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Good quality products and customer service, continuous improvement in processes, systems and capabilities are the hallmark of leaders in business.

The Electrical Standard Products (ESP) business and New Product Development (NPD) function of L&T Electrical & Automation have been awarded the Deming Prize 2019, by JUSE (Union of Japanese Scientists and Engineers), Japan.

The Deming Prize is one of the highest awards on Total Quality Management (TQM) in the globe. It is presented to an organization that has implemented TQM suitable for its management philosophy, scope/type/scale of business and management environment.

The TQM activities of ESP were evaluated for establishment of customer oriented objectives and strategies & top management leadership, suitable utilisation and implementation of TQM, effects obtained regarding business objectives and demonstration of organizational capabilities.

L&T's ESP is the first low voltage switchgear manufacturer in India that has received this recognition.



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**Note:**

Colour of HSN code signifies below

[Green colour : 18%\* GST]

\*Subject to change as per Govt. notification

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

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- **Servo & Motion Control Solutions**
- **Wires, Cables and Flat Cables**
- **Busbar Trunking Systems**
- **Rotary Switches**
- **Modular Remote Control Units & Indicating Units**
- **Timing Devices & Supply Monitors**
- **Cable Ducts & Load Break Switches**
- **Modular Switches and Sockets**
- **Medium Voltage AIS upto 36kV**
- **Rural Electrical Products**

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



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# Contactors

## Power Contactors

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

## 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

Optimum solution  
for your applications



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

### Features :

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

### Applications :

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

For more details please contact nearest branch.

### 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

## 3 Pole Power Contactors - Type MNX

### Features

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



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	795	10
				1 NC	CS94107	795	10
	12	30	MNX 12	1 NO	CS94108	910	10
				1 NC	CS94109	910	10
Fr 2	18	30	MNX 18	1 NO	CS94100	1035	10
				1 NC	CS94101	1035	10
	22	32	MNX 22	1 NO	CS94980	1215	10
				1 NC	CS94981	1215	10
Fr 3	25	45	MNX 25	#	CS94110	1235	10
	32	55	MNX 32	#	CS94111	2810	10
	40	55	MNX 40	#	CS94190	4280	10
Fr 4	50	85	MNX 50	#	CS97075	5475	1
	70	100	MNX 70	#	CS97076	7360	1
	80	100	MNX 80	#	CS97077	9360	1
	95	160	MNX 95	2 NO + 2 NC	CS94136	13725	1
Fr 5	110	160	MNX 110	2 NO + 2 NC	CS94137	16540	1
	140	160	MNX 140	2 NO + 2 NC	CS94138	21825	1
	185	250	MNX 185	2 NO + 2 NC	CS94139	26260	1
	225	300	MNX 225	2 NO + 2 NC	CS94140	28910	1
Fr 6	250	300	MNX 250	2 NO + 2 NC	CS94141	32610	1
	300	400	MNX 300	2 NO + 2 NC	CS90280	39315	1
	400	425	MNX 400	2 NO + 2 NC	CS94144	48145	1
	550	650	MNX 550	2 NO + 2 NC	CS94145	71700	1
	650	800	MNX 650	2 NO + 2 NC	CS96327	107295	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 - 300AAC-3
- Range 140A-300A available with conventional / universal AC/DC electronic coil version
- 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



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	1150	10
	12	32	MO 12	1 NO + 1 NC	CS94834	1300	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	3380	10
	40	50	MO 40	#	CS94569	5180	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	13040	1
	110	140	MO 110	#	CS94578	15805	1
Fr 4	140	250	MO 140	2 NO + 2 NC	CS95000	21515	1
	185	275	MO 185	2 NO + 2 NC	CS95001	25885	1
	225	275	MO 225	2 NO + 2 NC	CS95002	28490	1
Fr 4* (Electronic coil) AC/DC	140	250	MO 140	2 NO + 2 NC	CS95042	24740	1
	185	275	MO 185	2 NO + 2 NC	CS95047	29765	1
	225	275	MO 225	2 NO + 2 NC	CS95052	32765	1
Fr 5	250	400	MO 250	2 NO + 2 NC	CS94441	32135	1
	300	500	MO 300	2 NO + 2 NC	CS94440	38755	1
Fr 5* (Electronic coil) AC/DC	250	400	MO 250	2 NO + 2 NC	CS94456	36960	1
	300	500	MO 300	2 NO + 2 NC	CS94464	44565	1

## Vacuum Contactors<sup>s</sup> [8536]

### 3 Pole Vacuum Contactors - Type MVO

#### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 400 – 820AAC-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

\$ Available till stocks last



## 2 Pole Power Contactors [8536]

### 2 Pole Power Contactors - Type MNX

#### Features

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

Size	AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fr 1	9	25	MNX 9-2P	1 NO	CS90232	625	10
	12	30	MNX 12-2P	1 NO	CS90234	665	10
	18	30	MNX 18-2P	1 NO	CS90236	770	10
	22	32	MNX 22-2P	1 NO	CS90238	930	10
Fr 2	25	45	MNX 25-2P	#	CS90240	965	10
	32	55	MNX 32-2P	#	CS90241	2205	10
	40	55	MNX 40-2P	#	CS90242	3355	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	#	CS94064	10770	1
	110	160	MNX 110-2P	#	CS94065	11735	1
	140	160	MNX 140-2P	#	CS94066	15700	1
Fr 5	185	250	MNX 185-2P	2 NO + 2 NC	CS94978	20240	1
	225	300	MNX 225-2P	2 NO + 2 NC	CS94979	21455	1
	250	300	MNX 250-2P	2 NO + 2 NC	CS90301	23740	1
Fr 6	300	400	MNX 300-2P	2 NO + 2 NC	CS90346	28865	1
	400	425	MNX 400-2P	2 NO + 2 NC	CS94069	36045	1
	550	650	MNX 550-2P	2 NO + 2 NC	CS90243	58850	1
	650	800	MNX 650-2P	2 NO + 2 NC	CS90578	82210	1

## 3 Pole Power Contactors [8536]

### 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
- MDX 50-80 with universal AC/DC electronic coil



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	1590	1
	18	32	MDX 18	1 NO	CS96566	1850	1
	25	32	MDX 25	1 NO	CS96567	3105	1
Fr 2	32	56	MDX 32	#	CS96552	5550	1
	38	56	MDX 38	#	CS96553	6375	1
Fr 3	50	90	MDX 50*	#	CS91584	9570	1
	65	110	MDX 65*	#	CS91585	10825	1
	80	125	MDX 80*	#	CS91586	13040	1
	95	125	MDX 95	#	CS96557	16345	1
	110	125	MDX 110	#	CS96558	17080	1

Notes: 1) # Add-on blocks can be ordered separately.

2) \* Universal AC/DC electronic coil

3) For ordering MDX/MNX add-on aux contact blocks, please refer page No. 8

4) For ordering MDX/MNX surge suppressor and MIL kit, please refer page No. 9

5) For ordering Suffix, please refer page No. 10

6) Standard coil voltage: MDX - 24V, 48V, 110V and 220V DC.

7) Standard coil voltage: MNX 2P - 240V, 50Hz

8) For DC power ratings refer catalogue

9) For MDX side add-on and top add-on can not be mounted together

## 3 Pole Power Contactors [8536]

### 3 Pole Power Contactors - Type MX Mini

#### Features

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



MX 06

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contact	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>For AC control (Std. Coil Voltage - 24, 110, 240, 415V, 50Hz)</b>						
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
<b>For DC control (Std. Coil Voltage - 24, 110, 220V)</b>						
6A	20A	MX 06	1 NO	CS94021	1395	10
6A	20A	MX 06	1 NC	CS94022	1395	10
9A	20A	MX 09	1 NO	CS94023	1405	10
9A	20A	MX 09	1 NC	CS94024	1405	10
12A	20A	MX 12	1 NO	CS94025	1490	10
12A	20A	MX 12	1 NC	CS94026	1490	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	2970	1
	32	40	ML 2	2 NO + 2 NC	SS90701	5520	1
Fr 2	40	45	ML 3	2 NO + 2 NC	SS90721	8145	1
	70	100	ML 4	2 NO + 2 NC	SS90910	13320	1
Fr 3	110	125	ML 6	2 NO + 2 NC	SS90921	21020	1
	300	400	ML 12	2 NO + 2 NC	SS91010	47610	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	1015	10
	25	MCX 02	#	CS97010	1070	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	6125	1
Fr 3	100	MCX 22	#	CS97017	8015	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	20275	1
	255	MCX 34	2 NO + 2 NC	CS97022	21715	1
Fr 5	325	MCX 41	2 NO + 2 NC	CS97023	39605	1
	360	MCX 42	2 NO + 2 NC	CS97024	43780	1
	400	MCX 43	2 NO + 2 NC	CS97025	50775	1
	500	MCX 44	2 NO + 2 NC	CS97026	63715	1
	600	MCX 45	2 NO + 2 NC	CS97027	69510	1
	700	MCX 46	2 NO + 2 NC	CS97028	90800	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	21315	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.
- 8) MCX 01-04 available with 2NO+2NC power contacts. 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.)
<b>For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz</b>				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94018	1060	10
	MX0 31E (3 NO + 1 NC)	CS94019	1060	10
	MX0 22E (2 NO + 2 NC)	CS94020	1060	10
	MX0 13E (1 NO + 3 NC)	CS94041	1060	10
	MX0 04E (4 NC)	CS94042	1060	10
<b>For DC control std. Coil Voltage - 24, 110, 220V</b>				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94027	1420	10
	MX0 31E (3 NO + 1 NC)	CS94028	1420	10
	MX0 22E (2 NO + 2 NC)	CS94029	1420	10
	MX0 13E (1 NO + 3 NC)	CS94043	1420	10
	MX0 04E (4 NC)	CS94044	1420	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

Rated Current	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>For AC control std. Coil Voltage - 24, 110, 240, 415V, 50Hz</b>				
AC-15 4A at 415V	MO0 40E (4NO)	CS91623	775	10
	MO0 31E (3NO + 1NC)	CS91624	775	10
	MO0 22E (2NO + 2NC)	CS91625	775	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.)
<b>For DC control std. Coil Voltage - 24, 110, 220V</b>				
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	1545	1
	5	MO C5	1NO	CS96127	1650	1
	8.5	MO C8.5	1NO	CS96320	1830	1
	10	MO C10	1NO	CS96156	1985	1
	12.5	MO C12.5	1NO	CS96321	2040	1
	15	MO C15	1NO	CS90019	2845	1
	20	MO C20	1NO	CS90021	3250	1
	25	MO C25▲	1NO	CS96322	3685	1
Fr 2	30	MO C30\$	1NO	CS96148	5470	1
	40	MO C40	1NO	CS96147	9460	1
	50	MO C50	1NO	CS96324	10440	1
Fr 3	60	MO C60\$	1NO	CS96149	12235	1
	75	MO C75	1NO	CS96150	14115	1
	85	MO C85	1NO	CS96157	14810	1
	100	MO C100\$	1NO	CS96158	15750	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
- 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. 58-64**

### 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	800	10
25A	MR 11NW	CS94178	850	10
40A	MR 13	CS94992	870	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	620	10
25A	MU25-2P	CS90118	805	10
40A	MU40-2P	CS90119	1055	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 N000

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

## 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 <sup>^</sup>	465	CS94594 <sup>^</sup>	465	-	-	CS94033 <sup>^</sup>	400	-	-	SS94083 <sup>^</sup>	420
3 NO + 1 NC	CS94113 <sup>^</sup>	465	CS94595 <sup>^</sup>	465	-	-	CS94034 <sup>^</sup>	400	-	-	SS94084 <sup>^</sup>	420
2 NO + 2 NC	CS94114 <sup>^</sup>	465	CS94596 <sup>^</sup>	465	CS96569 <sup>~</sup>	540	CS94035 <sup>^</sup>	400	-	-	SS94085 <sup>^</sup>	420
1 NO + 3 NC	CS94115 <sup>^</sup>	465	CS94597 <sup>^</sup>	465	CS90906 <sup>~</sup>	540	CS94036 <sup>^</sup>	400	-	-	SS94086 <sup>^</sup>	420
4 NC	CS94116 <sup>^</sup>	465	CS94598 <sup>^</sup>	465	-	-	CS94037 <sup>^</sup>	400	-	-	SS94087 <sup>^</sup>	420
2 NO	CS94117 <sup>^</sup>	310	CS94591 <sup>^^</sup>	310	-	-	CS94030 <sup>^</sup>	260	CS90692 <sup>^</sup>	310	SS94080 <sup>^</sup>	290
1 NO + 1 NC	CS94118 <sup>^</sup>	310	CS94592 <sup>^^</sup>	310	CS96568 <sup>~</sup>	315	CS94031 <sup>^</sup>	260	CS90693 <sup>^</sup>	310	SS94081 <sup>^</sup>	290
2 NC	CS94119 <sup>^</sup>	310	CS94593 <sup>^^</sup>	310	-	-	CS94032 <sup>^</sup>	260	CS90694 <sup>^</sup>	310	SS94082 <sup>^</sup>	290
1 NO	CS94120 <sup>^</sup>	155	CS94585 <sup>^^</sup>	155	CS96586 <sup>~</sup>	175	-	-	CS90695 <sup>^</sup>	155	SS94715 <sup>^</sup>	145
1 NC	CS94121 <sup>^</sup>	155	CS94586 <sup>^^</sup>	155	-	-	-	-	CS90696 <sup>^</sup>	155	SS94716 <sup>^</sup>	145

# 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 <sup>^</sup>	465	CS94201 <sup>^</sup>	495	CS94201 <sup>^</sup>	495	CS94580 <sup>^</sup>	465
First Right	1 NO + 1 NC	CS94221 <sup>^</sup>	465	CS94202 <sup>^</sup>	495	CS94202 <sup>^</sup>	495	CS94581 <sup>^</sup>	465
Second Left	1 NO + 1 NC	-	-	-	-	CS94203 <sup>^</sup>	495	CS94582 <sup>^</sup>	465
Second right	1 NO + 1 NC	-	-	-	-	CS94204 <sup>^</sup>	495	CS94583 <sup>^</sup>	465

**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 <sup>^</sup>	565	CS95033 <sup>^</sup>	565	CS91208 <sup>^</sup>	565	ST94985 <sup>^</sup>	650
First Right	1 NO + 1 NC	CS94206 <sup>^</sup>	565	CS95034 <sup>^</sup>	565	CS91209 <sup>^</sup>	565		
Second Left	1 NO + 1 NC	CS94207 <sup>^</sup>	565	CS95035 <sup>^</sup>	565	CS95035 <sup>^</sup>	565	-	-
Second right	1 NO + 1 NC	CS94208 <sup>^</sup>	565	CS95036 <sup>^</sup>	565	CS95036 <sup>^</sup>	565	-	-

# 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 <sup>^</sup>	645	-	-
Right	1 NO + 1 NC	-	-	SS91474 <sup>^</sup>	680

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 <sup>^</sup>	210
Side mounted auxiliary contact block	MU 1/MU 2	1 NO + 1 NC	SS94072 <sup>~</sup>	175
		1NC	SS94074 <sup>~</sup>	155

~ Standard Packing is 1 ^Standard 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 <sup>*</sup>	365	10
MNX 9 - 40 / MCX 01 - 04 (S1)	CS94166 <sup>*</sup>	370	10
MNX 50 - 80 / MCX 11 - 23 (S3)	CS94163 <sup>*</sup>	405	10
MNX 95 - 250 / MCX 32 - 34 (S4)	CS94164 <sup>#</sup>	1340	10
MNX 300 - 400 / MCX 41 - 44 (S6)	CS94165 <sup>#</sup>	1810	10
MDX 50 - 110	CS96571 <sup>**</sup>	345	10

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

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	365	10
MO 9 - 110 <sup>*</sup>	CS94584	515	10
MDX 9 - 38	CS96572	390	1
MDX 50 - 110	CS96573	1205	1
MNX 9 - 40	CS94126	380	10
MNX 50 - 80	CS94197	1900	1
MNX 95 - 140	CS94198	2955	1
MNX 185 - 250	CS94199	3365	1
MNX 300 - 650	CS94200	3815	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



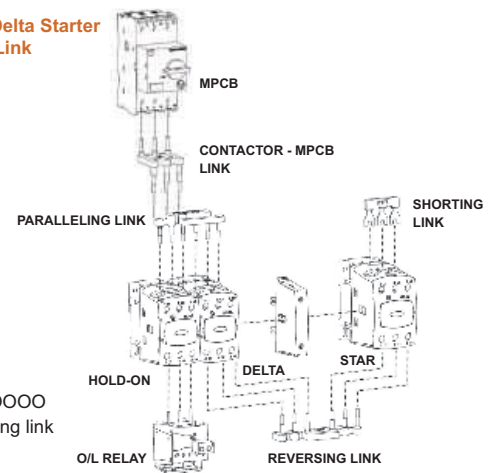
Contactor MPCB Link



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		

Ordering suffix for Electronic coil Contactor		
AC / DC control		
Voltage (V)	Suffix	Contactor
20-48	J000	MDX 50-80
60-110	A000	MDX 50-80
110-240	B000	MDX 50-80 & MO 140-300
240-415	D000	MO 140-300

## Note:

- 1) \* For MX DC, MDX, MX0 DC & MN0 DC
- 2) For other coil voltages please contact nearest branch office

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~~	650	CS94009 ^	495
MU 1H	CS90624~~	860		
MU 2	CS94011~~	1160		
MU 3	CS90612~~	1475		
ML 1.5	SS95305^	1605	SS90873 ^	665
ML 2	SS95307^	2615	SS90545 ^	1115
ML 3	SS95309^	4400		
ML 4	SS95311^	6855	SS91258 ~	2125
ML 6	SS95313^	12075		
ML 10	SS95315~	24590	SS91011 ~	4790
ML 12	SS95317~	28225		
MR	-	-	CS94102 ^	440
MU16-2P	CS90217^	210	CS90793 ^	270
MU25-2P	CS90218^	275		
MU40-2P	CS90219^	405		
MO 0 AC	-	-	CS94841 ^	475
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~	485
ML 2/ ML 3	ST23866~	660
ML 4/ ML 6	ST28735~	1200
Combination coil with timer		
Type	Cat. No.	M.R.P. (₹) Per Unit
ML 2	SS90650~	2275

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^~	2990		
		MO 50	CS96387^~	3030		
		MO 60	CS96388^~	3740		
		MO 70	CS96389^~	4360		
		MO 80	CS96390^~	5880	CS96318^	1500
		MO 95	CS96391^~	6950		
		MO 110	CS96392^~	8920	CS96319^	2550
		MO 140	CS90357~	12110		
		MO 185	CS90358~	13580	CS90356~	5345
		MO 225	CS90359~	15425		
		MO 250	CS94444~	18000	CS94442~	7970
		MO 300	CS94443~	21075		
		MO 140 (electronic coil)	CS90357~	12110	CS90855~	6135
		MO 185 (electronic coil)	CS90358~	13580		
		MO 225 (electronic coil)	CS90359~	15425		
		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~	6950	CS94196~	2550
		MNX 110	CS94154~	8920		
		MNX 140	CS94155~	12110	CS94194~	4680
		MNX 185	CS94156~	13580		
		MNX 225	CS94157~	15425		
		MNX 250	CS90310~	18000	CS94195~	5345
		MNX 300	CS90283~	21075		
		MNX 400	CS94161~	28995	CS94193~	15845
		MNX 550	CS94162~	38230		
		MNX 650	CS96336~	59175		
MCX Contactors	MCX 01-04	-	-	CS94105^	475	
	MCX 11	CS94077^	1715	CS94009^	495	
	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^	11570		
		MCX 34	CS94084^	12545		
		MCX 41	CS94295~	22110	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)	<b>Direct Mounting on MNX 9 - 40</b>			
	0.2 - 0.33	SS941410OEO	1265	10
	0.3 - 0.5	SS941410OGO	1265	10
	0.45 - 0.75	SS941410OJO	1265	10
	0.6 - 1	SS941410OKO	1265	10
	0.9 - 1.5	SS941410OMO	1275	10
	1.4 - 2.3	SS941410OPO	1275	10
	2 - 3.3	SS941410OQO	1275	10
	3 - 5	SS941410OSO	1275	10
	4.5 - 7.5	SS941410OUO	1275	10
	6 - 10	SS941420OVO	1275	10
	9 - 15	SS941420OBO	1295	10
	14 - 23	SS941440ODO	1425	10
	20 - 33	SS941450OEO	2120	10
24 - 40	SS941450OFO	2260	10	
MN 5 (Directly Operated)	<b>Direct Mounting on MNX 50 - 80</b>			
	9 - 15	SS941350OBO	2560	10
	14 - 23	SS941350ODO	2560	10
	20 - 33	SS941360OEO	2630	10
	30 - 50	SS941360OGO	2975	10
	36 - 60	SS941360OTO	3390	10
	45 - 75	SS941370OJO	3710	10
66 - 110	SS941370OKO	4230	10	
MN 12 (CT Operated)	<b>Separate Mounting</b>			
	28 - 46.5	SB942110OGO	6395	1
	42 - 69	SS941380OHO	6395	1
	60 - 100	SS941380OKO	6395	1
	90 - 150	SS941380OMO	6395	1
	135 - 225	SS941380OPO	7925	1
	180 - 300	SS941390OQO	8340	1
270 - 450	SS941390ORO	9995	1	
MN 12L # (CT Operated)	<b>Separate Mounting</b>			
	42 - 69	SS941270OHO	11655	1
	60 - 100	SS941270OKO	11655	1
	90 - 150	SS941270OMO	11655	1
	135 - 225	SS941270OPO	11655	1
	180 - 300	SS941270OQO	11655	1
340 - 570	SS941270OSO	11655	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)	<b>Direct Mounting on MO 9 - 45</b>			
	0.23 - 0.41	CS963550OFO	1545	10
	0.31 - 0.55	CS963550OGO	1545	10
	0.55 - 0.85	CS963550OJO	1545	10
	0.78 - 1.2	CS963550OLO	1545	10
	1.2 - 2.0	CS963550ONO	1545	10
	1.9 - 2.8	CS963550OPO	1555	10
	2.4 - 3.6	CS963550OQO	1555	10
	3.5 - 5.2	CS963550OSO	1555	10
	4.6 - 6.7	CS963550OTO	1555	10
	6.7 - 9.7	CS963550OVO	1555	10
	8.5 - 12.5	CS963550OAO	1580	10
	12.5 - 18.5	CS963560OCO	1580	10
	17 - 25.5	CS963560ODO	1780	10
	25 - 37	CS963560OEO	2765	10
	35 - 45	CS963560OGO	2825	10
RTO - 2 (Directly Operated)	<b>Direct Mounting on MO 50 - 70</b>			
	5 - 7.5	CS963660OUO	3130	1
	7 - 11	CS963660OVO	3130	1
	10.5 - 16	CS963660OBO	3130	1
	15 - 21	CS963660OCO	3130	1
	20 - 31	CS963660OEO	3235	1
	30 - 43	CS963660OFO	3550	1
	40 - 57	CS963660OSO	4295	1
50 - 75	CS963670OJO	4695	1	
RTO - 3 (Directly Operated)	<b>Direct Mounting on MO 80 - 110</b>			
	23 - 30	CS908730OEO	5195	1
	29 - 38	CS963030OQO	5295	1
	37 - 49	CS963040OGO	5565	1
	47 - 62	CS963120OTO	5620	1
	60 - 78	CS963130OJO	6555	1
	75 - 110	CS963140OKO	7515	1
RTO - 4 (CT Operated)	<b>Separate Mounting</b>			
	23.4 - 36	CS970960OGO	8080	1
	36 - 60	CS970960OJO	8080	1
	57 - 84	CS970960OKO	8080	1
	72 - 108	CS970960OLO	8080	1
	105 - 156	CS970960OMO	8080	1
	138 - 201	CS970960ONO	10015	1
	201 - 291	CS970960OQO	10230	1
	255 - 375	CS970960ORO	12635	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	2900	MPR200BB010	2900
	2 - 5.5		MPR201BE020	2900	MPR201BB020	2900
	4 - 11		MPR202BE040	3500	MPR202BB040	3500
	8 - 22		MPR203BE080	3500	MPR203BB080	3500
	16 - 44		MPR204BE160	4100	MPR204BB160	4100
	32 - 88		MPR205BE320	4100	MPR205BB320	4100

**Note :** MPR200nX/ MPR300 must sense Line current in case of Star-Delta Starter. Please refer page 66 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	6200	MPR300BB010	6200
	2-5.5	MPR301BE020	6200	MPR301BB020	6200
	4-11	MPR302BE040	6800	MPR302BB040	6800
	8-22	MPR303BE080	6800	MPR303BB080	6800
	16-44	MPR304BE160	7400	MPR304BB160	7400
	32-88	MPR305BE320	7400	MPR305BB320	7400

**Note :** For comprehensive Relays portfolio kindly refer page No. 65

# 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)	<b>Direct Mounting on ML 1.5 Contactors</b>			
	0.15 - 0.25	SS918580ODO	2090	10
	0.25 - 0.4	SS918580OFO	2090	10
	0.4 - 0.65	SS918580OHO	2090	10
	0.6 - 1	SS918580OKO	2090	10
	1 - 1.6	SS918580OMO	2090	10
	1.5 - 2.5	SS918580OPO	2090	10
	2.5 - 4	SS918580ORO	2090	10
	4 - 6.5	SS918580OTO	2090	10
	6 - 10	SS918580OVO	2090	10
	10 - 16	SS918580OBO	2090	10
	ML 2 / ML 3 (Directly Operated)	<b>Direct Mounting on ML 2/3 Contactors</b>		
9 - 14		SS918590OAO	3085	10
13 - 21		SS918590OCO	3085	10
20 - 32		SS918590OEO	3085	10
	28 - 42	SS918590OFO	3085	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)	<b>MU1 (3 Pole)</b>			
	4 - 6.5	SS96557OOTO	980	1
	6 - 10	SS96557OOVO	980	1
	<b>MU2 (3 Pole)</b>			
	9 - 14	SS95979OOAO	1115	1
	13 - 21	SS95979OOCO	1185	1
	15 - 25	SS95979OODO	1290	1
	20 - 32	SS95979OOEO	1445	1
	24 - 38	SS95979OOGO	1585	1
	28 - 42	SS95979OOF0	1715	1
Direct Mounting on MU Contactor	<b>MU 2P (2 Pole)</b>			
	1 - 1.6A	CS90207OOMO	490	1
	1.5 - 2.5A	CS90207OOPO	490	1
	2.5 - 4A	CS90207OORO	490	1
	4 - 6.5A	CS90207OOTO	490	1
	6 - 10A	CS90207OOVO	490	1
	9 - 14A	CS90207OOAO	490	1
	11 - 18A	CS90207OOCO	560	1
	13 - 22A	CS90207OODO	560	1
	16 - 26A	CS90207OOBO	560	1
20 - 32A	CS90207OOEO	705	1	
26 - 40A	CS90207OOF0	705	1	

