EM301B Class 1 Base mounting



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--------------------|---------------------|
| 3Ph 4 W kWh CT op base mtg 240V 5 -10 A | WM301BC3C00 | 3616 |
| 3Ph 4 W kWh Dir base mtg 240V 5 -20 A Sleek | WM301BC4D20 | 3030 |
| 3Ph 4 W kWh Dir base mtg 240V 10 -40 A Sleek | WM301BC6D20 | 3119 |
| 3Ph 4 W kWh Dir base mtg 240V 10 - 60 A big body | WM301BC7D10 | 3950 |
| 3Ph 4 W kWh Dir base mtg 240V 50 -100 A big body | WM301BC8D10 | 5727 |

Trivector Meter Class 0.5s

Model ER300P Class 0.5s (Base Mounting)



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|--------------------|---------------------|
| 3Ph, 4W TVM 110V (L-L) 1 A Class 0.5s BM | WR300BB1200 | 19009 |
| 3Ph, 4W TVM 110V (L-L) 5 A Class 0.5s BM | WR300BB5200 | 19009 |
| 3Ph, 4W TVM 240V (L-N) 1 A Class 0.5s BM * | WR300BC1200 | 17518 |
| 3Ph, 4W TVM 240V (L-N) 5 A Class 0.5s BM | WR300BC5200 | 17518 |
| 3Ph, 4W TVM 110V (L-L) 1 A Class 0.5s BM RS485 | WR300BB12RS | 22811 |
| 3Ph, 4W TVM 110V (L-L) 5 A Class 0.5s BM RS485 * | WR300BB52RS | 22811 |
| 3Ph, 4W TVM 240V (L-N) 1 A CI 0.5s BM RS485 * | WR300BC12RS | 21022 |
| 3Ph, 4W TVM 240V (L-N) 5 A CI 0.5s BM RS485 | WR300BC52RS | 21022 |

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 | 5917 |
| 3Ph, 4W TVM 240 V 10 - 60A BM RS 485* | WR300BC73RS485 | 8440 |
| 3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box | WR300BC73BOXH | 7330 |

* - available on request only

* - available on request only

Trivector Meter Class 0.2s

Model ER300P Class 0.2s (Base Mounting)



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|--------------------|---------------------|
| 3Ph, 4W TVM 110V (L-L) 1 A Class 0.2s BM | WR300BB1100 | 46120 |
| 3Ph, 4W TVM 110V (L-L) 5 A Class 0.2s BM | WR300BB5100 | 46120 |
| 3Ph, 4W TVM 110V (L-L) 1 A Class 0.2s BM RS485 | WR300BB11RS | 49200 |
| 3Ph, 4W TVM 110V (L-L) 5 A Class 0.2s BM RS485 | WR300BB51RS | 49200 |

Meter Reading Instrument [8471]



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|--------------------------------------|--------------------|---------------------|
| Meter Reading Instrument - (6.5 MB) | 990MRIXX00S | 85618 |
| Meter Reading Instrument - (16.5 MB) | 990MRIXX000 | 98276 |
| Meter Optical port to USB cable | 990PCXXUSB | 1000 |

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Basic Multifunction meters

Advanced Multifunction meters

MD Controller

Single Function Meters [9030]

1xxx Series

Features

- Accuracy Class 1.0, 0.5
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC
- 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 | 870 |
| 1Ph LED Voltmeter CI 1 | WL1120100000 | 870 |
| 3Ph LED Ammeter CI 1 | WL1310100000 | 1260 |
| 3Ph LED Voltmeter CI 1 | WL1320100000 | 1260 |
| LED Freq meter CI 0.2 | WL1130400000 | 870 |
| 1Ph LED Ammeter CI 0.5 | WL1110200000 | 1175 |
| 1Ph LED Voltmeter CI 0.5 | WL1120200000 | 1175 |
| 3Ph LED Ammeter CI 0.5 | WL1310200000 | 1525 |
| 3Ph LED Voltmeter CI 0.5 | WL1320200000 | 1525 |

VAF + PF Meters [9030]

4110 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
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- Parameters: VLL, VLN, A, F, PF, On Hrs, RPM, Apeak



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|-----------------------------------|--------------|---------------------|
| VAF + PF meter, CI 1 | WL4110100000 | 2180 |
| VAF + PF meter with RS485, CI 1 | WL4110110000 | 2700 |
| VAF + PF meter, CI 0.5 | WL4110200000 | 2480 |
| VAF + PF meter with RS485, CI 0.5 | WL4110210000 | 3000 |

Energy Meters [9030]

4000 Series

Features

- kWh/kVAh site selectable
- 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



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------|--------------|---------------------|
| kWh LED meter CI 1 | WL4000100000 | 2450 |
| kWh LED meter CI 1 with RS485 | WL4000110000 | 2890 |
| kWh LED meter CI 0.5 | WL4000200000 | 3110 |
| kWh LED meter CI 0.5 with RS485 | WL4000210000 | 3545 |
| kWh LCD meter CI 1 | WC4000100000 | 2715 |
| kWh LCD meter CI 1 with RS485 | WC4000110000 | 3150 |
| kWh LCD meter CI 0.5 | WC4000200000 | 3370 |
| kWh LCD meter CI 0.5 with RS485 | WC4000210000 | 3810 |

4000 Series

Features

- DIN mounting whole current operated meter
- Accuracy Class 1.0
- Inbuilt analytics with energy consumption of today and yesterday total, this week and last week total, this month and last month total on the screen without any additional software
- Push to push mode for variable kWh consumption monitoring
- Parameters: 1 Phase - Voltage, Current, kW, kWh
3 Phase - Voltage, Current, kW, kWh + PF, kVA, kVAh, MD



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------|--------------|---------------------|
| Energy meter 1P 5-40A CI 1 DIN | WD4000101000 | 2035 |
| Energy meter 3P 10-60A CI 1 DIN | WD4000103000 | 4620 |
| Energy meter RS485 module | WD400010RS00 | 2035 |
| Energy meter Wi-Fi module | WD400010WFO0 | 9500 |

4030 Series

Features

- Accuracy Class 1.0
- Flush mounting 96 x 96 mm
- Counter type energy meter
- Available with sealing arrangement
- Parameter : kWh



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--------------|---------------------|
| kWh Counter type meter CI 1 (3Ph 4W 240V 5A) | WL4030100000 | 2970 |

Dual Source Meters [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
- Parameters: V, A, F, PF, kW, kVA, Run hours, kWh (EB and DG), Old energy, Site selectable kWh / kVAh
- Meter with 1 Pulse output available*



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| Dualsource LED meter CI1 | WL4040100000 | 3500 |
| Dualsource LED meter CI1 with RS485 | WL4040110000 | 4030 |
| Dualsource LED meter CI0.5 | WL4040200000 | 4160 |
| Dualsource LED meter CI0.5 with RS485 | WL4040210000 | 4680 |
| Dualsource LCD meter CI1 | WC4040100000 | 3765 |
| Dualsource LCD meter CI1 with RS485 | WC4040110000 | 4290 |
| Dualsource LCD meter CI0.5 | WC4040200000 | 4420 |
| Dualsource LCD meter CI0.5 with RS485 | WC4040210000 | 4945 |

* PI contact nearest branch office.

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

All parameters of 4400 series in 3 line LED display



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4405 LED meter CI 1 | WL4405100000 | 4680 |
| MFM 4405 LED meter CI 1 with RS485 | WL4405110000 | 5550 |
| MFM 4405 LED meter CI 0.5 with RS485 | WL4405210000 | 6380 |
| MFM 4405 LED meter CI 0.5S with RS485 | WL4405310000 | 6430 |

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
- Constant Wh viewing in LCD Multifunction meters in auto scroll mode
- 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



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

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4410 LED meter CI 1 | WL4410100000 | 6480 |
| MFM 4410 LED meter CI 1 with RS485 | WL4410110000 | 7410 |
| MFM 4410 LED meter CI 0.5 with RS485 | WL4410210000 | 8800 |
| MFM 4410 LED meter CI 0.5S with RS485 | WL4410310000 | 9725 |
| MFM 4410 LED meter CI 0.2 with RS485 | WL4410410000 | 11580 |
| MFM 4410 LED meter CI 0.2S with RS485 | WL4410510000 | 14820 |
| MFM 4410 LCD meter CI 1 | WC4410100000 | 7410 |
| MFM 4410 LCD meter CI 1 with RS485 | WC4410110000 | 8335 |
| MFM 4410 LCD meter CI 0.5 with RS485 | WC4410210000 | 9725 |
| MFM 4410 LCD meter CI 0.5S with RS485 | WC4410310000 | 10650 |
| MFM 4410 LCD meter CI 0.2 with RS485 | WC4410410000 | 12500 |
| MFM 4410 LCD meter CI 0.2S with RS485 | WC4410510000 | 15740 |

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
- V, A, F, PF, kW, kVA, Old energy, Load hours, site selectable kWh/ kVAh



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4400 LED meter CI 1 | WL4400100000 | 3680 |
| MFM 4400 LED meter CI 1 with RS485 | WL4400110000 | 4550 |
| MFM 4400 LED meter CI 0.5 with RS485 | WL4400210000 | 5380 |
| MFM 4400 LED meter CI 0.5S with RS485 | WL4400310000 | 5430 |
| MFM 4400 LCD meter CI 1 | WC4400100000 | 3940 |
| MFM 4400 LCD meter CI 1 with RS485 | WC4400110000 | 4815 |

4420 Series

Parameters:

- All parameters of 4410 series
- Maximum Demand (kW & kVA)

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4420 LED meter CI 1 | WL4420100000 | 9725 |
| MFM 4420 LED meter CI 1 with RS485 | WL4420110000 | 10650 |
| MFM 4420 LED meter CI 0.5 with RS485 | WL4420210000 | 12040 |
| MFM 4420 LED meter CI 0.5S with RS485 | WL4420310000 | 12965 |
| MFM 4420 LED meter CI 0.2 with RS485 | WL4420410000 | 14820 |
| MFM 4420 LED meter CI 0.2S with RS485 | WL4420510000 | 18060 |
| MFM 4420 LCD meter CI 1 | WC4420100000 | 10650 |
| MFM 4420 LCD meter CI 1 with RS485 | WC4420110000 | 11580 |
| MFM 4420 LCD meter CI 0.5 with RS485 | WC4420210000 | 12965 |
| MFM 4420 LCD meter CI 0.5S with RS485 | WC4420310000 | 13890 |
| MFM 4420 LCD meter CI 0.2 with RS485 | WC4420410000 | 15740 |
| MFM 4420 LCD meter CI 0.2S with RS485 | WC4420510000 | 18985 |

4430 Series

Parameters:

- All parameters of Model 4420 series
- Bi-directional (Import-Export)

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 4430 LED meter CI 1 | WL4430100000 | 14355 |
| MFM 4430 LED meter CI 1 with RS485 | WL4430110000 | 15280 |
| MFM 4430 LED meter CI 0.5 with RS485 | WL4430210000 | 16670 |
| MFM 4430 LED meter CI 0.5S with RS485 | WL4430310000 | 17595 |
| MFM 4430 LED meter CI 0.2 with RS485 | WL4430410000 | 19450 |
| MFM 4430 LED meter CI 0.2S with RS485 | WL4430510000 | 22690 |
| MFM 4430 LCD meter CI 1 | WC4430100000 | 15280 |
| MFM 4430 LCD meter CI 1 with RS485 | WC4430110000 | 16205 |
| MFM 4430 LCD meter CI 0.5 with RS485 | WC4430210000 | 17595 |
| MFM 4430 LCD meter CI 0.5S with RS485 | WC4430310000 | 18520 |
| MFM 4430 LCD meter CI 0.2 with RS485 | WC4430410000 | 20370 |
| MFM 4430 LCD meter CI 0.2S with RS485 | WC4430510000 | 23615 |

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. (₹) Per Unit |
|--------------------------------------|--------------|---------------------------|
| MFM 4440 LED meter CI 1 with RS485 | WL4440110000 | 11115 |
| MFM 4440 LED meter CI 0.5 with RS485 | WL4440210000 | 12500 |
| MFM 4440 LED meter CI 0.2 with RS485 | WL4440410000 | 15280 |
| MFM 4440 LCD meter CI 1 with RS485 | WC4440110000 | 12040 |
| MFM 4440 LCD meter CI 0.5 with RS485 | WC4440210000 | 13430 |
| MFM 4440 LCD meter CI 0.2 with RS485 | WC4440410000 | 16210 |

5000 Series

Features

- Datalog (8 MB)
- Bi-directional (Import - Export)
- 128 samples/ cycle
- Analog I/O, digital I/O variants available*
- Meter with Ethernet port available

Parameters:

- V, A, F, kW, KVA, kVAh, kWh, 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.
- Constant Wh viewing in LCD Multifunction meters in auto scroll mode
- My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters



| Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--------------|---------------------------|
| MFM 5000 LED meter CI 1 with RS485 | WL5000110000 | 28340 |
| MFM 5000 LED meter CI 1 with Ethernet | WL5000120000 | 32200 |
| MFM 5000 LED meter CI 0.5 with Ethernet | WL5000220000 | 33580 |
| MFM 5000 LED meter CI 0.5S with Ethernet | WL5000320000 | 34500 |
| MFM 5000 LCD meter CI 1 with RS485 | WC5000110000 | 29260 |
| MFM 5000 LCD meter CI 1 with Ethernet | WC5000120000 | 33120 |
| MFM 5000 LCD meter CI 0.5 with RS485 | WC5000210000 | 30640 |
| MFM 5000 LCD meter CI 0.5S with RS485 | WC5000310000 | 31560 |
| MFM 5000 LCD meter CI 0.5 with Ethernet | WC5000220000 | 34500 |
| MFM 5000 LCD meter CI 0.5S with Ethernet | WC5000320000 | 35420 |
| MFM 5000 LCD meter CI 0.2 with RS485 | WC5000410000 | 33400 |
| MFM 5000 LCD meter CI 0.2S with RS485 | WC5000510000 | 36620 |

* For Input/Output options please contact nearest branch office.

5010 Series

Features

- 128 samples/ cycle
- Running demand, max demand, prediction demand in single page window

Parameters:

- V, A, F, kW, KVA, kVAh, kWh, 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.

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------------|
| MFM 5010 LED meter CI 1 | WL5010100000 | 10120 |
| MFM 5010 LED meter CI 1 with RS485 | WL5010110000 | 11040 |
| MFM 5010 LED meter CI 0.5S | WL5010300000 | 12420 |
| MFM 5010 LED meter CI 0.5S with RS485 | WL5010310000 | 13340 |
| MFM 5010 LED meter CI 0.2 with RS485 | WL5010410000 | 15180 |

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 output for control
- Time of Day (TOD) 6 slots available
- Block/sliding window site selectable
- Running demand, max demand, prediction demand in single page window



Parameters:

- V, A, F, kW, kVA, kVAr, kWh, kVAh, kVArh, PF, Runhr, Onhr, Intr, Phase angle, THD, Events, Neutral current, Max Demand (with RTC)

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------------------------|--------------|---------------------|
| MDC 6000 LED meter CI 1 with RS485 | WL6000110000 | 24910 |
| MDC 6000 LED meter CI 0.5S with RS485 | WL6000310000 | 27305 |
| MDC 6000 LCD meter CI 1 with RS485 | WC6000110000 | 25870 |
| MDC 6000 LCD meter CI 0.5S with RS485 | WC6000310000 | 28265 |

SmartComm EMS [8523]



SmartComm EMS

Simple and powerful energy monitoring software with multiple benefits that empowers the user to save money.

