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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 (E&A) 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.

E&A's ESP is the first low voltage switchgear manufacturer in India that has received this recognition.



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**Note:**

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

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





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### Customer Interaction Center (CIC)

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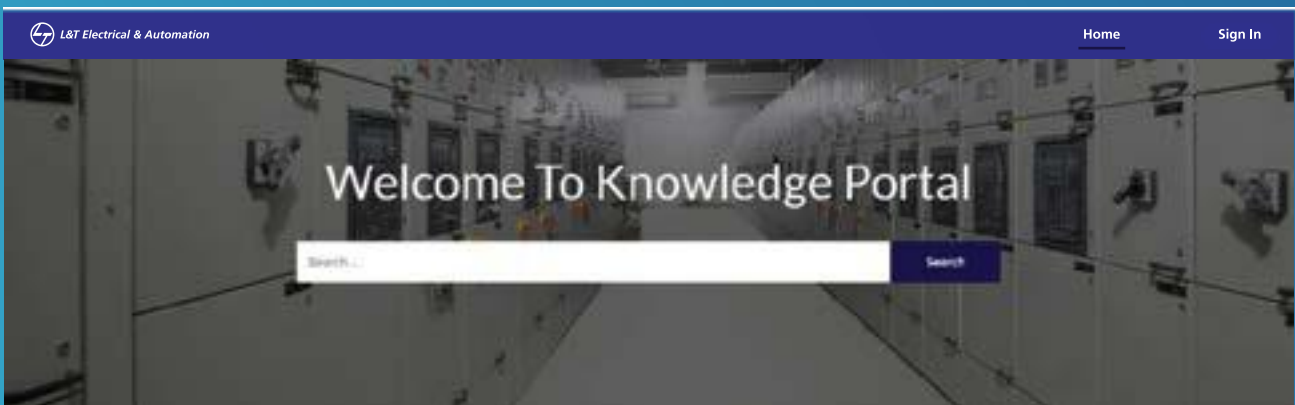
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# Contactors

## Power Contactors

### 1 Pole

- MR

### 2 Pole

- MNX
- MU-2P

### 3 Pole

- MO
- MNX
- MI
- MX Power
- ML
- MDX (DC Control)
- MVO (Vacuum)

### 4 Pole

- MCX

## Control Relays (Auxiliary Contactors)

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

## Capacitor Duty Contactors

- MO C

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

Optimum solution  
for your applications



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

### Features :

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

For more details please contact nearest branch.

### Applications :

- Street lighting
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- UPS
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- Resistive loads
- Battery charging
- Motor Starters

### 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 [8536]

## 3 Pole Power Contactors - Type MNX

### Features

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



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	885	10
				1 NC	CS94107	885	10
	12	30	MNX 12	1 NO	CS94108	1030	10
				1 NC	CS94109	1030	10
Fr 2	18	30	MNX 18	1 NO	CS94100	1195	10
				1 NC	CS94101	1195	10
	22	32	MNX 22	1 NO	CS94980	1415	10
				1 NC	CS94981	1415	10
Fr 3	25	45	MNX 25	#	CS94110	1465	10
	32	55	MNX 32	#	CS94111	3130	10
	40	55	MNX 40	#	CS94190	4660	10
Fr 4	50	85	MNX 50	#	CS97075	6325	1
	70	100	MNX 70	#	CS97076	8745	1
	80	100	MNX 80	#	CS97077	11120	1
Fr 5	95	160	MNX 95	2 NO + 2 NC	CS94136	16060	1
	110	160	MNX 110	2 NO + 2 NC	CS94137	19350	1
	140	160	MNX 140	2 NO + 2 NC	CS94138	25535	1
Fr 6	185	250	MNX 185	2 NO + 2 NC	CS94139	29410	1
	225	300	MNX 225	2 NO + 2 NC	CS94140	32380	1
	250	300	MNX 250	2 NO + 2 NC	CS94141	36525	1
Fr 7	300	400	MNX 300	2 NO + 2 NC	CS90280	44035	1
	400	425	MNX 400	2 NO + 2 NC	CS94144	61320	1
	550	650	MNX 550	2 NO + 2 NC	CS94145	91330	1
	650	800	MNX 650	2 NO + 2 NC	CS96327	136660	1

### Notes:

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

- ▲ If using 16 sq mm cable for MO 45 use of spreader link kit is mandatory
- ▲ For ordering spreader link kit for MO 45, Please refer page No. 9
- \* Universal AC/DC electronic coil version