# Accessories for Thermal Overload Relays [8538]

## Accessories for Thermal Overload Relays



Relay Mounting Kit    Kit for Mounting MN5 Relay    Din Rail Mounting Kit MN2 Relay

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Push button extn. unit for MN 2 Relays	SS94968O000	45	100
Kit for Mounting MN 2 Relay on ML 1.5 contactor	SS94701O000	165	50
Kit for Mounting MN 2 Relay separately (Direct Mounting Type)	SS94700O000	165	50
Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor	SS94638O000	265	20
Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor	SS94151O000	175	20
Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor	SS94152O000	230	20
DIN Rail Mounting Kit Relay on MN 2 Relay	SS91887O000	125	50

## Relay Reset Cord for MN Relay



Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MN Relay reset cord - 400mm	SB94207O000	600	1
MN Relay reset cord - 650mm	SB94208O000	620	1
MN Relay reset cord - 900mm	SB94209O000	640	1
MN Relay reset cord - 1200mm	SB94210O000	715	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	225	1
RTO-2 Relay Separate Mounting Kit	CS96306O000	525	1
RTO-3 Relay Separate Mounting Kit	CS96307O000	750	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	600	1
RTO Relay reset cord - 650mm	CS90942O000	620	1
RTO Relay reset cord - 900mm	CS90943O000	640	1
RTO Relay reset cord - 1200mm	CS90944O000	715	1
REO Relay Reset Cord - 400mm	CS90425O000	600	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

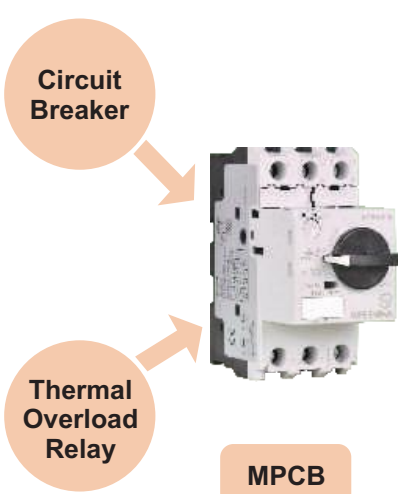
## Rotary Type

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

## Rotary Type

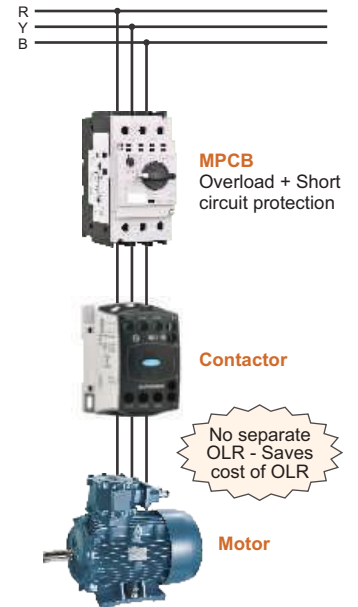
- MOG-H1: upto 32A
- MOG-H2: 32A-63A
- Short circuit + Overload protection
- Icu=100kA upto 13A & Icu=50kA from 16A-63A

- ✓ Short circuit protection
- ✓ Over current protection



**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	2055	1
0.25	0.06	0.16 - 0.25	3.3	ST418900000	2055	1
0.40	0.09	0.25 - 0.40	5.2	ST418910000	2055	1
0.63	0.12	0.40 - 0.63	8.2	ST418920000	2365	1
1.00	0.25	0.63 - 1.00	13	ST418930000	2365	1
1.60	0.55	1.00 - 1.60	20.8	ST418940000	2365	1
2.50	0.75	1.60 - 2.50	32.5	ST418950000	2365	1
4.00	1.50	2.50 - 4.00	52	ST418960000	2450	1
6.30	2.20	4.00 - 6.30	81.9	ST418970000	2450	1
10.00	4.00	6.30 - 10.00	130	ST418980000	2550	1
13.00	5.40	9.00 - 13.00	169	ST418990000	2950	1
16.00	7.50	11.00 - 16.00	208	ST419000000	3135	1
20.00	9.00	14.00 - 20.00	260	ST419010000	3360	1
25.00	12.50	19.00 - 25.00	325	ST419020000	3535	1
32.00	15.00	24.00 - 32.00	416	ST419030000	6280	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	2710	1
0.25	0.06	0.16 - 0.25	3.3	ST419050000	2710	1
0.40	0.09	0.25 - 0.40	5.2	ST419060000	2710	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	3095	1
2.50	0.75	1.60 - 2.50	32.5	ST419100000	3095	1
4.00	1.50	2.50 - 4.00	52	ST419110000	3125	1
6.30	2.20	4.00 - 6.30	81.9	ST419120000	3155	1
10.00	4.00	6.30 - 10.00	130	ST419130000	3390	1
13.00	5.40	9.00 - 13.00	169	ST419140000	3725	1
16.00	7.50	11.00 - 16.00	208	ST419150000	4115	1
20.00	9.00	14.00 - 20.00	260	ST419160000	4410	1
25.00	12.50	19.00 - 25.00	325	ST419170000	4495	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	2370	1
0.25	0.06	3.3	ST419240000	2370	1
0.40	0.09	5.2	ST419250000	2370	1
0.63	0.12	8.2	ST419260000	2935	1
1.00	0.25	13	ST419270000	2935	1
1.60	0.55	20.8	ST419280000	2935	1
2.50	0.75	32.5	ST419290000	2935	1
4.00	1.50	52	ST419300000	2935	1
6.30	2.20	81.9	ST419310000	2935	1
10.00	4.00	130	ST419320000	2995	1
13.00	5.40	169	ST419330000	2995	1
16.00	7.50	208	ST419340000	3030	1
20.00	9.00	260	ST419350000	3275	1
25.00	12.50	325	ST419360000	3735	1
32.00	15.00	416	ST419370000	6140	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	9070	1
40.00	20.00	28.00 - 40.00	520	ST419200000	9730	1
50.00	25.00	35.00 - 50.00	650	ST419210000	12025	1
63.00	34.00	45.00 - 63.00	819	ST419220000	12355	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	8325	1
40.00	20.00	520	ST419390000	8480	1
50.00	25.00	650	ST419400000	8760	1
63.00	34.00	819	ST419410000	8840	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	560	1
L	Auxiliary Contact Left side mtg. 1NO + 1NC	ST419450000	560	1
L	Auxiliary Contact Left side mtg. 2NC	ST419460000	560	1
F2	Trip Alarm Contact Front mtg. 1NO	ST419470000	720	10
F2	Trip Alarm Contact Front mtg. 1NC	ST419480000	720	10
L	Auxiliary + Alarm Left side mtg. 2NO	ST419490000	770	1
L	Short circuit alarm Left side mtg. 1NO + 1NC	ST419500000	770	1
R	Shunt trip 24V DC	ST419510000	1500	1
R	Shunt trip 110V, 50Hz	ST419520000	1580	1
R	Shunt trip 230V, 50Hz	ST429520000	1580	1
R	Under Voltage release, 110V, 50Hz	ST419530000	1580	1
R	Under Voltage release, 415V, 50Hz	ST419540000	1580	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.)
<b>Connecting Busbar link</b>			
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

# Motor Starters [8536]

## Direct-on-Line Starters

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



MN 16



MN 45



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					
10.0	7.5	9 - 15	MN 16 DOL	SS94351	3310	1
15.0	11.0	14 - 23	MN 25 DOL	SS94352	5060	1
20.0	15.0	20 - 33	MN 32 DOL	SS94353	8165	1
30.0	22.5	30 - 50	MN 45 DOL	SS94017	13965	1
45.0	33.5	45 - 75	MN 65 DOL	SS94018	19120	1
30.0	22.5	28 - 42	ML 3 DOL	SS90722	17160	1

## Fully Automatic Star-Delta Starters [8536]



MN 16F

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

Max. Motor Output at 415V, 3-Ph		Relay Max. Range (A)	Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
HP	kW					
17.5	13.0	9 - 15	MN 16 FASD	SS94362	11145	1
30.0	22.5	14 - 23	MN 25 FASD	SS94364	12465	1
40.0	30.0	20 - 33	MN 32 FASD	SS94366	20505	1
50.0	37.5	30 - 50	MN 45 FASD	SS94021	32930	1
75.0	55.0	45 - 75	MN 65 FASD	SS94022	54570	1
90.0	67.5	45 - 75	MN 80 FASD	SS94705	59650	1
150.0	110.0	66 - 110	MN 110 FASD	SS94706	78075	1
180.0	132.0	90 - 150	MN 140 FASD	SS94707	81725	1
50.0	37.5	28 - 42	ML3 FASD	SS90730	41370	1
75.0	55.0	45 - 75	ML4 FASD	SS90913	70895	1
125.0	90.0	66 - 110	ML6 FASD	SS90923	116240	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	105	20
MN DOL/FASD Push Button	SS939410000	175	10

## Timers

### Electronic Timers Type ST 100 [9107]



ST 100

Description	Cat. No.	M.R.P. (₹) Per Unit	Std Pkg. (Nos.)
<b>240 / 360 / 415V, 50Hz for</b>			
3 - 30 secs.	ST803280000	1430	1
12 - 120 secs.	ST803290000	1430	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.

## Ordering Suffix for ML & MN Starters

Coil Voltages	Relay Range (A)	
	ML	MN
B - 240 V	A : 9 - 14	B : 9 - 15
C - 360 V	B : 10 - 16	D : 14 - 23
D - 415 V	C : 13 - 21	E : 20 - 33
P - 440 V	E : 20 - 32	G : 30 - 50
	F : 28 - 42	J : 45 - 75
	G : 30 - 50	K : 66 - 110
	J : 45 - 75	Q : 2 - 3.3
	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	

# DIGITAL SINGLE PHASE CONTROLLER

*The power of flexibility and versatility*



## Basic version

## FEATURES

## Auto version

- |  |                                  |
|--|----------------------------------|
| ● Microcontroller Based Solution               | ● All features of Basic Version  |
| ● Dry Run Protection                           | ● Inbuilt Water Level Controller |
| ● UV/OV Protection                             | ● Water tank status indication   |
| ● Current, Voltage Metering & Periodic Display | ● WLC bypass feature             |
| ● Start & Run Capacitor                        | ● Auto start capacitor switching |
| ● Bypass Mode (For bore cleaning)              | ● Power on delay                 |
| ● Off Timer                                    | ● Dry run auto reset timer       |
| ● Digital Display                              | ● Auto & Manual mode             |
| ● Capacitor cut-off                            | ● RTC based daily ON/OFF timer   |
| ● Water Tank Status Indication                 | ● Timer count down display       |
| ● Automatic Current Setting                    | ● Cyclic timer                   |
|  | ● Timer Compensation             |

• Refer Rural Electrical Product Pricelist for Agricultural Electrical Product Range



### 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

# 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

Description	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Enclosed ATS, Frame 2, 125A	125A	<b>CK90161BSOO</b>	<b>58000</b>	1
Enclosed ATS, Frame 2, 160A	160A	<b>CK90162BSOO</b>	<b>62810</b>	1
Enclosed ATS, Frame 2, 200A	200A	<b>CK90163BSOO</b>	<b>65660</b>	1
Enclosed ATS, Frame 3, 250A	250A	<b>CK90164BSOO</b>	<b>79880</b>	1
Enclosed ATS, Frame 3, 315A	315A	<b>CK90165BSOO</b>	<b>83180</b>	1
Enclosed ATS, Frame 4, 400A	400A	<b>CK90166BSOO</b>	<b>98260</b>	1
Enclosed ATS, Frame 4, 630A	630A	<b>CK90167BSOO</b>	<b>108080</b>	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
- Enclosure version does not require separate cable gland box
- Terminal Shrouds, Source Separator and Phase Barriers included
- Staggered Terminals make cable termination easy
- Suitable for horizontal as well as vertical mounting



Open execution



SS enclosure



Motorised Changeover



Manual CO with fuse mounting kit\*

### 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

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	6530	-	-	1		
	63	CO1-63	CO10630000D ▲	4420							
	100	CO1-100	CO110000000	5930			CO110000S00	8330		-	-
	100	CO1-100	CO11000000D ▲	5480							
	125	CO1-125	CO112500000	7400						CO112500S00	10500
Fr 2	125	CO2-125	CO212500000	9020	CO212500S00	12140	CK90161B000	28850	1		
	160	CO2-160	CO216000000	9750	CO216000S00	13550	CK90162B000	33630	1		
	200	CO2-200	CO22000000A	11840	CO220000S00	15670	CK90163B000	34990	1		
Fr 3	250	CO3-250	CO325000000	17130	CO325000S00	21780	CK90164B000	44140	1		
	315	CO3-315	CO331500000	18040	CO331500S00	22830	CK90165B000	44930	1		
Fr 4	400	CO4-400	CO440000000	26590	CO440000S00	33270	CK90166B000	56580	1		
	630	CO4-630	CO463000000	31170	CO463000S00	38570	CK90167B000	61990	1		
Fr 5	630	CO5-630 <sup>α</sup>	CO563000000 <sup>α</sup>	34300	-	-	CK90168B000	65580	1		
	800	CO5-800	CO580000000	46340	CO580000S00	57520	CK90169B000	92540	1		
	1000	CO5-1000	CO510000000	78860	CO510000S00	102030	CK90170B000	120280	1		
Fr 6	1250	CO6-1250	CO612500000	103760	-	-	CK90081B000	148600	1		
	1600	CO6-1600	CO616000000	123860	-	-	CK90082B000	174480	1		
	2000	CO6-2000	CO620000000	159530	-	-	CK90083B000	201060	1		

▲ Direct handle version # Sheet Steel Enclosure version is with CO with extended handle \* Fuse mounting kit to be purchased separately. Refer below table  
<sup>α</sup> Fuse mounting kit CX56300000D 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	320	1
	CO2-(125-200A)	CX200020000	595	1
	CO3-(250-315A)	CX300020000	860	1
	CO4-(400-630A)	CX400020000	915	1
	CO5-(630-1000A)	CX500020000	1040	1
	CO6-(1250-2000A)	CX600020000	1110	1
Operating Handle Kit (handle + shaft + center bush + bush clip)	CO1-(63-125A)	CX100010000	525	1
	CO2-(125-200A)	CX300010000	880	1
	CO3-(250-315A)	CK903920000	1145	1
	CO4-(400-630A)	CX400010000	1170	1
	CO5-(630-1000A)	CX500010000	1275	1
Operating Handle	CO6-(1250-2000A)	CX600010000	1385	1
Castell Type Lock <sup>§</sup>	CO-(125-1000A)	CX400040000	1680	1
	CO6-(1250-2000A)	CX600040000	1680	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	885	1
	C/O Frame 4 & 5 (400-1000A)	CK903780000	1170	1
	C/O Frame 6 (1250-2000A)	CK906450000	1390	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	14440	1	
	AuXC-2000 Controller with wire harness	AuXC-2000 <sup>β</sup>	ATC20000000	21315	1
			CK900990000	2595	1
Control Accessories	Illuminated Push Button assembly with Wire harness	CK901950000	2440	1	

β Chapter ID [9032]

## Fuse Mounting Kit [8538]

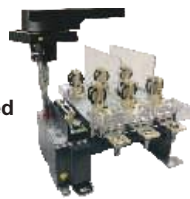


Description	Suitable fuse-link	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fuse Mounting Kit	HF 14x51	CO1-63	CX106300OCO	1285	1
	HN Size 000	CO2-125	CX212500ODO	3135	1
	HN Size 00	CO2-160	CX216000ODO	4160	1
	HN Size 1	CO3-250	CX325000ODO	5695	1
	HN Size 1	CO3-315	CX331500ODO	5960	1
	HN Size 2	CO4-400	CX440000ODO	8695	1
	HN Size 3	CO5-630	CX563000ODO	18780	1
	HN Size 3	CO5-800	CX580000ODO	20980	1

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

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

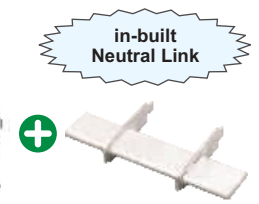
- Range 32A to 800A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaft for depth adjustment
- TPN SDF has isolable neutral
- 4P SDF has Switched Neutral Pole and is 100% rated
- Door interlock & padlock facility



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



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



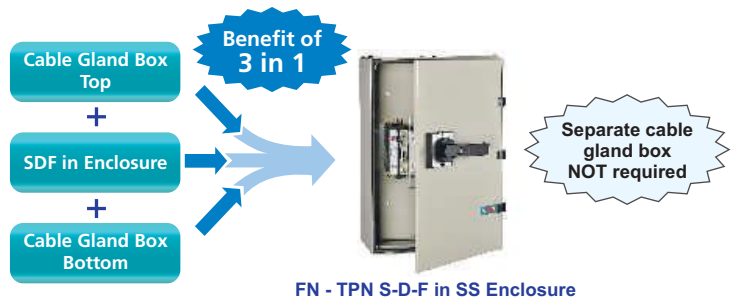
Size	Rated Current (A)	Suitable HRC fuse-link		Open Execution Type FN (TPN) S-D-F suitable for DIN fuse-link			Std. Pkg. (Nos.)	Open Execution Type FN S-D-F suitable for DIN fuse-link (4P)			Std. Pkg. (Nos.)
		Type	Range (A)	Type	Cat. No.	M.R.P. (₹) Per Unit		Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	HF Size 14x51	2 to 32	FN 32 TPN / FP	SK95518	1900	1	FN 32 TPN/FP	SK95518	1900	1
	32	HF Size 14x51	2 to 32	FN 32 TPN / FP CE*	SK95703*	1720	1	FN 32 TPN/FP CE*	SK95703	1720	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP	SK95421	2620	1	FN 63 TPN/FP	SK95421	2620	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK95704*	2360	1	FN 63 TPN/FP CE*	SK95704	2360	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK95568	5450	1	FN 100 FP	SK90496	6390	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK95001	7130	1	FN 125 FP	SK90497	8270	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK95713	7740	1	FN 160 FP	SK90498	9140	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK95418	9970	1	FN 200 FP	SK90471	11380	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK95642	11780	1	FN 250 FP	SK90472	13180	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK95461	14565	1	FN 315 FP	SK90473	15960	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK95481	17630	1	FN 400 FP	SK90480	19570	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK95521	28370	1	FN 630 FP	SK90481	30600	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK95679	30780	1	FN 800 FP	SK90482	34230	1

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

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

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

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



FN - TPN S-D-F in SS Enclosure

Size	Rated Current (A)	Suitable HRC fuse-link		In Sheet Steel Enclosure Type FN (TPN) S-D-F suitable for DIN fuse-link			Std. Pkg. (Nos.)
		Type	Range (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	HF Size 14x51	2 to 32	FN 32 TPN / FP CE*	SK90483*	4380	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK90484*	5130	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK90485	8750	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK90486	10360	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK90487	11090	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK90488	14740	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK90489	16990	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK90490	20140	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK90491	23500	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK90492	37670	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK90493	40430	1

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

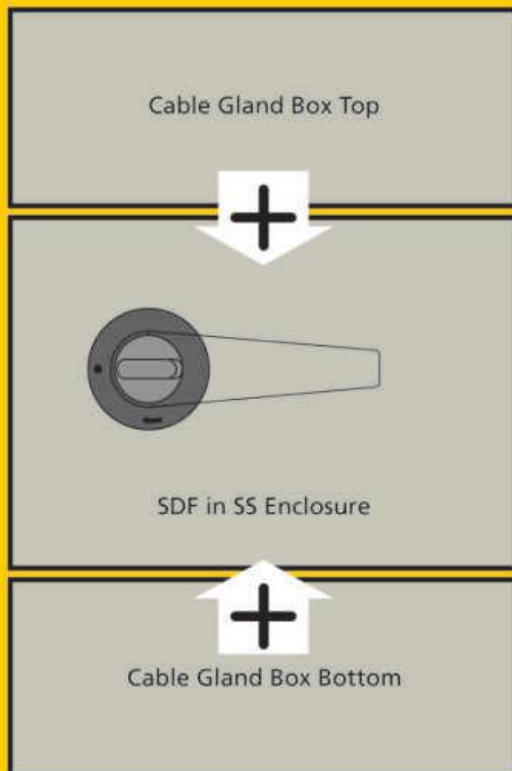
### Notes:

- 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. 28 for Switch-Disconnectors

# 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...

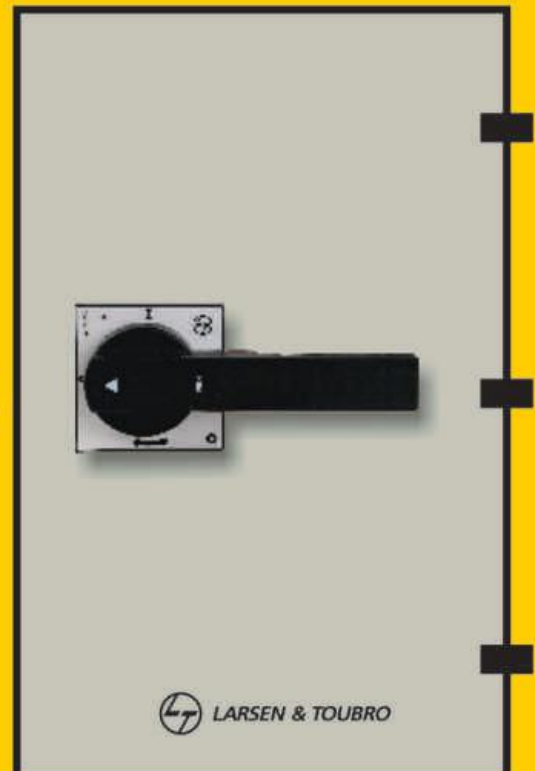
Get the benefits of **3**



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.