Features:

- Glimpse of all entire energy consumption in the plant through dashboard
- Quick understanding of energy consumption of today compared to yesterday, this month consumption compared to last month as well as yoy energy comparison through dashboard.
- Easy navigation through the modules
- Excel reports with charts
- All parameters in the device can be monitored from the software
- Multiple combination of devices and parameters for analysis
- Provision to generate multiple report types
- Specific Energy Consumption (SEC) report
- Access to features defined by user levels
- L&T meters preconfigured in the software
- New** • Monitor ON, OFF, Trip, Ready to close status of circuit breaker through L&T's UNCO module.
- New** • Control Circuit breaker ON & OFF, provision for breaker On & Trip counter, last 20 trips date & time stamp
- SmartComm EMS license ordering is based on number of nodes i.e meters / UNCO module to be connected in the system.



Please contact nearest branch office for optimal Energy Monitoring Solution and network architecture with SmartComm EMS software.

Your automation needs keep growing.

So does our range.



AC Drive : 0.1 kW to 450 kW
 Soft Starter : 23 A to 1600 A
 PLC : 10 I/Os to 5728 I/Os
 HMI : Screen size from 4.3" to 15"

Solutions for various industries:

- Printing & Packaging
- Plastics
- Machine Tool
- Crane & Elevator
- Textile
- Pharmaceuticals

L&T's expanding range of automation products and systems meets the precise needs of machinery manufacturers and end users. The range encompasses AC Drive, PLC and HMI.

L&T quality, L&T dependability and L&T customer support - you can count on it for virtually every application in machines or processes.

L&T's team of integration experts will offer system architecture and successful proof of concept. Put it all together and you have everything you need for quality automation solutions.

For over two decades, various industry sectors have been reaping the benefits of L&T's cost-effective, performance-oriented AC Drive solutions. L&T's grasp of the specific needs of each industry enables it to offer application-specific solutions for various industries – such as processing, textile, plastic, ceramic, pharmaceutical, elevator, oil & gas, power, cement, material-handling etc....

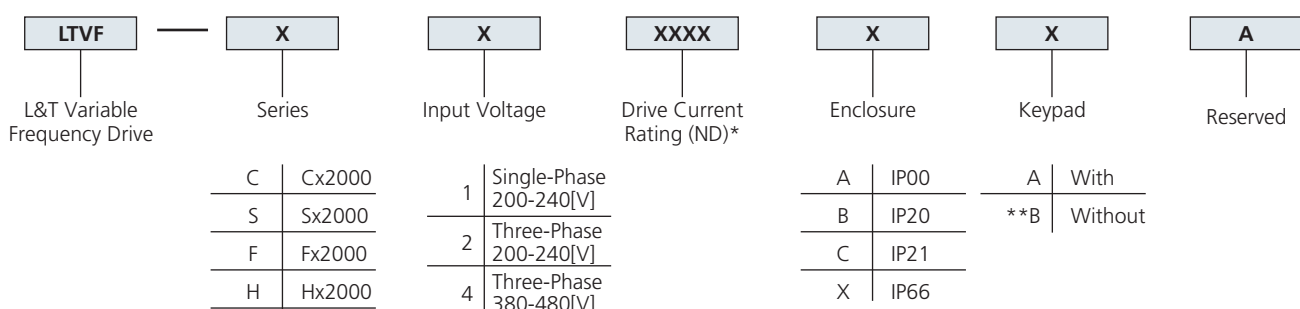
AC Drive Range:

- 1) **Cx2000**: Compact Drive - Range : 0.1 to 11kW (ND)
- 2) **Sx2000**: Smart Drive - Range : 0.75 to 90kW (ND)
- 3) **Fx2000**: Flexi Drive - Range : 0.75 to 375kW (HD)

Application Specific Drives:

- 1) **Hx2000**: HVAC Drive - Range : 0.75 to 90kW (ND)
- 2) **Sx2000**: IP66 Drive - Range : 0.75 to 22kW (HD)

Model type & Selection:



*For Cx2000 230Vac Single-Phase & Sx2000 IP66 mentioned current is for HD rating.
 **Valid for Cx2000 series only.

Compact Series Cx2000



- Range: 0.1kW to 11kW
- Starting Torque 150% at 3 Hz
- Built-in Potentiometer
- Built-in PID
- Built-in Brake Control
- Conformal Coating complying to IEC 60721-3-3 class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus RTU
- Built-in Braking Chopper upto 11kW
- Interface : 5DI, 1DO(R), 1AI (V/I), 1AO

| Input Voltage | Description | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------|--|----------------|---------------------|
| Single Phase 230Vac | Cx2000 VVVF 230V 1Ph Drive 0.10 kW (HD) | LTVF-C10001BAA | * |
| | Cx2000 VVVF 230V 1Ph Drive 0.20 kW (HD) | LTVF-C10002BAA | * |
| | Cx2000 VVVF 230V 1Ph Drive 0.40 kW (HD) | LTVF-C10003BAA | * |
| | Cx2000 VVVF 230V 1Ph Drive 0.75 kW (HD) | LTVF-C10005BAA | * |
| | Cx2000 VVVF 230V 1Ph Drive 1.50 kW (HD) | LTVF-C10008BAA | * |
| | Cx2000 VVVF 230V 1Ph Drive 2.20 kW (HD) | LTVF-C10011BAA | * |
| Three Phase 230Vac | Cx2000 VVVF 230V 3Ph Drive 0.40 kW (HD) / 0.75 kW (ND) | LTVF-C20003BAA | * |
| | Cx2000 VVVF 230V 3Ph Drive 0.75 kW (HD) / 1.1 kW (ND) | LTVF-C20006BAA | * |
| | Cx2000 VVVF 230V 3Ph Drive 1.5 kW (HD) / 2.20 kW (ND) | LTVF-C20010BAA | * |
| | Cx2000 VVVF 230V 3Ph Drive 2.2 kW (HD) / 3.0 kW (ND) | LTVF-C20012BAA | * |
| | Cx2000 VVVF 230V 3Ph Drive 3.7 kW (HD) / 4.0 kW (ND) | LTVF-C20018BAA | * |
| Three Phase 415Vac | Cx2000 VVVF 415V Drive 0.40 kW (HD) / 0.75 kW (ND) | LTVF-C40002BAA | * |
| | Cx2000 VVVF 415V Drive 0.75 kW (HD) / 1.1 kW (ND) | LTVF-C40003BAA | * |
| | Cx2000 VVVF 415V Drive 1.50 kW (HD) / 2.20 kW (ND) | LTVF-C40005BAA | * |
| | Cx2000 VVVF 415V Drive 2.20 kW (HD) / 3.70 kW (ND) | LTVF-C40007BAA | * |
| | Cx2000 VVVF 415V Drive 3.70 kW (HD) / 4.0 kW (ND) | LTVF-C40010BAA | * |
| | Cx2000 VVVF 415V Drive 5.50 kW (HD) / 7.50 kW (ND) | LTVF-C40016BAA | * |
| | Cx2000 VVVF 415V Drive 7.50 kW (HD) / 11.0 kW (ND) | LTVF-C40023BAA | * |

Note: * For prices please contact nearest branch office

1) Cx2000 has model without built-in keypad for which external LED keypad (LTOP-DOP-50) is used which comes with default 3m cable.

Smart Series Sx2000



- Range: 0.75kW to 90kW
- Starting Torque: 150% at 3 Hz for V/F, 200% at 0.5Hz for Vector Control
- Built-in Brake Control
- Built-in PLC functionality
- Peer to Peer Communication to share I/O's
- Conformal Coating complying to IEC 60721-3-3 class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus RTU
- Component Life Monitor
- Built-in Braking Chopper till 30kW
- Interface :
Upto 30kW ND: 7DI, 2DO (R+T), 2AI (V & V/I), 1AO (V/I)
From 37kW ND: 7DI, 3DO (2R+T), 2AI (V & V/I), 2AO (V & V/I)

| Input Voltage | Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--|----------------|---------------------|
| Single Phase 230Vac | Sx2000 VVVF 230V 1Ph Drive 0.40 kW (HD) / 0.75 kW (ND) | LTVF-S10003BAA | * |
| | Sx2000 VVVF 230V 1Ph Drive 0.75 kW (HD) / 1.5 kW (ND) | LTVF-S10006BAA | * |
| | Sx2000 VVVF 230V 1Ph Drive 1.5 kW (HD) / 2.20 kW (ND) | LTVF-S10010BAA | * |
| | Sx2000 VVVF 230V 1Ph Drive 2.2 kW (HD) / 3.70 kW (ND) | LTVF-S10012BAA | * |
| Three Phase 230Vac | Sx2000 VVVF 230V 3Ph Drive 0.40 kW (HD) / 0.75 kW (ND) | LTVF-S20003BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 0.75 kW (HD) / 1.5 kW (ND) | LTVF-S20006BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 1.5 kW (HD) / 2.20 kW (ND) | LTVF-S20010BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 2.2 kW (HD) / 3.70 kW (ND) | LTVF-S20012BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 4.0 kW (HD) / 5.5 kW (ND) | LTVF-S20018BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 5.5 kW (HD) / 7.5 kW (ND) | LTVF-S20030BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 7.5 kW (HD) / 11 kW (ND) | LTVF-S20040BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 11 kW (HD) / 15 kW (ND) | LTVF-S20056BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 15 kW (HD) / 18.5 kW (ND) | LTVF-S20069BAA | * |
| | Sx2000 VVVF 230V 3Ph Drive 18.5 kW (HD) / 22.0 kW (ND) | LTVF-S20099BAA | * |
| Three Phase 415Vac | Sx2000 VVVF 415V Drive 0.40 kW (HD) / 0.75 kW (ND) | LTVF-S40002BAA | * |
| | Sx2000 VVVF 415V Drive 0.75 kW (HD) / 1.50 kW (ND) | LTVF-S40003BAA | * |
| | Sx2000 VVVF 415V Drive 1.50 kW (HD) / 2.20 kW (ND) | LTVF-S40005BAA | * |
| | Sx2000 VVVF 415V Drive 2.20 kW (HD) / 3.7 kW (ND) | LTVF-S40007BAA | * |
| | Sx2000 VVVF 415V Drive 4.00 kW (HD) / 5.50 kW (ND) | LTVF-S40010BAA | * |
| | Sx2000 VVVF 415V Drive 5.50 kW (HD) / 7.50 kW (ND) | LTVF-S40016BAA | * |
| | Sx2000 VVVF 415V Drive 7.50 kW (HD) / 11.0 kW (ND) | LTVF-S40023BAA | * |
| | Sx2000 VVVF 415V Drive 11.0 kW (HD) / 15.0 kW (ND) | LTVF-S40030BAA | * |
| | Sx2000 VVVF 415V Drive 15.0 kW (HD) / 18.5 kW (ND) | LTVF-S40038BAA | * |
| | Sx2000 VVVF 415V Drive 18.5 kW (HD) / 22.0 kW (ND) | LTVF-S40044BAA | * |
| | Sx2000 VVVF 415V Drive 22.0 kW (HD) / 30.0 kW (ND) | LTVF-S40058BAA | * |
| | Sx2000 VVVF 415V Drive 30.0 kW (HD) / 37.0 kW (ND) | LTVF-S40075BAA | * |
| | Sx2000 VVVF 415V Drive 37.0 kW (HD) / 45.0 kW (ND) | LTVF-S40091BAA | * |
| | Sx2000 VVVF 415V Drive 45.0 kW (HD) / 55.0 kW (ND) | LTVF-S40107BAA | * |
| Sx2000 VVVF 415V Drive 55.0 kW (HD) / 75.0 kW (ND) | LTVF-S40142BAA | * | |
| Sx2000 VVVF 415V Drive 75.0 kW (HD) / 90.0 kW (ND) | LTVF-S40169BAA | * | |

Note:

* For prices please contact nearest branch office

Drives are covered under HS code 8504 40 90 and are charged at 28% GST.

Smart Series Sx2000 IP66



- Range: 0.75 to 22kW (HD)
- V/F, Slip Compensation, Sensorless Vector Control
- Starting Torque: 150% at 3Hz, for V/F, 200% at 0.5Hz for Vector Control
- Conformal Coating complying to IEC 60721-3-3, Class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus
- Peer to Peer communication to share I/Os
- Built-in Brake Control
- Built-in PLC functionality
- Component Life Monitor
- Built-in PID
- Built-in Braking Chopper
- Interface: 5DI, 1(R) DO + 1(TR) DO, 2AI, 1AO

| Input Voltage | Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--|----------------|---------------------|
| Three Phase 415Vac | Sx2000 400V IP66 Drive 0.40 kW (HD) | LTVF-S40002XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 0.75 kW (HD) | LTVF-S40003XAA | * |
| | Sx2000 400V IP66 Drive 1.50 kW (HD) | LTVF-S40005XAA | * |
| | Sx2000 400V IP66 Drive 2.20 kW (HD) | LTVF-S40007XAA | * |
| | Sx2000 400V IP66 Drive 4.00 kW (HD) | LTVF-S40010XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 7.50 kW (HD) | LTVF-S40016XAA | * |
| | Sx2000 400V IP66 Drive 7.50 kW (HD) | LTVF-S40023XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 15.0 kW (HD) | LTVF-S40030XAA | * |
| | Sx2000 400V IP66 Drive 15.0 kW (HD) | LTVF-S40038XAA | * |
| | Sx2000 400V IP66 Drive 18.5 kW (HD) | LTVF-S40044XAA | * |
| | Sx2000 400V IP66 Drive 22.0 kW (HD) | LTVF-S40058XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 0.40 kW (HD) | LTVF-S40001XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 1.50 kW (HD) | LTVF-S40004XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 2.20 kW (HD) | LTVF-S40006XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 4.00 kW (HD) | LTVF-S40009XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 5.50 kW (HD) | LTVF-S40012XAA | * |
| | Sx2000 VVVF 415V IP66 Drive 11.0 kW (HD) | LTVF-S40024XAA | * |
| Sx2000 VVVF 415V IP66 Drive 18.5 kW (HD) | LTVF-S40039XAA | * | |
| Sx2000 VVVF 415V IP66 Drive 22.0 kW (HD) | LTVF-S40045XAA | * | |