## 3 Pole Power Contactors - Type MO

### Features

- Conforms to IS / IEC 60947-4-1 & IEC 60947-4-1
- Range from 9A - 300A AC-3
- Range 140A-300A available with conventional / universal AC/DC electronic coil version
- 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	1405	10
	12	32	MO 12	1 NO + 1 NC	CS94834	1585	10
	18	32	MO 18	1 NO + 1 NC	CS94835	1780	10
Fr 1	25	45	MO 25	#	CS94567	2015	10
	32	50	MO 32	#	CS94568	4265	10
	40	50	MO 40	#	CS94569	6600	10
	45	50	MO 45▲	#	CS94570	8195	10
Fr 2	50	100	MO 50	#	CS94572	8560	1
	60	100	MO 60	#	CS94573	9325	1
	70	100	MO 70	#	CS94574	11515	1
Fr 3	80	125	MO 80	#	CS94576	14645	1
	95	125	MO 95	#	CS94577	16765	1
	110	140	MO 110	#	CS94578	20320	1
Fr 4	140	250	MO 140	2 NO + 2 NC	CS95000	27665	1
	185	275	MO 185	2 NO + 2 NC	CS95001	32090	1
	225	275	MO 225	2 NO + 2 NC	CS95002	35320	1
Fr 4* (Electronic coil) AC/DC	140	250	MO 140	2 NO + 2 NC	CS95042	35565	1
	185	275	MO 185	2 NO + 2 NC	CS95047	44045	1
	225	275	MO 225	2 NO + 2 NC	CS95052	47095	1
Fr 5	250	400	MO 250	2 NO + 2 NC	CS94441	39840	1
	300	500	MO 300	2 NO + 2 NC	CS94440	48050	1
Fr 5* (Electronic coil) AC/DC	250	400	MO 250	2 NO + 2 NC	CS94456	51635	1
	300	500	MO 300	2 NO + 2 NC	CS94464	59915	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 – 820A AC-3
- With contact erosion indicator
- Wide band potted coil with built-in surge suppressor
- Coil on top design
- RoHS compliant



MVO 820

AC3 Rating (A)	AC1 Rating (A)	Type	Aux. Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
400	630	MVO 400	2 NO + 2 NC	CS90097	170185	1
500	630	MVO 500	2 NO + 2 NC	CS90098	220850	1
630	820	MVO 630	2 NO + 2 NC	CS90099	280660	1
820	1000	MVO 820	2 NO + 2 NC	CS90077	424790	1

\$ Available till stocks last

## 2 Pole Power Contactors [8536]

## 3 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	760	10
	12	30	MNX 12-2P	1 NO	CS90234	825	10
	18	30	MNX 18-2P	1 NO	CS90236	960	10
	22	32	MNX 22-2P	1 NO	CS90238	1135	10
Fr 2	25	45	MNX 25-2P	#	CS90240	1210	10
	32	55	MNX 32-2P	#	CS90241	2615	10
	40	55	MNX 40-2P	#	CS90242	3725	10
Fr 3	50	85	MNX 50-2P	#	CS94061	5335	1
	70	100	MNX 70-2P	#	CS94062	7240	1
	80	100	MNX 80-2P	#	CS94063	8915	1
Fr 4	95	160	MNX 95-2P	#	CS94064	13860	1
	110	160	MNX 110-2P	#	CS94065	15210	1
	140	160	MNX 140-2P	#	CS94066	20205	1
Fr 5	185	250	MNX 185-2P	2 NO + 2 NC	CS94978	24935	1
	225	300	MNX 225-2P	2 NO + 2 NC	CS94979	26435	1
	250	300	MNX 250-2P	2 NO + 2 NC	CS90301	29250	1
Fr 6	300	400	MNX 300-2P	2 NO + 2 NC	CS90346	35560	1
	400	425	MNX 400-2P	2 NO + 2 NC	CS94069	49300	1
	550	650	MNX 550-2P	2 NO + 2 NC	CS90243	75095	1
	650	800	MNX 650-2P	2 NO + 2 NC	CS90578	108460	1

### 3 Pole Power Contactors - Type MDX (DC Control)

#### Features

- Conforms to IS/IEC 60947-4-1 & IEC 60947-4-1
- Range from 9 - 110A AC-3
- Built in surge suppressor for MDX 9 - 80
- MDX 50-80 with universal AC/DC electronic coil