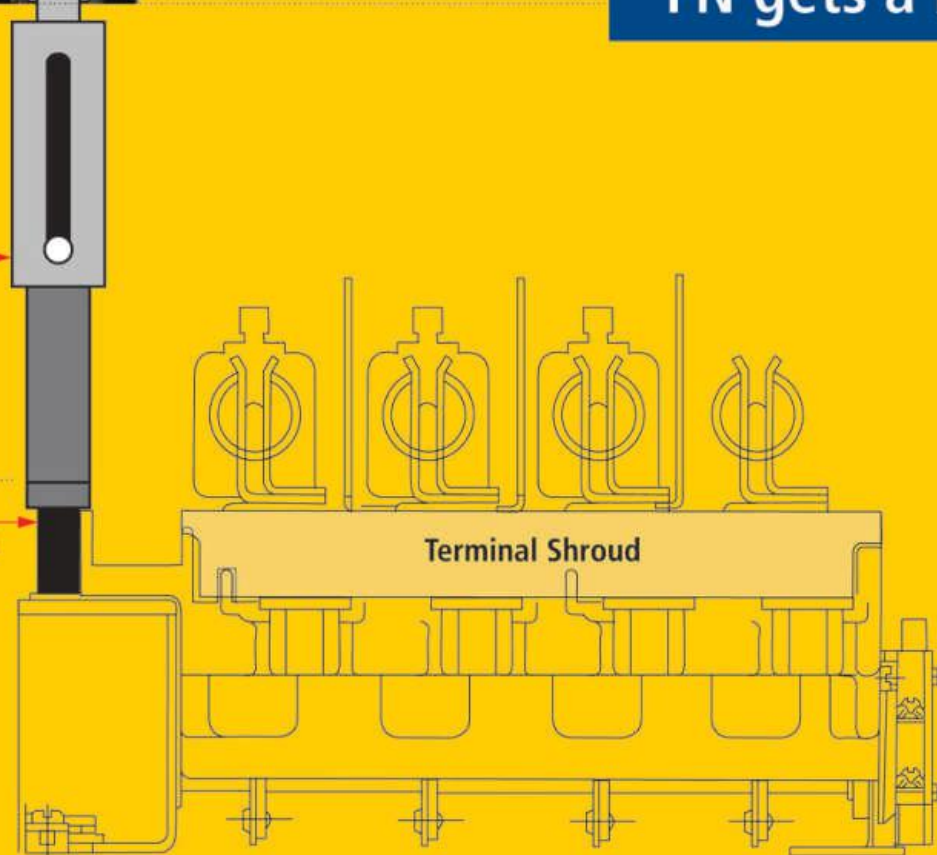


**FN gets a Facelift!**

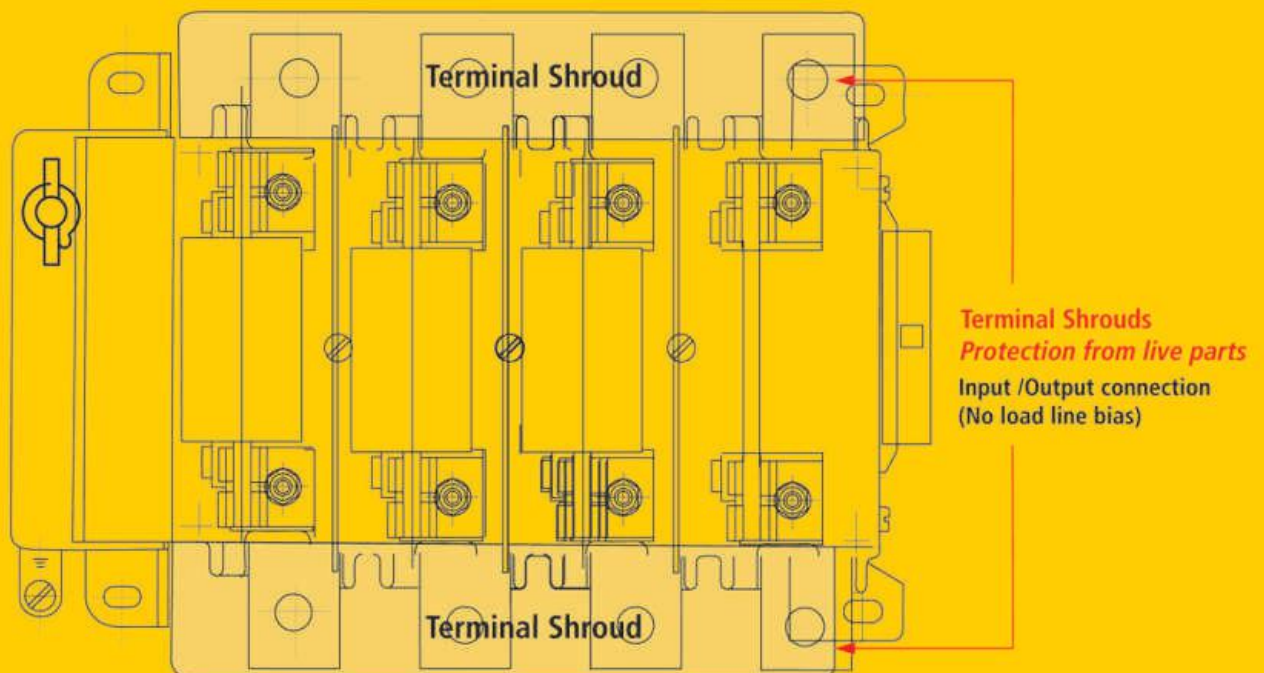
Telescopic Shafts :  
Flexibility for fine  
adjustment in depth

Slide

Adjustable telescopic shaft



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



## Type 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
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaft for depth adjustment
- Door interlock & padlock facility



FN 2P S-D-F

Size	Rated Current (A)	Suitable fuse-link type	Type FN (2P) S-D-F suitable for DIN fuse-link			Std. Pkg (Nos.)
			Open Execution			
			Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	HF Size 14x51	FN 32 2P	SK95594	1560	1
	63	HF Size 14x51	FN 63 2P	SK95595	2110	1
Fr 2	100	HN Size 000/00	FN 100 2P	ST35086	4290	1
	125	HN Size 000/00	FN 125 2P	ST35087	5460	1
	160	HN Size 000/00	FN 160 2P	ST35088	5850	1
Fr 3	200	HN Size 0	FN 200 2P	ST35089	7540	1
	250	HN Size 1	FN 250 2P	ST31674	9330	1
Fr 4	315	HN Size 1	FN 315 2P	ST38930	12070	1
	400	HN Size 2	FN 400 2P	ST31676	14000	1
Fr 5	630	HN Size 3	FN 630 2P	ST35090	23030	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
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaft for depth adjustment
- Door interlock & padlock facility



FN - TPN S-D-F

Size	Rated Current (A)	Suitable fuse-link type	Type FN (TPN) S-D-F suitable for BOLTED fuse-link			Std. Pkg (Nos.)
			Open Execution			
			Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	A1L	FN 32 TPN	SK95653	1800	1
	63	A1L	FN 63 TPN	SK95651	2530	1
Fr 2	100	A4	FN 100 TPN	SK95570	5120	1
	125	A4	FN 125 TPN	SK95009	6630	1
	160	A4	FN 160 TPN	SK95714	7350	1
Fr 3	200	B1 / B2	FN 200 TPN	SK95588	9420	1
	250	B2 / B3	FN 250 TPN	SK95682	11610	1
Fr 4	315	B3	FN 315 TPN	SK95590	14360	1
	400	B4	FN 400 TPN	SK95591	17200	1
Fr 5	630	C2	FN 630 TPN	SK95592	26950	1

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

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

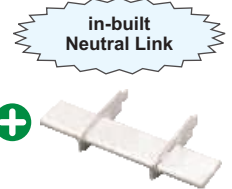
- Range 32A to 800A, 415V, AC 23A
- TPN and 4P version
- Suitable for Cylindrical / DIN fuse-link
- Telescopic shaft for depth adjustment
- DIN rail mounting up to 100A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility
- FNX 4-Pole with in-built Neutral Link



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	
Fr 1	32	HF Size 14x51	2 to 32	FNX 32 TPN / FP	SK96903	*	1	FNX 32 TPN / FP	SK96903	*	1
	63	HF Size 14x51	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	102	30
	4		SF90145	102	30
	6		SF90146	102	30
	8		SF90147	102	30
	10		SF90148	102	30
	16		SF90150	102	30
	20		SF90151	102	30
	25		SF90152	102	30
	32		SF90142	102	30
	40		SF90143	112	30
	50		SF90158	238	30
	63		SF90159	298	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	315	3
	80		SF94941	335	3
	100		SF94942	335	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	440	3
	160		SF94939	440	3
0	80	Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base	SF94128	565	3
	100		SF94129	565	3
	125		SF94130	565	3
	160		SF94131	575	3
	200		SF94132	575	3
1	125	Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base	SF94230	595	3
	160		SF94231	625	3
	200		SF94232	630	3
	250		SF94233	685	3
	315		SF94234	820	3
2	200	Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base	SF94332	855	3
	250		SF94333	890	3
	315		SF94334	895	3
	400		SF94335	900	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	1425	1
	630		SF94437	1445	1
	800		SF94938	1770	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	93	15	
			63		ST35828	93	15	
		A2	Suitable for type HK 32H/32B fuse base	4	ST30747	74	12	
				6	ST30748	74	12	
				10	ST30749	77	12	
				16	ST30750	77	12	
				20	ST30751	77	12	
				25	ST30752	77	12	
				32	ST30753	77	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	255	12		
			160	ST35829	270	12		
	Centre Tag, 2 holes	B1	80	Suitable for type FN 200 S-D-F	ST30774	240	12	
					100	ST30775	240	12
					125	ST30776	300	12
		B2	125		ST30777	330	3	
					160	ST30778	345	3
200					ST30779	350	3	
B3		250	Suitable for type FN 250/315 S-D-F		ST30781	495	3	
					315	ST30782	510	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	1390	1	FN 32 TPN / 4P	SK955410000	1980	1
	63	FN 63 2P	SK904190000	1890	1	FN 63 TPN / 4P	SK955400000	2695	1
Fr 2	100	FN 100 2P	SK904200000	3930	1	FN 100 TPN	SK955710000	4950	1
	125	FN 125 2P	SK904210000	4910	1	FN 125 TPN	SK954050000	6160	1
Fr 3	200	FN 200 2P	SK904500000	6590	1	FN 200 TPN	SK956070000	8410	1
	250	FN 250 2P	SK904540000	7920	1	FN 250 TPN	SK956830000	10490	1
Fr 4	315	FN 315 2P	SK904650000	10060	1	FN 315 TPN	SK956090000	11660	1
	400	FN 400 2P	SK904660000	12010	1	FN 400 TPN	SK956100000	15470	1
Fr 5	630	FN 630 2P	SK904670000	19370	1	FN 630 TPN	SK956110000	23020	1
	800	FN 800 2P	SK904680000	20310	1	FN 800 TPN	SK955510000	25270	1
	1000	FN 1000 2P	SK904690000	26350	1	FN 1000 TPN	SK957100000	33950	1
Fr 6	1000	-	-	-	-	C-Line SD 1000 4P	COS10000040	42660	1
	1250	-	-	-	-	C-Line SD 1250 4P	COS12500040	45060	1
	1600	-	-	-	-	C-Line SD 1600 4P	COS16000040	62570	1
	2000	-	-	-	-	C-Line SD 2000 4P	COS20000040	77710	1

\*For Switched Neutral Pole in FN TPN S-D, order Switched Neutral Kit separately. Refer 'Spares & Accessories for type FN' table

## Spares & Accessories for type FNX [8538]

## Spares & Accessories for type FN [8538]



Castell Type Lock



DIN Rail Assembly



Auxiliary Contact Kit



Handle Assembly



Handle Assembly



Earthing Link



Switched Neutral Kit



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
	FNX 315 / 400 / 630 / 800	SK91526	*	1
Castell Type Lock <sup>§</sup>	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	130	1
Insulated fuse pulling handle for Type HN fuse-link from 63A-800A	SF90126	490	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	630	1
Operating Handle	CXS6001	1385	1
Castell Type Lock <sup>§</sup>	CX60004	1680	1

<sup>§</sup> Chapter ID [8301]

<sup>#</sup> Also suitable for Switch-Disconnecter FN 1000

Description	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	
Auxiliary Contact Kit (1NO + 1 NC)	FN 32 / 63	SK91302	425	1	
	FN 100 / 125 / 160	SK91328	490	1	
	FN 200 / 250	SK91329	610	1	
	FN 315 / 400 / 630 / 800	SK91330 <sup>#</sup>	670	1	
2 <sup>nd</sup> Aux. Contact (1NO + 1NC)	FN 32 / 63	SK90670	425	1	
	FN 100 to FN 1000	SK90696	490	1	
Earthing Link	FN 32 to FN 1000 <sup>@</sup>	CK90396	300	1	
Terminal Shroud Kit	FN 32 / 63	SK91190	115	1	
	FN 100 / 125 / 160	SK91137	150	1	
	FN 200 / 250	SK91335	270	1	
	FN 315 / 400	SK91346	280	1	
	FN 630 / 800	SK91347 <sup>#</sup>	295	1	
Handle Assembly - A	FN 32 / 63	SK91257	305	1	
	FN 100 to FN 250	SK91258	660	1	
	FN 315 / 400 / 630 / 800	SK91259 <sup>#</sup>	735	1	
Handle Assembly - B	FN 32 / 63	SK91277	305	1	
	FN 100 to FN 250	SK91278	660	1	
	FN 315 / 400 / 630 / 800	SK91279 <sup>#</sup>	735	1	
Handle Assembly - CE	FN 32 / 63	SK91337	180	1	
Interphase Barrier Kit	FN 200	SK91343	220	1	
	FN 315 / 400	SK91344	230	1	
	FN 630 / 800	SK91345 <sup>#</sup>	240	1	
Castell Type Lock <sup>§</sup>	FN 100 / 125 / 160 / 200 / 250	A	SK00333	1790	1
		B	SK00334	1790	1
		C	SK00335	1790	1
		D	SK00336	1790	1
	FN 315 / 400 / 630 / 800	A	SK00345 <sup>#</sup>	1790	1
		B	SK00346 <sup>#</sup>	1790	1
		C	SK00347 <sup>#</sup>	1790	1
		D	SK00348 <sup>#</sup>	1790	1
Switched Neutral Kit <sup>#</sup>	FN 100 / 125 / 160	SK95233	3430	1	
	FN 200 / 250	SK95516	3660	1	
	FN 315 / 400	SK95517	3955	1	
	FN 630 / 800	SK95546 <sup>*</sup>	5555	1	

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



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Variants: 3P/4P

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

## DY125U MCCBs



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

Type	Current Rating (A)	Breaking Capacity Icu (kA)	2 Pole		Breaking Capacity Icu (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit		Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DY125U	16	AC : 25kA @ 240V AC, 50 Hz/60 Hz DC : 5kA @ 250V DC (2P in series)	EM90982O0BO	1240	AC : 10kA @ 415V AC, 50 Hz/60 Hz DC : 5kA @ 250V DC (3P in series)	EM90983O0BO	1710	EM90984O0BO	2260	1
	20		EM90982O0CO	1240		EM90983O0CO	1710	EM90984O0CO	2260	1
	25		EM90982O0DO	1240		EM90983O0DO	1710	EM90984O0DO	2260	1
	32		EM90982O0EO	1240		EM90983O0EO	1710	EM90984O0EO	2260	1
	40		EM90982O0FO	1240		EM90983O0FO	1710	EM90984O0FO	2260	1
	50		EM90982O0GO	1240		EM90983O0GO	1710	EM90984O0GO	2260	1
	63		EM90982O0HO	1240		EM90983O0HO	1710	EM90984O0HO	2260	1
	80		EM90982O0JO ▲	1360		EM90983O0JO ▲	1880	EM90984O0JO ▲	2590	1
			EM90812O0JO	1240		EM90813O0JO	1710	EM90814O0JO	2260	1
	100		EM90982O0KO ▲	1360		EM90983O0KO ▲	1880	EM90984O0KO ▲	2590	1
			EM90812O0KO	1240		EM90813O0KO	1710	EM90814O0KO	2260	1
125	EM90982O0LO ▲	1930	EM90983O0LO ▲	2730	EM90984O0LO ▲	3590	1			

▲ - Spreader Terminals are included

Note: 2 Pole in 3 Pole frame size

Phase barriers are supplied with all MCCBs

## Accessories for DY125U MCCBs [8538]



Auxiliary/Trip Alarm Contact



Shunt Release



Spreader Terminals



Direct ROM



Extended ROM

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary/Trip Alarm Contact</b>			
1C/O	EM90966O000	525	1
<b>Shunt Release</b>			
Short Rated 110/240/415V AC	EM90520OMOO	605	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
2 Pole (upto 100A)	CM97785O002	175	Set of 4
3 Pole (upto 100A)	CM97785O000	250	Set of 6
4 Pole (upto 100A)	CM97921O000	425	Set of 8
<b>Rotary Handle</b>			
Direct ROM	EM90969O000	780	1
Extended ROM	EM90970O000	1475	1
<b>SS Enclosure</b>			
Size I Enclosure for 3P & 4P	CM90996O000	1560	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. 41 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	3880	CM905180OCO	4980	1
	20-25		CM905170ODO	3880	CM905180ODO	4980	1
	25-32		CM905170OEO	3880	CM905180OEO	4980	1
	32-40		CM905170OFO	3880	CM905180OFO	4980	1
	40-50		CM905170OGO	3880	CM905180OGO	4980	1
	50-63		CM905170OHO	3880	CM905180OHO	4980	1
	63-80		CM905170OJO	3880	CM905180OJO	4980	1
	80-100		CM905170OKO	3880	CM905180OKO	4980	1
DU125D	100-125		CM906760OLO	4450	CM906770OLO	5790	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	CM978980OC2	3110	30	CM978940OC2	4460	CM979330OC2	5910	1
	20-25		CM978980OD2	3110		CM978940OD2	4460	CM979330OD2	5910	1
	25-32		CM978980OE2	3110		CM978940OE2	4460	CM979330OE2	5910	1
	32-40		CM978980OF2	3110		CM978940OF2	4460	CM979330OF2	5910	1
	40-50	DC : 15kA @ 250V DC, (2P in Series) L/R < 15 msec.	CM978980OG2	3110		CM978940OG2	4460	CM979330OG2	5910	1
	50-63		CM978980OH2	3110		CM978940OH2	4460	CM979330OH2	5910	1
	63-80		CM978980OJ2	3110		CM978940OJ2	4460	CM979330OJ2	5910	1
	80-100		CM978980OK2	3110		CM978940OK2	4460	CM979330OK2	5910	1
DU125H	100-125		CM911980OLO	4210		CM906780OLO	5090	CM906790OLO	6500	1

Note: 2 Pole in 3 pole frame size

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

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



Auxiliary Contact



ATAC



Shunt Release



UV Release



Spreader Terminals



Direct ROM



Extended ROM

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact</b>			
1 C/O - Right	CM978860000	715	1
2 C/O - Right	CM978870000	1400	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM978880000	715	1
2 C/O - Right	CM978890000	1400	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM978900000	1315	1
<b>Shunt Release</b>			
24V DC - Left	CM914020400	1300	1
110V AC - Left	CM978830A00	1300	1
240/415V AC - Left	CM978830M00	1300	1
<b>Under Voltage Release</b>			
240V AC - Left	CM97892B000	1830	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
DU100H - 2 Pole	CM977850002	175	Set of 4
DU125H - 2 Pole	CM911990OLO	225	Set of 4
DU100D/DU100H - 3 Pole	CM977850000	250	Set of 6
DU125D/DU125H - 3 Pole	CM906870OLO	355	Set of 6
DU100D/DU100H - 4 Pole	CM979210000	425	Set of 8
DU125D/DU125H - 4 Pole	CM906880OLO	500	Set of 8
<b>Rotary Handle</b>			
DU100D/DU125D/	Direct ROM	CM978950000	940
DU100H/DU125H			
<b>DIN rail kit</b>			
DU100D/DU125D/DU100H/DU125H	CM909440000	75	1
<b>SS Enclosure</b>			
Size I Enclosure	CM909960000	1560	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. 41 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	6500	CM90634OOMO	8700	1
	160-200					CM90631OONO	7720	CM90634OONO	9720	1
	200-250					CM90631OPO	8690	CM90634OPO	11440	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	4820	36	CM98062O000	8110	CM98065OOMO	9860	1
	160-200		CM90905OONO	5570		CM98061O000	10500	CM98065OONO	13550	1
	200-250		CM90905OPO	6240		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.)
<b>Auxiliary Contact</b>			
1 C/O - Right	CM97886O000	715	1
2 C/O - Right	CM97887O000	1400	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM97888O000	715	1
2 C/O - Right	CM97889O000	1400	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM97890O000	1315	1
<b>Shunt Release</b>			
24V DC - Left	CM91402O400	1300	1
110V AC - Left	CM97883OAOO	1300	1
240/415V AC - Left	CM97883OMOO	1300	1
<b>Under Voltage Release</b>			
240V AC - Left	CM97892BOOO	1830	1



Spreader Terminals Direct ROM Extended ROM

Description	External			
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	
<b>Spreader Terminals</b>				
DU250 - 2 Pole	CM90960O000	915	Set of 4	
DU250C/DU250 - 3 Pole	ST98053O000	1200	Set of 6	
DU250C/DU250 - 4 Pole	CM92007O000	1520	Set of 8	
<b>Rotary Handle</b>				
DU250C/DU250	Direct ROM	CM98040O000	975	1
	Extended ROM	CM98041O000	1545	1
<b>SS Enclosure</b>				
Size II Enclosure	CM91003O000	3590	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.)
<b>Auxiliary Contact</b>			
1 C/O	CM99801O000	830	1
2 C/O	CM99802O000	1560	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM99803O000	845	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM99804O000	1565	1
<b>Shunt Release</b>			
110/240/415V AC, 110/220V DC	CM99805O000	2035@	1
24V DC	CM98976O400	2035@	1
<b>Under Voltage Release</b>			
240V AC - Left	CM99986BOOO	2560	1



Spreader Terminals Direct ROM Extended ROM

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
2 Pole	CM90964O000	1435	Set of 4
3 Pole	ST98065O000	2265	Set of 6
4 Pole	ST98066O000	3245	Set of 8
<b>Rotary Handle</b>			
Direct ROM	CM99860O000	1515	1
Extended ROM	CM99861O000	2600	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	47500	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	47500	1
	400	550	50	SB950530000	47500	1
	630	850	50	SB950540000	47500	1
	800	1050	50	SB950550000	47500	1

₹ Available till stocks last

## Accessories for DTH 800 MCCBs <sup>₹</sup> [8538]



UV Release



Shunt Release



Auxiliary Contact



Extended ROM

Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact</b>			
2 C/O	SL942170000	1710	1
<b>Shunt Release</b>			
415V AC, 220V DC - Right	SL985260000	2140	1
240V AC, 110V DC - Right	SL985340000	2140	1
<b>Under Voltage Release</b>			
415V AC - Left	SL985480000	2140	1
240V AC - Left	SL985450000	2140	1
110V AC - Left	SL985430000	2140	1

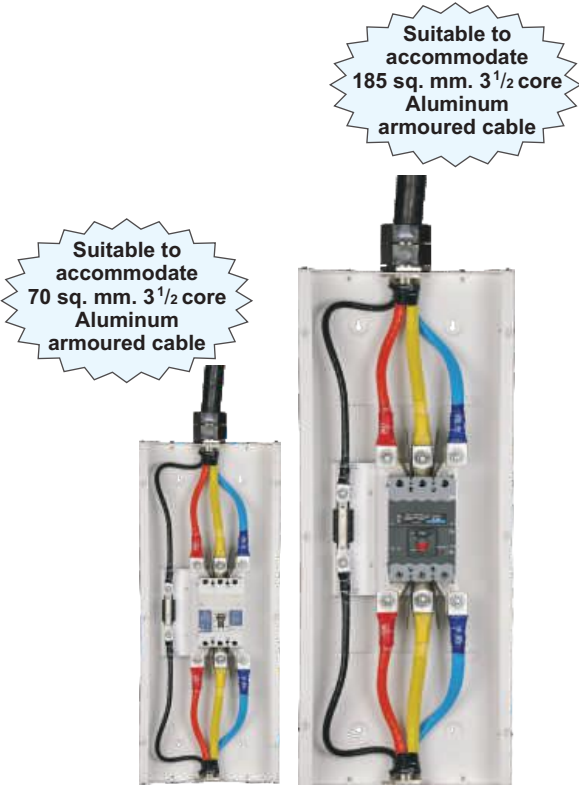
Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Extension Link</b>			
3 Pole	ST306580000	3080	Set of 6
<b>Rotary Handle</b>			
Extended ROM	CM998980000	2630	1

₹ 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	1560	1
Size II Enclosure for DU250C/DU250/DN1	CM910030000	3590	1

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



Easy wall Mounting

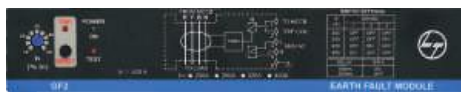


In-built Neutral Link



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	6480	Built in CBCT	1
GF2	200 - 400A	ST277460000	9435	Built in CBCT	1
GF11	up to 800A	ST285940000	5955 #	External CT required	1

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

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

Rating (A)	16	20	25	32	40	50	63	80	100	125	160	200	250	320	400	500	630
Icu=Ics (kA)*																	
25	DN0-100C								DN1-C								
36	DN0-100D/125D										DN3B						
36/50	DZ1																
36/50/70	DN2										DN3						



dsine TM

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



dsine-DZ1 TM

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- Ics= 100% of Icu
- Adjustable overload settings: 0.67 - 1.0 x In
- Adjustable short-circuit settings: 6 - 12 x In\*\*\*
- Transparent sealable release cover
- Compact size
- Wide range of accessories

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DN0-100D*	16-20	36	CM978930OC2OG	6090	CM979190OC2OG	8450	1
	20-25		CM978930OD2OG	6090	CM979190OD2OG	8450	1
	25-32		CM978930OE2OG	6090	CM979190OE2OG	8450	1
	32-40		CM978930OF2OG	6090	CM979190OF2OG	8450	1
	40-50		CM978930OG2OG	6090	CM979190OG2OG	8450	1
	50-63		CM978930OH2OG	6090	CM979190OH2OG	8450	1
	63-80		CM978930OJ2OG	6090	CM979190OJ2OG	8450	1
	80-100		CM978930OK2OG	6090	CM979190OK2OG	8450	1
DN0-125D*	100-125		CM90680OOL0OG	6900	CM906810OOL0OG	9190	1
DN0-100C	16-20	25	CM916120OCCOOG	6170	CM917120OCCOOG	8540	1
	20-25		CM916120ODDOOG	6170	CM917120ODDOOG	8540	1
	25-32		CM916120OEOOOG	6170	CM917120OEOOOG	8540	1
	32-40		CM916120OFOOOG	6170	CM917120OFOOOG	8540	1
	40-50		CM916120OOGOOG	6170	CM917120OOGOOG	8540	1
	50-63		CM916120OHOOG	6170	CM917120OHOOG	8540	1
	63-80		CM916120OJOOG	6170	CM917120OJOOG	8540	1
	80-100		CM916120OKOOG	6170	CM917120OKOOG	8540	1
DN1-250C	100-125		CM90638OOLO	8920	CM90642OOLO	10800	1
	125-160		CM90638OOMO	11690	CM90642OOMO	13860	1
	160-200		CM90638OONO	15280	CM90642OONO	19040	1
	200-250		CM90638OOPO	17440	CM90642OOPO	21870	1

Kindly refer page no. 41 for cost effective MCCB for motor starter application

**Note:**  
 Breaking Capacity : C = 25kA, D = 36kA, N = 50kA, S = 70kA  
 @ Motorised version available for DN2 and DN3 frames (please refer page No. 43)  
 \* DN0-100D/125D : Ics= 50% Icu  
 \*\* For DN0, DN1, DN3B-Short Circuit Setting: 9In  
 For DN1-250N (50kA) please contact nearest branch office  
 \*\*\* From 16A to 50A, Fixed Magnetic setting (375A)



d sine With Thermal - Magnetic Release :

Type	Thermal Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)	
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit		
DZ1-160D	11-16	36	DZ1T0016DXC1A	8040	DZ1F0016DXC1A	10000	1	
	14-20		DZ1T0020DXC1A	8040	DZ1F0020DXC1A	10000	1	
	17-25		DZ1T0025DXC1A	8040	DZ1F0025DXC1A	10000	1	
	22-32		DZ1T0032DXC1A	8040	DZ1F0032DXC1A	10000	1	
	27-40		DZ1T0040DXC1A	8040	DZ1F0040DXC1A	10000	1	
	34-50		DZ1T0050DXC1A	8040	DZ1F0050DXC1A	10000	1	
	43-63		DZ1T0063DXD1A	8040	DZ1F0063DXD1A	10000	1	
	54-80		DZ1T0080DXD1A	8040	DZ1F0080DXD1A	10000	1	
	67-100		DZ1T0100DXD1A	8040	DZ1F0100DXD1A	10000	1	
	84-125		DZ1T0125DXD1A	8970	DZ1F0125DXD1A	11140	1	
	108-160		DZ1T0160DXD1A	11930	DZ1F0160DXD1A	14170	1	
DN2-250D	100-125	36	CM92008OOL1OG	10050	CM92108OOL1OG	12480	1	
	125-160		CM92008OOM1OG	13360	CM92108OOM1OG	15870	1	
	160-200		CM92009OON1OG	17330	CM92109OON1OG	21320	1	
	200-250		CM92009OOP1OG	19180	CM92109OOP1OG	23430	1	
DN3B-400D	250-320		CM984010OQOOG	22790	CM984030OQOOG	27780	1	
	320-400		CM984010OROOG	22810	CM984030OROOG	28240	1	
DN3-400D	250-320		CM940050OQ1OG	*	CM941050OQ1OG	*	1	
	320-400		CM940050OR1OG	*	CM941050OR1OG	*	1	
DN3-630D	400-500		CM940060OS1OG	26930	CM941060OS1OG	33630	1	
	500-630		CM940060OT1OG	29900	CM941060OT1OG	37270	1	
DZ1-160N	11-16		50	DZ1T0016NXC1A	10320	DZ1F0016NXC1A	12680	1
	14-20	DZ1T0020NXC1A		10320	DZ1F0020NXC1A	12680	1	
	17-25	DZ1T0025NXC1A		10320	DZ1F0025NXC1A	12680	1	
	22-32	DZ1T0032NXC1A		10320	DZ1F0032NXC1A	12680	1	
	27-40	DZ1T0040NXC1A		10320	DZ1F0040NXC1A	12680	1	
	34-50	DZ1T0050NXC1A		10320	DZ1F0050NXC1A	12680	1	
	43-63	DZ1T0063NXD1A		10320	DZ1F0063NXD1A	12680	1	
	54-80	DZ1T0080NXD1A		10320	DZ1F0080NXD1A	12680	1	
	67-100	DZ1T0100NXD1A		10320	DZ1F0100NXD1A	12680	1	
	84-125	DZ1T0125NXD1A		13390	DZ1F0125NXD1A	15020	1	
	108-160	DZ1T0160NXD1A		14660	DZ1F0160NXD1A	17360	1	
DN2-250N	100-125	50	CM92005OOL1OG	15000	CM92105OOL1OG	16820	1	
	125-160		CM92005OOM1OG	16420	CM92105OOM1OG	19440	1	
	160-200		CM92006OON1OG	19390	CM92106OON1OG	24240	1	
	200-250		CM92006OOP1OG	20980	CM92106OOP1OG	25740	1	
DN3-400N	250-320		CM940030OQ1OG	24550	CM941030OQ1OG	30340	1	
	320-400		CM940030OR1OG	24630	CM941030OR1OG	30760	1	
DN3-630N	400-500		CM940040OS1OG	29260	CM941040OS1OG	36950	1	
	500-630		CM940040OT1OG	31830	CM941040OT1OG	39390	1	
DN2-250S	100-125		70	CM92002OOL1OG	21370	CM92102OOL1OG	23430	1
	125-160			CM92002OOM1OG	23380	CM92102OOM1OG	25940	1
	160-200			CM92003OON1OG	25800	CM92103OON1OG	31460	1
	200-250	CM92003OOP1OG		27570	CM92103OOP1OG	33190	1	
DN3-400S	250-320	CM940010OQ1OG		30070	CM941010OQ1OG	34890	1	
	320-400	CM940010OR1OG		30360	CM941010OR1OG	35010	1	
DN3-630S	400-500	CM940020OS1OG		38530	CM941020OS1OG	46980	1	
	500-630	CM940020OT1OG		39200	CM941020OT1OG	48920	1	

For DC application please refer catalogue

Kindly refer page no. 41 for cost effective MCCB for motor starter application

\* Price on request Note: Add suffix as "OOOO" to all DZ1 cat. nos.