Note: * For prices please contact nearest branch office

Flexi Series Fx2000



- Range: 0.75kW to 375kW (HD)
- Ideal for Heavy Duty Application Crane, Winder, Textile Application, Plastic extruders
- Starting Torque: 250% at 0Hz for Closed Loop
- Built-in Crane & Wobulation Macros
- Winder Algorithm - Optional
- Conformal Coating complying to IEC 60721-3-3 class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus RTU
- Built-in DC Reactor from 22kW to 280kW
- Built-in Braking Chopper till 30kW
- Interface : 8DI, 3DO (2R+1T), 2AI (V & I), 2AO (V & I)

| Input Voltage | Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--|----------------|---------------------|
| Three Phase 415Vac | Fx2000 VVVF 415V Drive 0.75 kW (HD) / 1.50 kW (ND) | LTVF-F40004CAA | * |
| | Fx2000 VVVF 415V Drive 1.50 kW (HD) / 2.20 kW (ND) | LTVF-F40006CAA | * |
| | Fx2000 VVVF 415V Drive 2.20 kW (HD) / 3.70 kW (ND) | LTVF-F40008CAA | * |
| | Fx2000 VVVF 415V Drive 3.70 kW (HD) / 4.00 kW (ND) | LTVF-F40012CAA | * |
| | Fx2000 VVVF 415V Drive 5.50 kW (HD) / 7.50 kW (ND) | LTVF-F40016CAA | * |
| | Fx2000 VVVF 415V Drive 7.50 kW (HD) / 11.0 kW (ND) | LTVF-F40024CAA | * |
| | Fx2000 VVVF 415V Drive 11.0 kW (HD) / 15.0 kW (ND) | LTVF-F40030CAA | * |
| | Fx2000 VVVF 415V Drive 15.0 kW (HD) / 18.5 kW (ND) | LTVF-F40039CAA | * |
| | Fx2000 VVVF 415V Drive 18.5 kW (HD) / 22.0 kW (ND) | LTVF-F40045CAA | * |
| | Fx2000 VVVF 415V Drive 22.0 kW (HD) / 30.0 kW (ND) | LTVF-F40061CAA | * |
| | Fx2000 VVVF 415V Drive 30.0 kW (HD) / 37.0 kW (ND) | LTVF-F40075CAA | * |
| | Fx2000 VVVF 415V Drive 37.0 kW (HD) / 45.0 kW (ND) | LTVF-F40091CAA | * |
| | Fx2000 VVVF 415V Drive 45.0 kW (HD) / 55.0 kW (ND) | LTVF-F40110CAA | * |
| | Fx2000 VVVF 415V Drive 55.0 kW (HD) / 75.0 kW (ND) | LTVF-F40152CAA | * |
| | Fx2000 VVVF 415V Drive 75.0 kW (HD) / 90.0 kW (ND) | LTVF-F40183CAA | * |
| | Fx2000 VVVF 415V Drive 90.0 kW (HD) / 110 kW (ND) | LTVF-F40223AAA | * |
| | Fx2000 VVVF 415V Drive 110 kW (HD) / 132 kW (ND) | LTVF-F40264AAA | * |
| | Fx2000 VVVF 415V Drive 132 kW (HD) / 160 kW (ND) | LTVF-F40325AAA | * |
| | Fx2000 VVVF 415V Drive 160 kW (HD) / 185 kW (ND) | LTVF-F40370AAA | * |
| | Fx2000 VVVF 415V Drive 185 kW (HD) / 220 kW (ND) | LTVF-F40432AAA | * |
| | Fx2000 VVVF 415V Drive 220 kW (HD) / 285 kW (ND) | LTVF-F40547AAA | * |
| | Fx2000 VVVF 415V Drive 285 kW (HD) / 315 kW (ND) | LTVF-F40613AAA | * |
| | Fx2000 VVVF 415V Drive 315 kW (HD) / 375 kW (ND) | LTVF-F40731AAA | * |
| Fx2000 VVVF 415V Drive 375 kW (HD) / 450 kW (ND) | LTVF-F40877AAA | * | |

Note: * For prices please contact nearest branch office

AC Drives [8504]

HVAC Series Hx2000



- Range: 0.75 to 90kW
- V/F, Slip Compensation
- Built-in RTC for Scheduling
- Built-in EMC filter class C3
- Password Protection
- Multi-motor Control
- Built-in Payback Counter
- Dry Pump Detection
- Built-in 4 PID (1 Main & 3 EPID)
- Built-in RS485 Communication, BACnet, Modbus-RTU, Metasys N2
- Global Specification Compliant - CE, UL (Plenum Rated)
- Conformal Coating complying to IEC 60721-3-3, Class 3C2 (3C3 Avg.)
- Interface: 7DI, 6DO, 2AI, 2AO

| Input Voltage | Description | Cat. No. | M.R.P. (₹) Per Unit |
|-------------------------------------|-------------------------------------|----------------|---------------------|
| Three Phase 415Vac | Hx2000 VVVF 415V Drive 0.75 kW (ND) | LTVF-H40002BAA | * |
| | Hx2000 VVVF 415V Drive 1.50 kW (ND) | LTVF-H40004BAA | * |
| | Hx2000 VVVF 415V Drive 2.20 kW (ND) | LTVF-H40006BAA | * |
| | Hx2000 VVVF 415V Drive 3.7 kW (ND) | LTVF-H40008BAA | * |
| | Hx2000 VVVF 415V Drive 5.50 kW (ND) | LTVF-H40012BAA | * |
| | Hx2000 VVVF 415V Drive 7.50 kW (ND) | LTVF-H40016BAA | * |
| | Hx2000 VVVF 415V Drive 11.0 kW (ND) | LTVF-H40024BAA | * |
| | Hx2000 VVVF 415V Drive 15.0 kW (ND) | LTVF-H40030BAA | * |
| | Hx2000 VVVF 415V Drive 18.5 kW (ND) | LTVF-H40038BAA | * |
| | Hx2000 VVVF 415V Drive 22.0 kW (ND) | LTVF-H40045BAA | * |
| | Hx2000 VVVF 415V Drive 30.0 kW (ND) | LTVF-H40061BAA | * |
| | Hx2000 VVVF 415V Drive 37.0 kW (ND) | LTVF-H40075BAA | * |
| | Hx2000 VVVF 415V Drive 45.0 kW (ND) | LTVF-H40091BAA | * |
| | Hx2000 VVVF 415V Drive 55.0 kW (ND) | LTVF-H40107BAA | * |
| Hx2000 VVVF 415V Drive 75.0 kW (ND) | LTVF-H40142BAA | * | |
| Hx2000 VVVF 415V Drive 90.0 kW (ND) | LTVF-H40169BAA | * | |

Note: * For prices please contact nearest branch office

Accessories for AC Drives [8504]

| Input Voltage | Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|---|--------------|---------------------|
| Cx2000 | Cx2000 Digital Operator with 3m cable | LTOP-DOP-50 | * |
| Sx2000 | LCD Digital Operator | LTOP-DOP-200 | * |
| | I/O Expansion Card for Sx2000 | LTIO-EXP-S | * |
| | CANOpen Communication card | LTCI-CAN-S | * |
| | Profibus-DP Communication card | LTCI-PDP-S. | * |
| | Ethernet IP - Modbus TCP Communication card | LTCI-ETH-S. | * |
| Fx2000 | LCD Digital Operator | LTOP-DOP-200 | * |
| | I/O Expansion Card 1 for Fx2000 | LTIO-EX1-F | * |
| | I/O Expansion Card 2 for Fx2000 | LTIO-EX2-F | * |
| | Synchronization Option Card | LTCN-SYN-F | * |
| | Position control option card for Fx2000 | LTCN-PCN-F | * |
| | Incremental card for Open collector and Line Driver Encoder | LTEN-INC-F | * |
| | Profibus-DP Communication Interface card | LTCI-PDP-F | * |
| | Application Development PLC Option card | LTAD-PLC-F | * |
| | CANOpen Communication Interface card | LTCI-CAN-F | * |
| | DeviceNet Communication Interface card | LTCI-DEN-F | * |
| Ethernet IP/Modbus TCP Communication Interface card | LTCI-ETH-F | * | |
| Hx2000 | I/O Expansion Card 2 for Hx2000 | LTIO-EXP2-H | * |
| | I/O Expansion Card for Hx2000 | LTIO-EXP-H | * |
| DBU for Sx2000, Fx2000 | Dynamic Braking Unit for 11 - 15kW | LTDBU-0150-4 | * |
| | Dynamic Braking Unit for 18.5 - 22kW | LTDBU-0220-4 | * |
| | Dynamic Braking Unit for 30 - 37kW | LTDBU-0370-4 | * |
| | Dynamic Braking Unit for 45 - 55kW | LTDBU-0550-4 | * |
| | Dynamic Braking Unit for 75kW | LTDBU-0750-4 | * |
| | Dynamic Braking Unit for 220 - 375kW | LTDBU-2200-4 | * |

Note:

* For prices please contact nearest branch office
Drives are covered under HS code 8504 40 90 and are charged at 28% GST.

EMX4e 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



- 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
- Real time graphs of motor operating performance
- 384 event logs
- 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

| Description | Cat. No. | M.R.P. (₹) Per Unit | Bypass Contactor |
|---|-----------------|---------------------|------------------|
| EMX4e,24A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0024B-511 | * | Built - In |
| EMX4e,42A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0042B-511 | * | |
| EMX4e,52A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0052B-511 | * | |
| EMX4e,64A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0064B-511 | * | |
| EMX4e,69A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0069B-511 | * | |
| EMX4e,105A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0105B-511 | * | |
| EMX4e,115A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0115B-511 | * | |
| EMX4e,135A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0135B-511 | * | |
| EMX4e,184A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0184B-511 | * | |
| EMX4e,200A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0200B-511 | * | |
| EMX4e,229A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0229B-511 | * | |
| EMX4e,250A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0250B-511 | * | |
| EMX4e,352A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0352B-511 | * | |
| EMX4e,397A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0397B-511 | * | |
| EMX4e,410A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0410B-511 | * | |
| EMX4e,550A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0550B-511 | * | |
| EMX4e,580A,Main 200-525Vac,CTR 110-240Vac | EMX4e-0580B-511 | * | |

| Description | Cat. No. | M.R.P. (₹) Per Unit | Bypass Contactor |
|---|-----------------|---------------------|------------------|
| EMX4i,24A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0024B-511 | * | Built - In |
| EMX4i,42A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0042B-511 | * | |
| EMX4i,52A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0052B-511 | * | |
| EMX4i,64A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0064B-511 | * | |
| EMX4i,69A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0069B-511 | * | |
| EMX4i,105A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0105B-511 | * | |
| EMX4i,115A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0115B-511 | * | |
| EMX4i,135A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0135B-511 | * | |
| EMX4i,184A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0184B-511 | * | |
| EMX4i,200A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0200B-511 | * | |
| EMX4i,229A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0229B-511 | * | |
| EMX4i,250A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0250B-511 | * | |
| EMX4i,352A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0352B-511 | * | |
| EMX4i,397A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0397B-511 | * | |
| EMX4i,410A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0410B-511 | * | |
| EMX4i,550A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0550B-511 | * | |
| EMX4i,580A,Main 200-525Vac,CTR 110-240Vac | EMX4i-0580B-511 | * | |

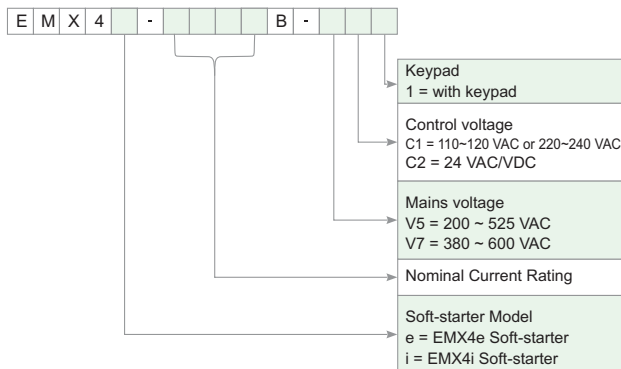
Optional Accessories for EMX4i and EMX4e

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|--------------|---------------------|
| Remote Keypad Card, EMX4 | PIC-RC-01 | * |
| Remote Keypad Card & Keypad EMX4 with cable & mounting kit | PIC-RC-02 | * |
| Remote Keypad, EMX4 with cable & mounting kit | PIC-RK-01 | * |
| EMX4e/i Finger guard Kit,0184B-0580B,IP20 | 995-17309-00 | * |
| Smart Control Card Pump Application,EMX4 | SCC-PC-01 | * |
| Modbus RTU Card, EMX4 | PIC-MB-01 | * |
| DeviceNet Card, EMX4 | PIC-DN-01 | * |
| Profibus Card, EMX4 | PIC-PB-01 | * |
| Modbus TCP Card, EMX4 | PIC-MT-01 | * |
| Ethernet IP Card, EMX4 | PIC-EI-01 | * |
| Profinet Card, EMX4 | PIC-PN-01 | * |

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 transients and excess I²T.

Ordering Information for EMX3 Soft Starter



Note: * For prices please contact nearest branch office

EMX3 Soft Starters



| EMX3 Cat. No. | Suitable for Motor with Rated Current in Amps [#] | | M.R.P. (₹) Per Unit | Bypass Contactor |
|----------------|--|----------------------------------|---------------------|------------------|
| | 3 Wire (Inline Connection) | 6 Wire (Inside Delta Connection) | | |
| EMX3-0023B-411 | 23 | 34 | * | Built - In |
| EMX3-0043B-411 | 43 | 64 | * | |
| EMX3-0053B-411 | 53 | 79 | * | |
| EMX3-0076B-411 | 76 | 114 | * | |
| EMX3-0097B-411 | 97 | 145 | * | |
| EMX3-0105B-411 | 105 | 157 | * | |
| EMX3-0145B-411 | 145 | 217 | * | |
| EMX3-0170B-411 | 170 | 255 | * | |
| EMX3-0220B-411 | 220 | 330 | * | |
| EMX3-0255B-411 | 255 | 382 | * | |
| EMX3-0350B-411 | 350 | 525 | * | |
| EMX3-0425B-411 | 425 | 638 | * | |
| EMX3-0500B-411 | 500 | 750 | * | |
| EMX3-0580B-411 | 580 | 870 | * | |
| EMX3-0700B-411 | 700 | 1050 | * | |
| EMX3-0820B-411 | 820 | 1230 | * | |
| EMX3-0920B-411 | 920 | 1380 | * | |
| EMX3-1000B-411 | 1000 | 1500 | * | |

Note: * For prices please contact nearest branch office

| EMX3 Cat. No. | Suitable for Motor with Rated Current in Amps [#] | | M.R.P. (₹) Per Unit | Bypass Contactor |
|----------------|--|----------------------------------|---------------------|--|
| | 3 Wire (Inline Connection) | 6 Wire (Inside Delta Connection) | | |
| EMX3-0255C-411 | 255 | 382 | * | Terminals for connecting External contactor (AC1 duty) |
| EMX3-0360C-411 | 360 | 540 | * | |
| EMX3-0430C-411 | 400 | 645 | * | |
| EMX3-0620C-411 | 620 | 930 | * | |
| EMX3-0650C-411 | 650 | 975 | * | |
| EMX3-0790C-411 | 790 | 1185 | * | |
| EMX3-0930C-411 | 930 | 1395 | * | |
| EMX3-1200C-411 | 1200 | 1800 | * | |
| EMX3-1410C-411 | 1410 | 2115 | * | |
| EMX3-1600C-411 | 1600 | 2400 | * | |

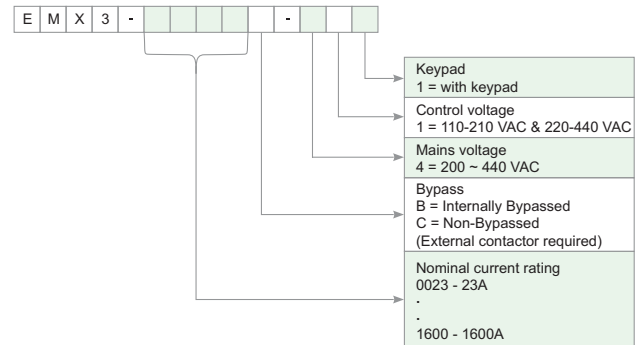
* All protections remain active during bypass operation

Note: * For prices please contact nearest branch office

Note : The above EMX3 current ratings are based on 300% starting current, 10 starts per hour, 10 seconds starting time and ambient temperature of 45°C. For proper sizing of soft starter based on the application parameters please use Winstart Software. For Winstart software please contact Customer Interaction Centre.