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	1595	1
	12	28	MDX 12	1 NO	CS96565	1840	1
	18	32	MDX 18	1 NO	CS96566	2095	1
	25	32	MDX 25	1 NO	CS96567	3415	1
Fr 2	32	56	MDX 32	#	CS96552	6470	1
	38	56	MDX 38	#	CS96553	7715	1
Fr 3	50	90	MDX 50*	#	CS91584	11260	1
	65	110	MDX 65*	#	CS91585	12745	1
	80	125	MDX 80*	#	CS91586	15780	1
	95	125	MDX 95	#	CS96557	18880	1
	110	125	MDX 110	#	CS96558	21045	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	1090	10
6A	20A	MX 06	1 NC	CS94013	1090	10
9A	20A	MX 09	1 NO	CS94014	1125	10
9A	20A	MX 09	1 NC	CS94015	1125	10
12A	20A	MX 12	1 NO	CS94016	1205	10
12A	20A	MX 12	1 NC	CS94017	1205	10
<b>For DC control (Std. Coil Voltage - 24, 110, 220V)</b>						
6A	20A	MX 06	1 NO	CS94021	1705	10
6A	20A	MX 06	1 NC	CS94022	1705	10
9A	20A	MX 09	1 NO	CS94023	1750	10
9A	20A	MX 09	1 NC	CS94024	1750	10
12A	20A	MX 12	1 NO	CS94025	1820	10
12A	20A	MX 12	1 NC	CS94026	1820	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	3720	1
Fr 2	32	40	ML 2	2 NO + 2 NC	SS90701	6910	1
	40	45	ML 3	2 NO + 2 NC	SS90721	10200	1
Fr 3	70	100	ML 4	2 NO + 2 NC	SS90910	16675	1
	110	125	ML 6	2 NO + 2 NC	SS90921	26320	1
Fr 4	300	400	ML 12	2 NO + 2 NC	SS91010	59620	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	1065	10
	25	MCX 02	#	CS97010	1125	10
	32	MCX 03	#	CS97011	1160	10
	40	MCX 04	#	CS97012	1770	10
Fr 2	50	MCX 11	#	CS97013	2345	1
	63	MCX 12	#	CS97014	4470	1
	80	MCX 13	#	CS97015	6950	1
Fr 3	100	MCX 22	#	CS97017	9090	1
	130	MCX 23	#	CS97018	10605	1
Fr 4	160	MCX 32	2 NO + 2 NC	CS97020	17300	1
	200	MCX 33	2 NO + 2 NC	CS97021	23375	1
	255	MCX 34	2 NO + 2 NC	CS97022	26230	1
Fr 5	325	MCX 41	2 NO + 2 NC	CS97023	46310	1
	360	MCX 42	2 NO + 2 NC	CS97024	50355	1
	400	MCX 43	2 NO + 2 NC	CS97025	58400	1
	500	MCX 44	2 NO + 2 NC	CS97026	71930	1
	600	MCX 45	2 NO + 2 NC	CS97027	79950	1
	700	MCX 46	2 NO + 2 NC	CS97028	100070	1
	800	MCX 47	2 NO + 2 NC	CS94291	127015	1

Automatic Transfer Controllers (ATC)



AuXC-2000 Controller

Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
AuXC-2000 Controller	ATC20000000	25085	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.

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

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	1235	10
	MX0 31E (3 NO + 1 NC)	CS94019	1235	10
	MX0 22E (2 NO + 2 NC)	CS94020	1235	10
	MX0 13E (1 NO + 3 NC)	CS94041	1235	10
	MX0 04E (4 NC)	CS94042	1235	10
<b>For DC control std. Coil Voltage - 24, 110, 220V</b>				
AC-15 4A at 415V	MX0 40E (4 NO)	CS94027	1685	10
	MX0 31E (3 NO + 1 NC)	CS94028	1685	10
	MX0 22E (2 NO + 2 NC)	CS94029	1685	10
	MX0 13E (1 NO + 3 NC)	CS94043	1685	10
	MX0 04E (4 NC)	CS94044	1685	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	840	10
	MO0 31E (3NO + 1NC)	CS91624	840	10
	MO0 22E (2NO + 2NC)	CS91625	840	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	1815	10
	MN0 31E (3 NO + 1 NC)	SS94666	1815	10
	MN0 22E (2 NO + 2 NC)	SS94667	1815	10
	MN0 13E (1 NO + 3 NC)	SS94668	1815	10
	MN0 04E (4 NC)	SS94669	1815	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	1835	1
	5	MO C5	1NO	CS96127	1920	1
	8.5	MO C8.5	1NO	CS96320	2155	1
	10	MO C10	1NO	CS96156	2340	1
	12.5	MO C12.5	1NO	CS96321	2405	1
	15	MO C15	1NO	CS90019	3225	1
	20	MO C20	1NO	CS90021	3655	1
	25	MO C25▲	1NO	CS96322	4135	1
Fr 2	30	MO C30\$	1NO	CS96148	6495	1
	40	MO C40	1NO	CS96147	11240	1
	50	MO C50	1NO	CS96324	11725	1
Fr 3	60	MO C60\$	1NO	CS96149	13615	1
	75	MO C75	1NO	CS96150	15710	1
	85	MO C85	1NO	CS96157	17270	1
	100	MO C100\$	1NO	CS96158	18645	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. 61-68**

### 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	1045	10
25A	MR 11NW	CS94178	1115	10
40A	MR 13	CS94992	1140	40

### Note:

- 1) Ordering Suffix BOOO - 240V, 50Hz
- 2) For ordering add-on aux. contact block, please refer page No. 9

## Two Pole Contactors - Type MU-2P

### Features

- Wide band potted coil
- Neutral isolation



MU 16-2P

AC3 Rating (A)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
16A	MU16-2P	CS90117	815	10
25A	MU25-2P	CS90118	1025	10
40A	MU40-2P	CS90119	1325	10

### Note:

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

# 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-2P
Front add-on possible	Yes	No	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Side add-on possible	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No	Yes	No	No

**Note:** 1) Mounting of side add-on aux. contact block is not recommended for mechanically interlocked MCX 11/12/13 contactors  
2) Accessories are common for MNX 2P & MNX 3P contactors