**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 :**

<b>Rating (A)</b>	40	63	100	160	250	400	630	800	1000	1250
<b>Icu (kA)</b>	36/50									
	DZ1									
<b>36/50/70/100</b>	DN2					DN3				
<b>50/70/100</b>	DN4									

**d sine With Microprocessor Release MTX1.0 & iTRP1 :**



dsine MTX1.0

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



dsine-DZ iTRP1

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- Ics=100% Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 12 x Ir
- OR Instantaneous setting from 1.5 to 12 x In
- Switchable thermal memory
- Variable trip class
- Transparent sealable release cover
- Compact size
- Wide range of accessories

Type	Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)	
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit		
DZ1-160D#	10-40	36	DZ1T0040DXF1A	13500	DZ1F0040DXF1A	17300	1	
	16-63		DZ1T0063DXF1A	13500	DZ1F0063DXF1A	17300	1	
	25-100		DZ1T0100DXF1A	13500	DZ1F0100DXF1A	17300	1	
	40-160		DZ1T0160DXF1A	17250	DZ1F0160DXF1A	23970	1	
DN2-250D	16-40		CM920630000X1	15120	CM921550000X1	19380	1	
	25-63		CM920710000X1	15120	CM921540000X1	19380	1	
	40-100		CM920510000X1	15120	CM921530000X1	19380	1	
	63-160		CM920740000X1	19320	CM921520000X1	26850	1	
	100-250		CM920540000X1	24030	CM921510000X1	31650	1	
DN3-400D	160-400		CM930010000X1	28080	CM930030000X1	34670	1	
DN3-630D	250-630		CM930050000X1	31700	CM930070000X1	40870	1	
DZ1-160N#	10-40		50	DZ1T0040NXF1A	16100	DZ1F0040NXF1A	22100	1
	16-63			DZ1T0063NXF1A	16100	DZ1F0063NXF1A	22100	1
	25-100			DZ1T0100NXF1A	16100	DZ1F0100NXF1A	22100	1
	40-160			DZ1T0160NXF1A	20470	DZ1F0160NXF1A	26550	1
DN2-250N	16-40			CM920640000X1	18030	CM921600000X1	24750	1
	25-63	CM920720000X1		18030	CM921590000X1	24750	1	
	40-100	CM920520000X1		18030	CM921580000X1	24750	1	
	63-160	CM920750000X1		22930	CM921570000X1	29740	1	
	100-250	CM920550000X1		26980	CM921560000X1	35540	1	
DN3-400N	160-400	CM930020000X1		30860	CM930040000X1	39800	1	
DN3-630N	250-630	CM930060000X1		33540	CM930080000X1	43350	1	
DN4-1250N	320-800	CM960210000X1		50490	CM961110000X1	60360	1	
	400-1000	CM960220000X1		74160	CM961120000X1	105230	1	
	500-1250	CM960230000X1		90740	CM961130000X1	132910	1	
DN2-250S	16-40	70		CM920650000X1	19800	CM921650000X1	25210	1
	25-63			CM920730000X1	19800	CM921640000X1	25210	1
	40-100		CM920590000X1	19800	CM921630000X1	25210	1	
	63-160		CM920760000X1	26690	CM921620000X1	34070	1	
	100-250		CM920560000X1	31440	CM921610000X1	37890	1	
DN3-400S	160-400		CM940530000X1	37620	CM941530000X1	47510	1	
DN3-630S	250-630		CM940790000X1	40660	CM941790000X1	54100	1	
DN4-1250S	320-800		CM960250000X1	66320	CM961150000X1	82440	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, DN3 and DN4 frames (please refer page No. 43)

Add suffix as "OOOO" to all DZ1 cat. nos. # For 25A, please contact nearest branch office

d sine With Microprocessor Release MTX2.0 & iTRP3 :



dsine MTX2.0

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



dsine-DZ iTRP3

- Conforms to IS/IEC 60947-2
- 16A to 160A, 3P & 4P
- 36kA & 50kA breaking capacities
- Ics=100% Icu
- Adjustable overload setting from 0.25 to 1.0 x In
- Adjustable short-circuit setting from 1.5 to 10 x Ir
- Adjustable Instantaneous setting, 6 In & 12 In
- Inbuilt ground fault protection from 20%-70% of In
- Adjustable neutral overload protection from 50% to 200% of Ir
- Switchable thermal memory
- Provision for release testing
- Individual fault indication LEDs
- Transparent sealable release cover
- Compact size
- Wide range of accessories

Type	Release Range (A)	Breaking Capacity Icu at 415V AC, 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)	
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit		
New DZ1-160D#	10-40	36	DZ1T0040DXH1A	23480	DZ1F0040DXH1A	27260	1	
	16-63		DZ1T0063DXH1A	23480	DZ1F0063DXH1A	27260	1	
	25-100		DZ1T0100DXH1A	23480	DZ1F0100DXH1A	27260	1	
	40-160		DZ1T0160DXH1A	27410	DZ1F0160DXH1A	33990	1	
DN2-250D	16-40		CM920630000AG	26640	CM921550000AG	30930	1	
	25-63		CM920710000AG	26640	CM921540000AG	30930	1	
	40-100		CM920510000AG	26640	CM921530000AG	30930	1	
	63-160		CM920740000AG	31100	CM921520000AG	37390	1	
	100-250		CM920540000AG	32720	CM921510000AG	40270	1	
DN3-400D	160-400		CM930010000AG	37420	CM930030000AG	43750	1	
DN3-630D	250-630		CM930050000AG	41130	CM930070000AG	51890	1	
New DZ1-160N#	10-40		50	DZ1T0040NXH1A	26250	DZ1F0040NXH1A	31310	1
	16-63			DZ1T0063NXH1A	26250	DZ1F0063NXH1A	31310	1
	25-100			DZ1T0100NXH1A	26250	DZ1F0100NXH1A	31310	1
	40-160			DZ1T0160NXH1A	31040	DZ1F0160NXH1A	36990	1
DN2-250N	16-40			CM920640000AG	28090	CM921600000AG	33500	1
	25-63	CM920720000AG		28090	CM921590000AG	33500	1	
	40-100	CM920520000AG		28090	CM921580000AG	33500	1	
	63-160	CM920750000AG		33210	CM921570000AG	39580	1	
	100-250	CM920550000AG		34610	CM921560000AG	41720	1	
DN3-400N	160-400	CM930020000AG		40050	CM930040000AG	47770	1	
DN3-630N	250-630	CM930060000AG		44300	CM930080000AG	55600	1	
DN4-1250N	320-800	CM960210000AG		75640	CM961110000AG	85910	1	
	400-1000	CM960220000AG		91660	CM961120000AG	122650	1	
	500-1250	CM960230000AG		108420	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	51520	1	
DN3-400S	160-400		CM940530000AG	49060	CM941530000AG	61390	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, DN3 and DN4 frames (please refer page No. 43)  
 Add suffix "OOOO" to all DZ1 cat nos.  
 # For 25A, please contact nearest branch office  
 \*Price on request

Accessories for MTX2.0 [8538]

Modules for MTX2.0 release	Cat. No.	M.R.P. (₹) Per Unit
Current Metering Module (Display & Metering Module)	CM956980000	9110
Cable (2m length)	CM011960000	1060
Power Supply Module	CL907220000	*
UNCO Module for Status Indication & Control through communication	CL908520000	8780

Current Metering & latest trip record



Display Module Metering Module

MTX2.0 with current metering module



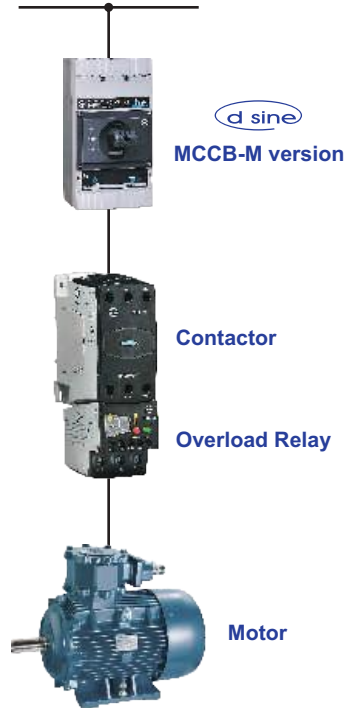
d sine MCCBs for Motor back-up Protection:



- 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	4480	1
	40		CM98944OOF0	4480	1
	50		CM98944OOGO	4480	1
	63		CM98944OOHO	4480	1
	80		CM98944OOJO	4480	1
	100		CM98944OOKO	4480	1
DN1-160M	100		CM90345OOKO	7180	1
	125		CM90345OOL0	7300	1
	160		CM90345OOM0	8670	1
DN2-250M	200		CM921710ON0OG	11800	1
	250		CM921710OP0OG	15780	1
DN3-400M	320		CM945160OQ0OG	18880	1
	400		CM945160OR0OG	19810	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

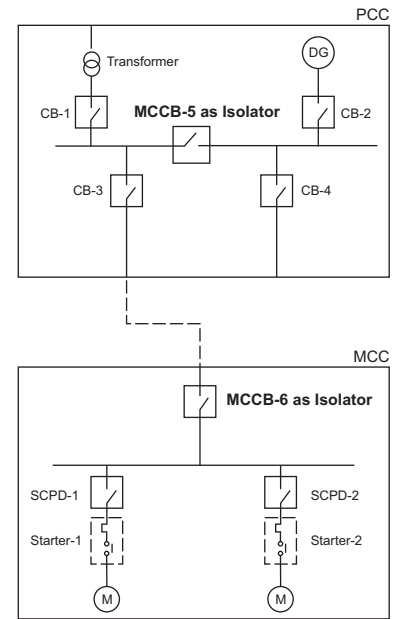
**d sine**  
dsine-M range

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	4550	CM90717OOEO	5800	1
	63	CM90716OOHO	4550	CM90717OOHO	5800	1
	100	CM90716OOKO	5440	CM90717OOKO	6750	1
	125	CM90716OOL0	6010	CM90717OOL0	7650	1
	160	CM90716OOMO	6500	CM90717OOMO	8150	1
DN2-250SD	200	CM96814OONOOG	12860	CM96815OONOOG	16230	1
	250	CM96802OOP0OG	13590	CM96803OOP0OG	17710	1
DN3B-400SD	320	CM98410OOQ0OG	16460	CM98412OOQ0OG	21810	1
	400	CM98410OOROOG	19450	CM98412OOROOG	24760	1
DN3-630SD	500	CM96806OOS0OG	22020	CM96807OOS0OG	28460	1
	630	CM96806OOT0OG	22250	CM96807OOT0OG	29540	1
DN4-1250SD	800	CM93041OOUO	45720	CM93042OOUO	59920	1
	1000	CM93041OOVO	61770	CM93042OOVO	83290	1
	1250	CM93041OOAO	80980	CM93042OOAO	111270	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	ATC20000000	21315	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 + 1 No. : AuXC2000	70295	Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-400		82060	Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-630		82300	

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]



Description	Internal		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Auxiliary Contact [8538]</b>			
DN0, DN1 - 1 C/O - Right	CM97886O000	715	1
DN0, DN1 - 2 C/O - Right	CM97887O000	1400	1
<b>DZ1 - 1 C/O</b>	EM90110O000	735	1
DN2, DN3B, DN3, DN4 - 1 C/O	CM99801O000	830	1
DN2, DN3B, DN3, DN4 - 2 C/O	CM99802O000	1560	1
<b>Trip Alarm Contact [8538]</b>			
DN0, DN1 - 1 C/O - Right	CM97888O000	715	1
DN0, DN1 - 2 C/O - Right	CM97889O000	1400	1
<b>DZ1 - 1 C/O</b>	EM90110O000	735	1
DN2, DN3B, DN3, DN4 - 1 C/O - Right	CM99803O000	845	1
<b>Auxiliary 1 C/O + TAC 1 C/O [8538]</b>			
DN0, DN1 - Right	CM97890O000	1315	1
DN2, DN3B, DN3, DN4 - Right	CM99804O000	1565	1
<b>Shunt Release [8538]</b>			
DN0, DN1 - 24V DC - Left	CM91402O400	1300	1
DN0, DN1 - 110V AC - Left	CM97883OAOO	1300	1
DN0, DN1 - 240/415V AC - Left	CM97883OMOO	1300	1
<b>DZ1 - 240V AC<sup>§</sup></b>	EM90032OBOO	1820	
DN2, DN3B, DN3, DN4 - 110/240/415V AC, 110/220V DC	CM99805O000	2035@	1
DN2, DN3B, DN3 - 24V DC	CM98976O400	2035@	1
<b>Under Voltage Release [8538]</b>			
DN0, DN1 - 240V AC - Left	CM97892BOOO	1830	1
<b>DZ1 - 240V AC<sup>§</sup></b>	EM90031BOOO	2205	1
DN2, DN3B, DN3 - 240V AC - Left	CM99986BOOO	2560**	1
DN4 - 240V AC - Left	CM99906O000	2785**	1

@ - 'NO' of control contactor to be connected in series for DC control supply  
 \*\* Use these UV Cat. Nos. with Grey lock MCCBs only  
 § For other voltages, please contact nearest branch office  
 \*For additional accessories of DZ1 MCCBs, please contact nearest branch office

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>External Neutral CT [8504]</b>			
<b>DZ1 - 40A, 63A</b>	EM90507O000	1325	1
<b>DZ1 - 100A, 160A</b>	EM90508O000	1325	1
DN2 - 40A	CM99946O000	1325	1
DN2 - 63A	CM99947O000	1325	1
DN2 - 100A	CM99948O000	1325	1
DN2 - 160A	CM99949O000	1900	1
DN2 - 250A	CM99950O000	1900	1
DN3 - 400A	CM99954O000	3550	1
DN3 - 630A	CM99955O000	3550	1
DN4 - 800A	CM99889O000	5445	1
DN4 - 1000A	CM99890O000	5445	1
DN4 - 1250A	CM99891O000	5780	1
<b>Adaptor kit for External Neutral CT [8538]</b>			
<b>DZ1-160 &amp; DN2-250</b>	CM99994O000	480	Set of 2
DN3 - 400	CM99995O000	1005	Set of 2
DN3 - 630	CM99997O000	1015	Set of 2
DN4 - 800	CM99996O000	1670	Set of 2
DN4 - 1000	CM90966O000	3690	Set of 4
DN4 - 1250	CM99998O000	6290	Set of 2
<b>Stored Energy Electrical Operating Mechanism</b>			
DN2-240V AC*		20860	
DN3-240V AC*		25640	
DN4-240V AC*		45000	

\* Available as customised factory-fitted solution, please contact nearest branch office



Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Rotary Handle [8538]</b>			
DN0 Direct ROM	CM97895O000	940	1
DN1 Direct ROM	CM98040O000	975	1
<b>DZ1 Direct ROM</b>	EM90207O000	1010	1
DN2 Direct ROM	CM99829O000	1010	1
DN3B, DN3 Direct ROM	CM99860O000	1515	1
DN0 Extended ROM	CM97896O000	1355	1
DN1 Extended ROM	CM98041O000	1545	1
<b>DZ1 Extended ROM</b>	EM90209O000	1505	1
DN2 Extended ROM	CM99830O000	1590	1
DN3B, DN3 Extended ROM	CM99861O000	2600	1
DN4 Extended ROM	CM99884O000	3295	1
<b>Panel door mounted Key lock for Extended ROM # [8301]</b>			
Type 1	CM99958TOOOO	1655	1
Type 2	CM99958TOOOA	1655	1
Type 3	CM99958TOOOB	1655	1
Type 12	CM99958TOOOC	1655	1
Type 23	CM99958TOOOD	1655	1

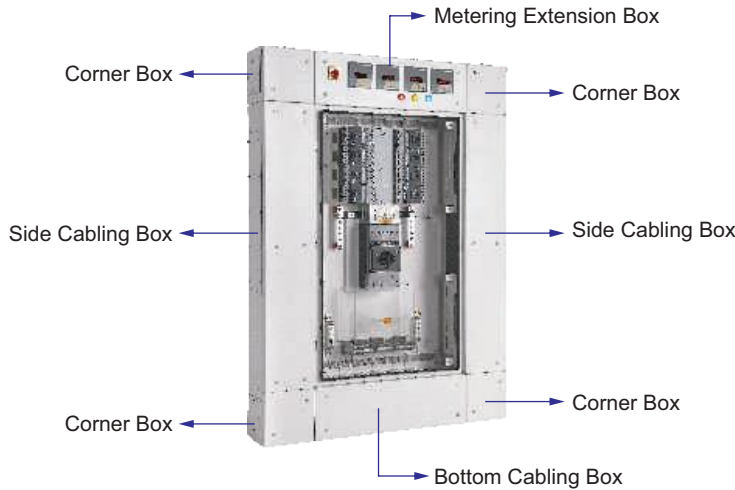
# - Can be used with dsine, DU, DTH new look extended ROM




Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals [8538]</b>			
DN0-100 - 3 Pole	CM97785O000	250	Set of 6
DN0-125D - 3 Pole	CM90687O0LO	355	Set of 6
<b>DZ1 - 160 - 3 Pole</b>	EM90609O000	1190	Set of 6
DN1, DN2 - 250 - 3 Pole	ST98053O000	1200	Set of 6
DN3B/DN3-400 - 3 Pole	ST98065O000	2265	Set of 6
DN3-630 - 3 Pole	ST98054O000	2595	Set of 6
DN4-800 - 3 Pole	CM91161OOUO	5315	Set of 6
DN4-1000 - 3 Pole	CM91161OOVO	10625	Set of 12
DN4-1250 - 3 Pole	CM91161OOAO	18475	Set of 6
DN0-100 - 4 Pole	CM97921O000	425	Set of 8
DN0-125D - 4 Pole	CM90688O0LO	500	Set of 8
<b>DZ1 - 160 - 4 Pole</b>	EM90610O000	1340	Set of 8
DN1, DN2 - 250 - 4 Pole	CM92007O000	1520	Set of 8
DN3B/DN3-400 - 4 Pole	ST98066O000	3245	Set of 8
DN3-630 - 4 Pole	CM92004O000	3495	Set of 8
DN4-800 - 4 Pole	ST90362O000	6775	Set of 8
DN4-1000 - 4 Pole	CM90064OOVO	13545	Set of 16
DN4-1250 - 4 Pole	ST98058O000	23235	Set of 8
<b>Mechanical Interlock Kit - Base Plate [8538]</b>			
DN2-250	CM99731O000	4130	1
DN3-400	CM99732O000	6335	1
DN3-630	CM99854O000	6575	1
<b>DIN rail kit [8538]</b>			
DN0	CM90944O000	75	1

Note: Phase Barriers are supplied along with MCCBs





### 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	15130
	DN1-250N 3 Pole MCCB - 200A	CM98608OONO	16650
	DN1-250N 3 Pole MCCB - 250A	CM98608OPO	20100
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	26930
	DN3-630D 3 Pole MCCB - 630A	CM94006OOT1OG	29900

Outgoing Device [8536]			
SMDB Type	Description	Cat. No.	M.R.P. (₹) Per Unit
TN250D, TN400D & TN630D	DN0-100D 3 Pole MCCB - 20 A	CM97893OOC2OG	6090
	DN0-100D 3 Pole MCCB - 25 A	CM97893OOD2OG	6090
	DN0-100D 3 Pole MCCB - 32 A	CM97893OOE2OG	6090
	DN0-100D 3 Pole MCCB - 40 A	CM97893OOF2OG	6090
	DN0-100D 3 Pole MCCB - 50 A	CM97893OOG2OG	6090
	DN0-100D 3 Pole MCCB - 63 A	CM97893OOH2OG	6090
	DN0-100D 3 Pole MCCB - 80 A	CM97893OOJ2OG	6090
	DN0-100D 3 Pole MCCB - 100 A	CM97893OOK2OG	6090
	TN630D	DN1-250N 3 Pole MCCB - 160 A	CM98608OOMO
DN1-250N 3 Pole MCCB - 200 A		CM98608OONO	16650
DN1-250N 3 Pole MCCB - 250 A		CM98608OPO	20100

**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:

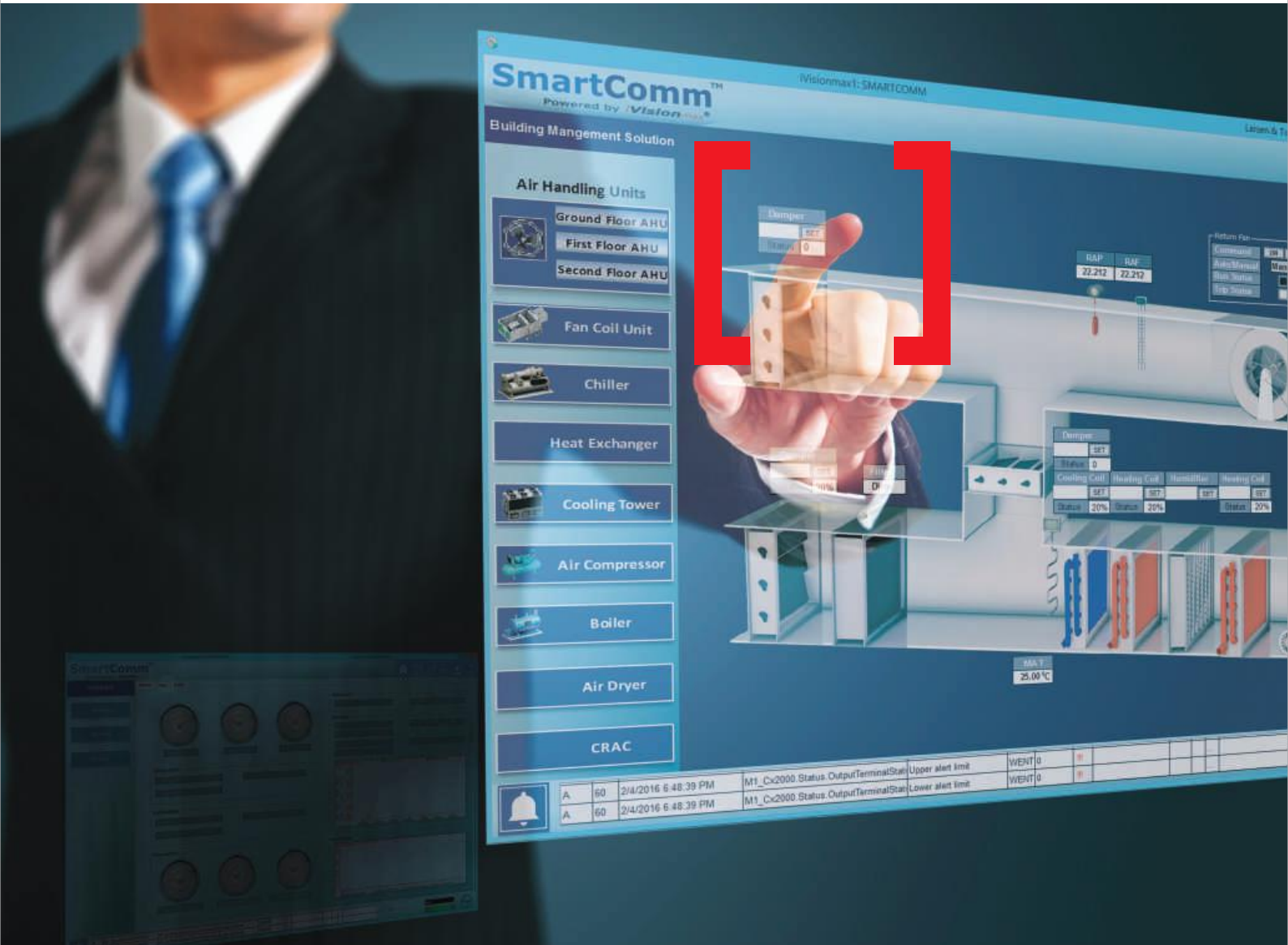
- Ammeter, voltmeter, selector switch and indicating lights have to be ordered separately.
- Mounting base to be used without bottom cabling box.