Note: Soft Starters are covered under HS code 8504 40 90 and are charged at 28% GST.

Ordering Information for EMX3 Soft Starter



EMX3 Soft Starters : For Heavy Duty Applications

- Ratings from 23 to 1600A
- Control Voltage from 94VAC to 484VAC
- Constant current
- XLR-8 Adaptive acceleration control for pumps
- Kickstart
- XLR-8 Adaptive deceleration control for pumps
- Forward / Reverse Jog
- Comprehensive motor protection
- Large LCD Keypad
- Auto Start / stop
- 2 motor data sets
- Fully programmable overload trip
- 5 digital inputs, 4 digital outputs, 1 analog output
- Built-in RTD & Thermistor inputs
- 99 event logs with time stamping
- Starter communication timeout
- Network communication trip
- Auto detection of inline or inside delta power connection
- Programmable auto start/stop
- 24 VDC auxiliary power supply
- Power through operation allows to run soft starter even with one SCR shorted
- Emergency run operation
- I/O expansion card (optional)

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 I²T.

CSX Soft Starters



CSXi Soft Starters



| Motor kW | Cat. No. | M.R.P. (₹) Per Unit |
|----------|-------------------|---------------------|
| 7.5 | CSX-007-41 | * |
| 15 | CSX-015-41 | * |
| 18 | CSX-018-41 | * |
| 22 | CSX-022-41 | * |
| 30 | CSX-030-41 | * |
| 37 | CSX-037-41 | * |
| 45 | CSX-045-41 | * |
| 55 | CSX-055-41 | * |
| 75 | CSX-075-41 | * |
| 90 | CSX-090-41 | * |
| 110 | CSX-110-41 | * |

| Motor kW | Cat. No. | M.R.P. (₹) Per Unit |
|----------|--------------------|---------------------|
| 7.5 | CSXi-007-41 | * |
| 15 | CSXi-015-41 | * |
| 18 | CSXi-018-41 | * |
| 22 | CSXi-022-41 | * |
| 30 | CSXi-030-41 | * |
| 37 | CSXi-037-41 | * |
| 45 | CSXi-045-41 | * |
| 55 | CSXi-055-41 | * |
| 75 | CSXi-075-41 | * |
| 90 | CSXi-090-41 | * |
| 110 | CSXi-110-41 | * |

Note: * For prices please contact nearest branch office

Note: The above CSX & CSXi ratings are based on 400% starting current, 10 starts per hour up to 30kW & 6 starts per hour for 37kW & above, 6 seconds starting time and ambient temperature of 45°C.

For proper sizing of soft starter based on the application parameters please use Winstart Software.

Optional Modules/Cards for CSX / CSXi / EMX3

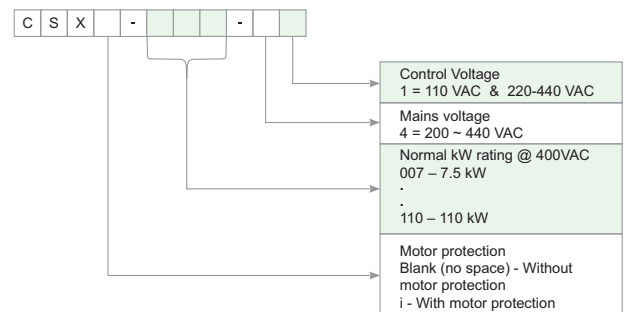


| Description | Cat. No. | M.R.P. (₹) Per Unit |
|---|---------------------|---------------------|
| Modbus Interface | PIM-MB-01 | * |
| Profibus Interface | PIM-PB-01 | * |
| DeviceNet Interface | PIM-DN-01 | * |
| USB Interface | PIM-USB-01 | * |
| Modbus TCP Module | PIM-MT-01 | * |
| Ethernet IP Module | PIM-EI-01 | * |
| Profinet Module | PIM-PN-01 | * |
| EMX3 RTD/Ground Fault Expansion Card | 995-04804-00 | * |
| EMX3 I/O Expansion Card | 995-04803-00 | * |
| DeviceNet Card, EMX4 | PIC-DN-01 | * |
| Ethernet IP Card, EMX4 | PIC-EI-01 | * |
| Modbus RTU Card, EMX4 | PIC-MB-01 | * |
| Modbus TCP Card, EMX4 | PIC-MT-01 | * |
| Profibus Card, EMX4 | PIC-PB-01 | * |
| Profinet Card, EMX4 | PIC-PN-01 | * |
| Remote Keypad Card, EMX4 | PIC-RC-01 | * |
| Remote Keypad Card & Keypad EMX4 | PIC-RC-02 | * |
| Remote Keypad, EMX4 with cable & mountin | PIC-RK-01 | * |
| Smart Control Card Pump Application, EMX4 | SCC-PC-01 | * |

Note: * For prices please contact nearest branch office

Note: Soft Starters are covered under HS code 8504 40 90 and are charged at 28% GST.

Ordering Information for CSX Series Soft Starter



CSX Soft Starters : For Standard Applications

- Inbuilt Bypass Contactor
- Soft Start / Soft Stop
- Compact
- Complements existing motor protection
- Truly plug & play
- Communication options available

CSXi 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

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 I²T.

PLC

Features:

- Processing speed: 0.06 μ s/step
- Expandable upto 10 modules
- Built-in Function: RTC, HSC, PTO, PID, Interrupt, Analog I/O
- Various communication Interface: Built-in USB / RS-232C / RS-485 / Ethernet, optional other communication modules
- Built-in Web-server, E-mail
- EtherCAT based motion control modules with Virtual Axis
- Built-in SD Card interface
- Smart Remote IO



Range:

- Up to 352 local I/O points
- Up to 5728 remote I/O points

HMI



Range:

- Text Display
- 4" ~ 15" TFT color LCD

Features:

- Large Memory: Upto 128MB display data and 1MB back-up memory
- Various Communication Interface: Ethernet / RS-232C / RS-422/485
- USB host and device
- SD memory card interface
- Web server / Data monitoring
- Remote controlling and monitoring
- Presence sensor (within 1m)
- Sound Output

Servo

Features:

- Absolute encoder (standard)
- 1.6 kHz Frequency response
- Serial communication (RS-422/485, Modbus)
- Supports various operation modes (CSP, CSV, CST, PP, PV, PT, HM, IP, etc.)
- Safe-torque off function
- 4-step notch filter
- 2-step vibration suppression filter at the load position
- FFT function for real-time frequency analysis
- Scalable analog output



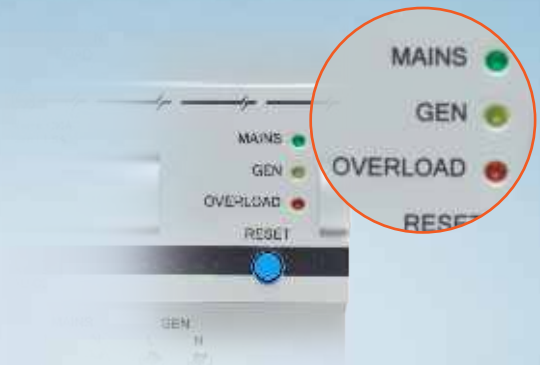
Range:

- Capacity: 0.1kW to 15kW
- Voltage: 200Vac / 400Vac
- Speed: 1500rpm / 3000rpm
- Control: Pulse/Analog or Network

Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@lntebg.com Web: www.lntebg.com

Experience the most robust performance of Single Phase ACCL



LED Indication

Different LED colors for clear differentiation between Mains ON, Genset ON and Genset Overload

Reset Button

To Restore the supply to load, after non essential loads are switched off

Automatic Changeover with Current Limiter

- Reliable advanced micro-controller based design for measuring and controlling output
- Assured trouble free performance through rigorous 18 quality checks
- Extensively tested for Indian field conditions



Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@Lntebg.com Web: www.Lntebg.com

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 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
- Suitable for accessory fitment



| Rating | Modules 1 Mod = 17.5 mm | B-Curve Cat. No. | M.R.P. (₹) Per Unit | C-Curve Cat. No. | M.R.P. (₹) Per Unit | D-Curve Cat. No. | M.R.P. (₹) Per Unit |
|-------------------------|-------------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|
| Single Pole (SP) | | | | | | | |
| 0.5A | 1 | - | - | BB10E50C | 330 | BB10E50D | 335 |
| 1A | 1 | - | - | BB10010C | 330 | BB10010D | 335 |
| 2A | 1 | - | - | BB10020C | 330 | BB10020D | 335 |
| 3A | 1 | - | - | BB10030C | 330 | BB10030D | 335 |
| 4A | 1 | - | - | BB10040C | 330 | BB10040D | 335 |
| 6A | 1 | BB10060B | 216 | BB10060C | 216 | BB10060D | 285 |
| 10A | 1 | BB10100B | 216 | BB10100C | 216 | BB10100D | 285 |
| 16A | 1 | BB10160B | 216 | BB10160C | 216 | BB10160D | 285 |
| 20A | 1 | BB10200B | 216 | BB10200C | 216 | BB10200D | 285 |
| 25A | 1 | BB10250B | 216 | BB10250C | 216 | BB10250D | 285 |
| 32A | 1 | BB10320B | 216 | BB10320C | 216 | BB10320D | 285 |
| 40A | 1 | BB10400B | 490 | BB10400C | 490 | BB10400D | 515 |
| 50A | 1 | BB10500B | 490 | BB10500C | 490 | BB10500D* | 515 |
| 63A | 1 | BB10630B | 490 | BB10630C | 490 | BB10630D* | 515 |



| Rating | Modules 1 Mod = 17.5 mm | B-Curve Cat. No. | M.R.P. (₹) Per Unit | C-Curve Cat. No. | M.R.P. (₹) Per Unit | D-Curve Cat. No. | M.R.P. (₹) Per Unit |
|-------------------------|-------------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|
| Double Pole (DP) | | | | | | | |
| 0.5A | 2 | - | - | BB20E50C | 900 | BB20E50D | 915 |
| 1A | 2 | - | - | BB20010C | 900 | BB20010D | 915 |
| 2A | 2 | - | - | BB20020C | 900 | BB20020D | 915 |
| 3A | 2 | - | - | BB20030C | 900 | BB20030D | 915 |
| 4A | 2 | - | - | BB20040C | 900 | BB20040D | 915 |
| 6A | 2 | BB20060B | 675 | BB20060C | 675 | BB20060D | 695 |
| 10A | 2 | BB20100B | 675 | BB20100C | 675 | BB20100D | 695 |
| 16A | 2 | BB20160B | 675 | BB20160C | 675 | BB20160D | 695 |
| 20A | 2 | BB20200B | 675 | BB20200C | 675 | BB20200D | 695 |
| 25A | 2 | BB20250B | 675 | BB20250C | 675 | BB20250D | 695 |
| 32A | 2 | BB20320B | 675 | BB20320C | 675 | BB20320D | 695 |
| 40A | 2 | BB20400B | 1090 | BB20400C | 1090 | BB20400D | 1130 |
| 50A | 2 | BB20500B | 1090 | BB20500C | 1090 | BB20500D* | 1130 |
| 63A | 2 | BB20630B | 1090 | BB20630C | 1090 | BB20630D* | 1130 |



| Rating | Modules 1 Mod = 17.5 mm | B-Curve Cat. No. | M.R.P. (₹) Per Unit | C-Curve Cat. No. | M.R.P. (₹) Per Unit | D-Curve Cat. No. | M.R.P. (₹) Per Unit |
|------------------------|-------------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|
| Three Pole (TP) | | | | | | | |
| 0.5A | 3 | - | - | BB30E50C | 1265 | BB30E50D | 1280 |
| 1A | 3 | - | - | BB30010C | 1265 | BB30010D | 1280 |
| 2A | 3 | - | - | BB30020C | 1265 | BB30020D | 1280 |
| 3A | 3 | - | - | BB30030C | 1265 | BB30030D | 1280 |
| 4A | 3 | - | - | BB30040C | 1265 | BB30040D | 1280 |
| 6A | 3 | BB30060B | 1100 | BB30060C | 1100 | BB30060D | 1130 |
| 10A | 3 | BB30100B | 1100 | BB30100C | 1100 | BB30100D | 1130 |
| 16A | 3 | BB30160B | 1100 | BB30160C | 1100 | BB30160D | 1130 |
| 20A | 3 | BB30200B | 1100 | BB30200C | 1100 | BB30200D | 1130 |
| 25A | 3 | BB30250B | 1100 | BB30250C | 1100 | BB30250D | 1130 |
| 32A | 3 | BB30320B | 1100 | BB30320C | 1100 | BB30320D | 1130 |
| 40A | 3 | BB30400B | 1695 | BB30400C | 1695 | BB30400D | 1755 |
| 50A | 3 | BB30500B | 1695 | BB30500C | 1695 | BB30500D* | 1755 |
| 63A | 3 | BB30630B | 1695 | BB30630C | 1695 | BB30630D* | 1755 |

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

* For details, please contact L&T branch office

Miniature Circuit Breaker (MCB) [8536]



| Rating | Modules 1 Mod = 17.5 mm | B-Curve Cat. No. | M.R.P. (₹) Per Unit | C-Curve Cat. No. | M.R.P. (₹) Per Unit | D-Curve Cat. No. | M.R.P. (₹) Per Unit |
|-----------------------|-------------------------------|---------------------|---------------------------|---------------------|---------------------------|---------------------|---------------------------|
| Four Pole (FP) | | | | | | | |
| 0.5A | 4 | - | - | BB40E50C | 1740 | BB40E50D | 1760 |
| 1A | 4 | - | - | BB40010C | 1740 | BB40010D | 1760 |
| 2A | 4 | - | - | BB40020C | 1740 | BB40020D | 1760 |
| 3A | 4 | - | - | BB40030C | 1740 | BB40030D | 1760 |
| 4A | 4 | - | - | BB40040C | 1740 | BB40040D | 1760 |
| 6A | 4 | BB40060B | 1490 | BB40060C | 1490 | BB40060D | 1505 |
| 10A | 4 | BB40100B | 1490 | BB40100C | 1490 | BB40100D | 1505 |
| 16A | 4 | BB40160B | 1490 | BB40160C | 1490 | BB40160D | 1505 |
| 20A | 4 | BB40200B | 1490 | BB40200C | 1490 | BB40200D | 1505 |
| 25A | 4 | BB40250B | 1490 | BB40250C | 1490 | BB40250D | 1505 |
| 32A | 4 | BB40320B | 1490 | BB40320C | 1490 | BB40320D | 1505 |
| 40A | 4 | BB40400B | 2115 | BB40400C | 2115 | BB40400D | 2170 |
| 50A | 4 | BB40500B | 2115 | BB40500C | 2115 | BB40500D* | 2170 |
| 63A | 4 | BB40630B | 2115 | BB40630C | 2115 | BB40630D* | 2170 |