## Front Mounting Add-on aux. Contact Block



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



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



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



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



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



**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>	550	CS94594 <sup>^</sup>	550	-	-	CS94033 <sup>^</sup>	485	-	-	SS94083 <sup>^</sup>	605
3 NO + 1 NC	CS94113 <sup>^</sup>	550	CS94595 <sup>^</sup>	550	-	-	CS94034 <sup>^</sup>	485	-	-	SS94084 <sup>^</sup>	605
2 NO + 2 NC	CS94114 <sup>^</sup>	550	CS94596 <sup>^</sup>	550	CS96569 <sup>~</sup>	695	CS94035 <sup>^</sup>	485	-	-	SS94085 <sup>^</sup>	605
1 NO + 3 NC	CS94115 <sup>^</sup>	550	CS94597 <sup>^</sup>	550	CS90906 <sup>~</sup>	695	CS94036 <sup>^</sup>	485	-	-	SS94086 <sup>^</sup>	605
4 NC	CS94116 <sup>^</sup>	550	CS94598 <sup>^</sup>	550	-	-	CS94037 <sup>^</sup>	485	-	-	SS94087 <sup>^</sup>	605
2 NO	CS94117 <sup>^</sup>	365	CS94591 <sup>^^</sup>	365	-	-	CS94030 <sup>^</sup>	315	CS90692 <sup>^</sup>	365	SS94080 <sup>^</sup>	385
1 NO + 1 NC	CS94118 <sup>^</sup>	365	CS94592 <sup>^^</sup>	365	CS96568 <sup>~</sup>	405	CS94031 <sup>^</sup>	315	CS90693 <sup>^</sup>	365	SS94081 <sup>^</sup>	385
2 NC	CS94119 <sup>^</sup>	365	CS94593 <sup>^^</sup>	365	-	-	CS94032 <sup>^</sup>	315	CS90694 <sup>^</sup>	365	SS94082 <sup>^</sup>	385
1 NO	CS94120 <sup>^</sup>	185	CS94585 <sup>^^</sup>	185	CS96586 <sup>~</sup>	225	-	-	CS90695 <sup>^</sup>	185	SS94715 <sup>^</sup>	220
1 NC	CS94121 <sup>^</sup>	185	CS94586 <sup>^^</sup>	185	-	-	-	-	CS90696 <sup>^</sup>	185	SS94716 <sup>^</sup>	220

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



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



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

## Side Mounting Add-on aux. Contact Block

Side Mounting	Suitable for								
	Aux Contact	MNX 9-40/ 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>	550	CS94201 <sup>^</sup>	590	CS94201 <sup>^</sup>	590	CS94580 <sup>^</sup>	550
First Right	1 NO + 1 NC	CS94221 <sup>^</sup>	550	CS94202 <sup>^</sup>	590	CS94202 <sup>^</sup>	590	CS94581 <sup>^</sup>	550
Second Left	1 NO + 1 NC	-	-	-	-	CS94203 <sup>^</sup>	590	CS94582 <sup>^</sup>	550
Second right	1 NO + 1 NC	-	-	-	-	CS94204 <sup>^</sup>	590	CS94583 <sup>^</sup>	550

**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.



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



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

## Side Mounting 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>	675	CS95033 <sup>^</sup>	675	CS91208 <sup>^</sup>	675	ST94985 <sup>^</sup>	835
First Right	1 NO + 1 NC	CS94206 <sup>^</sup>	675	CS95034 <sup>^</sup>	675	CS91209 <sup>^</sup>	675		
Second Left	1 NO + 1 NC	CS94207 <sup>^</sup>	675	CS95035 <sup>^</sup>	675	CS95035 <sup>^</sup>	675	-	-
Second right	1 NO + 1 NC	CS94208 <sup>^</sup>	675	CS95036 <sup>^</sup>	675	CS95036 <sup>^</sup>	675	-	-

# 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	<b>SS91494<sup>^</sup></b>	<b>840</b>	-	-
Right	1 NO + 1 NC	-	-	<b>SS91474<sup>^</sup></b>	<b>840</b>

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

## Add-on aux. Contact Block - MR



MR 1NO

Description	For Contactor	Contacts Type	Cat. No.	M.R.P. (₹) Per Unit
Top add-on single pole	MR	1 NO	<b>CS94179<sup>^</sup></b>	<b>275</b>

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

# Accessories - Surge Suppressors [8538]

## For MX, MNX, MDX & MCX



For Contactor	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0 AC (S1)	<b>CS94039<sup>*</sup></b>	<b>440</b>	10
MNX 9 - 40 / MCX 01 - 04 (S1)	<b>CS94166<sup>*</sup></b>	<b>445</b>	10
MNX 50 - 80 / MCX 11 - 23 (S3)	<b>CS94163<sup>*</sup></b>	<b>490</b>	10
MNX 95 - 250 / MCX 32 - 34 (S4)	<b>CS94164<sup>#</sup></b>	<b>1625</b>	10
MNX 300 - 400 / MCX 41 - 44 (S6)	<b>CS94165<sup>#</sup></b>	<b>2190</b>	10
MDX 95 - 110	<b>CS96571<sup>**</sup></b>	<b>445</b>	10