## 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				



# Smart is in the Communication



## Presenting SmartComm – Integration | Monitoring | Protection | Control | Reporting

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.

SmartComm built-in features of Energy Monitoring, Controlling and Monitoring Switchgears as well as Building Automation and Management functionality.

### Key Features:

- Customised SLD
- Multi-device and Protocol Compatibility
- Real-time Reporting
- Easy View Interface

### 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

**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 protections
- 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:

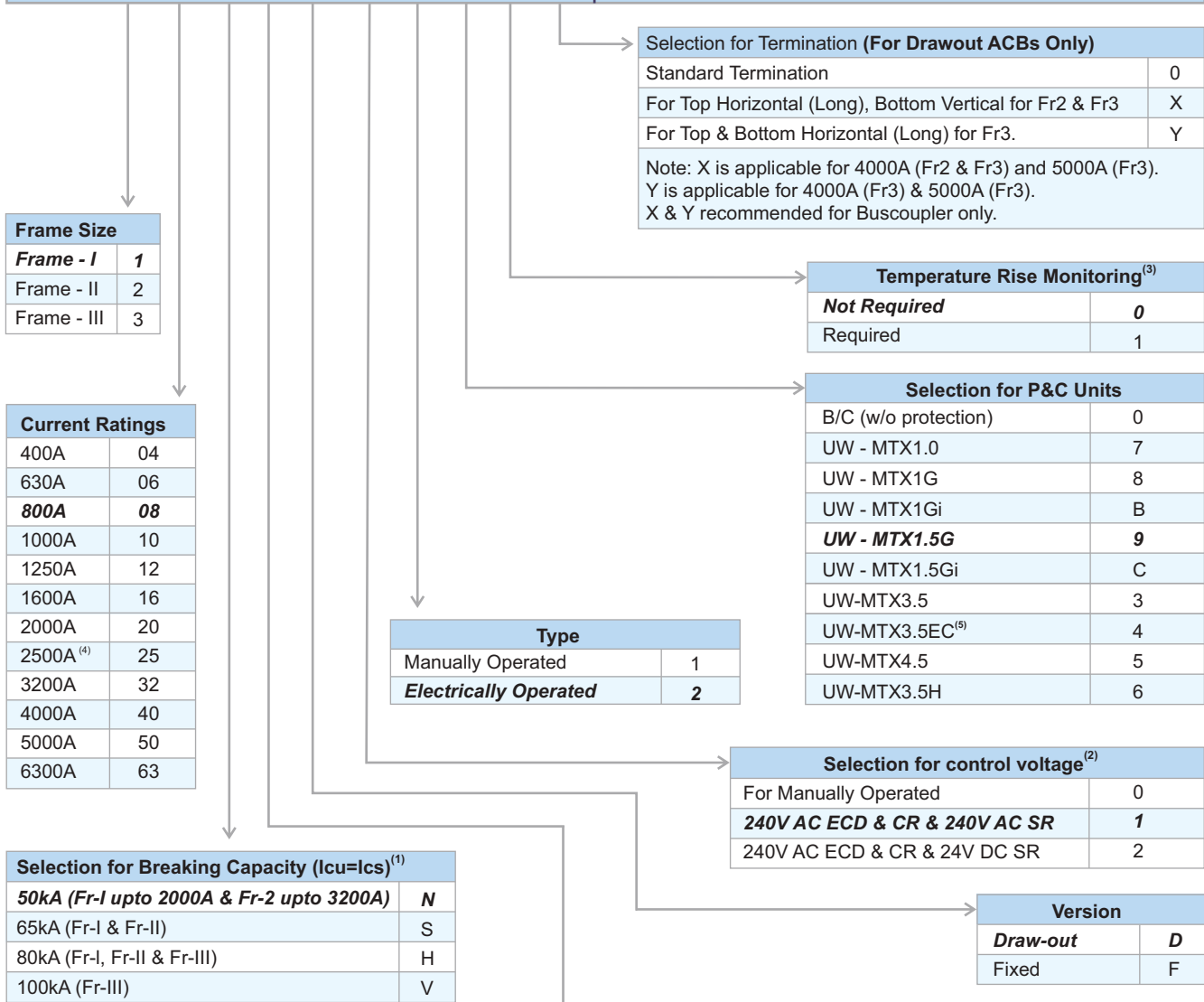
**$I_{cu} = I_{cs} = I_{cw}$  for 1 sec**

Rated current	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A	5000A	6300A
Frame-1	N : 50kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	S : 65kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	H : 80kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	UW1-08	UW1-10	UW1-12	UW1-16	UW1-20	UW1-25				
Frame-2	N : 50kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	S : 65kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	H : 80kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	UW2-08	UW2-10	UW2-12	UW2-16	UW2-20	UW2-25	UW2-32	UW2-40		
Frame-3	H : 80kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	V : 100kA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	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 | OMEGA Fr-1 800A 50kA 3P EDO UW-MTX1.5G**



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

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

Selection for Breaking Capacity (I <sub>cu</sub> =I <sub>cs</sub> ) <sup>(1)</sup>	
50kA (Fr-I upto 2000A & Fr-2 upto 3200A)	N
65kA (Fr-I & Fr-II)	S
80kA (Fr-I, Fr-II & Fr-III)	H
100kA (Fr-III)	V

Selection for Termination (For Drawout ACBs Only)	
Standard Termination	0
For Top Horizontal (Long), Bottom Vertical for Fr2 & Fr3	X
For Top & Bottom Horizontal (Long) for Fr3.	Y

Note: X is applicable for 4000A (Fr2 & Fr3) and 5000A (Fr3).  
Y is applicable for 4000A (Fr3) & 5000A (Fr3).  
X & Y recommended for Buscoupler only.

Temperature Rise Monitoring <sup>(3)</sup>	
Not Required	0
Required	1

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

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

Selection for control voltage <sup>(2)</sup>	
For Manually Operated	0
<b>240V AC ECD &amp; CR &amp; 240V AC SR</b>	<b>1</b>
240V AC ECD & CR & 24V DC SR	2

Version	
<b>Draw-out</b>	<b>D</b>
Fixed	F

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

**Please Note :**

- <sup>(1)</sup> For I<sub>cu</sub> values please refer product catalogue
- <sup>(2)</sup> Other options of control voltage are available as accessory
- <sup>(3)</sup> Temperature protection is available in UW-MTX3.5/3.5EC/3.5H/4.5
- <sup>(4)</sup> For Fr-1, 2500A selection, please contact the nearest branch office
- <sup>(5)</sup> For system requiring 690V metering, kindly order separate Power Metering module with MTX 3.5 (refer page 52)

## 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 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) <sup>§</sup>	
COM Module (MODBUS) for communication <sup>§</sup>	
PM Module for power metering <sup>§</sup>	

\* 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
<b>Terminal Adaptor for Draw-out Omega ACBs</b>		
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
<b>Terminal Adaptor for Fixed Omega ACBs</b>		
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

Air Circuit Breakers



Operation Counter



Door Interlock



Closing Release



Shunt Release



UV Release

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Other Accessories [8538]</b>		
Operation Counter	CL909830000#	*
Door Interlock	CL909780000	
Electrical Position Indication (EPI)	CL958260000	
<b>Microswitches for Indication [8536]</b>		
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

# Operation Counter inbuilt for rating 4000A to 6300A



R-Lock



C-Lock

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

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

\* Available on request

\$ Only locks [8301]  
Locking arrangement [8538]

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Electrical Charging Device (ECD) [8501]</b>		
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	
<b>Closing Release (CR) [8538]</b>		
24-30V DC	CL908174000	*
48/60V DC	CL908175000	
110V AC / 110V DC	CL90817A000	
125/127V DC	CL908171000	
220 - 240V AC / 220 - 250V DC	CL90817B000	
415V AC	CL90817D000	
<b>Shunt Release (SR) [8538]</b>		
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	
<b>Under Voltage Release (UVR) with time delay (0-1-3-5 sec) [8538]</b>		
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
<b>External Neutral CT for UW-MTX Releases [8504]</b>		
Frame-1, 2 & 3 400-800A	CL007170000	*
Frame-1, 2 & 3 1000-1600A	CL007180000	
Frame-1 2000-2500A	CL007190000	
Frame-2 & 3 2000-4000A	CL007200000	
Frame-3 5000-6300A	CL007210000	

## Automatic Transfer Controllers (ATC) [9032]



AuXC-2000 Controller

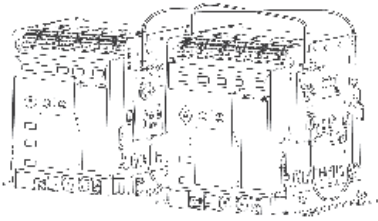
Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 controller	ATC20000000	21315	1

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
<b>Mechanical Interlock using Bowden Cable (5 meters length)</b>		
Between 2 Incomers	CL906630000	*
Between 3 Incomers	CL906640000	
Between 2 Incomers & 1 Standby	CL906650000	
Between 2 Incomers & 1 Buscoupler	CL906660000	
<b>Mechanical Interlock using Bowden Cable (3 meters length)</b>		
Between 2 Incomers	CL906590000	*
Between 3 Incomers	CL906600000	
Between 2 Incomers & 1 Standby	CL906610000	
Between 2 Incomers & 1 Buscoupler	CL906620000	
<b>Mechanical Interlock using Bowden Cable (2 meters length)</b>		
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
<b>MATRIX Releases &amp; Modules [8538]</b>		
UW-MTX1.0	CL919660000	*
UW-MTX1G	CL919710000	
UW-MTX1Gi	CL905620000	
UW-MTX1.5G	CL919650000	
UW-MTX1.5Gi	CL905520000	
UW-MTX3.5	CL906450000	
UW-MTX3.5EC	CL906440000	
UW-MTX3.5H	CL906460000	
UW-MTX4.5	CL906110000	
Power supply module	CL907220000	
Relay Module	CL907160000	
MODBUS Module	CL907090000	
Profibus Module	CL907320000	
Matrix Smart Card Module	CL907050000	
Power Metering Module (415V)	CL906490000	
Power Metering Module (690V)	CL906850000	
ZSI Module	CL907180000	
TCS Module	CL907190000	
EL Module	CL907200000	
REF Module	CL907210000	
Simulation Kit	CL907240000	

For Energy Management Communication Software Please contact the nearest branch office

## 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 Status and Control through MODBUS protocol (UN-CO module)



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 Status and Control through MODBUS protocol (UN-CO module)

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



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

For technical & dimension details please refer product catalogue. 400AACB 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	140530	SL96061	176390
SL96051	173030	SL96071	208890
SL96042	140530	SL96062	176390
SL96052	173030	SL96072	208890
SL96043	147490	SL96063	184780
SL96053	179990	SL96073	217280
SL96044	164290	SL96064	204610
SL96054	196790	SL96074	237110
SL96045	186850	SL96065	227910
SL96055	219350	SL96075	260410
SL96046	227570	SL96066	279460
SL96056	260070	SL96076	311960
SL96047	278880	SL96067	342150
SL96057	311380	SL96077	374650

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95331	132030	SL95351	167890
SL95341	164530	SL95361	200390
SL95332	132030	SL95352	167890
SL95342	164530	SL95362	200390
SL95333	138990	SL95353	176280
SL95343	171490	SL95363	208780
SL95334	155790	SL95354	196110
SL95344	188290	SL95364	228610
SL95335	178350	SL95355	219410
SL95345	210850	SL95365	251910
SL95336	219070	SL95356	270960
SL95346	251570	SL95366	303460
SL95337	270380	SL95357	333650
SL95347	302880	SL95367	366150

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	125160	SL95591	148340
SL95562	92660	SL95582	115840
SL95572	125160	SL95592	148340
SL95563	96600	SL95583	120740
SL95573	129100	SL95593	153240
SL95564	116520	SL95584	145660
SL95574	149020	SL95594	178160
SL95565	128040	SL95585	160070
SL95575	160540	SL95595	192570

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95481	84160	SL95501	107340
SL95491	116660	SL95511	139840
SL95482	84160	SL95502	107340
SL95492	116660	SL95512	139840
SL95483	88100	SL95503	112240
SL95493	120600	SL95513	144740
SL95484	108020	SL95504	137160
SL95494	140520	SL95514	169660
SL95485	119540	SL95505	151570
SL95495	152040	SL95515	184070

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	19000
Microprocessor based SR18G+D (LSING + Current Metering)	Add	6400
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	6900

**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
SL957210000	61440
SL957220000	61980
SL957230000	63800
SL957240000	66050
SL957250000	85720
SL957260000	95470
SL932970000	108510



# C-POWER Air Circuit Breakers [8536]



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

Rating	Breaking Capacity I <sub>cu</sub> =I <sub>cs</sub> =I <sub>cw</sub> (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	209080	#	260620	#	200580	#	252120
		EDO	H	SL95321	241580	#	293120	#	233080	#	284620
1000A	65kA	MDO	H	SL95312	225950	#	276710	#	217450	#	268210
		EDO	H	SL95322	258450	#	309210	#	249950	#	300710
1250A	65kA	MDO	H	SL95313	249380	#	303060	#	240880	#	294560
		EDO	H	SL95323	281880	#	335560	#	273380	#	327060
1600A	65kA	MDO	H	SL95314	271200	#	339440	#	262700	#	330940
		EDO	H	SL95324	303700	#	371940	#	295200	#	363440
2000A	75kA	MDO	H	SL95315	319200	#	401090	#	310700	#	392590
		EDO	H	SL95325	351700	#	433590	#	343200	#	425090
2500A	75kA	MDO	H	SL95316	337880	#	414770	#	329380	#	406270
		EDO	H	SL95326	370380	#	447270	#	361880	#	438770
3200A	75kA	MDO	H2	SL94822	343180	SL94826	421200	SL94814	334680	SL94818	412700
		EDO	H2	SL94824	375680	SL94828	453700	SL94816	367180	SL94820	445200
4000A	75kA	MDO	H2	SL94823	400180	SL94827	519080	SL94815	391680	SL94819	510580
		EDO	H2	SL94825	432680	SL94829	551580	SL94817	424180	SL94821	543080
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 <sub>cu</sub> =I <sub>cs</sub> =I <sub>cw</sub> (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	153420	#	201540
				SL97636	178420	#	240530	SL93006	169920	#	232030

**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	19000
Microprocessor based SR18G+D (LSING + Current Metering)	Add	6400
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	6900
Microprocessor based SR71 (LSING + Current metering + Advance protection + PS Module)	Add	*
Communication Module (MODBUS) for SR71 release (SR71 - COM) <sup>§</sup>	SL94698OOOO	
Power Metering Module for SR71 release (SR71 - PM) <sup>§</sup>	SL94699OOOO	

<sup>§</sup> 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
<b>Lockable Trip Push Button (LTPB) [8301]</b>		
Type AA	SL93148000A	2460
Type BB	SL93148000B	2460
Type CC	SL93148000C	2460
Type DD	SL93148000D	2460
Lockable Trip Push Button kit (3 I/C & 2 B/C)	SL919360000	12300
<b>Locking of ACB in Isolated position (LIP) [8301]</b>		
Type A	SL93146000A	2460
Type B	SL93146000B	2460
Type C	SL93146000C	2460
Type D	SL93146000D	2460
<b>Locking of ACB in Any position (LAP) [8301]</b>		
Type A	SL93147000A	2460
Type B	SL93147000B	2460
Type C	SL93147000C	2460
Type D	SL93147000D	2460
<b>Racking Interlock [8301]</b>		
Type AA	SL93149000A	4420
Type BB	SL93149000B	4420
Type CC	SL93149000C	4420
Type DD	SL93149000D	4420
<b>Padlock [8301]</b>		
Racking Padlock Assembly	CL900250000	1460
<b>Other Accessories [8538]</b>		
Door Interlock	SL931500000	2350
Mechanical Operation Counter*	XM808370000	2430
Mounting Kit for Front Mounted Counter	SL958820000	580
Spring Charge Indication Microswitch	SL960000000	1790

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



Vertical Terminal Adaptor

Description & Rating	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Vertical Terminal Adaptors for Draw out C-POWER ACB [8538]</b>			
400-1250 S1/800-1000 C	SL932810000	3150	1
1600-2000 S1/1250-1600 C/800-1600 H	SL932820000	3680	1
2000 C	SL932840000	5040	1
2000 H/2500 C/H	SL932850000	5460	1
2500 S1	SL932890000	5460	1
3200 S1	SL932860000	6050	1
3200H2/H1, 4000H2/H	SL932880000	14680	1

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Shunt Release (SR) [8538]</b>		
Type EA : 24/48V DC	SL927180400	2500
Type EA : 110V DC	SL927180100	2500
Type EA : 220V DC	SL927180200	2500
Type EA1 : 110V AC	SL927180A00	2500
Type EA1 : 240V AC	SL927180B00	2500
Type EA1 : 415V AC	SL927180D00	2500
<b>Under Voltage Release (UVR) [8538]</b>		
Type MV : 24V DC	ST368770000	3620
Type MV : 240V AC	SL92720B000	3620
Type MV : 415V AC	SL92720D000	3620
<b>Earth Fault Release ( for DN1) [8538]</b>		
Type EF1 (10%, 20% In )	SL913400000	2350
Type EF2 (30%, 40%, 50% In)	SL913410000	2350
<b>Remote Fault Indication [8538]</b>		
AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC	SL946540000	7320
<b>Microswitches for Indication [8536]</b>		
Microswitch for Voltmetric Releases (2) each	SL927030000	1900
Microswitch for Common Indication of O/L & S/C (3) each	SL927040000	1900
Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release)	SL927050000	3170
Service Position Microswitch - Right (2)	SL931420000	1280
Service Position Microswitch - Left (2)	SL931430000	1280
Test or Isolated Position Microswitch - Right (2)	SL931440000	1280
Test or Isolated Position Microswitch - Left (2)	SL931450000	1280

**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	8780	1

# Spares of C-POWER Air Circuit Breakers

## Protection Releases



SR71



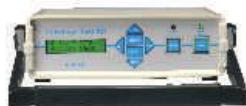
SR18G+D/SR18Gi+D



SR18G



DN1



Universal Test Kit



CT

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Protection Releases [8538]</b>		
Microprocessor based type SR71	<b>On Request</b>	
Microprocessor based type SR18Gi+D	SL948130000	36210
Microprocessor based type SR18G+D	SL948120000	35710
Microprocessor based type SR18G	SL960300000	29310
Thermal-Magnetic Release type DN1	SL931520000	20810
Universal Test Kit	CL904620000	63350

### 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.)
<b>CTs for SR18G / SR18G+D / SR18Gi+D [8504]</b>			
400 S1 Fix & Draw-out	SL015230000	4270	1
630 S1 Fix & Draw-out	ST374950000	4270	1
800 C/H/S1 Fix & Draw-out	SL018570000	4270	1
1000 C/H/S1 Fix & Draw-out	SL018580000	4270	1
1250 C/H/S1 Fix & Draw-out	SL905710000	5210	1
1600 C/H/S1 Fix & Draw-out	SL905720000	5210	1
2000 C/H Fix & Draw-out	SL905650000	5580	1
2000 S1 Draw-out	SL932100000	5580	1
2500 C/H Fix & Draw-out	SL905660000	5580	1
2500 S1 Draw-out			
3200 H2/H1 Draw-out	SL017400000	6740	1
4000 H2/H Draw-out	SL017390000	7630	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

Circle/9/01/2015

# 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](mailto:cic@lntebg.com) Web: [www.lntebg.com](http://www.lntebg.com)

## Power Factor Correction Capacitors [8532]

Parameters	Standard Duty		Standard Duty Prime	Heavy Duty		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	300 x In	500 x In	500 x In
Number of switching operations per year	5000	5000	6000	8000	8000	15000	10000	20000	18000
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.	200000 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 33.1 kVAR - Series : LTCCD	1 to 25	440	180
	1.2 to 27.7	480	189
	1.3 to 33.1	525	193
Box 1 to 6 kVAR - Series : LTBCF 7.5 to 33.1 kVAR - Series : LTBCD	1 to 30	440	246
	11.1 to 27.7	480	258
	13.2 to 33.1	525	263

### Heavy Duty Capacitors



Type	kVAR Rating	Voltage (V)	M.R.P. (₹) per kVAR
Cylindrical Series: LTCCCH	1 & 2	440 V	350
Cylindrical Series: LTCCN (Gas Filled)	3 & 4	440 V	350
	5 to 15		312
	20 & 25	480 V	303
	7.5 to 15		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!



### 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

#### Convenient & Suitable for

- Transformer compensation
- Direct motor compensation

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
	<b>New</b> 1.2 to 5.5	480 V	380
	11.1 & 15		349
	20 to 27.7		340
	<b>New</b> 1.3 to 3.9	525 V	387
	5 to 15		355
	20 to 33.3		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 & 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



Catalogue Number

Capacitor Series	kVAR ratings		
	440 V	480 V	525 V
LTCCF	1, 2, 3, 4, 5, 6	<b>New</b> 1.2, 2.2, 3.3, 4.4, 5.5	<b>New</b> 1.3, 2.6, 3.9, 5.3, 6.6
LTBCF	1, 2, 3, 4, 5, 6		
LTCCD/LTBCD	7.5, 8.33, 10, 12.5, 15, 20, 25, 30*	<b>New</b> 11.1, 13.8, 16.6, 22.1, 27.7	<b>New</b> 13.2, 16.6, 20, 26.5, 30, 33.1
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	1**, 2**, 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	1.2, 2.2, 3.3, 4.4, 5.5, 11.1, 15, 20, 25, 27.7	1.3, 2.6, 3.9, 5, 6.6, 13.2, 15, 20, 25, 30, 33.3
LTBCP	5, 7.5, 10, 12.5, 15, 20, 25, 50	5.5, 11.1, 13.8, 16.6, 22.1, 27.7	6.6, 13.2, 16.6, 20, 26.5, 30, 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 \*\* For 1 & 2 kVAR use Series LTCCH



## 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
New 1	LTFR0701B2	6200	LTAL0701B2	4400	LTFR1401B2	9710	LTAL1401B2	6890
New 2	LTFR0702B2	6500	LTAL0702B2	4800	LTFR1402B2	11375	LTAL1402B2	9050
New 3	LTFR0703B2	6800	LTAL0703B2	5440	LTFR1403B2	12190	LTAL1403B2	9750
New 4	LTFR0704B2	7220	LTAL0704B2	5780	LTFR1404B2	12800	LTAL1404B2	10250
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)
New 1 kVAr	LTCCR, LTCCF	1.2 kVAr	1.3 kVAr	LTCCR, LTCCF	1.3 kVAr
New 2 kVAr	LTCCR, LTCCF	2.2 kVAr	2.6 kVAr	LTCCR, LTCCF	2.6 kVAr
New 3 kVAr	LTCCR, LTCCF	3.3 kVAr	3.9 kVAr	LTCCR, LTCCF	3.9 kVAr
New 4 kVAr	LTCCF	4.4 kVAr	5.3 kVAr	LTCCF	5.3 kVAr
	LTCCR		5 kVAr	LTCCR	
5 kVAr	LTCCR, LTCCF, LT BCH, LT BCP	5.5 kVAr	6.6 kVAr	LTCCR, LTCCF, LT BCH, LT BCP	6.6 kVAr
	LTCCN, LTCCU, LTBCU	7.5 kVAr	7.5 kVAr	LTCCN, LTCCU, LTBCU	7.5 kVAr
10 kVAr	LTCCD, LTBCD, LTCCR, LT BCH, LT BCP	11.1 kVAr	13.2 kVAr	LTCCD, LTBCD, LTCCR, LT BCH, LT BCP	13.2 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, LTCCU, LTBCU	15 kVAr
	LTCCD, LTBCD, LT BCP	13.8 kVAr	16.6 kVAr	LTCCD, LTBCD, LT BCP	16.6 kVAr
15 kVAr	LTCCN, LTCCR, LT BCH, LTCCU, LTBCU	20 kVAr	20 kVAr	LTCCN, LTCCR, LT BCH, LTCCU, LTBCU, LT BCP, LTCCD, LTBCD	20 kVAr
	LT BCP, LTCCD, LTBCD	16.6 kVAr			
20 kVAr	LTCCN, LTCCR, LT BCH, LTBCU	25 kVAr	25 kVAr	LTCCN, LTCCR, LT BCH, LTBCU	25 kVAr
	LT BCP, LTCCD, LTBCD	22.1 kVAr	26.5 kVAr	LTCCD, LTBCD, LT BCP	26.5 kVAr
	LTCCU	7.5 + 15 kVAr	2 x 12.5 kVAr	LTCCU	2 x 12.5 kVAr
25 kVAr	LTCCD, LTBCD, LTCCR, LT BCH, LT BCP	27.7 kVAr	33.1 kVAr	LTCCD, LTBCD, LT BCP, LTCCN, LTCCR, LT BCH, LTBCU	30 kVAr
	LTBCU	30 kVAr	33.1 kVAr		
	LTCCN		25 + 8.33 kVAr		
	LTCCU	12.5 + 15 kVAr	15 + 20 kVAr		
50 kVAr	LTCCD, LTBCD, LTCCR, LT BCH, LT BCP	2 x 27.7 kVAr	2 x 33.1 kVAr	LTCCD, LTBCD, LT BCP, LTCCN, LTCCR, LT BCH, LTBCU	2 x 30 kVAr
	LTBCU	2 x 30 kVAr	2 x 33.1 kVAr		
	LTCCN		2 x (25 + 8.33) kVAr		
	LTCCU	2 x (12.5 + 15) kVAr	2 x (15 + 20) kVAr		
100 kVAr	LTCCD, LTBCD, LTCCR, LT BCH, LT BCP	4 x 27.7 kVAr	4 x 33.1 kVAr	LTCCD, LTBCD, LT BCP, LTCCN, LTCCR, LT BCH, LTBCU	4 x 30 kVAr
	LTBCU	4 x 30 kVAr	4 x 33.1 kVAr		
	LTCCN		4 x (25 + 8.33) kVAr		
	LTCCU	4 x (12.5 + 15) kVAr	4 x (15 + 20) 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	1545	1
	5	MO C5	1NO	CS96127	1650	1
	8.5	MO C8.5	1NO	CS96320	1830	1
	10	MO C10	1NO	CS96156	1985	1
	12.5	MO C12.5	1NO	CS96321	2040	1
	15	MO C15	1NO	CS90019	2845	1
	20	MO C20	1NO	CS90021	3250	1
	25	MO C25▲	1NO	CS96322	3685	1
Fr 2	30	MO C30\$	1NO	CS96148	5470	1
	40	MO C40	1NO	CS96147	9460	1
	50	MO C50	1NO	CS96324	10440	1
Fr 3	60	MO C60\$	1NO	CS96149	12235	1
	75	MO C75	1NO	CS96150	14115	1
	85	MO C85	1NO	CS96157	14810	1
	100	MO C100\$	1NO	CS96158	15750	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]

New

### etaULTRA - APFC Controller - 3 CT inputs

#### Features:

- 3 Phase Current and Voltage measurement
- PF display - 3 Digit after decimal
- Cascading - Master - Slave Configuration possible to increase contact outputs
- Individual harmonics measurement up to 31st order
- Dual PF setting for Mains - DG application
- Communication through Inbuilt MODBUS RS-485 Protocol



### etaULTRA R - APFC controller for Contactor switching with 3 CT inputs

Steps	No of steps (For Contactor switching)	Voltage Input	Cat. No.	Size	M.R.P. (₹) Per Unit
etaULTRA 8R	8	110/415	CS910500000	144 x 144	17500
etaULTRA 16R	16		CS910510000		23500

### etaULTRA T - APFC controller for Thyristor switching with 3 CT inputs

Steps	No of steps (For Thyristor switching)	Voltage Input	Cat. No.	Size	M.R.P. (₹) Per Unit
etaULTRA 8T+2R#	8	110/415	CS910520000	144 x 144	17500
etaULTRA 14T+2R#	14		CS910530000		23500

2R# - These two Relay contacts are meant for Alarm and Fan control. They are not to be used for Thyristor control.