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

DC MCBs as per IEC 60947-2 [8536]

Rated Voltage:130V DC (for SP), 250V DC (for DP)
with breaking capacity of 6 kA

| Rating | Modules 1 Mod = 17.5mm | Cat. No. | M.R.P. (₹) Per Unit |
|--------------------|------------------------------|-----------------|---------------------------|
| Single Pole | | | |
| 0.5A | 1 | BB10E5DC | 485 |
| 1A | 1 | BB1001DC | 485 |
| 2A | 1 | BB1002DC | 485 |
| 3A | 1 | BB1003DC | 485 |
| 4A | 1 | BB1004DC | 485 |
| 6A | 1 | BB1006DC | 415 |
| 10A | 1 | BB1010DC | 415 |
| 16A | 1 | BB1016DC | 415 |
| 20A | 1 | BB1020DC | 415 |
| 25A | 1 | BB1025DC | 415 |
| 32A | 1 | BB1032DC | 415 |
| 40A | 1 | BB1040DC | 540 |
| 50A | 1 | BB1050DC | 540 |
| 63A | 1 | BB1063DC | 540 |



Rated Voltage:250V DC (for SP), 500V DC (for DP)
with breaking capacity of 10 kA

| Rating | Modules 1 Mod = 17.5mm | Cat. No. | M.R.P. (₹) Per Unit |
|--------------------|------------------------------|-----------------|---------------------------|
| Single Pole | | | |
| 0.5A | 1 | BJ10E5DC | * |
| 1A | 1 | BJ1001DC | * |
| 2A | 1 | BJ1002DC | * |
| 3A | 1 | BJ1003DC | * |
| 4A | 1 | BJ1004DC | * |
| 6A | 1 | BJ1006DC | * |
| 10A | 1 | BJ1010DC | * |
| 16A | 1 | BJ1016DC | * |
| 20A | 1 | BJ1020DC | * |
| 25A | 1 | BJ1025DC | * |
| 32A | 1 | BJ1032DC | * |
| 40A | 1 | BJ1040DC | * |

New Double Pole

| | | | |
|------|---|-----------------|---|
| 0.5A | 2 | BJ20E5DC | * |
| 1A | 2 | BJ2001DC | * |
| 2A | 2 | BJ2002DC | * |
| 3A | 2 | BJ2003DC | * |
| 4A | 2 | BJ2004DC | * |
| 6A | 2 | BJ2006DC | * |
| 10A | 2 | BJ2010DC | * |
| 16A | 2 | BJ2016DC | * |
| 20A | 2 | BJ2020DC | * |
| 25A | 2 | BJ2025DC | * |
| 32A | 2 | BJ2032DC | * |
| 40A | 2 | BJ2040DC | * |

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos.
* For details, please contact L&T branch office

Double Pole

| | | | |
|------|---|-----------------|-------------|
| 0.5A | 2 | BB20E5DC | 985 |
| 1A | 2 | BB2001DC | 985 |
| 2A | 2 | BB2002DC | 985 |
| 3A | 2 | BB2003DC | 985 |
| 4A | 2 | BB2004DC | 985 |
| 6A | 2 | BB2006DC | 865 |
| 10A | 2 | BB2010DC | 865 |
| 16A | 2 | BB2016DC | 865 |
| 20A | 2 | BB2020DC | 865 |
| 25A | 2 | BB2025DC | 865 |
| 32A | 2 | BB2032DC | 865 |
| 40A | 2 | BB2040DC | 1160 |
| 50A | 2 | BB2050DC | 1160 |
| 63A | 2 | BB2063DC | 1160 |



Auxiliary & Accessories for MCBs [8538]

| Description | Cat. No. | M.R.P. (₹) Per Unit |
|--|-----------------|---------------------|
| Auxiliary Contact - 6A , 240V AC, (1NO+1NC), 0.5 Mod | BZA11006 | 705 |
| Shunt Release - 240V AC, 1 Mod | BZS00240 | 1880 |
| Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod | BZT11006 | 820 |



MCBs (Miniature Circuit Breakers) : 80A-125A [8536]

Range Highlights

- Short circuit Breaking Capacity - 15kA (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 | Module | C Curve Cat. No. | M.R.P. (₹) Per Unit |
|--------------------|--------|---------------------|---------------------------|
| Single Pole | | | |
| 80A | 1.5 | AU15S10803C | 1975 |
| 100A | 1.5 | AU15S11003C | 2210 |
| 125A | 1.5 | AU15S11253C | 2380 |

| Two Pole | | | |
|-----------------|---|-------------|------|
| 80A | 3 | AU15S20803C | 4370 |
| 100A | 3 | AU15S21003C | 4665 |
| 125A | 3 | AU15S21253C | 5135 |

| Three Pole | | | |
|-------------------|-----|-------------|------|
| 80A | 4.5 | AU15S30803C | 6900 |
| 100A | 4.5 | AU15S31003C | 7355 |
| 125A | 4.5 | AU15S31253C | 8160 |

| Four Pole | | | |
|------------------|---|-------------|-------|
| 80A | 6 | AU15S40803C | 9010 |
| 100A | 6 | AU15S41003C | 9375 |
| 125A | 6 | AU15S41253C | 10605 |



| D Curve Cat. No. | M.R.P. (₹) Per Unit |
|---------------------|---------------------------|
| AU15S10803D | 2090 |
| AU15S11003D | 2345 |
| AU15S11253D | 2535 |

| | |
|-------------|------|
| AU15S20803D | 4645 |
| AU15S21003D | 4955 |
| AU15S21253D | 5445 |

| | |
|-------------|------|
| AU15S30803D | 7325 |
| AU15S31003D | 7805 |
| AU15S31253D | 8655 |

| | |
|-------------|-------|
| AU15S40803D | 9545 |
| AU15S41003D | 9950 |
| AU15S41253D | 11255 |

Residual Current Circuit Breaker (RCCB) [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 300 mA sensitivity
- Truly current operated - operation even at nominal voltage
- Operates on Core Balance Current Transformer (CBCT) principle
- Operation even in case of neutral failure
- Advanced neutral mechanism



| Rating | Sensitivity | Modules 1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹) Per Unit |
|-------------------------|-------------|----------------------------|----------|---------------------------|
| Double Pole (DP) | | | | |
| 25A | 30 mA | 2 | BG202503 | 2405 |
| | 100 mA | 2 | BG202510 | 2520 |
| | 300 mA | 2 | BG202530 | 2520 |
| 40A | 30 mA | 2 | BG204003 | 2720 |
| | 100 mA | 2 | BG204010 | 2880 |
| | 300 mA | 2 | BG204030 | 2880 |
| 63A | 30 mA | 2 | BG206303 | 3390 |
| | 100 mA | 2 | BG206310 | 3475 |
| | 300 mA | 2 | BG206330 | 3475 |
| 100A | 30 mA | 2 | BG210003 | 5950 |
| | 100 mA | 2 | BG210010 | 6030 |
| | 300 mA | 2 | BG210030 | 6030 |



| Rating | Sensitivity | Modules 1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹) Per Unit |
|-----------------------|-------------|----------------------------|----------|---------------------------|
| Four Pole (FP) | | | | |
| 25A | 30 mA | 4 | BG402503 | 3185 |
| | 100 mA | 4 | BG402510 | 3300 |
| | 300 mA | 4 | BG402530 | 3300 |
| 40A | 30 mA | 4 | BG404003 | 3195 |
| | 100 mA | 4 | BG404010 | 3350 |
| | 300 mA | 4 | BG404030 | 3350 |
| 63A | 30 mA | 4 | BG406303 | 3670 |
| | 100 mA | 4 | BG406310 | 3850 |
| | 300 mA | 4 | BG406330 | 3850 |
| 100A | 30 mA | 4 | BG410003 | 6435 |
| | 100 mA | 4 | BG410010 | 6550 |
| | 300 mA | 4 | BG410030 | 6550 |

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 | Module | CAT Nos. | M.R.P. (₹) Per Unit |
|---------------|-------------|--------|-------------|---------------------|
| 2P Adi | | | | |
| 25A | 30mA | 2 | AURAD202503 | 3915 |
| | 100mA | 2 | AURAD202510 | 4095 |
| | 300mA | 2 | AURAD202530 | 4095 |
| 40A | 30mA | 2 | AURAD204003 | 4160 |
| | 100mA | 2 | AURAD204010 | 4225 |
| | 300mA | 2 | AURAD204030 | 4225 |
| 63A | 30mA | 2 | AURAD206303 | 4855 |
| | 100mA | 2 | AURAD206310 | 4950 |
| | 300mA | 2 | AURAD206330 | 4950 |
| 100A | 30mA | 2 | AURAD210003 | 7180 |

| Rating | Sensitivity | Module | CAT Nos. | M.R.P. (₹) Per Unit |
|---------------|-------------|--------|-------------|---------------------|
| 4P Adi | | | | |
| 25A | 30mA | 4 | AURAD402503 | 4730 |
| | 100mA | 4 | AURAD402510 | 4825 |
| | 300mA | 4 | AURAD402530 | 4825 |
| 40A | 30mA | 4 | AURAD404003 | 4910 |
| | 100mA | 4 | AURAD404010 | 4995 |
| | 300mA | 4 | AURAD404030 | 4995 |
| 63A | 30mA | 4 | AURAD406303 | 5350 |
| | 100mA | 4 | AURAD406310 | 5460 |
| | 300mA | 4 | AURAD406330 | 5460 |
| 100A | 30mA | 4 | AURAD410003 | 8520 |
| | 300mA | 4 | AURAD410030 | 8520 |

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 1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹) Per Unit | Modules 1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹) Per Unit | Modules 1 Mod = 17.5 mm | Cat. No. | M.R.P. (₹) Per Unit |
|------------------|----------------------------|----------|---------------------|----------------------------|----------|---------------------|----------------------------|----------|---------------------|
| Double Pole (DP) | | | Three Pole (TP) | | | Four Pole (FP) | | | |
| 40A | 2 | BF204000 | 400 | 3 | BF304000 | 705 | 4 | BF404000 | 920 |
| 63A | 2 | BF206300 | 515 | 3 | BF306300 | 815 | 4 | BF406300 | 935 |
| 80A | 2 | BF208000 | 655 | 3 | BF308000 | 900 | 4 | BF408000 | 1060 |
| 100A | 2 | BF210000 | 690 | 3 | BF310000 | 910 | 4 | BF410000 | 1125 |

Note: Standard Pack Quantity for Isolator : DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.

SPDs (Surge Protection Devices) [8536]

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_{max} up to 70kA
- Type 1+2 : Protection against direct and indirect lightning surges
 - Maximum Discharge Current - I_{max} up to 100kA



Extend SPD life with Spare Cartridges

| Description | Configuration | Module | Cat. No. | M.R.P. (₹) Per Unit |
|-------------------------------------|---------------|--------|--------------|---------------------|
| Type 1+2, I _{max} 50kA | 1P+N | 2 | AUSP121PN50 | 10800 |
| | 3P+N | 4 | AUSP123PN50 | 21200 |
| Type 2, I _{max} 40kA | 1P+N | 1 | AUSP021PN40 | 7500 |
| | 3P+N | 2 | AUSP023PN40 | 15000 |
| Type 2, I _{max} 15kA | 1P+N | 1 | AUSP021PN15 | 6000 |
| | 3P+N | 2 | AUSP023PN15 | 11800 |
| Type 1+2, I _{max} 100kA | 1P+N | 2 | AUSP121PN100 | 12000 |
| | 3P+N | 4 | AUSP123PN100 | 22000 |
| Type 2, I _{max} 70kA | 1P+N | 2 | AUSP021PN70 | 12000 |
| | 3P+N | 4 | AUSP023PN70 | 20000 |

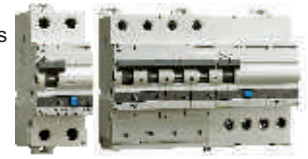
| New | Description | Cat. No. | M.R.P. (₹) Per Unit |
|-----|--|--------------|---------------------|
| | Cartridge for AUSP021PN15 | AUSC021PN15 | 1800 |
| | Cartridge for AUSP021PN40 | AUSC021PN40 | 2250 |
| | Cartridge for AUSP021PN70 /AUSP023PN70 | AUSC021PN70 | 2400 |
| | Cartridge for AUSP023PN15 | AUSC023PN15 | 2360 |
| | Cartridge for AUSP023PN40 | AUSC023PN40 | 3000 |
| | Cartridge for AUSP121PN100 /AUSP123PN100 | AUSC121PN100 | 3600 |
| | Cartridge for AUSP121PN50 / AUSP123PN50 | AUSC121PN50 | 3455 |