Ordering Suffix \* 110-240V: BOOO, 415V: DOOO \*\* : OOOO

# 110V: AOOO, 220-240V: BOOO, 360-525V: DOOO

MVO, MDX 9-80, MNX 550-650, MCX 45-47, MX DC & MX0 DC have built in surge suppressor

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

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



For Contactor	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MX 06 to MX 12 / MX 0	<b>CS94038</b>	<b>440</b>	10
MO 9 - 110*	<b>CS94584</b>	<b>620</b>	10
MDX 9 - 38	<b>CS96572</b>	<b>505</b>	1
MDX 50 - 110	<b>CS96573</b>	<b>1545</b>	1
MNX 9 - 40	<b>CS94126</b>	<b>380</b>	10
MNX 50 - 80	<b>CS94197</b>	<b>2510</b>	1
MNX 95 - 140	<b>CS94198</b>	<b>3900</b>	1
MNX 185 - 250	<b>CS94199</b>	<b>4445</b>	1
MNX 300 - 650	<b>CS94200</b>	<b>5040</b>	1
MCX 01 - 04	<b>CS94126</b>	<b>380</b>	10
MCX 11 - 13	<b>ST50540</b>	<b>765</b>	10
MCX 22 - 23	<b>CS93095</b>	<b>3595</b>	1
MCX 32 - 34	<b>SS94992</b>	<b>3710</b>	1
MCX 41 - 47	<b>CS94301</b>	<b>6125</b>	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	<b>CS94274</b>	<b>420</b>	10
MO 50 - 70 / MOC 40 - 60	<b>CS94093</b>	<b>665</b>	10
MO 80 - 110 / MOC 75 - 100	<b>CS94094</b>	<b>965</b>	1
MO 140 - 225	<b>CS91057</b>	<b>2700</b>	1
MO 250 - 300	<b>CS90940</b>	<b>4210</b>	1

Note:

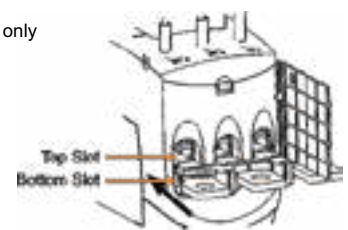
1) If using 16 sq mm cable for MO 45/MO C25 use of spreader link is mandatory

2) Spreader Link Kit consists of six terminals along with phase barrier (Not applicable for MO 250-300)

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

4) Ordering Suffix: OOOO

5) Insert spreader link in top slot only



# 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	<b>CS90396 #</b>	<b>345</b>	10
MOG H1/S1 with MO 25-45	<b>CS90391 #</b>	<b>345</b>	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	<b>CS90548 #</b>	<b>865</b>	10
MOG H1/S1 with MO 25-45	<b>CS90546 #</b>	<b>865</b>	10

## Star Delta Starter - Link



Star Delta Starter



Reversing / star delta Link



Paralleling Link



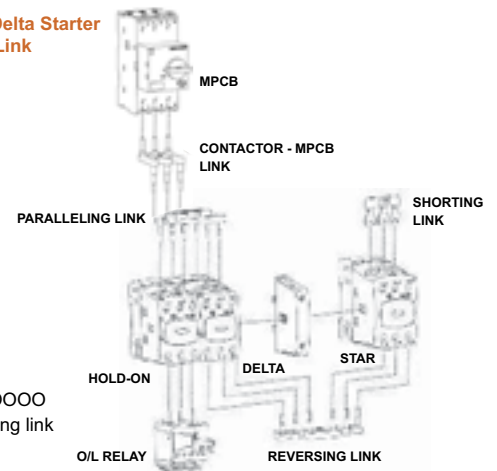
Contactor MPCB Link



Shorting Link

Suitable For	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MOG H1/S1 with MO 9-18	<b>CS90549 #</b>	<b>1040</b>	10
MOG H1/S1 with MO 25-45	<b>CS90547 #</b>	<b>1040</b>	10

## Example of Star Delta Starter Connection with Link



# Ordering Suffix OOOO  
For MPCB paralleling link refer page no.19

# 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	<b>CS90136</b>	<b>2305</b>	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



ML Spare Kits



ML Spare Coils

Spare Contact kit			Spare Coil	
Type	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
ML 1.5	SS95305 <sup>^</sup>	2160	SS90873 <sup>^</sup>	840
ML 2	SS95307 <sup>^</sup>	3515	SS90545 <sup>^</sup>	1410
ML 3	SS95309 <sup>^</sup>	5920		
ML 4	SS95311 <sup>^</sup>	9225	SS91258 <sup>~</sup>	2690
ML 6	SS95313 <sup>^</sup>	16245		
ML 10	SS95315 <sup>~</sup>	33090	SS91011 <sup>~</sup>	6060
ML 12	SS95317 <sup>~</sup>	37980		
MR	-	-	CS94102 <sup>^</sup>	580
MU16-2P	CS90217 <sup>^</sup>	245	CS90793 <sup>^</sup>	315
MU25-2P	CS90218 <sup>^</sup>	320		
MU40-2P	CS90219 <sup>^</sup>	470		
MO 0 AC	-	-	CS94841 <sup>^</sup>	475
MN 0 AC	-	-	SS94191 <sup>^</sup>	665
MN 0 DC	-	-	SS94651 <sup>~</sup>	1235