### etaSMART - APFC Controller - 1 CT input

#### 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	8200
6	96 x 96	CS908850000			9500
8	96 x 96	CS909020000			11000
12	144 x 144	CS909030000			12700
14	144 x 144	CS909040000			14000
16	144 x 144	CS909050000			15500

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

# APFC Controller [8536]

## etaCON M - APFC Controller

APFC controller for Contactor switching with 1 CT input

### 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
- Capacitor failure indication
- Suitable for LT 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	10500
5	4 + 1*	96 x 96	5 Step APFC Controller	ETACONM005R	12200
6	5 + 1*	96 x 96	3 Step APFC Controller + 3 Step Plug-in module	ETACONM003R + ETACONEXP3R	12700
7	6 + 1*	96 x 96	5 Step APFC Controller + 2 Step Plug-in module	ETACONM005R + ETACONEXP2R	13750
8	7 + 1*	96 x 96	5 Step APFC Controller + 3 Step Plug-in module	ETACONM005R + ETACONEXP3R	14400
8	7 + 1*	144 x 144	8 Step APFC Controller	ETACONM008R	15500
10	9 + 1*	144 x 144	8 Step Controller + 2 Step Plug-in module	ETACONM008R + ETACONEXP2R	17050
11**	10 + 1*	144 x 144	8 Step Controller + 3 Step Plug-in module	ETACONM008R + ETACONEXP3R	17700
12	11 + 1*	144 x 144	8 Step APFC Controller + 2 Step Plug-in module + 2 Step Plug-in module	ETACONM008R + ETACONEXP2R + ETACONEXP2R	18600
13	12 + 1*	144 x 144	8 Step APFC Controller + 2 Step Plug-in module + 3 Step Plug-in module	ETACONM008R + ETACONEXP2R + ETACONEXP3R	19250
14	13 + 1*	144 x 144	8 Step APFC Controller + 3 Step Plug-in module + 3 Step Plug-in module	ETACONM008R + ETACONEXP3R + ETACONEXP3R	19900

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

\*\* Maximum 11 steps can be offered when communicable module is used

## 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	10500
5 Step APFC Controller (96 x96)			ETACONM005R	12200
8 Step APFC Controller (144 x144)			ETACONM008R	15500

## etaCON M Optional Plug-in Modules

Description	Model	Cat. No.	M.R.P. (₹) Per Unit
2 Steps Plug-in Module	2 Relays NO	ETACONEXP2R	1550
3 Steps Plug-in Module	3 Relays NO	ETACONEXP3R	2200
RS485 Plug-in Module	RS485 Plug-in Module	ETACONRS485	7700

# 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			

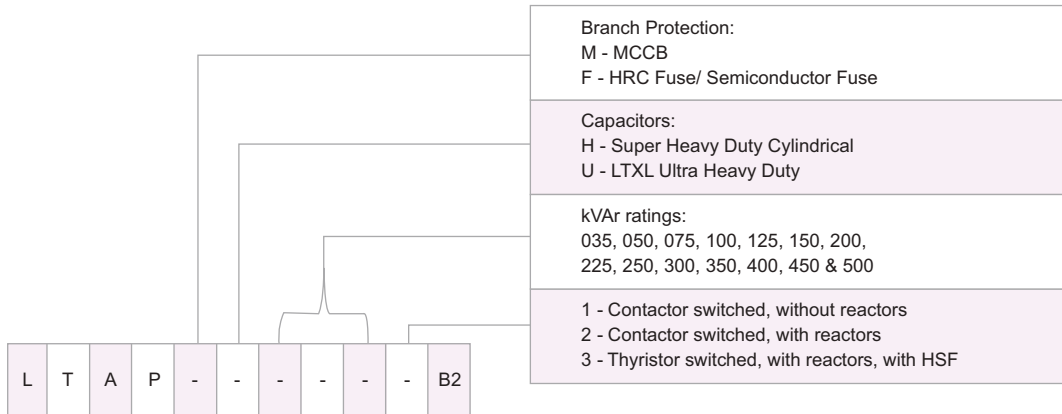
# etaSYS Standard APFC Panels [8537]

## 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	15000
		4 NO		MC31ANX4000	

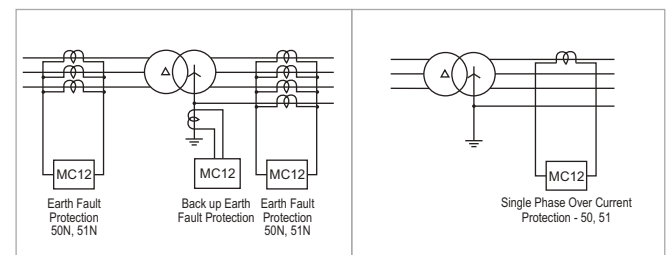
## Single Pole Over Current or Earth Fault Relay

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	11000
		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	17000
		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	21000
		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	22000

## 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	7200
	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	2900
		2 - 5.5		MPR201BE020	2900
		4 - 11		MPR202BE040	3500
		8 - 22		MPR203BE080	3500
		16 - 44		MPR204BE160	4100
		32 - 88		MPR205BE320	4100
	110V AC	1 - 2.75		MPR200BB010	2900
		2 - 5.5		MPR201BB020	2900
		4 - 11		MPR202BB040	3500
		8 - 22		MPR203BB080	3500
		16 - 44		MPR204BB160	4100
		32 - 88		MPR205BB320	4100

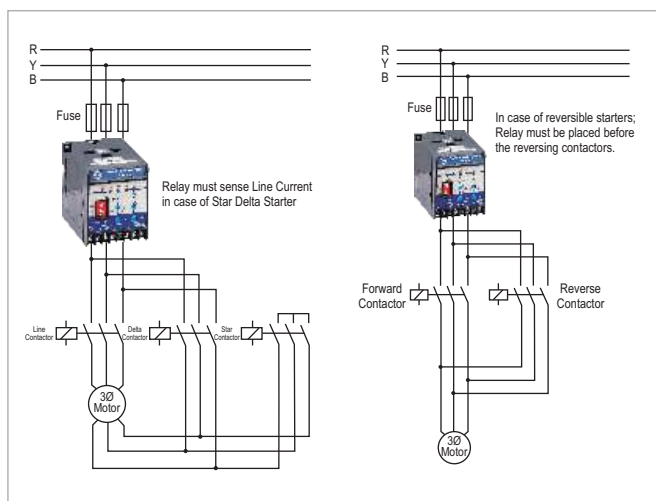
## MPR300 Electronic Motor Protection Relay With in-built Earth Fault Protection



- 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	6200
		2 - 5.5		MPR301BE020	6200
		4 - 11		MPR302BE040	6800
		8 - 22		MPR303BE080	6800
		16 - 44		MPR304BE160	7400
		32 - 88		MPR305BE320	7400
	110V AC	1 - 2.75		MPR300BB010	6200
		2 - 5.5		MPR301BB020	6200
		4 - 11		MPR302BB040	6800
		8 - 22		MPR303BB080	6800
		16 - 44		MPR304BB160	7400
		32 - 88		MPR305BB320	7400

## MPR200nX / MPR300 Application Diagram



## MPR200nX / MPR300 Trip Time Characteristics

Trip class	Trip time delay		
	I = 120% of I <sub>m</sub>	I = 150% of I <sub>m</sub>	I = 720% of I <sub>m</sub>
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

I<sub>m</sub> - Motor Full Load Current  
I - Actual current drawn by the Motor

# Motor Protection Relays [8536]

## 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	19000

## 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



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

# Voltage & Frequency Relays [8536]

## 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	11000
	88 - 264V AC/DC		MV12AB00X00	

# APFC Controller [8536]



## etaULTRA - APFC Controller - 3 CT inputs

### Features:

- 3 Phase Current and Voltage measurement
- PF display - 3 Digit after decimal
- Cascading - Master - Slave Configuration possible to increase contact outputs
- Individual harmonics measurement up to 31st order
- Dual PF setting for Mains - DG application



## etaULTRA R - APFC controller for Contactor switching with 3 CT inputs

Steps	No of steps (For Contactor switching)	Voltage Input	Cat. No.	Size	M.R.P. (₹) Per Unit
etaULTRA 8R	8	110/415	CS910500000	144 x 144	17500
etaULTRA 16R	16		CS910510000		23500

## etaULTRA T - APFC controller for Thyristor switching with 3 CT inputs

Steps	No of steps (For Thyristor switching)	Voltage Input	Cat. No.	Size	M.R.P. (₹) Per Unit
etaULTRA 8T+2R <sup>#</sup>	8	110/415	CS910520000	144 x 144	17500
etaULTRA 14T+2R <sup>#</sup>	14		CS910530000		23500

2R<sup>#</sup> - These two Relay contacts are meant for Alarm and Fan control. They are not to be used for Thyristor control.

## etaSMART - APFC Controller - 1 CT input

### 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	8200
6	96 x 96	CS908850000			9500
8	96 x 96	CS909020000			11000
12	144 x 144	CS909030000			12700
14	144 x 144	CS909040000			14000
16	144 x 144	CS909050000			15500

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

## etaCON M - APFC Controller

APFC controller for Contactor switching with 1 CT input

### 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
- Capacitor failure indication
- Suitable for LT 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	10500
5	4 + 1*	96 x 96	5 Step APFC Controller	ETACONM005R	12200
6	5 + 1*	96 x 96	3 Step APFC Controller + 3 Step Plug-in module	ETACONM003R + ETACONEXP3R	12700
7	6 + 1*	96 x 96	5 Step APFC Controller + 2 Step Plug-in module	ETACONM005R + ETACONEXP2R	13750
8	7 + 1*	96 x 96	5 Step APFC Controller + 3 Step Plug-in module	ETACONM005R + ETACONEXP3R	14400
8	7 + 1*	144 x 144	8 Step APFC Controller	ETACONM008R	15500
10	9 + 1*	144 x 144	8 Step Controller + 2 Step Plug-in module	ETACONM008R + ETACONEXP2R	17050
11**	10 + 1*	144 x 144	8 Step Controller + 3 Step Plug-in module	ETACONM008R + ETACONEXP3R	17700
12	11 + 1*	144 x 144	8 Step APFC Controller + 2 Step Plug-in module + 2 Step Plug-in module	ETACONM008R + ETACONEXP2R + ETACONEXP2R	18600
13	12 + 1*	144 x 144	8 Step APFC Controller + 2 Step Plug-in module + 3 Step Plug-in module	ETACONM008R + ETACONEXP2R + ETACONEXP3R	19250
14	13 + 1*	144 x 144	8 Step APFC Controller + 3 Step Plug-in module + 3 Step Plug-in module	ETACONM008R + ETACONEXP3R + ETACONEXP3R	19900

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

\*\* Maximum 11 steps can be offered when communicable module is used

## 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	10500
5 Step APFC Controller (96 x96)			ETACONM005R	12200
8 Step APFC Controller (144 x144)			ETACONM008R	15500

## etaCON M Optional Plug-in Modules

Description	Model	Cat. No.	M.R.P. (₹) Per Unit
2 Steps Plug-in Module	2 Relays NO	ETACONEXP2R	1550
3 Steps Plug-in Module	3 Relays NO	ETACONEXP3R	2200
RS485 Plug-in Module	RS485 Plug-in Module	ETACONRS485	7700



## 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	1340
1P LCD Meter 5-30A with BOX	WM101BC5DL0BOX	1793
1P LCD Meter 5-30A with OPTICAL PORT	WM101BC5DDH	1840
1P LCD Meter 5-30A with Optical port + BOX	WM101BC5DDHBOX	2293
1P LCD Meter 10-60A	WM101BC7DL0	1585
1P LCD Meter 10-60A with BOX	WM101BC7DL0BOX	1999
1P LCD Meter 10-60A with Optical Port	WM101BC7DDH	2027
1P LCD Meter 10-60A with Optical Port + BOX	WM101BC7DDHBOX	2331

## 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

\*\*EM301B's available till stocks last

## 3 Phase 4 Wire kWh meter LCD type

Model ER300P Base Mounting



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph 4 W kWh CT op base mtg 240V, /5A, Acc 0.5s	WR301BC3C00	4050
3Ph 4 W kWh Dir base mtg 240V 5 - 30 A Acc 1	WR301BC4D20	3393
3Ph 4 W kWh Dir base mtg 240V 10 - 40 A Acc 1	WR301BC6D20	3493
3Ph 4 W kWh Dir base mtg 240V 10 - 60 A Acc 1	WR301BC7D10	4423
3Ph 4 W kWh Dir base mtg 240V 20 - 100 A Acc 1	WR301BC8D10	6415

## 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	6035
3Ph, 4W TVM 240 V 10 - 60A BM RS 485*	WR300BC73RS485	8609
3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box	WR300BC73BOXH	7476

\* - 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	47042
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.2s BM	WR300BB5100	47042
3Ph, 4W TVM 110V ( L-L) 1 A Class 0.2s BM RS485	WR300BB11RS	50184
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.2s BM RS485	WR300BB51RS	50184

## 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	19389
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.5s BM	WR300BB5200	19389
3Ph, 4W TVM 240V ( L-N) 1 A Class 0.5s BM *	WR300BC1200	17869
3Ph, 4W TVM 240V ( L-N) 5 A Class 0.5s BM	WR300BC5200	17869
3Ph, 4W TVM 110V ( L-L) 1 A Class 0.5s BM RS485	WR300BB12RS	23267
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.5s BM RS485 *	WR300BB52RS	23267
3Ph, 4W TVM 240V ( L-N) 1 A CI 0.5s BM RS485 *	WR300BC12RS	21442
3Ph, 4W TVM 240V ( L-N) 5 A CI 0.5s BM RS485	WR300BC52RS	21442

\* - available on request only

## Meter Reading Instrument

[8471]



Description	Cat. No.	M.R.P. (₹) Per Unit
Meter Reading Instrument - (6.5 MB)	990MRIXX00S	87330
Meter Reading Instrument - (16.5 MB)	990MRIXX000	100241
Meter Optical port to USB cable	990PCXXUSB	1200

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Your trusted partner for the continued growth of your business – Larsen & Toubro – presents SmartComm Energy Management System. It enables you to measure and monitor your electrical system, consequently helping you save energy. At the heart of this monitoring system are our digital panel meters, with host of benefits.

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- Glimpse of all entire energy consumption in the plant through dashboard
- Provision to generate multiple report types

## Digital Panel Meters

- Meters with Class 1, Class 0.5, 0.5S, Class 0.2, 0.2S accuracy
- Meters with THD and individual harmonics up to 31st
- Direct access to Basic, Power and Energy parameters through front keys
- RS485 or Ethernet communication available
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## Customer Interaction Center (CIC)

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858  
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## L&T's metering solutions include:

Single function meters

VAF + PF meters

Energy meters

Dual Source meters

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 / DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- Inbuilt selector switch for 3 phase meters
- CT/PT site programmable
- Frequency parameter available in 3Ph Voltmeter additionally



Description	Cat. No.	M.R.P. (₹) Per Unit
1Ph LED Ammeter CI 1	WL1110100000	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



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

## 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)
- 2 relay o/p for Maximum Demand Indication (w/o Real Time Clock)

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)
- 2 relay o/p for Maximum Demand Indication (w/o Real Time Clock)

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



### 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]

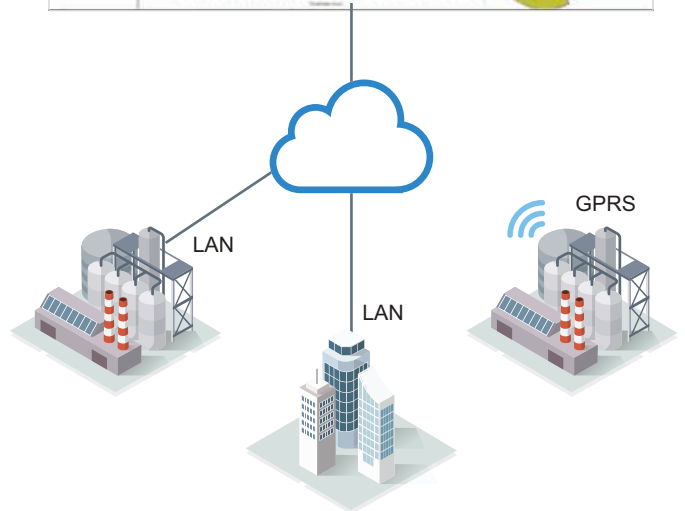
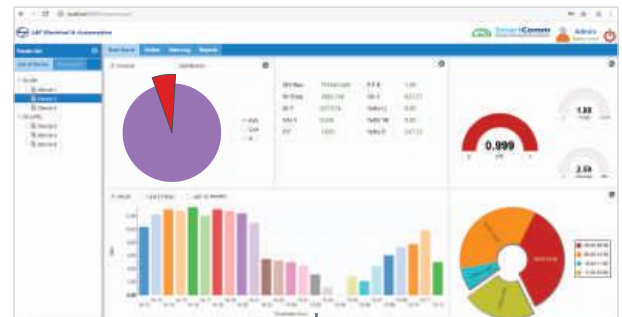


## SmartComm EMS

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
  - Monitor ON, OFF, Trip, Ready to close status of circuit breaker through L&T's UNCO module.
  - Control Circuit breaker ON & OFF, provision for breaker On & Trip counter, last 20 trips date & time stamp
  - Email & sms notification
- SmartComm EMS license ordering is based on number of nodes i.e meters / UNCO module to be connected in the system.



SmartComm EMS software now upgraded for Cloud and Web



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

# ► Automation Solutions



Metal



Oil & Gas



HVAC



Textile



Pharma



Sugar



Water

AC Drives	Soft Starter	PLC	HMI	Servo
Cx2000	EMX4e			
Sx2000	EMX4i	XLB - E	B - XT	
Fx2000	EMX3	XLB - S	S - XT	M5
Hx2000	CSX	XLB - U	I - XT	
	CSXi			

## 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 blind display drive comes with optional detachable display. Please contact branch office for the same.

## Smart Series Sx2000



- Range: 0.75kW to 90kW
- Starting Torque: 150% at 3 Hz for V/F, 200% at 0.5Hz for Sensorless 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 18% 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 Sensorless 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, 2DO (1R+1T), 2AI, 1AO

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Three Phase 415Vac	Sx2000 VVVF 415V IP66 Drive 0.40 kW (HD)	LTVF-S40001XAA	*
	Sx2000 VVVF 415V IP66 Drive 0.75 kW (HD)	LTVF-S40003XAA	*
	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 7.50 kW (HD)	LTVF-S40016XAA	*
	Sx2000 VVVF 415V IP66 Drive 11.0 kW (HD)	LTVF-S40024XAA	*
	Sx2000 VVVF 415V IP66 Drive 15.0 kW (HD)	LTVF-S40030XAA	*
	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 Vector Control
- Built-in Crane function
- Conformal Coating complying to IEC 60721-3-3 class 3C2 (3C3 Avg.)
- Built-in RS485 Modbus RTU
- Built-in DC Reactor from 22kW to 220kW HD
- Built-in Braking Chopper till 22kW HD
- 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  
Drives are covered under HS code 8504 40 90 and are charged at 18% GST.

# 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 (5R+1T), 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	*
	Profinet option card for Sx2000	LTCI-PFN-S	*
Fx2000	Ethernet IP - Modbus TCP Communication card	LTCI-ETH-S	*
	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	*
	Profinet option card for Fx2000	LTCI-PFN-P	*
	Application Development PLC Option card	LTAD-PLC-F	*
	CANOpen Communication Interface card	LTCI-CAN-F	*
Hx2000	DeviceNet Communication Interface card	LTCI-DEN-F	*
	Ethernet IP/Modbus TCP Communication Interface card	LTCI-ETH-F	*
DBU for Sx2000, Fx2000	I/O Expansion Card for Hx2000	LTIO-EXP-H	*
	I/O Expansion Card 2 for Hx2000	LTIO-EXP2-H	*
	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 18% 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

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	*	

## EMX4i 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
- Real time graphs of motor operating performance
- 384 event logs with time stamping
- Advanced protection system
- Communication options available
- Smart card for level controlled pump activation and pump protection
- Under Voltage / Over Voltage protection available
- Fire Mode Function
- Starts per hour count
- Power through function available
- Scheduling based on RTC

Description	Cat. No.	M.R.P. (₹) 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	*	

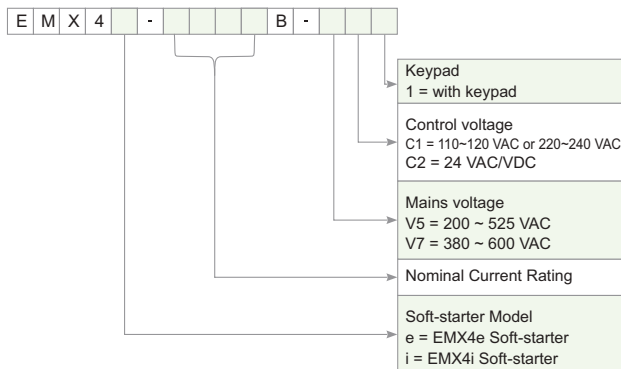
## Optional Accessories for EMX4i and EMX4e

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 transient's and excess I<sup>2</sup>T.

Ordering Information for EMX3 Soft Starter



### Note:

\* For prices please contact nearest branch office  
Soft Starters are covered under HS code 8504 40 90 and are charged at 18% GST.

## EMX3 Soft Starters



EMX3 Cat. No.	Suitable for Motor with Rated Current in Amps <sup>#</sup>		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 <sup>#</sup>		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	*	

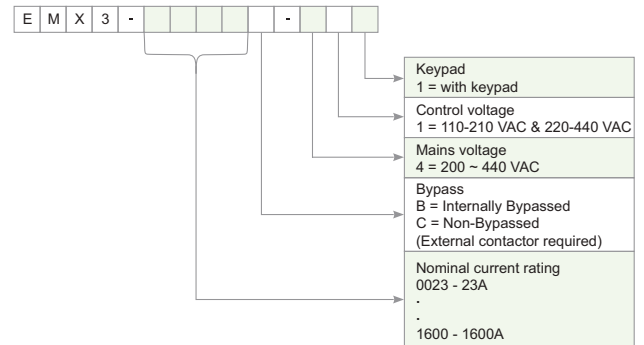
\* All protections remain active during bypass operation

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 18% 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 I<sup>2</sup>T.