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

- 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-AC

| Rating | Sensitivity | Module | CAT Nos. | M.R.P. (₹) Per Unit |
|--------------|-------------|--------|-------------|---------------------|
| 2P AC | | | | |
| 6A | 10mA | 2 | AUF3C200601 | 3625 |
| | 30mA | 2 | AUF3C200603 | 3625 |
| | 100mA | 2 | AUF3C200610 | 3705 |
| | 300mA | 2 | AUF3C200630 | 3725 |
| 10A | 10mA | 2 | AUF3C201001 | 3625 |
| | 30mA | 2 | AUF3C201003 | 3625 |
| | 100mA | 2 | AUF3C201010 | 3705 |
| | 300mA | 2 | AUF3C201030 | 3725 |
| 16A | 10mA | 2 | AUF3C201601 | 3625 |
| | 30mA | 2 | AUF3C201603 | 3625 |
| | 100mA | 2 | AUF3C201610 | 3705 |
| | 300mA | 2 | AUF3C201630 | 3725 |
| 20A | 30mA | 2 | AUF3C202003 | 3625 |
| | 100mA | 2 | AUF3C202010 | 3705 |
| | 300mA | 2 | AUF3C202030 | 3725 |
| 25A | 30mA | 2 | AUF3C202503 | 3625 |
| | 100mA | 2 | AUF3C202510 | 3705 |
| | 300mA | 2 | AUF3C202530 | 3725 |
| 32A | 30mA | 2 | AUF3C203203 | 3625 |
| | 100mA | 2 | AUF3C203210 | 3705 |
| | 300mA | 2 | AUF3C203230 | 3725 |
| 40A | 30mA | 2 | AUF3C204003 | 3625 |
| | 100mA | 2 | AUF3C204010 | 3705 |
| | 300mA | 2 | AUF3C204030 | 3725 |
| 63A | 30mA | 4 | AUF3C206303 | 4650 |
| | 100mA | 4 | AUF3C206310 | 4925 |
| | 300mA | 4 | AUF3C206330 | 4965 |
| 4P AC | | | | |
| 16A | 30mA | 7.5 | AUF3C401603 | 4205 |
| | 100mA | 7.5 | AUF3C401610 | 4675 |
| | 300mA | 7.5 | AUF3C401630 | 4770 |
| 20A | 30mA | 7.5 | AUF3C402003 | 4205 |
| | 100mA | 7.5 | AUF3C402010 | 4675 |
| | 300mA | 7.5 | AUF3C402030 | 4770 |
| 25A | 30mA | 7.5 | AUF3C402503 | 4205 |
| | 100mA | 7.5 | AUF3C402510 | 4675 |
| | 300mA | 7.5 | AUF3C402530 | 4770 |
| 32A | 30mA | 7.5 | AUF3C403203 | 4340 |
| | 100mA | 7.5 | AUF3C403210 | 4680 |
| | 300mA | 7.5 | AUF3C403230 | 4780 |
| 40A | 30mA | 7.5 | AUF3C404003 | 4405 |
| | 100mA | 7.5 | AUF3C404010 | 4680 |
| | 300mA | 7.5 | AUF3C404030 | 4795 |
| 63A | 30mA | 7.5 | AUF3C406303 | 5280 |
| | 100mA | 7.5 | AUF3C406310 | 5385 |
| | 300mA | 7.5 | AUF3C406330 | 5385 |
| 80A | 30mA | 12 | AUF3C408003 | 19340 |
| | 100mA | 12 | AUF3C408010 | 19770 |
| | 300mA | 12 | AUF3C408030 | 19770 |
| 100A | 30mA | 12 | AUF3C410003 | 20675 |
| | 100mA | 12 | AUF3C410010 | 21170 |
| | 300mA | 12 | AUF3C410030 | 21170 |

Type-Adi

| Rating | Sensitivity | Module | CAT Nos. | M.R.P. (₹) Per Unit |
|---------------|-------------|--------|-------------|---------------------|
| 2P Adi | | | | |
| 6A | 30mA | 2 | AUF3D200603 | 4660 |
| | 100mA | 2 | AUF3D200610 | 5130 |
| | 300mA | 2 | AUF3D200630 | 5320 |
| 10A | 30mA | 2 | AUF3D201003 | 4660 |
| | 100mA | 2 | AUF3D201010 | 5130 |
| | 300mA | 2 | AUF3D201030 | 5320 |
| 16A | 30mA | 2 | AUF3D201603 | 4660 |
| | 100mA | 2 | AUF3D201610 | 5130 |
| | 300mA | 2 | AUF3D201630 | 5320 |
| 20A | 30mA | 2 | AUF3D202003 | 4660 |
| | 100mA | 2 | AUF3D202010 | 5130 |
| | 300mA | 2 | AUF3D202030 | 5320 |
| 25A | 30mA | 2 | AUF3D202503 | 4660 |
| | 100mA | 2 | AUF3D202510 | 5130 |
| | 300mA | 2 | AUF3D202530 | 5320 |
| 32A | 30mA | 2 | AUF3D203203 | 4660 |
| | 100mA | 2 | AUF3D203210 | 5130 |
| | 300mA | 2 | AUF3D203230 | 5320 |
| 40A | 30mA | 2 | AUF3D204003 | 4660 |
| | 100mA | 2 | AUF3D204010 | 5130 |
| | 300mA | 2 | AUF3D204030 | 5320 |
| 63A | 30mA | 4 | AUF3D206303 | 5815 |
| | 100mA | 4 | AUF3D206310 | 6155 |
| | 300mA | 4 | AUF3D206330 | 6205 |
| 4P Adi | | | | |
| 16A | 30mA | 7.5 | AUF3D401603 | 5255 |
| | 100mA | 7.5 | AUF3D401610 | 5845 |
| | 300mA | 7.5 | AUF3D401630 | 5965 |
| 20A | 30mA | 7.5 | AUF3D402003 | 5255 |
| | 100mA | 7.5 | AUF3D402010 | 5845 |
| | 300mA | 7.5 | AUF3D402030 | 5965 |
| 25A | 30mA | 7.5 | AUF3D402503 | 5255 |
| | 100mA | 7.5 | AUF3D402510 | 5845 |
| | 300mA | 7.5 | AUF3D402530 | 5965 |
| 32A | 30mA | 7.5 | AUF3D403203 | 5425 |
| | 100mA | 7.5 | AUF3D403210 | 5850 |
| | 300mA | 7.5 | AUF3D403230 | 5975 |
| 40A | 30mA | 7.5 | AUF3D404003 | 5505 |
| | 100mA | 7.5 | AUF3D404010 | 5850 |
| | 300mA | 7.5 | AUF3D404030 | 5995 |
| 63A | 30mA | 7.5 | AUF3D406303 | 6600 |
| | 100mA | 7.5 | AUF3D406310 | 6730 |
| | 300mA | 7.5 | AUF3D406330 | 6730 |
| 80A | 30mA | 12 | AUF3D408003 | 19340 |
| | 100mA | 12 | AUF3D408010 | 19770 |
| | 300mA | 12 | AUF3D408030 | 19770 |
| 100A | 30mA | 12 | AUF3D410003 | 20675 |
| | 100mA | 12 | AUF3D410010 | 21170 |
| | 300mA | 12 | AUF3D410030 | 21170 |

* For technical details, please contact L&T branch office

Single Phase - ACCL [8536]

Automatic Changeover with Current Limiter

Range Highlights

- Conforms to IEC 60947-6, IEC 60947-3
- Wide Range of Current Ratings
 - (Generator side) - 1.5A to 30A
 - (Electricity Board side) - 30A
- RoHS compliant



| Description | Module | CAT Nos. | M.R.P. (₹) Per Unit |
|-------------|--------|---------------|---------------------|
| 30A/1.5A | 4 | AUCL010301E5 | 1935 |
| 30A/2.5A | 4 | AUCL010302E5 | 1935 |
| 30A/3A | 4 | AUCL01030003 | 1935 |
| 30A/4A | 4 | AUCL01030004 | 1935 |
| 30A/5A | 4 | AUCL01030005 | 1935 |
| 30A/6A | 4 | AUCL01030006 | 1935 |
| 30A/8A | 4 | AUCL01030008 | 1935 |
| 30A/10A | 4 | AUCL01030010 | 1935 |
| 30A/12A | 4 | AUCL01030012 | 1935 |
| 30A/15A | 4 | AUCL01030015 | 1935 |
| 30A/20A | 4 | AUCL01030020 | 1935 |
| 30A/30A | 4 | AUCL01030030* | 1935 |

* Non-current limiting variant

Modular Contactors [8536]

Range Highlights

- Wide Range of Current Ratings:
 - 25A, 40A and 63A
- Conforms to:
 - IEC 61095, EN 61095
 - IEC 60497-4-1, EN 60497-4-1
 - IEC 60497-5-1
- Protection Degree IP 20



| Description (AC-1) | Module | Cat. No. | M.R.P. (₹) Per Unit |
|------------------------|--------|-------------|---------------------|
| 25A-1NO | 1 | AUMC1002501 | 1340 |
| 25A-2NO | 1 | AUMC2002501 | 1670 |
| 40A-2NO | 3 | AUMC2004003 | 2870 |
| 40A-3NO | 3 | AUMC3004003 | 4010 |
| 40A-4NO | 3 | AUMC4004003 | 4800 |
| 63A-2NO+2NC | 3 | AUMC2206303 | 5100 |
| 63A-3NO | 3 | AUMC3006303 | 5200 |
| 63A-4NO | 3 | AUMC4006303 | 5720 |
| Accessory [8538] | | | |
| Auxiliary Contact, 2NO | 0.5 | AUMCAUX240 | 1600 |

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 | Module | Cat. No. | M.R.P. (₹) Per Unit |
|--------------------|--------|-------------|---------------------|
| Double Pole | | | |
| 25A | 2 | AUC00202500 | 1405 |
| 40A | 2 | AUC00204000 | 2155 |
| 63A | 3 | AUC00206300 | 2505 |
| Four Pole | | | |
| 40A | 4 | AUC00404000 | 3710 |
| 63A | 6 | AUC00406300 | 4210 |

Indicating Lights [8531]



| Description | Module | Cat. No. | M.R.P. (₹) Per Unit |
|-----------------|--------|-------------|---------------------|
| RED | 1 | AUIL01RED00 | 830 |
| YELLOW | 1 | AUIL01YEL00 | 830 |
| BLUE | 1 | AUIL01BLU00 | 830 |
| GREEN | 1 | AUIL01GRE00 | 830 |
| RED-YELLOW-BLUE | 1 | AUIL01RYB00 | 1005 |

Time Switches [9107]



| Description | Module | Cat. No. | M.R.P. (₹) Per Unit |
|---------------------|--------|-------------|---------------------|
| Analog time switch | 1 | AUTS01ANA00 | 3750 |
| Analog time switch | 3 | AUTS03ANA00 | 4560 |
| Digital time switch | 2 | AUTS02DIG00 | 2870 |
| Astro time switch | 2 | AUTS02AST00 | 4820 |

Accessories [8538]



All Half Module and One Module Accessories are common for 80A-125A MCBs, RCBOs and Adi RCCBs

| Description | Configuration | Module | Voltage | CAT Nos. | M.R.P. (₹) Per Unit |
|--|--|--------|-----------------|-----------|---------------------|
| Auxiliary Contact | 1NO+1NC | 0.5 | 240V AC, 24V DC | AUAXAC240 | 735 |
| AUX/TAC* | 1NO+1NC | 0.5 | 240V AC, 24V DC | AUATAC240 | 865 |
| Undervoltage Release | - | 1 | 240V AC | AUUVAC240 | 1755 |
| | - | 1 | 24V DC | AUUVDC024 | 1755 |
| Oversvoltage Release | - | 1 | 240V AC | AUOVAC240 | 2155 |
| Shunt Release | - | 1 | 240V AC | AUSRAC240 | 2005 |
| | - | 1 | 24V DC | AUSRDC024 | 2005 |
| Padlock-Suitable for Lock Hasp 3.5 - 5 mm dia. max | Suitable for 1Pole=1Mod devices: RCCBs, RCBOs, Changeover Switches up to 40A | | | AUPD01 | 405 |
| | Suitable for 1Pole-1.5Mod devices: MCBs 80A-125A, Changeover Switch 63A | | | AUPD02 | 455 |

Note: Standard Pack Quantity for Padlock - 2 Nos.

* For 80A-125A MCBs please contact nearest L&T branch

Energy Meters [9030]

Range Highlights

- Communication with additional RS485 & WiFi module
- Class 1 accuracy
- Direct current operated meter
- Reverse current indication for three-phase meter



| Description | Module | Cat. No. | M.R.P. (₹) Per Unit |
|----------------------|--------|--------------|---------------------|
| Single Phase (5-40A) | 2 | WD4000101000 | 2035 |
| Three Phase (10-60A) | 7 | WD4000103000 | 4620 |

Specially Designed

Distribution Board suitable for Aluminum shuttering (Mivan) Construction

New



> Scan or click to play video



SPN DBs [8537]

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. (₹) 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 [8537]

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. (₹) 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 L&T branch office

Highlights

- Conforms to IS 8623-1 & 3, 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



IP 30 - Single Door IP 43 - Metal Door IP 43 - Glazed Door

| Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|----------|------------|---------------------|
| | Incomer | Outgoing | | |
| IP 30 - Single Door | | | | |
| 4 way | 2 | 2 | DBSPN004SD | 985 |
| 6 way | 2 | 4 | DBSPN006SD | 1075 |
| 8 way | 2 | 6 | DBSPN008SD | 1240 |
| 12 way | 2 | 10 | DBSPN012SD | 1470 |
| 16 way | 2 | 14 | DBSPN016SD | 1815 |
| 18 way | 2 | 16 | DBSPN018SD | 2295 |
| IP 43 - Metal Door | | | | |
| 4 way | 2 | 2 | DBSPN004DD | 1355 |
| 6 way | 2 | 4 | DBSPN006DD | 1560 |
| 8 way | 2 | 6 | DBSPN008DD | 1675 |
| 12 way | 2 | 10 | DBSPN012DD | 2020 |
| 16 way | 2 | 14 | DBSPN016DD | 2530 |
| 18 way | 2 | 16 | DBSPN018DD | 3300 |
| IP 43 - Glazed Door | | | | |
| 4 way | 2 | 2 | DBSPN004GD | 1700 |
| 6 way | 2 | 4 | DBSPN006GD | 1810 |
| 8 way | 2 | 6 | DBSPN008GD | 1975 |
| 12 way | 2 | 10 | DBSPN012GD | 2390 |
| 16 way | 2 | 14 | DBSPN016GD | 2970 |
| 18 way | 2 | 16 | DBSPN018GD | 3445 |
| IP 54 - Metal Door | | | | |
| 4 way | 2 | 2 | DBSPN00454 | 4200 |
| 6 way | 2 | 4 | DBSPN00654 | 4685 |
| 8 way | 2 | 6 | DBSPN00854 | 4940 |
| 12 way | 2 | 10 | DBSPN01254 | 5705 |
| 16 way | 2 | 14 | DBSPN01654 | 6315 |
| 18 way | 2 | 16 | DBSPN01854 | 6765 |

Highlights

- Conforms to IS 8623-1 & 3, 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 SP MCBs as outgoing



IP 30 - Single Door IP 43 - Metal Door IP 43 - Glazed Door

| Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|----------|------------|---------------------|
| | Incomer | Outgoing | | |
| IP 30 - Single Door | | | | |
| 4 way | 4 | 4+4+4 | DBTPE004SD | 2545 |
| 6 way | 4 | 6+6+6 | DBTPE006SD | 3125 |
| 4 way | 8 | 4+4+4 | DBTPN004SD | 2730 |
| 6 way | 8 | 6+6+6 | DBTPN006SD | 3365 |
| 8 way | 8 | 8+8+8 | DBTPN008SD | 3960 |
| 12 way | 8 | 12+12+12 | DBTPN012SD | 5865 |
| 16 way | 8 | 16+16+16 | DBTPN016SD | 7225 |
| IP 43 - Metal Door | | | | |
| 4 way | 4 | 4+4+4 | DBTPE004DD | 3105 |
| 6 way | 4 | 6+6+6 | DBTPE006DD | 3830 |
| 4 way | 8 | 4+4+4 | DBTPN004DD | 3310 |
| 6 way | 8 | 6+6+6 | DBTPN006DD | 4085 |
| 8 way | 8 | 8+8+8 | DBTPN008DD | 4890 |
| 12 way | 8 | 12+12+12 | DBTPN012DD | 7325 |
| 16 way | 8 | 16+16+16 | DBTPN016DD | 9030 |
| IP 43 - Glazed Door | | | | |
| 4 way | 4 | 4+4+4 | DBTPE004GD | 3965 |
| 6 way | 4 | 6+6+6 | DBTPE006GD | 4895 |
| 4 way | 8 | 4+4+4 | DBTPN004GD | 4230 |
| 6 way | 8 | 6+6+6 | DBTPN006GD | 5215 |
| 8 way | 8 | 8+8+8 | DBTPN008GD | 6255 |
| 12 way | 8 | 12+12+12 | DBTPN012GD | 9595 |
| 16 way | 8 | 16+16+16 | DBTPN016GD | 11515 |
| IP 54 - Metal Door | | | | |
| 4 way | 4 | 4+4+4 | DBTPE00454 | 9940 |
| 6 way | 4 | 6+6+6 | DBTPE00654 | 12260 |
| 4 way | 8 | 4+4+4 | DBTPN00454 | 10465 |
| 6 way | 8 | 6+6+6 | DBTPN00654 | 12595 |
| 8 way | 8 | 8+8+8 | DBTPN00854 | 13775 |
| 12 way | 8 | 12+12+12 | DBTPN01254 | 19415 |
| 16 way | 8 | 16+16+16 | DBTPN01654 | 23305 |