**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 <sup>^</sup>	565
MO C40 - 60	CS96318 <sup>^</sup>	1750
MO C75 - 100	CS96319 <sup>^</sup>	3030

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 <sup>~</sup>	695
ML 2/ ML 3	ST23866 <sup>~</sup>	950
ML 4/ ML 6	ST28735 <sup>~</sup>	1730
Combination coil with timer		
Type	Cat. No.	M.R.P. (₹) Per Unit
ML 2	SS90650 <sup>~</sup>	3275

**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



MNX Spare Coils

MCX Spare Kits

	Spare Contact kit			Spare Coil		
	Type	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
MO Contactors	MO 9 (1 NO + 1 NC)	CS94843 <sup>^</sup>	530	CS94841 <sup>^</sup>	475	
	MO 12 (1 NO + 1 NC)	CS94844 <sup>^</sup>	685			
	MO 18 (1 NO + 1 NC)	CS94845 <sup>^</sup>	750			
		MO 9	CS96380 <sup>^~</sup>	530	CS96317 <sup>^</sup>	565
		MO 12	CS96381 <sup>^~</sup>	685		
		MO 18	CS96382 <sup>^~</sup>	750		
		MO 25	CS96383 <sup>^~</sup>	860		
		MO 32	CS96384 <sup>^~</sup>	1950		
		MO 40	CS96385 <sup>^~</sup>	3230		
		MO 45	CS96386 <sup>^~</sup>	3300		
		MO 50	CS96387 <sup>^~</sup>	3335		
		MO 60	CS96388 <sup>^~</sup>	4190		
		MO 70	CS96389 <sup>^~</sup>	4795		
		MO 80	CS96390 <sup>^~</sup>	6470	CS96318 <sup>^</sup>	1750
		MO 95	CS96391 <sup>^~</sup>	8410		
		MO 110	CS96392 <sup>^~</sup>	10790	CS96319 <sup>^</sup>	3030
		MO 140	CS90357 <sup>~</sup>	14650		
		MO 185	CS90358 <sup>~</sup>	15390	CS90356 <sup>~</sup>	6235
		MO 225	CS90359 <sup>~</sup>	17650		
		MO 250	CS94444 <sup>~</sup>	21780	CS94442 <sup>~</sup>	9290
		MO 300	CS94443 <sup>~</sup>	25505		
		MO 140 (electronic coil)	CS90357 <sup>~</sup>	14650	CS90855 <sup>~</sup>	11975
		MO 185 (electronic coil)	CS90358 <sup>~</sup>	15390		
		MO 225 (electronic coil)	CS90359 <sup>~</sup>	17650		
		MO 250 (electronic coil)	CS94444 <sup>~</sup>	21780	CS90738 <sup>~</sup>	12095
		MO 300 (electronic coil)	CS94443 <sup>~</sup>	25505		
		MVO	-	-	CS90174 <sup>~</sup>	25245
	MNX Contactors	MNX 9	CS94123 <sup>^</sup>	530	CS94105 <sup>^</sup>	475
		MNX 12	CS94124 <sup>^</sup>	685		
		MNX 18	CS94125 <sup>^</sup>	750		
MNX 22		CS94269 <sup>^</sup>	770			
MNX 25		CS94127 <sup>^</sup>	860			
			CS94128 <sup>^</sup>	1950	CS94192 <sup>^</sup>	1750
		MNX 40	CS94147 <sup>^</sup>	3230		
		MNX 50	CS94150 <sup>^</sup>	3335		
		MNX 70	CS94151 <sup>^</sup>	4795		
		MNX 80	CS94152 <sup>^</sup>	6470		
		MNX 95	CS94153 <sup>~</sup>	8410	CS94196 <sup>~</sup>	3030
		MNX 110	CS94154 <sup>~</sup>	10790		
		MNX 140	CS94155 <sup>~</sup>	14650	CS94194 <sup>~</sup>	6235
		MNX 185	CS94156 <sup>~</sup>	15390		
		MNX 225	CS94157 <sup>~</sup>	17650		
		MNX 250	CS90310 <sup>~</sup>	21780	CS94195 <sup>~</sup>	9290
		MNX 300	CS90283 <sup>~</sup>	25505		
		MNX 400	CS94161 <sup>~</sup>	35085	CS94193 <sup>~</sup>	18825
		MNX 550	CS94162 <sup>~</sup>	46260		
		MNX 650	CS96336 <sup>~</sup>	71605		
MCX Contactors	MCX 01-04	-	-	CS94105 <sup>^</sup>	475	
	MCX 11	CS94077 <sup>^</sup>	1715	CS94009 <sup>^</sup>	525	
	MCX 12	CS94078 <sup>^</sup>	3360			
	MCX 13	CS90307 <sup>^</sup>	4685			
	MCX 22	CS94331 <sup>~</sup>	5810	ST91291 <sup>^~</sup>	1500	
	MCX 23	CS90078 <sup>~</sup>	7125			
	MCX 32	CS94082 <sup>^</sup>	10725	CS94196 <sup>~</sup>	3030	
	MCX 33	CS94083 <sup>^</sup>	13745			
	MCX 34	CS94084 <sup>^</sup>	14905			
	MCX 41	CS94295 <sup>~</sup>	26265	CS94195 <sup>~</sup>	9290	
	MCX 42	CS94296 <sup>~</sup>	31465			
	MCX 43	CS94297 <sup>~</sup>	36650			
	MCX 44	CS94298 <sup>~</sup>	44895			
	MCX 45	CS94299 <sup>~</sup>	48400			
	MCX 46	CS94300 <sup>~</sup>	55690	CS94193 <sup>~</sup>	18825	
MCX 47	CS90308 <sup>~</sup>	66475				