# PLC

## Features:

- Processing speed: 0.06 $\mu$ 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@Ln-tebg.com Web: www.Ln-tebg.com

# The Most Flexible Solution For Changeover Applications



20.A7P8

Settable overload current limit  
at DG side

UAAE88

Separate power consumption  
monitoring for Mains & Genset

5PA888

Settable TPN / SPN mode for  
three phase and single phase  
DG supply

## Three Phase Automatic Changeover with Current Limiter

- Settable Overvoltage & Undervoltage protection
- Secured with password to avoid unauthorized access
- Protection against single phasing
- Simple & convenient programming
- Separate LED indication for Mains, Genset & Overload condition



### 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](mailto:cic@Lntebg.com) Web: [www.Lntebg.com](http://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
<b>Single Pole (SP)</b>							
0.5A	1	-	-	BB10E50C	345	BB10E50D	350
1A	1	-	-	BB10010C	345	BB10010D	350
2A	1	-	-	BB10020C	345	BB10020D	350
3A	1	-	-	BB10030C	345	BB10030D	350
4A	1	-	-	BB10040C	345	BB10040D	350
6A	1	BB10060B	219	BB10060C	219	BB10060D	290
10A	1	BB10100B	219	BB10100C	219	BB10100D	290
16A	1	BB10160B	219	BB10160C	219	BB10160D	290
20A	1	BB10200B	219	BB10200C	219	BB10200D	290
25A	1	BB10250B	219	BB10250C	219	BB10250D	290
32A	1	BB10320B	219	BB10320C	219	BB10320D	290
40A	1	BB10400B	500	BB10400C	500	BB10400D	525
50A	1	BB10500B	500	BB10500C	500	BB10500D*	525
63A	1	BB10630B	500	BB10630C	500	BB10630D*	525

## Double Pole (DP)



0.5A	2	-	-	BB20E50C	930	BB20E50D	945
1A	2	-	-	BB20010C	930	BB20010D	945
2A	2	-	-	BB20020C	930	BB20020D	945
3A	2	-	-	BB20030C	930	BB20030D	945
4A	2	-	-	BB20040C	930	BB20040D	945
6A	2	BB20060B	695	BB20060C	695	BB20060D	715
10A	2	BB20100B	695	BB20100C	695	BB20100D	715
16A	2	BB20160B	695	BB20160C	695	BB20160D	715
20A	2	BB20200B	695	BB20200C	695	BB20200D	715
25A	2	BB20250B	695	BB20250C	695	BB20250D	715
32A	2	BB20320B	695	BB20320C	695	BB20320D	715
40A	2	BB20400B	1125	BB20400C	1125	BB20400D	1165
50A	2	BB20500B	1125	BB20500C	1125	BB20500D*	1165
63A	2	BB20630B	1125	BB20630C	1125	BB20630D*	1165

## Three Pole (TP)



0.5A	3	-	-	BB30E50C	1320	BB30E50D	1330
1A	3	-	-	BB30010C	1320	BB30010D	1330
2A	3	-	-	BB30020C	1320	BB30020D	1330
3A	3	-	-	BB30030C	1320	BB30030D	1330
4A	3	-	-	BB30040C	1320	BB30040D	1330
6A	3	BB30060B	1135	BB30060C	1135	BB30060D	1165
10A	3	BB30100B	1135	BB30100C	1135	BB30100D	1165
16A	3	BB30160B	1135	BB30160C	1135	BB30160D	1165
20A	3	BB30200B	1135	BB30200C	1135	BB30200D	1165
25A	3	BB30250B	1135	BB30250C	1135	BB30250D	1165
32A	3	BB30320B	1135	BB30320C	1135	BB30320D	1165
40A	3	BB30400B	1745	BB30400C	1745	BB30400D	1810
50A	3	BB30500B	1745	BB30500C	1745	BB30500D*	1810
63A	3	BB30630B	1745	BB30630C	1745	BB30630D*	1810

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
<b>Four Pole (FP)</b>							
0.5A	4	-	-	<b>BB40E50C</b>	<b>1820</b>	<b>BB40E50D</b>	<b>1840</b>
1A	4	-	-	<b>BB40010C</b>	<b>1820</b>	<b>BB40010D</b>	<b>1840</b>
2A	4	-	-	<b>BB40020C</b>	<b>1820</b>	<b>BB40020D</b>	<b>1840</b>
3A	4	-	-	<b>BB40030C</b>	<b>1820</b>	<b>BB40030D</b>	<b>1840</b>
4A	4	-	-	<b>BB40040C</b>	<b>1820</b>	<b>BB40040D</b>	<b>1840</b>
6A	4	<b>BB40060B</b>	<b>1525</b>	<b>BB40060C</b>	<b>1525</b>	<b>BB40060D</b>	<b>1560</b>
10A	4	<b>BB40100B</b>	<b>1525</b>	<b>BB40100C</b>	<b>1525</b>	<b>BB40100D</b>	<b>1560</b>
16A	4	<b>BB40160B</b>	<b>1525</b>	<b>BB40160C</b>	<b>1525</b>	<b>BB40160D</b>	<b>1560</b>
20A	4	<b>BB40200B</b>	<b>1525</b>	<b>BB40200C</b>	<b>1525</b>	<b>BB40200D</b>	<b>1560</b>
25A	4	<b>BB40250B</b>	<b>1525</b>	<b>BB40250C</b>	<b>1525</b>	<b>BB40250D</b>	<b>1560</b>
32A	4	<b>BB40320B</b>	<b>1525</b>	<b>BB40320C</b>	<b>1525</b>	<b>BB40320D</b>	<b>1560</b>
40A	4	<b>BB40400B</b>	<b>2180</b>	<b>BB40400C</b>	<b>2180</b>	<b>BB40400D</b>	<b>2250</b>
50A	4	<b>BB40500B</b>	<b>2180</b>	<b>BB40500C</b>	<b>2180</b>	<b>BB40500D*</b>	<b>2250</b>
63A	4	<b>BB40630B</b>	<b>2180</b>	<b>BB40630C</b>	<b>2180</b>	<b>BB40630D*</b>	<b>2250</b>

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

## 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
<b>Single Pole</b>			
0.5A	1	<b>BB10E5DC</b>	<b>505</b>
1A	1	<b>BB1001DC</b>	<b>505</b>
2A	1	<b>BB1002DC</b>	<b>505</b>
3A	1	<b>BB1003DC</b>	<b>505</b>
4A	1	<b>BB1004DC</b>	<b>505</b>
6A	1	<b>BB1006DC</b>	<b>435</b>
10A	1	<b>BB1010DC</b>	<b>435</b>
16A	1	<b>BB1016DC</b>	<b>435</b>
20A	1	<b>BB1020DC</b>	<b>435</b>
25A	1	<b>BB1025DC</b>	<b>435</b>
32A	1	<b>BB1032DC</b>	<b>435</b>
40A	1	<b>BB1040DC</b>	<b>570</b>
50A	1	<b>BB1050DC</b>	<b>570</b>
63A	1	<b>BB1063DC</b>	<b>570</b>



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
<b>Single Pole</b>			
0.5A	1	<b>BJ10E5DC</b>	<b>605</b>
1A	1	<b>BJ1001DC</b>	<b>605</b>
2A	1	<b>BJ1002DC</b>	<b>605</b>
3A	1	<b>BJ1003DC</b>	<b>605</b>
4A	1	<b>BJ1004DC</b>	<b>605</b>
6A	1	<b>BJ1006DC</b>	<b>495</b>
10A	1	<b>BJ1010DC</b>	<b>495</b>
16A	1	<b>BJ1016DC</b>	<b>495</b>
20A	1	<b>BJ1020DC</b>	<b>495</b>
25A	1	<b>BJ1025DC</b>	<b>495</b>
32A	1	<b>BJ1032DC</b>	<b>495</b>
40A	1	<b>BJ1040DC</b>	<b>680</b>

### Double Pole

0.5A	2	<b>BB20E5DC</b>	<b>1025</b>
1A	2	<b>BB2001DC</b>	<b>1025</b>
2A	2	<b>BB2002DC</b>	<b>1025</b>
3A	2	<b>BB2003DC</b>	<b>1025</b>
4A	2	<b>BB2004DC</b>	<b>1025</b>
6A	2	<b>BB2006DC</b>	<b>905</b>
10A	2	<b>BB2010DC</b>	<b>905</b>
16A	2	<b>BB2016DC</b>	<b>905</b>
20A	2	<b>BB2020DC</b>	<b>905</b>
25A	2	<b>BB2025DC</b>	<b>905</b>
32A	2	<b>BB2032DC</b>	<b>905</b>
40A	2	<b>BB2040DC</b>	<b>1225</b>
50A	2	<b>BB2050DC</b>	<b>1225</b>
63A	2	<b>BB2063DC</b>	<b>1225</b>

### Double Pole

0.5A	2	<b>BJ20E5DC</b>	<b>1255</b>
1A	2	<b>BJ2001DC</b>	<b>1255</b>
2A	2	<b>BJ2002DC</b>	<b>1255</b>
3A	2	<b>BJ2003DC</b>	<b>1255</b>
4A	2	<b>BJ2004DC</b>	<b>1255</b>
6A	2	<b>BJ2006DC</b>	<b>1060</b>
10A	2	<b>BJ2010DC</b>	<b>1060</b>
16A	2	<b>BJ2016DC</b>	<b>1060</b>
20A	2	<b>BJ2020DC</b>	<b>1060</b>
25A	2	<b>BJ2025DC</b>	<b>1060</b>
32A	2	<b>BJ2032DC</b>	<b>1060</b>
40A	2	<b>BJ2040DC</b>	<b>1505</b>

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos.



## Auxiliary & Accessories for MCBs [8538]

Description	Cat. No.	M.R.P. (₹) Per Unit
Auxiliary Contact - 6A , 240V AC, (1NO+1NC), 0.5 Mod	<b>BZA11006</b>	<b>730</b>
Shunt Release - 240V AC, 1 Mod	<b>BZS00240</b>	<b>1940</b>
Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod	<b>BZT11006</b>	<b>845</b>

# 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
<b>Single Pole</b>			
80A	1.5	AU15S10803C	1975
100A	1.5	AU15S11003C	2210
125A	1.5	AU15S11253C	2380

<b>Two Pole</b>			
80A	3	AU15S20803C	4370
100A	3	AU15S21003C	4665
125A	3	AU15S21253C	5135

<b>Three Pole</b>			
80A	4.5	AU15S30803C	6900
100A	4.5	AU15S31003C	7355
125A	4.5	AU15S31253C	8160

<b>Four Pole</b>			
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
<b>Double Pole (DP)</b>				
25A	30 mA	2	BG202503	2500
	100 mA	2	BG202510	2620
	300 mA	2	BG202530	2620
40A	30 mA	2	BG204003	2830
	100 mA	2	BG204010	2995
	300 mA	2	BG204030	2995
63A	30 mA	2	BG206303	3525
	100 mA	2	BG206310	3615
	300 mA	2	BG206330	3615
100A	30 mA	2	BG210003	6160
	100 mA	2	BG210010	6240
	300 mA	2	BG210030	6240

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Four Pole (FP)</b>				
25A	30 mA	4	BG402503	3310
	100 mA	4	BG402510	3430
	300 mA	4	BG402530	3430
40A	30 mA	4	BG404003	3325
	100 mA	4	BG404010	3485
	300 mA	4	BG404030	3485
63A	30 mA	4	BG406303	3815
	100 mA	4	BG406310	4005
	300 mA	4	BG406330	4005
100A	30 mA	4	BG410003	6595
	100 mA	4	BG410010	6715
	300 mA	4	BG410030	6715

# 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
<b>2P Adi</b>				
25A	30mA	2	AURAD202503	3935
	100mA	2	AURAD202510	4115
	300mA	2	AURAD202530	4115
40A	30mA	2	AURAD204003	4180
	100mA	2	AURAD204010	4245
	300mA	2	AURAD204030	4245
63A	30mA	2	AURAD206303	4880
	100mA	2	AURAD206310	4975
	300mA	2	AURAD206330	4975
100A	30mA	2	AURAD210003	7215

Rating	Sensitivity	Module	CAT Nos.	M.R.P. (₹) Per Unit
<b>4P Adi</b>				
25A	30mA	4	AURAD402503	4755
	100mA	4	AURAD402510	4850
	300mA	4	AURAD402530	4850
40A	30mA	4	AURAD404003	4935
	100mA	4	AURAD404010	5020
	300mA	4	AURAD404030	5020
63A	30mA	4	AURAD406303	5375
	100mA	4	AURAD406310	5485
	300mA	4	AURAD406330	5485
100A	30mA	4	AURAD410003	8565
	300mA	4	AURAD410030	8565

# 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	420	3	BF304000	740	4	BF404000	965
63A	2	BF206300	540	3	BF306300	855	4	BF406300	980
80A	2	BF208000	690	3	BF308000	945	4	BF408000	1115
100A	2	BF210000	725	3	BF310000	955	4	BF410000	1180

**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<sub>max</sub> up to 70kA
- Type 1+2 : Protection against direct and indirect lightning surges
  - Maximum Discharge Current - I<sub>max</sub> up to 100kA



**Extend SPD life with Spare Cartridges**

Description	Configuration	Module	Cat. No.	M.R.P. (₹) Per Unit
Type 1+2, I <sub>max</sub> 50kA	1P+N	2	AUSP121PN50	6480
	3P+N	4	AUSP123PN50	12720
Type 2, I <sub>max</sub> 40kA	1P+N	1	AUSP021PN40	4500
	3P+N	2	AUSP023PN40	9000
Type 2, I <sub>max</sub> 15kA	1P+N	1	AUSP021PN15	3600
	3P+N	2	AUSP023PN15	7080
Type 1+2, I <sub>max</sub> 100kA	1P+N	2	AUSP121PN100	7200
	3P+N	4	AUSP123PN100	13200
Type 2, I <sub>max</sub> 70kA	1P+N	2	AUSP021PN70	7200
	3P+N	4	AUSP023PN70	12000

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
<b>2P AC</b>				
6A	10mA	2	AUF3C200601	3735
	30mA	2	AUF3C200603	3735
	100mA	2	AUF3C200610	3815
	300mA	2	AUF3C200630	3855
10A	10mA	2	AUF3C201001	3735
	30mA	2	AUF3C201003	3735
	100mA	2	AUF3C201010	3815
	300mA	2	AUF3C201030	3855
16A	10mA	2	AUF3C201601	3735
	30mA	2	AUF3C201603	3735
	100mA	2	AUF3C201610	3815
	300mA	2	AUF3C201630	3855
20A	30mA	2	AUF3C202003	3735
	100mA	2	AUF3C202010	3815
	300mA	2	AUF3C202030	3855
25A	30mA	2	AUF3C202503	3735
	100mA	2	AUF3C202510	3815
	300mA	2	AUF3C202530	3855
32A	30mA	2	AUF3C203203	3735
	100mA	2	AUF3C203210	3815
	300mA	2	AUF3C203230	3855
40A	30mA	2	AUF3C204003	3735
	100mA	2	AUF3C204010	3815
	300mA	2	AUF3C204030	3855
63A	30mA	4	AUF3C206303	4790
	100mA	4	AUF3C206310	5075
	300mA	4	AUF3C206330	5115
<b>4P AC</b>				
16A	30mA	7.5	AUF3C401603	4330
	100mA	7.5	AUF3C401610	4815
	300mA	7.5	AUF3C401630	4915
20A	30mA	7.5	AUF3C402003	4330
	100mA	7.5	AUF3C402010	4815
	300mA	7.5	AUF3C402030	4915
25A	30mA	7.5	AUF3C402503	4330
	100mA	7.5	AUF3C402510	4815
	300mA	7.5	AUF3C402530	4915
32A	30mA	7.5	AUF3C403203	4470
	100mA	7.5	AUF3C403210	4820
	300mA	7.5	AUF3C403230	4925
40A	30mA	7.5	AUF3C404003	4535
	100mA	7.5	AUF3C404010	4820
	300mA	7.5	AUF3C404030	4940
63A	30mA	7.5	AUF3C406303	5440
	100mA	7.5	AUF3C406310	5545
	300mA	7.5	AUF3C406330	5545
80A	30mA	12	AUF3C408003	19435
	100mA	12	AUF3C408010	19870
	300mA	12	AUF3C408030	19870
100A	30mA	12	AUF3C410003	20780
	100mA	12	AUF3C410010	21275
	300mA	12	AUF3C410030	21275

## Type-Adi

Rating	Sensitivity	Module	CAT Nos.	M.R.P. (₹) Per Unit
<b>2P Adi</b>				
6A	30mA	2	AUF3D200603	4845
	100mA	2	AUF3D200610	5335
	300mA	2	AUF3D200630	5535
10A	30mA	2	AUF3D201003	4845
	100mA	2	AUF3D201010	5335
	300mA	2	AUF3D201030	5535
16A	30mA	2	AUF3D201603	4845
	100mA	2	AUF3D201610	5335
	300mA	2	AUF3D201630	5535
20A	30mA	2	AUF3D202003	4845
	100mA	2	AUF3D202010	5335
	300mA	2	AUF3D202030	5535
25A	30mA	2	AUF3D202503	4845
	100mA	2	AUF3D202510	5335
	300mA	2	AUF3D202530	5535
32A	30mA	2	AUF3D203203	4845
	100mA	2	AUF3D203210	5335
	300mA	2	AUF3D203230	5535
40A	30mA	2	AUF3D204003	4845
	100mA	2	AUF3D204010	5335
	300mA	2	AUF3D204030	5535
63A	30mA	4	AUF3D206303	6020
	100mA	4	AUF3D206310	6370
	300mA	4	AUF3D206330	6420
<b>4P Adi</b>				
16A	30mA	7.5	AUF3D401603	5440
	100mA	7.5	AUF3D401610	6050
	300mA	7.5	AUF3D401630	6175
20A	30mA	7.5	AUF3D402003	5440
	100mA	7.5	AUF3D402010	6050
	300mA	7.5	AUF3D402030	6175
25A	30mA	7.5	AUF3D402503	5440
	100mA	7.5	AUF3D402510	6050
	300mA	7.5	AUF3D402530	6175
32A	30mA	7.5	AUF3D403203	5615
	100mA	7.5	AUF3D403210	6055
	300mA	7.5	AUF3D403230	6185
40A	30mA	7.5	AUF3D404003	5700
	100mA	7.5	AUF3D404010	6055
	300mA	7.5	AUF3D404030	6205
63A	30mA	7.5	AUF3D406303	6830
	100mA	7.5	AUF3D406310	6965
	300mA	7.5	AUF3D406330	6965
80A	30mA	12	AUF3D408003	19435
	100mA	12	AUF3D408010	19870
	300mA	12	AUF3D408030	19870
100A	30mA	12	AUF3D410003	20780
	100mA	12	AUF3D410010	21275
	300mA	12	AUF3D410030	21275

\* 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	1985
30A/2.5A	4	AUCL010302E5	1985
30A/3A	4	AUCL01030003	1985
30A/4A	4	AUCL01030004	1985
30A/5A	4	AUCL01030005	1985
30A/6A	4	AUCL01030006	1985
30A/8A	4	AUCL01030008	1985
30A/10A	4	AUCL01030010	1985
30A/12A	4	AUCL01030012	1985
30A/15A	4	AUCL01030015	1985
30A/20A	4	AUCL01030020	1985
30A/30A	4	AUCL01030030*	1985

\* Non-current limiting variant

## Three Phase - ACCL [8536]



### Automatic Changeover with Current Limiter

#### Range Highlights

- Settable overload current limit at DG side
- Separate power consumption monitoring for Mains & Genset
- Settable overvoltage & undervoltage protection
- Settable TPN or SPN mode at DG side
- Protection against single phasing



Description (AC-1)	Cat. No.	M.R.P. (₹) Per Unit
32A / 32A	AUCL03032032	8000
40A / 32A	AUCL03040032	8400
40A / 40A	AUCL03040040	8900
50A / 50A	AUCL03050050	12000
63A / 50A	AUCL03063050	13500
63A / 63A	AUCL03063063	15000
80A / 80A	AUCL03080080	20500
125A / 125A	AUCL03125125	33000

## 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
<b>Double Pole</b>			
25A	2	AUC00202500	1405
40A	2	AUC00204000	2155
63A	3	AUC00206300	2505
<b>Four Pole</b>			
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

## 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	1345
25A-2NO	1	AUMC2002501	1680
40A-2NO	3	AUMC2004003	2885
40A-3NO	3	AUMC3004003	4130
40A-4NO	3	AUMC4004003	4850
63A-2NO+2NC	3	AUMC2206303	5125
63A-3NO	3	AUMC3006303	5250
63A-4NO	3	AUMC4006303	5775
<b>Accessory [8538]</b>			
Auxiliary Contact, 2NO	0.5	AUMCAUX240	1625

## 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	750
AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240	880
Undervoltage Release	-	1	240V AC	AUUVAC240	1780
	-	1	24V DC	AUUVDC024	1780
Overvoltage Release	-	1	240V AC	AUOVAC240	2200
Shunt Release	-	1	240V AC	AUSRAC240	2045
	-	1	24V DC	AUSRDC024	2045
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



# Reliable Protection for DC Installations

## 250/500V DC MCBs

- ◆ 250V(SP) & 500V(DP)  
10kA breaking capacity
- ◆ Conforms to IEC 60947-2
- ◆ Range : 0.5A to 40A
- ◆   compliant

### 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](mailto:cic@Lntebg.com) Web: [www.Lntebg.com](http://www.Lntebg.com)

## 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	2955
Astro time switch	2	AUTS02AST00	4965

## 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

## DBs suitable for Aluminum Shuttering Construction [8537]

### SPN DBs

#### Highlights

- Available in CRCA sheet steel, RAL9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bar | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification label
- With provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer + Outgoing			
<b>IP 43 - Metal Door</b>				
4 way	2	2	LTSD04M	*
6 way	2	4	LTSD06M	*
8 way	2	6	LTSD08M	*
12 way	2	10	LTSD12M	*
16 way	2	14	LTSD16M	*

### TPN DBs

#### Highlights

- Available in CRCA sheet steel, RAL 9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bars | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification labels
- With provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer + Outgoing			
<b>IP 43 - Metal Door</b>				
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

*Specially Designed*

## Distribution Board suitable for Aluminum shuttering (Mivan) Construction



> To experience Scan or click



**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		
<b>IP 30 - Single Door</b>				
4 way	2	2	DBSPN004SD	1035
6 way	2	4	DBSPN006SD	1130
8 way	2	6	DBSPN008SD	1305
12 way	2	10	DBSPN012SD	1545
16 way	2	14	DBSPN016SD	1910
18 way	2	16	DBSPN018SD	2295
<b>IP 43 - Metal Door</b>				
4 way	2	2	DBSPN004DD	1425
6 way	2	4	DBSPN006DD	1640
8 way	2	6	DBSPN008DD	1760
12 way	2	10	DBSPN012DD	2125
16 way	2	14	DBSPN016DD	2660
18 way	2	16	DBSPN018DD	3300
<b>IP 43 - Glazed Door</b>				
4 way	2	2	DBSPN004GD	1785
6 way	2	4	DBSPN006GD	1905
8 way	2	6	DBSPN008GD	2075
12 way	2	10	DBSPN012GD	2510
16 way	2	14	DBSPN016GD	3120
18 way	2	16	DBSPN018GD	3445
<b>IP 54 - Metal Door</b>				
4 way	2	2	DBSPN00454	4285
6 way	2	4	DBSPN00654	4780
8 way	2	6	DBSPN00854	5040
12 way	2	10	DBSPN01254	5820
16 way	2	14	DBSPN01654	6445
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		
<b>IP 30 - Single Door</b>				
4 way	4	4+4+4	DBTPE004SD	2685
6 way	4	6+6+6	DBTPE006SD	3300
4 way	8	4+4+4	DBTPN004SD	2885
6 way	8	6+6+6	DBTPN006SD	3555
8 way	8	8+8+8	DBTPN008SD	4180
12 way	8	12+12+12	DBTPN012SD	6190
16 way	8	16+16+16	DBTPN016SD	7625
<b>IP 43 - Metal Door</b>				
4 way	4	4+4+4	DBTPE004DD	3280
6 way	4	6+6+6	DBTPE006DD	4045
4 way	8	4+4+4	DBTPN004DD	3495
6 way	8	6+6+6	DBTPN006DD	4310
8 way	8	8+8+8	DBTPN008DD	5160
12 way	8	12+12+12	DBTPN012DD	7730
16 way	8	16+16+16	DBTPN016DD	9530
<b>IP 43 - Glazed Door</b>				
4 way	4	4+4+4	DBTPE004GD	4185
6 way	4	6+6+6	DBTPE006GD	5165
4 way	8	4+4+4	DBTPN004GD	4465
6 way	8	6+6+6	DBTPN006GD	5505
8 way	8	8+8+8	DBTPN008GD	6600
12 way	8	12+12+12	DBTPN012GD	10125
16 way	8	16+16+16	DBTPN016GD	12150
<b>IP 54 - Metal Door</b>				
4 way	4	4+4+4	DBTPE00454	10140
6 way	4	6+6+6	DBTPE00654	12510
4 way	8	4+4+4	DBTPN00454	10675
6 way	8	6+6+6	DBTPN00654	12850
8 way	8	8+8+8	DBTPN00854	14055
12 way	8	12+12+12	DBTPN01254	19805
16 way	8	16+16+16	DBTPN01654	23775



**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		
<b>IP 43 - Metal Door</b>					
4 way	8	2+2+2	4+4+4	DBHPI004DD	5750
6 way	8	2+2+2	6+6+6	DBHPI006DD	6865
8 way	8	2+2+2	8+8+8	DBHPI008DD	8160
12 way	8	2+2+2	12+12+12	DBHPI012DD	11155
16 way	8	2+2+2	16+16+16	DBHPI016DD	13385
<b>IP 54 - Metal Door</b>					
4 way	8	2+2+2	4+4+4	DBHPI00454	12790
6 way	8	2+2+2	6+6+6	DBHPI00654	15235
8 way	8	2+2+2	8+8+8	DBHPI00854	16825
12 way	8	2+2+2	12+12+12	DBHPI01254	22970
16 way	8	2+2+2	16+16+16	DBHPI01654	27315



**Tier PPI DBs**

IP 43 - Metal Door

Description	No. of Modules			Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Sub-Incomer	Outgoing		
<b>IP 43 - Metal Door</b>					
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
<b>IP 54 - Metal Door</b>					
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		
<b>IP 30 - Single Door</b>					
4 way	8	4+4+4	4+4+4	DBPSG004SD	8020
6 way	8	4+4+4	6+6+6	DBPSG006SD	8755
8 way	8	4+4+4	8+8+8	DBPSG008SD	9380
12 way	8	4+4+4	12+12+12	DBPSG012SD	10795
<b>IP 43 - Metal Door</b>					
4 way	8	4+4+4	4+4+4	DBPSG004DD	9140
6 way	8	4+4+4	6+6+6	DBPSG006DD	10305
8 way	8	4+4+4	8+8+8	DBPSG008DD	11500
12 way	8	4+4+4	12+12+12	DBPSG012DD	14395
<b>IP 54 - Metal Door</b>					
4 way	8	4+4+4	4+4+4	DBPSG00454	14605
6 way	8	4+4+4	6+6+6	DBPSG00654	16445
8 way	8	4+4+4	8+8+8	DBPSG00854	18370
12 way	8	4+4+4	12+12+12	DBPSG01254	23435