Highlights

- Conforms to IS 8623-1 & 3, 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. (₹) Per Unit |
|---------------------------|----------------|-------------|----------|------------|---------------------|
| | Incomer | Sub-Incomer | Outgoing | | |
| IP 43 - Metal Door | | | | | |
| 4 way | 8 | 2+2+2 | 4+4+4 | DBHPI004DD | 5345 |
| 6 way | 8 | 2+2+2 | 6+6+6 | DBHPI006DD | 6385 |
| 8 way | 8 | 2+2+2 | 8+8+8 | DBHPI008DD | 7590 |
| 12 way | 8 | 2+2+2 | 12+12+12 | DBHPI012DD | 10375 |
| 16 way | 8 | 2+2+2 | 16+16+16 | DBHPI016DD | 12450 |
| IP 54 - Metal Door | | | | | |
| 4 way | 8 | 2+2+2 | 4+4+4 | DBHPI00454 | 12535 |
| 6 way | 8 | 2+2+2 | 6+6+6 | DBHPI00654 | 14935 |
| 8 way | 8 | 2+2+2 | 8+8+8 | DBHPI00854 | 16495 |
| 12 way | 8 | 2+2+2 | 12+12+12 | DBHPI01254 | 22515 |
| 16 way | 8 | 2+2+2 | 16+16+16 | DBHPI01654 | 26775 |



Tier PPI DBs

IP 43 - Metal Door

| Description | No. of Modules | | | Cat. Nos. | M.R.P. (₹) Per Unit |
|---------------------------|----------------|-------------|----------|------------|---------------------|
| | Incomer | Sub-Incomer | Outgoing | | |
| IP 43 - Metal Door | | | | | |
| 6 way | 8 | 2+2+2 | 6+6+6 | DBTPI006DD | 7210 |
| 8 way | 8 | 2+2+2 | 8+8+8 | DBTPI008DD | 9045 |
| 10 way | 8 | 2+2+2 | 10+10+10 | DBTPI010DD | 9485 |
| 12 way | 8 | 2+2+2 | 12+12+12 | DBTPI012DD | 10320 |
| 16 way | 8 | 2+2+2 | 16+16+16 | DBTPI016DD | 10865 |
| 12 way | MCCB* | 2+2+2 | 12+12+12 | DBTPL012DD | 10750 |
| IP 54 - Metal Door | | | | | |
| 6 way | 8 | 2+2+2 | 6+6+6 | DBTPI00654 | 11850 |
| 8 way | 8 | 2+2+2 | 8+8+8 | DBTPI00854 | 14875 |
| 10 way | 8 | 2+2+2 | 10+10+10 | DBTPI01054 | 15605 |
| 12 way | 8 | 2+2+2 | 12+12+12 | DBTPI01254 | 16970 |
| 16 way | 8 | 2+2+2 | 16+16+16 | DBTPI01654 | 17870 |
| 12 way | MCCB* | 2+2+2 | 12+12+12 | DBTPL01254 | 17685 |

* Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer

Highlights

- Conforms to IS 8623-1 & 3, 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 1. Modular Incomer - FP MCB/Isolator/RCCB/RCBO as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing
2. MCCB Incomer - MCCB* as incomer, DP RCCB/RCBO as sub-incomer and SP MCBs as outgoing



With Modular Incomer

IP 30 - Single Door

IP 43 - Metal Door

| Description | No. of Modules | | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|-------------|----------|------------|---------------------|
| | Incomer | Sub-Incomer | Outgoing | | |
| IP 30 - Single Door | | | | | |
| 4 way | 8 | 4+4+4 | 4+4+4 | DBPSG004SD | 7565 |
| 6 way | 8 | 4+4+4 | 6+6+6 | DBPSG006SD | 8255 |
| 8 way | 8 | 4+4+4 | 8+8+8 | DBPSG008SD | 8845 |
| 12 way | 8 | 4+4+4 | 12+12+12 | DBPSG012SD | 10180 |
| IP 43 - Metal Door | | | | | |
| 4 way | 8 | 4+4+4 | 4+4+4 | DBPSG004DD | 8620 |
| 6 way | 8 | 4+4+4 | 6+6+6 | DBPSG006DD | 9720 |
| 8 way | 8 | 4+4+4 | 8+8+8 | DBPSG008DD | 10845 |
| 12 way | 8 | 4+4+4 | 12+12+12 | DBPSG012DD | 13580 |
| IP 54 - Metal Door | | | | | |
| 4 way | 8 | 4+4+4 | 4+4+4 | DBPSG00454 | 14315 |
| 6 way | 8 | 4+4+4 | 6+6+6 | DBPSG00654 | 16120 |
| 8 way | 8 | 4+4+4 | 8+8+8 | DBPSG00854 | 18005 |
| 12 way | 8 | 4+4+4 | 12+12+12 | DBPSG01254 | 22975 |



With MCCB Incomer

IP 30 - Single Door

IP 43 - Metal Door

| Description | No. of Modules | | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|-------------|----------|------------|---------------------|
| | Incomer* | Sub-Incomer | Outgoing | | |
| IP 30 - Single Door | | | | | |
| 4 way | MCCB | 4+4+4 | 4+4+4 | DBPGL004SD | 10895 |
| 6 way | MCCB | 4+4+4 | 6+6+6 | DBPGL006SD | 12540 |
| 8 way | MCCB | 4+4+4 | 8+8+8 | DBPGL008SD | 14405 |
| 12 way | MCCB | 4+4+4 | 12+12+12 | DBPGL012SD | 16725 |
| IP 43 - Metal Door | | | | | |
| 4 way | MCCB | 4+4+4 | 4+4+4 | DBPGL004DD | 12430 |
| 6 way | MCCB | 4+4+4 | 6+6+6 | DBPGL006DD | 14220 |
| 8 way | MCCB | 4+4+4 | 8+8+8 | DBPGL008DD | 16290 |
| 12 way | MCCB | 4+4+4 | 12+12+12 | DBPGL012DD | 18545 |
| IP 54 - Metal Door | | | | | |
| 4 way | MCCB | 4+4+4 | 4+4+4 | DBPGL00454 | 20810 |
| 6 way | MCCB | 4+4+4 | 6+6+6 | DBPGL00654 | 23805 |
| 8 way | MCCB | 4+4+4 | 8+8+8 | DBPGL00854 | 27270 |
| 12 way | MCCB | 4+4+4 | 12+12+12 | DBPGL01254 | 31055 |

* Suitable for 3 Pole & 4 Pole DU100H, DU100D, DN0-100D & DN0-100C MCCB as incomer

TPN Phase Selector DB [8537]

Flexi/Row DB [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 3 nos. of 63A L&T rotary switches | 3 nos. of rocker switches for phase identification | 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | 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



IP 30 - Single Door



IP 43 - Metal Door

| Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|----------|------------|---------------------------|
| | Incomer | Outgoing | | |
| IP 30 - Single Door | | | | |
| 4 way | 8 | 4+4+4 | DBPSR004SD | 10475 |
| 6 way | 8 | 6+6+6 | DBPSR006SD | 11135 |
| 8 way | 8 | 8+8+8 | DBPSR008SD | 12340 |
| 10 way | 8 | 10+10+10 | DBPSR010SD | 12800 |
| 12 way | 8 | 12+12+12 | DBPSR012SD | 13545 |
| IP 43 - Metal Door | | | | |
| 4 way | 8 | 4+4+4 | DBPSR004DD | 11755 |
| 6 way | 8 | 6+6+6 | DBPSR006DD | 11945 |
| 8 way | 8 | 8+8+8 | DBPSR008DD | 12795 |
| 10 way | 8 | 10+10+10 | DBPSR010DD | 13670 |
| 12 way | 8 | 12+12+12 | DBPSR012DD | 14415 |
| IP 54 - Metal Door | | | | |
| 4 way | 8 | 4+4+4 | DBPSR00454 | 15575 |
| 6 way | 8 | 6+6+6 | DBPSR00654 | 15825 |
| 8 way | 8 | 8+8+8 | DBPSR00854 | 16960 |
| 10 way | 8 | 10+10+10 | DBPSR01054 | 18115 |
| 12 way | 8 | 12+12+12 | DBPSR01254 | 19095 |

Highlights

- Conforms to IS 8623-1 & 3, 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 - neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | cable ties | blanking plates and circuit identification labels
- With provision to mount modular devices as per requirement



IP 30 - Single Door



IP 43 - Metal Door



IP 43 - Glazed Door

| Description | No. of Modules Per Row | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|------------------------|------------|---------------------------|
| IP 30 - Single Door | | | |
| 2 Row 28 Module | 14 | DBROW228SD | 3445 |
| 3 Row 42 Module | 14 | DBROW342SD | 4135 |
| 4 Row 56 Module | 14 | DBROW456SD | 4735 |
| 4 Row 64 Module | 16 | DBROW464SD | 5320 |
| IP 43 - Metal Door | | | |
| 2 Row 28 Module | 14 | DBROW228DD | 3885 |
| 3 Row 42 Module | 14 | DBROW342DD | 4665 |
| 4 Row 56 Module | 14 | DBROW456DD | 5345 |
| 4 Row 64 Module | 16 | DBROW464DD | 6000 |
| IP 43 - Glazed Door | | | |
| 2 Row 28 Module | 14 | DBROW228GD | 4560 |
| 3 Row 42 Module | 14 | DBROW342GD | 5590 |
| 4 Row 56 Module | 14 | DBROW456GD | 6335 |
| 4 Row 64 Module | 16 | DBROW464GD | 6950 |
| IP 54 - Metal Door | | | |
| 2 Row 28 Module | 14 | DBROW22854 | 7185 |
| 3 Row 42 Module | 14 | DBROW34254 | 8885 |
| 4 Row 56 Module | 14 | DBROW45654 | 9680 |
| 4 Row 64 Module | 16 | DBROW46454 | 10685 |

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 | 265 | 5 |
| SP 56 Mod | BSP56 | 995 | 5 |
| DP 12 Mod | BDP12 | 435 | 5 |
| TP 12 Mod | BTP12 | 465 | 5 |
| FP 12 Mod | BFP12 | 975 | 5 |
| End Caps for SP | ECP01 | 10 | 10 |
| End Caps for DP/TP | ECP03 | 30 | 10 |
| End Caps for FP | ECP04 | 40 | 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 | 15 | 10 |
| Half Module | BKP05 | 15 | 10 |

Padlock [8301]

Highlights

- Version with standard lock and a common key



PDK02

| Description | Cat. Nos. | M.R.P. (₹) Per Unit | Std. Pack Qty. |
|------------------|-----------|---------------------------|----------------|
| Lock and Key Kit | PDK02 | 435 | 5 |

Vertical TPN DB with Modular Incomer [8537]

Vertical TPN DB with MCCB Incomer [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 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



IP 30 - Single Door IP 43 - Metal Door IP 43 - Glazed Door

Highlights

- Conforms to IS 8623-1 & 3, 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 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



IP 30 - Single Door IP 43 - Metal Door IP 43 - Glazed Door

Up to 125A MCCB Incomer

| Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|----------|------------|---------------------------|
| | Incomer | Outgoing | | |
| IP 30 - Single Door | | | | |
| 4 way | 8 | 4+4+4 | DBVTM004SD | 7555 |
| 6 way | 8 | 6+6+6 | DBVTM006SD | 8270 |
| 8 way | 8 | 8+8+8 | DBVTM008SD | 9225 |
| 12 way | 8 | 12+12+12 | DBVTM012SD | 13320 |
| 16 way | 8 | 16+16+16 | DBVTM016SD | 15405 |
| IP 43 - Metal Door | | | | |
| 4 way | 8 | 4+4+4 | DBVTM004DD | 8040 |
| 6 way | 8 | 6+6+6 | DBVTM006DD | 9830 |
| 8 way | 8 | 8+8+8 | DBVTM008DD | 10775 |
| 12 way | 8 | 12+12+12 | DBVTM012DD | 14905 |
| 16 way | 8 | 16+16+16 | DBVTM016DD | 17590 |
| IP 43 - Glazed Door | | | | |
| 4 way | 8 | 4+4+4 | DBVTM004GD | 10810 |
| 6 way | 8 | 6+6+6 | DBVTM006GD | 11890 |
| 8 way | 8 | 8+8+8 | DBVTM008GD | 13745 |
| 12 way | 8 | 12+12+12 | DBVTM012GD | 18335 |
| 16 way | 8 | 16+16+16 | DBVTM016GD | 19465 |
| IP 54 - Metal Door | | | | |
| 4 way | 8 | 4+4+4 | DBVTM00454 | 16630 |
| 6 way | 8 | 6+6+6 | DBVTM00654 | 18505 |
| 8 way | 8 | 8+8+8 | DBVTM00854 | 19420 |
| 12 way | 8 | 12+12+12 | DBVTM01254 | 26655 |
| 16 way | 8 | 16+16+16 | DBVTM01654 | 28225 |

| Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|----------|------------|---------------------------|
| | Incomer* | Outgoing | | |
| IP 30 - Single Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTL004SD | 8755 |
| 6 way | MCCB | 6+6+6 | DBVTL006SD | 9515 |
| 8 way | MCCB | 8+8+8 | DBVTL008SD | 10360 |
| 12 way | MCCB | 12+12+12 | DBVTL012SD | 15360 |
| 16 way | MCCB | 16+16+16 | DBVTL016SD | 18170 |
| IP 43 - Metal Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTL004DD | 9610 |
| 6 way | MCCB | 6+6+6 | DBVTL006DD | 11030 |
| 8 way | MCCB | 8+8+8 | DBVTL008DD | 12080 |
| 12 way | MCCB | 12+12+12 | DBVTL012DD | 16075 |
| 16 way | MCCB | 16+16+16 | DBVTL016DD | 18920 |
| IP 43 - Glazed Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTL004GD | 11030 |
| 6 way | MCCB | 6+6+6 | DBVTL006GD | 12495 |
| 8 way | MCCB | 8+8+8 | DBVTL008GD | 14100 |
| 12 way | MCCB | 12+12+12 | DBVTL012GD | 18795 |
| 16 way | MCCB | 16+16+16 | DBVTL016GD | 20805 |
| IP 54 - Metal Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTL00454 | 18955 |
| 6 way | MCCB | 6+6+6 | DBVTL00654 | 20325 |
| 8 way | MCCB | 8+8+8 | DBVTL00854 | 22785 |
| 12 way | MCCB | 12+12+12 | DBVTL01254 | 28755 |
| 16 way | MCCB | 16+16+16 | DBVTL01654 | 34410 |