\* 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	1465	10
	0.3 - 0.5	SS941410OGO	1465	10
	0.45 - 0.75	SS941410OJO	1465	10
	0.6 - 1	SS941410OKO	1465	10
	0.9 - 1.5	SS941410OMO	1475	10
	1.4 - 2.3	SS941410OPO	1475	10
	2 - 3.3	SS941410OQO	1475	10
	3 - 5	SS941410OSO	1475	10
	4.5 - 7.5	SS941410OUO	1475	10
	6 - 10	SS941420OVO	1475	10
	9 - 15	SS941420OBO	1480	10
	14 - 23	SS941440ODO	1615	10
	20 - 33	SS941450OEO	2380	10
24 - 40	SS941450OFO	2495	10	
MN 5 (Directly Operated)	<b>Direct Mounting on MNX 50 - 80</b>			
	9 - 15	SS941350OBO	2960	10
	14 - 23	SS941350ODO	2960	10
	20 - 33	SS941360OEO	2985	10
	30 - 50	SS941360OGO	3605	10
	36 - 60	SS941360OTO	3915	10
	45 - 75	SS941370OJO	4200	10
66 - 110	SS941370OKO	4795	10	
MN 12 (CT Operated)	<b>Separate Mounting</b>			
	28 - 46.5	SB942110OGO	7245	1
	42 - 69	SS941380OHO	7245	1
	60 - 100	SS941380OKO	7245	1
	90 - 150	SS941380OMO	7245	1
	135 - 225	SS941380OPO	8980	1
	180 - 300	SS941390OQO	9450	1
270 - 450	SS941390ORO	11545	1	
MN 12L # (CT Operated)	<b>Separate Mounting</b>			
	42 - 69	SS941270OHO	20990	1
	60 - 100	SS941270OKO	20990	1
	90 - 150	SS941270OMO	20990	1
	135 - 225	SS941270OPO	20990	1
	180 - 300	SS941270OQO	20990	1
340 - 570	SS941270OSO	20990	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	1920	10
	0.31 - 0.55	CS963550OGO	1920	10
	0.55 - 0.85	CS963550OJO	1920	10
	0.78 - 1.2	CS963550OLO	1920	10
	1.2 - 2.0	CS963550ONO	1920	10
	1.9 - 2.8	CS963550OPO	1965	10
	2.4 - 3.6	CS963550OQO	1965	10
	3.5 - 5.2	CS963550OSO	1965	10
	4.6 - 6.7	CS963550OTO	1965	10
	6.7 - 9.7	CS963550OVO	1965	10
	8.5 - 12.5	CS963550OAO	2035	10
	12.5 - 18.5	CS963560OCO	2035	10
	17 - 25.5	CS963560ODO	2245	10
	25 - 37	CS963560OEO	3400	10
	35 - 45	CS963560OGO	3470	10
RTO - 2 (Directly Operated)	<b>Direct Mounting on MO 50 - 70</b>			
	5 - 7.5	CS963660OUO	4055	1
	7 - 11	CS963660OVO	4055	1
	10.5 - 16	CS963660OBO	4055	1
	15 - 21	CS963660OCO	4055	1
	20 - 31	CS963660OEO	4165	1
	30 - 43	CS963660OFO	4730	1
	40 - 57	CS963660OSO	5240	1
50 - 75	CS963670OJO	5730	1	
RTO - 3 (Directly Operated)	<b>Direct Mounting on MO 80 - 110</b>			
	23 - 30	CS908730OEO	6545	1
	29 - 38	CS963030OQO	6800	1
	37 - 49	CS963040OGO	7015	1
	47 - 62	CS963120OTO	7145	1
	60 - 78	CS963130OJO	8420	1
75 - 110	CS963140OKO	9560	1	
RTO - 4 (CT Operated)	<b>Separate Mounting</b>			
	23.4 - 36	CS970960OGO	9955	1
	36 - 60	CS970960OJO	9955	1
	57 - 84	CS970960OKO	9955	1
	72 - 108	CS970960OLO	9955	1
	105 - 156	CS970960OMO	9955	1
	138 - 201	CS970960ONO	12335	1
	201 - 291	CS970960OQO	12605	1
	255 - 375	CS970960ORO	15565	1