**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		
<b>IP 30 - Single Door</b>					
4 way	MCCB	4+4+4	4+4+4	DBPGL004SD	11550
6 way	MCCB	4+4+4	6+6+6	DBPGL006SD	13295
8 way	MCCB	4+4+4	8+8+8	DBPGL008SD	15270
12 way	MCCB	4+4+4	12+12+12	DBPGL012SD	17730
<b>IP 43 - Metal Door</b>					
4 way	MCCB	4+4+4	4+4+4	DBPGL004DD	13180
6 way	MCCB	4+4+4	6+6+6	DBPGL006DD	15075
8 way	MCCB	4+4+4	8+8+8	DBPGL008DD	17270
12 way	MCCB	4+4+4	12+12+12	DBPGL012DD	19660
<b>IP 54 - Metal Door</b>					
4 way	MCCB	4+4+4	4+4+4	DBPGL00454	21230
6 way	MCCB	4+4+4	6+6+6	DBPGL00654	24285
8 way	MCCB	4+4+4	8+8+8	DBPGL00854	27820
12 way	MCCB	4+4+4	12+12+12	DBPGL01254	31680

\* 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		
<b>IP 30 - Single Door</b>				
4 way	8	4+4+4	DBPSR004SD	11055
6 way	8	6+6+6	DBPSR006SD	11750
8 way	8	8+8+8	DBPSR008SD	13020
10 way	8	10+10+10	DBPSR010SD	13505
12 way	8	12+12+12	DBPSR012SD	14290
<b>IP 43 - Metal Door</b>				
4 way	8	4+4+4	DBPSR004DD	12405
6 way	8	6+6+6	DBPSR006DD	12605
8 way	8	8+8+8	DBPSR008DD	13500
10 way	8	10+10+10	DBPSR010DD	14425
12 way	8	12+12+12	DBPSR012DD	15210
<b>IP 54 - Metal Door</b>				
4 way	8	4+4+4	DBPSR00454	15890
6 way	8	6+6+6	DBPSR00654	16145
8 way	8	8+8+8	DBPSR00854	17300
10 way	8	10+10+10	DBPSR01054	18480
12 way	8	12+12+12	DBPSR01254	19480

## 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
<b>IP 30 - Single Door</b>			
2 Row 28 Module	14	DBROW228SD	3705
3 Row 42 Module	14	DBROW342SD	4450
4 Row 56 Module	14	DBROW456SD	5095
4 Row 64 Module	16	DBROW464SD	5720
<b>IP 43 - Metal Door</b>			
2 Row 28 Module	14	DBROW228DD	4180
3 Row 42 Module	14	DBROW342DD	5015
4 Row 56 Module	14	DBROW456DD	5750
4 Row 64 Module	16	DBROW464DD	6450
<b>IP 43 - Glazed Door</b>			
2 Row 28 Module	14	DBROW228GD	4790
3 Row 42 Module	14	DBROW342GD	5870
4 Row 56 Module	14	DBROW456GD	6655
4 Row 64 Module	16	DBROW464GD	7300
<b>IP 54 - Metal Door</b>			
2 Row 28 Module	14	DBROW22854	7330
3 Row 42 Module	14	DBROW34254	9065
4 Row 56 Module	14	DBROW45654	9875
4 Row 64 Module	16	DBROW46454	10900

# 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	45	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	460	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

## 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

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
<b>IP 30 - Single Door</b>				
4 way	8	4+4+4	DBVTM004SD	7710
6 way	8	6+6+6	DBVTM006SD	8270
8 way	8	8+8+8	DBVTM008SD	9410
12 way	8	12+12+12	DBVTM012SD	13320
16 way	8	16+16+16	DBVTM016SD	15715
<b>IP 43 - Metal Door</b>				
4 way	8	4+4+4	DBVTM004DD	8205
6 way	8	6+6+6	DBVTM006DD	9830
8 way	8	8+8+8	DBVTM008DD	10995
12 way	8	12+12+12	DBVTM012DD	14905
16 way	8	16+16+16	DBVTM016DD	17945
<b>IP 43 - Glazed Door</b>				
4 way	8	4+4+4	DBVTM004GD	11030
6 way	8	6+6+6	DBVTM006GD	11890
8 way	8	8+8+8	DBVTM008GD	14020
12 way	8	12+12+12	DBVTM012GD	18335
16 way	8	16+16+16	DBVTM016GD	19855
<b>IP 54 - Metal Door</b>				
4 way	8	4+4+4	DBVTM00454	16965
6 way	8	6+6+6	DBVTM00654	18505
8 way	8	8+8+8	DBVTM00854	19810
12 way	8	12+12+12	DBVTM01254	26655
16 way	8	16+16+16	DBVTM01654	28790



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		
<b>IP 30 - Single Door</b>				
4 way	MCCB	4+4+4	DBVTL004SD	9415
6 way	MCCB	6+6+6	DBVTL006SD	10230
8 way	MCCB	8+8+8	DBVTL008SD	11140
12 way	MCCB	12+12+12	DBVTL012SD	16515
16 way	MCCB	16+16+16	DBVTL016SD	19535
<b>IP 43 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTL004DD	10285
6 way	MCCB	6+6+6	DBVTL006DD	11805
8 way	MCCB	8+8+8	DBVTL008DD	12930
12 way	MCCB	12+12+12	DBVTL012DD	17205
16 way	MCCB	16+16+16	DBVTL016DD	20245
<b>IP 43 - Glazed Door</b>				
4 way	MCCB	4+4+4	DBVTL004GD	11860
6 way	MCCB	6+6+6	DBVTL006GD	13435
8 way	MCCB	8+8+8	DBVTL008GD	15160
12 way	MCCB	12+12+12	DBVTL012GD	20205
16 way	MCCB	16+16+16	DBVTL016GD	22370
<b>IP 54 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTL00454	19335
6 way	MCCB	6+6+6	DBVTL00654	20735
8 way	MCCB	8+8+8	DBVTL00854	23245
12 way	MCCB	12+12+12	DBVTL01254	29335
16 way	MCCB	16+16+16	DBVTL01654	35100

\* 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		
<b>IP 30 - Single Door</b>				
4 way	MCCB	4+4+4	DBVTH004SD	11285
6 way	MCCB	6+6+6	DBVTH006SD	11840
8 way	MCCB	8+8+8	DBVTH008SD	13020
12 way	MCCB	12+12+12	DBVTH012SD	18395
16 way	MCCB	16+16+16	DBVTH016SD	22165
<b>IP 43 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTH004DD	12785
6 way	MCCB	6+6+6	DBVTH006DD	14525
8 way	MCCB	8+8+8	DBVTH008DD	15970
12 way	MCCB	12+12+12	DBVTH012DD	21375
16 way	MCCB	16+16+16	DBVTH016DD	25380
<b>IP 43 - Glazed Door</b>				
4 way	MCCB	4+4+4	DBVTH004GD	20995
6 way	MCCB	6+6+6	DBVTH006GD	23555
8 way	MCCB	8+8+8	DBVTH008GD	24500
12 way	MCCB	12+12+12	DBVTH012GD	25815
16 way	MCCB	16+16+16	DBVTH016GD	27780
<b>IP 54 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTH00454	27520
6 way	MCCB	6+6+6	DBVTH00654	30050
8 way	MCCB	8+8+8	DBVTH00854	31080
12 way	MCCB	12+12+12	DBVTH01254	36390
16 way	MCCB	16+16+16	DBVTH01654	38305

\* 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
<b>IP 30 - Metal Door</b>			
2 way	2	DBENC002SD	540
3 way	3	DBENC003SD	540
4 way	4	DBENC004SD	540
6 way	6	DBENC006SD	810

### 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
<b>Metal Plug &amp; Sockets</b>				
10 A, 2 Pin + SC <sup>^</sup>	P + N	1	DBMPS110SD	1385
20 A, 2 Pin + SC <sup>^</sup>	P + N	1	DBMPS120SD	1490
20 A, 2 Pin + SC <sup>^</sup>	P + N	2	DBMPS220SD	1620
20 A, 3 Pin + SC <sup>^</sup>	3P	3	DBMPS320SD	2745
32 A, 3 Pin + SC <sup>^</sup>	3P	3	DBMPS332SD	3245
32 A, 3 Pin + SC <sup>^</sup>	3P	4	DBMPS432SD	3450
63 A, 5 Pin + SC <sup>^</sup>	3P+N+E	4	DBMPS463SD	11710
<b>Plastic Plug &amp; Sockets</b>				
16 A, 3 Pin	P+N+E	2	DBPPS316SD	2250
32 A, 3 Pin	P+N+E	4	DBPPS332SD	2430
32 A, 5 Pin	3P+N+E	8	DBPPS532SD	4415
63 A, 5 Pin	3P+N+E	8	DBPPS563SD	11225

## Metal Plug [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (₹) Per Unit
10 A, 2 Pin + SC <sup>^</sup>	P + N	MPS210P	145
20 A, 2 Pin + SC <sup>^</sup>	P + N	MPS220P	155
20 A, 3 Pin + SC <sup>^</sup>	3P	MPS320P	200
32 A, 3 Pin + SC <sup>^</sup>	3P	MPS332P	375

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 <sup>^</sup>	P + N	MPS210S	145
20 A, 2 Pin + SC <sup>^</sup>	P + N	MPS220S	170
20 A, 3 Pin + SC <sup>^</sup>	3P	MPS320S	225
32 A, 3 Pin + SC <sup>^</sup>	3P	MPS332S	375

<sup>^</sup> 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
<b>CEB for SPN DBs</b>		
CEB-SPN Double Door, 4 way	<b>DBSPN004CB</b>	<b>610</b>
CEB-SPN Double Door, 6 way	<b>DBSPN006CB</b>	<b>650</b>
CEB-SPN Double Door, 8 way	<b>DBSPN008CB</b>	<b>720</b>
CEB-SPN Double Door, 12 way	<b>DBSPN012CB</b>	<b>805</b>
CEB-SPN Double Door, 16 way	<b>DBSPN016CB</b>	<b>1125</b>
CEB-SPN Double Door, 18 way	<b>DBSPN018CB</b>	<b>1190</b>
<b>CEB for TPN DBs</b>		
CEB-TPN Double Door, 4 way	<b>DBTPN004CB</b>	<b>970</b>
CEB-TPN Double Door, 6 way	<b>DBTPN006CB</b>	<b>1205</b>
CEB-TPN Double Door, 8 way	<b>DBTPN008CB</b>	<b>1900</b>
CEB-TPN Double Door, 12 way	<b>DBTPN012CB</b>	<b>2445</b>
CEB-TPN Double Door, 16 way	<b>DBTPN016CB</b>	<b>2470</b>
CEB-TPE Double Door, 4 way	<b>DBTPE004CB</b>	<b>910</b>
CEB-TPE Double Door, 6 way	<b>DBTPE006CB</b>	<b>1140</b>
<b>CEB for Horizontal PPI DBs</b>		
CEB-Horz. PPI Double Door, 4 way	<b>DBHPI004CB</b>	<b>1120</b>
CEB-Horz. PPI Double Door, 6 way	<b>DBHPI006CB</b>	<b>1270</b>
CEB-Horz. PPI Double Door, 8 way	<b>DBHPI008CB</b>	<b>1495</b>
CEB-Horz. PPI Double Door, 12 way	<b>DBHPI012CB</b>	<b>1675</b>
CEB-Horz. PPI Double Door, 16 way	<b>DBHPI016CB</b>	<b>1890</b>
<b>CEB for Tier PPI DBs</b>		
CEB-Tier PPI Double Door, 6 way	<b>DBTPI006CB</b>	<b>1060</b>
CEB-Tier PPI Double Door, 8 way	<b>DBTPI008CB</b>	<b>1105</b>
CEB-Tier PPI Double Door, 10 way	<b>DBTPI010CB</b>	<b>1340</b>
CEB-Tier PPI Double Door, 12 way	<b>DBTPI012CB</b>	<b>1640</b>
CEB-Tier PPI Double Door, 16 way	<b>DBTPI016CB</b>	<b>1745</b>
CEB-Tier PPI Double Door, 12 way MCCB incomer	<b>DBTPL012CB</b>	<b>1660</b>



Description	Cat. Nos.	M.R.P. (₹) Per Unit
<b>CEB for VTPN DBs</b>		
CEB-VTPN Double Door, Modular Incomer	<b>DBVTMXXCB</b>	<b>810</b>
CEB-VTPN Double Door, MCCB Incomer	<b>DBVTXXXCB</b>	<b>2900</b>
<b>CEB for FLEXI DBs</b>		
CEB for Flexi DBs with 14 Modules per Row	<b>DBROWX14CB</b>	<b>850</b>
CEB for Flexi DBs with 16 Modules per Row	<b>DBROWX16CB</b>	<b>985</b>
<b>CEB for Phase Segregated DBs</b>		
CEB-PSG Double Door, 4 way	<b>DBPSG004CB</b>	<b>1900</b>
CEB-PSG Double Door, 6 way	<b>DBPSG006CB</b>	<b>2260</b>
CEB-PSG Double Door, 8 way	<b>DBPSG008CB</b>	<b>2505</b>
CEB-PSG Double Door, 12 way	<b>DBPSG012CB</b>	<b>2785</b>
<b>CEB for Phase Selector DBs</b>		
CEB-Phase Selector Double Door, 4 way	<b>DBPSR004CB</b>	<b>840</b>
CEB-Phase Selector Double Door, 6 way	<b>DBPSR006CB</b>	<b>950</b>
CEB-Phase Selector Double Door, 8 way	<b>DBPSR008CB</b>	<b>1545</b>
CEB-Phase Selector Double Door, 10 way	<b>DBPSR010CB</b>	<b>1780</b>
CEB-Phase Selector Double Door, 12 way	<b>DBPSR012CB</b>	<b>1930</b>

# 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			
<b>IP 43 - Metal Door</b>					
SPN	6 way	2	4	<b>DBSPN006DDTV</b>	<b>3065</b>
	8 way	2	6	<b>DBSPN008DDTV</b>	<b>3300</b>
	12 way	2	10	<b>DBSPN012DDTV</b>	<b>4080</b>
	16 way	2	14	<b>DBSPN016DDTV</b>	<b>4705</b>
	18 way	2	16	<b>DBSPN018DDTV</b>	<b>5780</b>
TPN	4 way	8	4+4+4	<b>DBTPN004DDTV</b>	<b>5940</b>
	6 way	8	6+6+6	<b>DBTPN006DDTV</b>	<b>6860</b>
	8 way	8	8+8+8	<b>DBTPN008DDTV</b>	<b>7960</b>

# Selection as per Type 2 Co-ordination

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



Pl. download docWHIZ from  
[www.Intebg.com/docwhiz](http://www.Intebg.com/docwhiz)



L&T ESP BizWhiz and ProductWhiz from  
Google Play Store/Apple App 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



# Where continuity is crucial

The Henikwon S-Line Busbar Trunking System from L&T provides reliable, safe and economic distribution solutions for commercial spaces.



Clarity/1220148P

## Key Features:

- Minimum transmission loss when compared to cables
- Current Rating: 400A to 6300A
- Rated Insulation Voltage - 1100V
- Class-F Halogen free insulation with RoHS compliance
- Maintenance free block set joints
- Enclosure: G.I. or Aluminium
- Ingress protection: IP-54, IP-55, IP-65, IP-66
- Plug-in boxes with interlocking
- Excellent short circuit ratings up to 100kA

**HENIKWON S-Line**  
Busbar Trunking System

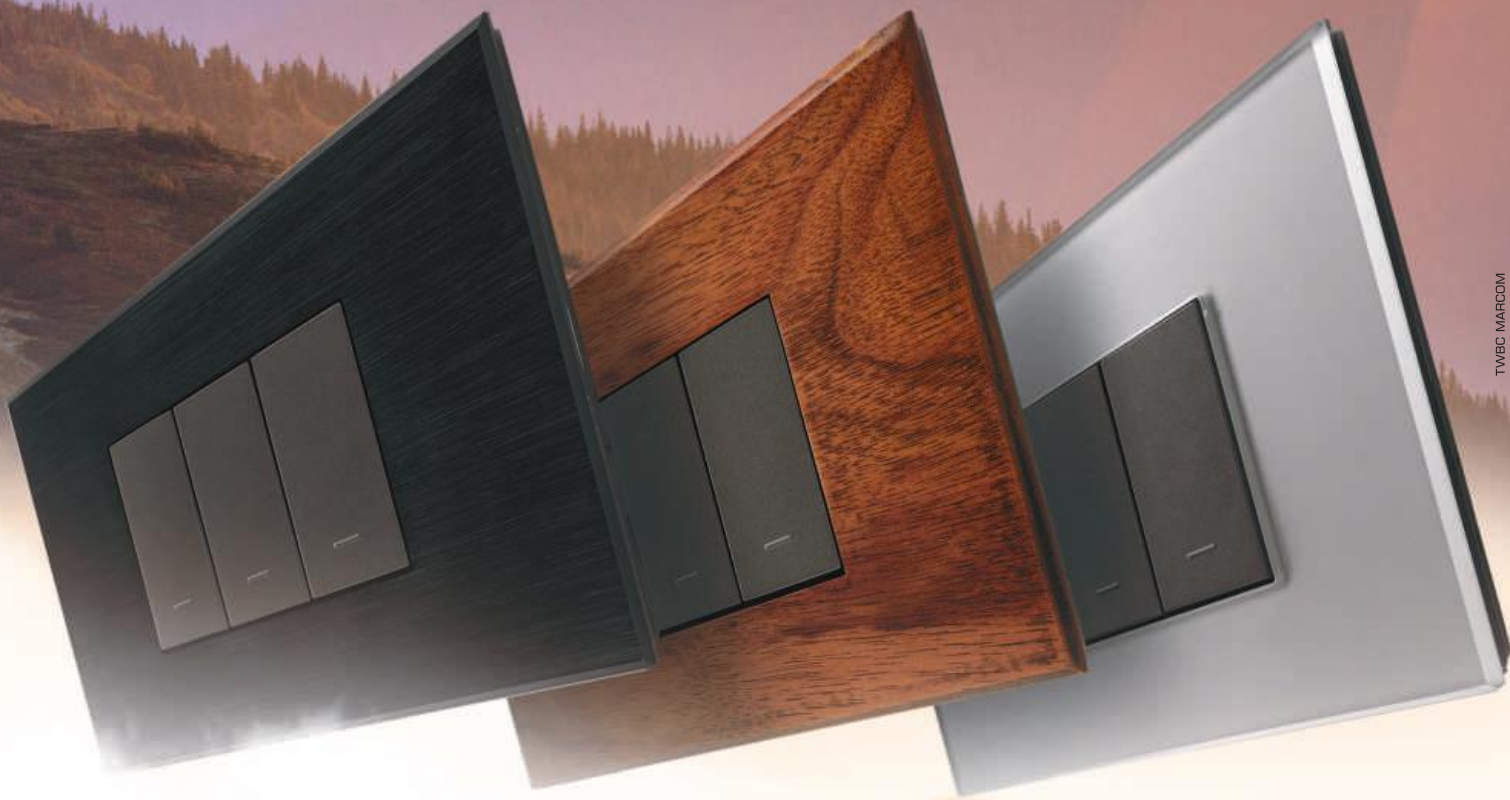
## Customer Interaction Center (CIC)

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

# SWITCH UPTO THE EXTRAORDINARY. SWITCH UPTO ENGLAZE.

When you have stepped beyond the ordinary, every step you take elevates you to the next level. Flawlessly at and majestically minimal, Englaze would silently stay a testament to your taste, the life you lived and the world you built around you.

MOULDED METAL | REAL WOOD | CRAFTED GLASS





# AC Drive Solutions from L&T

Based on experience. Backed by commitment.



## Hx2000 HVAC Drive

L&T's Hx2000 AC drive adds a new dimension to L&T'S AC Drive Solutions.

Built to L&T's stringent quality standards, the Hx2000 is tested and certified to meet global benchmarks, thus giving you the assurance of total reliability.

It sets the standard for the drive industry by introducing Innovative Energy Reduction, Environment friendly features for HVAC System that incorporates the outstanding energy saving benefits for Fans & Pump application.

**Range: 0.75kW to 90kW**

### Features:

- Built-in RTC for Scheduling
- Built-in EMC filter as default (C3)
- Built-in 2 PID
- Multiple-Motor Control (1 main motor and 5 auxiliary motors)
- Built-in Payback Counter
- Pump Clean Control
- V/F, Slip Compensation
- Fire Mode
- Password Protection
- Built-in RS485 Communication for HVAC - BACnet, Modbus-RTU, Metasys N2
- Lubrication Control
- Dry Pump Detection
- Global Compliant- UL Plenum Rated, CE

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# The Drive for Harsh Ambient Conditions.



## **Sx2000** IP66 AC Drive

Sx2000 provides protection against harsh environmental conditions by restricting entry of foreign substances such as fine dust and high-pressure water spray.

Satisfies IEC 60529 standard IP66 Drive

Satisfies NEMA standard type 4X for indoor use.

### **Range: 0.75kW to 22kW (HD)**

#### **Features:**

- Built-in Disconnecter Switch
- V/F, Sensorless Vector Control, Slip compensation
- Starting Torque: 150% at 3 Hz for V/F, 200% at 0.5Hz for Vector Control
- Conformal Coating complying to IEC 60721-3-3 class 3C2
- Built-in RS485 Modbus
- Peer to Peer Communication to share I/O's
- Built-in Brake Control
- Inbuilt PLC functionality
- Component Life Monitor
- Built-in PID
- Multi Keypad
- Built-in Braking Chopper till 22kW (HD)

#### **Customer Interaction Center (CIC)**

BSNL / MTNL (toll free): 1800 233 5858 Reliance (toll free): 1800 200 5858  
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# Discontinued Products/Suggested Alternate Products

Product Group	Discontinued Products	Suggested Alternate Products
MCCB	DH100, 3P & 4P	DN0-100C, 3P & 4P
	DH125, 3P & 4P	DZ1-160D, 3P & 4P
	DL100, 3P & 4P	DZ1-160N, 3P & 4P
	DU100 & DU125U, 2P & 3P	DY125U, 2P & 3P
Digital Panel Meters	VEGA Single function	New meter WL 1XXX series
	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	

## General Terms

All prices are on maximum retail price basis inclusive of all Duties, GST and any other Tax as applicable.

Prices are subject to revision without notice.

## Warranty Policy

All the products listed in the price list carry a warranty, against manufacturing defects for a period of 18\* months from the date of purchase.

Should the product prove to be defective due to faulty workmanship or otherwise, we will remedy the defect or replace the faulty parts or the whole product at our discretion, as soon as possible, free of cost.

The warranty is however subject to the provision of proper usage, efficient maintenance and does not cover defects arising out of fire, accident, inefficient maintenance, faulty operation and willful or accidental damage. It also does not cover damage to power electronic components like thyristors & IGBTs, which fail predominantly due to over-temperature & over-voltage. The user needs to take adequate precautions to eliminate these conditions. The manufacturer shall not be liable for any consequential loss, injury or damages attributable to defect or failure of its products.

## Comprehensive Service Support

L&T has over five decades of experience in providing after sales service for low voltage distribution systems in every type of industry & commercial complex in India.

L&T offers the following services, partnering you in your maintenance of low voltage distribution products :

- Regular Maintenance
- Preventive Maintenance Programme
- On Call
- Annual Maintenance Contract
- Product Support for Managing Obsolescence - Retrofitting & Upgradation of your switchgear products.

\* Proof of purchase to be retained to avail warranty

# Get the Switchgear Training Edge!

Aimed at maximizing productivity, conserving energy, minimizing costs and enhancing safety, our Electrical & Automation training programmes have benefitted over 2.45 Lakh professionals in the last 33 years. These training programmes are highly beneficial as they provide right exposure and impart knowledge on selection, installation, maintenance and testing of Electrical & Automation products.

## So gain the advantage and go the extra mile with:

- 14 courses on contemporary topics
- Courses applicable to all switchgear brands
- Training Centers in Pune, Lucknow, Coonoor, Vadodara, Delhi & Kolkata
- Blend of theory and practical experience

## The typical training programmes cover:

- Low Voltage & Medium Voltage Switchgear
- Switchboard Electrical Design
- AC Drives & Building Management Solutions
- Protective Relays & Earthing
- Power Quality Solutions

Please contact any of the training centres for participation and detailed training programme schedule.



### Pune

Larsen & Toubro Limited  
Switchgear Training Centre  
T-156 / 157, MIDC,  
Bhosari,  
Pune - 411 026  
Tel: 020 2712 0037 / 2712 0653  
E-mail: stc-pune@Lntebg.com



### Lucknow

Larsen & Toubro Limited  
Switchgear Training Centre  
C-6 & 7, UPSIDC,  
P. O. Sarojininagar,  
Lucknow - 226 008  
Tel: 0522 247 6015 / 97944 54455  
E-mail: stc-lucknow@Lntebg.com



### Delhi

Larsen & Toubro Ltd  
Switchgear Training Centre  
32, Shivaji Marg,  
Nearest Metro Stations Kirti Nagar/Moti Nagar,  
New Delhi - 110015  
Tel: 011- 40819515, 40819695, 40819500  
E-mail: stc-delhi@Lntebg.com



### Coonoor

Larsen & Toubro Limited  
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Ooty-Coonoor Main Road  
Yellanahalli P.O.,  
The Nilgiris - 643 243  
Tel: : 0423 251 7107  
E-mail: stc-coonoor@Lntebg.com



### Vadodara

Larsen & Toubro Limited  
Switchgear Training Centre  
Behind L&T Knowledge City,  
Near Village Ankhol,  
Vadodara - 390019  
Tel: 0265 2457805/7808  
E-mail: stc-vadodara@Lntebg.com



### Kolkata

Larsen & Toubro Limited  
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Landmark - Kenil Worth Hotel  
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e-mail: esp-bsr@LNTEBG.com

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Old Padra Road  
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