* Suitable for 3 Pole & 4 Pole DU100H, DU100D, DU125D, DU125H & DNO MCCB as incomer

Vertical TPN DB with MCCB Incomer [8537]

Plug & Socket DB [8537]

Up to 250A MCCB Incomer



IP 30 - Single Door IP 43 - Metal Door IP 43 - Glazed Door

| Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|----------------------------|----------------|----------|------------|---------------------|
| | Incomer* | Outgoing | | |
| IP 30 - Single Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTH004SD | 10745 |
| 6 way | MCCB | 6+6+6 | DBVTH006SD | 11275 |
| 8 way | MCCB | 8+8+8 | DBVTH008SD | 12400 |
| 12 way | MCCB | 12+12+12 | DBVTH012SD | 17515 |
| 16 way | MCCB | 16+16+16 | DBVTH016SD | 21105 |
| IP 43 - Metal Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTH004DD | 12175 |
| 6 way | MCCB | 6+6+6 | DBVTH006DD | 13830 |
| 8 way | MCCB | 8+8+8 | DBVTH008DD | 15205 |
| 12 way | MCCB | 12+12+12 | DBVTH012DD | 20355 |
| 16 way | MCCB | 16+16+16 | DBVTH016DD | 24170 |
| IP 43 - Glazed Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTH004GD | 19995 |
| 6 way | MCCB | 6+6+6 | DBVTH006GD | 22430 |
| 8 way | MCCB | 8+8+8 | DBVTH008GD | 23330 |
| 12 way | MCCB | 12+12+12 | DBVTH012GD | 24585 |
| 16 way | MCCB | 16+16+16 | DBVTH016GD | 26455 |
| IP 54 - Metal Door | | | | |
| 4 way | MCCB | 4+4+4 | DBVTH00454 | 26980 |
| 6 way | MCCB | 6+6+6 | DBVTH00654 | 29460 |
| 8 way | MCCB | 8+8+8 | DBVTH00854 | 30470 |
| 12 way | MCCB | 12+12+12 | DBVTH01254 | 35675 |
| 16 way | MCCB | 16+16+16 | DBVTH01654 | 37550 |

* Suitable for 3 pole and 4 pole DU250, DU250C & DN1 MCCB as incomer

Enclosure [8537]

Highlights

- Conforms to IS 8623-1 & 3, 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 |
|---------------------------|----------------|------------|---------------------|
| IP 30 - Metal Door | | | |
| 2 way | 2 | DBENC002SD | 515 |
| 3 way | 3 | DBENC003SD | 515 |
| 4 way | 4 | DBENC004SD | 515 |
| 6 way | 6 | DBENC006SD | 775 |

Highlights

- Conforms to IS 8623-1 & 3, 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 |
|-----------------------------------|-------------|----------------|------------|---------------------|
| Metal Plug & Sockets | | | | |
| 10 A, 2 Pin + SC [^] | P + N | 1 | DBMPS110SD | 1335 |
| 20 A, 2 Pin + SC [^] | P + N | 1 | DBMPS120SD | 1435 |
| 20 A, 2 Pin + SC [^] | P + N | 2 | DBMPS220SD | 1565 |
| 20 A, 3 Pin + SC [^] | 3P | 3 | DBMPS320SD | 2650 |
| 32 A, 3 Pin + SC [^] | 3P | 3 | DBMPS332SD | 3135 |
| 32 A, 3 Pin + SC [^] | 3P | 4 | DBMPS432SD | 3330 |
| 63 A, 5 Pin + SC [^] | 3P+N+E | 4 | DBMPS463SD | 11310 |
| Plastic Plug & Sockets | | | | |
| 16 A, 3 Pin | P+N+E | 2 | DBPPS316SD | 2170 |
| 32 A, 3 Pin | P+N+E | 4 | DBPPS332SD | 2345 |
| 32 A, 5 Pin | 3P+N+E | 8 | DBPPS532SD | 4265 |
| 63 A, 5 Pin | 3P+N+E | 8 | DBPPS563SD | 10845 |

Metal Plug [8536]



| Description | No. of Pins | Cat. Nos. | M.R.P. (₹) Per Unit |
|-------------------------------|-------------|-----------|---------------------|
| 10 A, 2 Pin + SC [^] | P + N | MPS210P | 140 |
| 20 A, 2 Pin + SC [^] | P + N | MPS220P | 150 |
| 20 A, 3 Pin + SC [^] | 3P | MPS320P | 195 |
| 32 A, 3 Pin + SC [^] | 3P | MPS332P | 365 |

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 | 145 |
| 20 A, 2 Pin + SC [^] | P + N | MPS220S | 165 |
| 20 A, 3 Pin + SC [^] | 3P | MPS320S | 215 |
| 32 A, 3 Pin + SC [^] | 3P | MPS332S | 365 |

[^] SC-Scraping Earth

Note: Standard pack quantity - 20 nos.

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 |
|--|------------|---------------------------|
| CEB for SPN DBs | | |
| CEB-SPN Double Door, 4 way | DBSPN004CB | 580 |
| CEB-SPN Double Door, 6 way | DBSPN006CB | 615 |
| CEB-SPN Double Door, 8 way | DBSPN008CB | 685 |
| CEB-SPN Double Door, 12 way | DBSPN012CB | 765 |
| CEB-SPN Double Door, 16 way | DBSPN016CB | 1070 |
| CEB-SPN Double Door, 18 way | DBSPN018CB | 1130 |
| CEB for TPN DBs | | |
| CEB-TPN Double Door, 4 way | DBTPN004CB | 970 |
| CEB-TPN Double Door, 6 way | DBTPN006CB | 1205 |
| CEB-TPN Double Door, 8 way | DBTPN008CB | 1900 |
| CEB-TPN Double Door, 12 way | DBTPN012CB | 2445 |
| CEB-TPN Double Door, 16 way | DBTPN016CB | 2470 |
| CEB-TPE Double Door, 4 way | DBTPE004CB | 910 |
| CEB-TPE Double Door, 6 way | DBTPE006CB | 1140 |
| CEB for Horizontal PPI DBs | | |
| CEB-Horz. PPI Double Door, 4 way | DBHPI004CB | 1120 |
| CEB-Horz. PPI Double Door, 6 way | DBHPI006CB | 1270 |
| CEB-Horz. PPI Double Door, 8 way | DBHPI008CB | 1495 |
| CEB-Horz. PPI Double Door, 12 way | DBHPI012CB | 1675 |
| CEB-Horz. PPI Double Door, 16 way | DBHPI016CB | 1890 |
| CEB for Tier PPI DBs | | |
| CEB-Tier PPI Double Door, 6 way | DBTPI006CB | 1060 |
| CEB-Tier PPI Double Door, 8 way | DBTPI008CB | 1105 |
| CEB-Tier PPI Double Door, 10 way | DBTPI010CB | 1340 |
| CEB-Tier PPI Double Door, 12 way | DBTPI012CB | 1640 |
| CEB-Tier PPI Double Door, 16 way | DBTPI016CB | 1745 |
| CEB-Tier PPI Double Door, 12 way MCCB incomer | DBTPL012CB | 1660 |



| Description | Cat. Nos. | M.R.P. (₹) Per Unit |
|--|------------|---------------------------|
| CEB for VTPN DBs | | |
| CEB-VTPN Double Door, Modular Incomer | DBVTMXXCB | 755 |
| CEB-VTPN Double Door, MCCB Incomer | DBVTXXXCB | 2710 |
| CEB for FLEXI DBs | | |
| CEB for Flexi DBs with 14 Modules per Row | DBROWX14CB | 850 |
| CEB for Flexi DBs with 16 Modules per Row | DBROWX16CB | 985 |
| CEB for Phase Segregated DBs | | |
| CEB-PSG Double Door, 4 way | DBPSG004CB | 1755 |
| CEB-PSG Double Door, 6 way | DBPSG006CB | 2090 |
| CEB-PSG Double Door, 8 way | DBPSG008CB | 2315 |
| CEB-PSG Double Door, 12 way | DBPSG012CB | 2575 |
| CEB for Phase Selector DBs | | |
| CEB-Phase Selector Double Door, 4 way | DBPSR004CB | 840 |
| CEB-Phase Selector Double Door, 6 way | DBPSR006CB | 950 |
| CEB-Phase Selector Double Door, 8 way | DBPSR008CB | 1545 |
| CEB-Phase Selector Double Door, 10 way | DBPSR010CB | 1780 |
| CEB-Phase Selector Double Door, 12 way | DBPSR012CB | 1930 |

New

DBs with provision for TV/Telephone splitters [8537]

Highlights

- Distribution Boards equipped with provisions to mount TV / Telephone splitters
- Available in SPN & TPN DBs



| DB Type | Description | No. of Modules | | Cat. Nos. | M.R.P. (₹) Per Unit |
|---------------------------|-------------|--------------------|-------|--------------|---------------------------|
| | | Incomer + Outgoing | | | |
| IP 43 - Metal Door | | | | | |
| SPN | 6 way | 2 | 4 | DBSPN006DDTV | 2975 |
| | 8 way | 2 | 6 | DBSPN008DDTV | 3200 |
| | 12 way | 2 | 10 | DBSPN012DDTV | 3960 |
| | 16 way | 2 | 14 | DBSPN016DDTV | 4565 |
| | 18 way | 2 | 16 | DBSPN018DDTV | 5610 |
| TPN | 4 way | 8 | 4+4+4 | DBTPN004DDTV | 5630 |
| | 6 way | 8 | 6+6+6 | DBTPN006DDTV | 6500 |
| | 8 way | 8 | 8+8+8 | DBTPN008DDTV | 7545 |

Selection as per Type 2 Co-ordination

All our type 2 charts are available on **docWHIZ** & **ProductWhiz**.



Pl. download docWHIZ from
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or ProductWhiz from
GOOGLE PLAY STORE

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 | MPCB/MCCB | MPCB/MCCB | MPCB/MCCB | MPCB/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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- Excellent short circuit ratings up to 100kA

HENIKWON S-Line
Busbar Trunking System

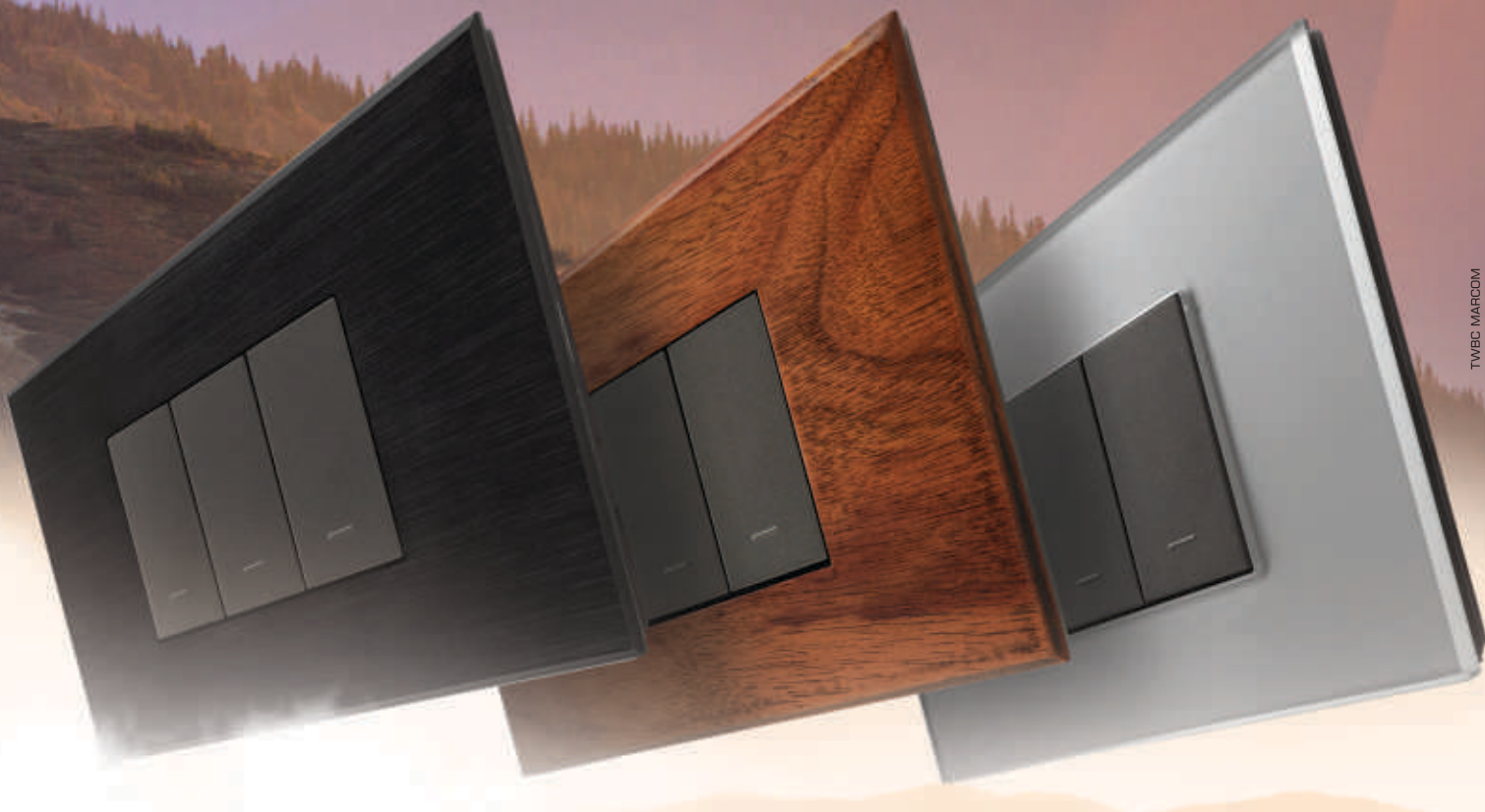
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- Built-in Brake Control
- Inbuilt PLC functionality
- Component Life Monitor
- Built-in PID
- Multi Keypad
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| | VEGA VAF+PF | New meter WL 4110 series |
| | VEGA Multifunction Model A/B/C | New meter Multifunction WL 4410/4420/4430 |
| | Quasar Multifunction | New meter Multifunction WC 4420 |
| | NOVA Basic Multifunction | New meter Basic Multifunction WL4400 / WC4400 |
| | Gemini Dual Source | New meter Dual Source WL4040 / WC4040 |
| | LCD kWh meter | New meter Energy meter WL4000 / WC4000 |
| | Acrux Counter meter | New meter WL4030 counter series |
| Mi energy DIN meter | New DIN meters 4000 series | |

Notes:

Lined area for notes with horizontal dashed lines.

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