# Thermal Overload Relays [8536]

## Type RX



### Features

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

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
RX (Directly Operated)	0.23-0.41	CS963570OFO	1130	10
	0.45-0.78	CS963570OJO	1130	10
	0.78-1.2	CS963570OLO	1130	10
	1.2-1.9	CS963570ONO	1130	10
Direct Mounting on MX Contactors	1.8-2.8	CS963570OPO	1130	10
	2.6-3.6	CS963570OQO	1130	10
	3.6-5.2	CS963570OSO	1130	10
	4.8-7	CS963570OTO	1130	10
	6.4-9.7	CS963570OVO	1130	10
	8.2-12.1	CS963570OAO	1130	10

## Type 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	2575	10
	0.25 - 0.4	SS918580OFO	2575	10
	0.4 - 0.65	SS918580OHO	2575	10
	0.6 - 1	SS918580OKO	2575	10
	1 - 1.6	SS918580OMO	2575	10
	1.5 - 2.5	SS918580OPO	2575	10
	2.5 - 4	SS918580ORO	2575	10
	4 - 6.5	SS918580OTO	2575	10
	6 - 10	SS918580OVO	2575	10
	10 - 16	SS918580OBO	2575	10
ML 2 / ML 3 (Directly Operated)	<b>Direct Mounting on ML 2/3 Contactors</b>			
	9 - 14	SS918590OAO	3800	10
	13 - 21	SS918590OCO	3800	10
	20 - 32	SS918590OEO	3800	10
	28 - 42	SS918590OFO	3800	10

## Type MU-2P (2 Pole)



MU-2P

Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type of Mounting (Operation)	Relay Range (A)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Direct Mounting on MU-2P Contactor	<b>MU 2P (2 Pole)</b>				Direct Mounting on MU-2P Contactor		<b>MU 2P (2 Pole)</b>		
	1 - 1.6A	CS902070OMO	640	1		11 - 18A	CS902070OCO	710	1
	1.5 - 2.5A	CS902070OPO	640	1		13 - 22A	CS902070ODO	710	1
	2.5 - 4A	CS902070ORO	640	1		16 - 26A	CS902070OBO	710	1
	4 - 6.5A	CS902070OTO	640	1		20 - 32A	CS902070OEO	880	1
	6 - 10A	CS902070OVO	640	1		26 - 40A	CS902070OFO	880	1
	9 - 14A	CS902070OAO	640	1					

# Accessories for Thermal Overload Relays [8538]

## Accessories for Thermal Overload Relays



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

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Push button extn. unit for MN 2 Relays	SS949680000	55	100
Kit for Mounting MN 2 Relay on ML 1.5 contactor	SS947010000	195	50
Kit for Mounting MN 2 Relay separately (Direct Mounting Type)	SS947000000	195	50
Kit for Mounting MN 5 Relay on MNX 95 / 110 / 140 contactor	SS946380000	315	20
Kit for Mounting MN 5 Relay on ML 2 / ML 3 contactor	SS941510000	205	20
Kit for Mounting MN5 Relay on ML 4 / ML 6 contactor	SS941520000	275	20
DIN Rail Mounting Kit Relay on MN 2 Relay	SS918870000	150	50

## Relay Reset Cord for MN & RTO relay



400 mm 650 mm 900 mm 1200 mm

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
MN Relay reset cord - 400mm	SB942070000	710	1
MN Relay reset cord - 650mm	SB942080000	735	1
MN Relay reset cord - 900mm	SB942090000	760	1
MN Relay reset cord - 1200mm	SB942100000	850	1
RTO Relay reset cord - 400mm	CS909410000	710	1
RTO Relay reset cord - 650mm	CS909420000	735	1
RTO Relay reset cord - 900mm	CS909430000	760	1
RTO Relay reset cord - 1200mm	CS909440000	850	1

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
RTO-1 Relay Separate Mounting Kit	CS963350000	265	1
RTO-2 Relay Separate Mounting Kit	CS963060000	625	1
RTO-3 Relay Separate Mounting Kit	CS963070000	890	1

## Separate Mounting Kit for RTO Relay



# Electronic Motor Protection Relay [8536]

## Type REO - Direct Mounting on MO Contactor

### Features

- Protections:
  - Overload
  - Single Phasing, Phase unbalance
  - Locked Rotor
  - Earth Fault in REO 1.1G & REO 4G
- Trip indication
- Selectable Trip class - 10A, 10, 20, 30 as per IEC 60947-4-1



To Experience the Benefits of REO Electronic Overload Relay



Click or Scan

Model	Type of Mounting	Relay Range (A)	REO 1.1/4		REO 1.1G/4G (With in built earth fault protection)		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
REO 1.1/1.1G	Direct Mounting on MO 9-45	0.15-0.75	CS904180OJO	4355	CS904230OJO	7665	10
		0.6-3	CS904180OQO	4355	CS904230OQO	7665	10
		2.4-12	CS904180OLO	4355	CS904230OLO	7665	10
		9-45	CS904180OGO	4900	CS904230OGO	7930	10
REO 4/4G	Separate Mounting	18-90	CS904180OUO	14000	CS904230OUO	15500	1
		72-360	CS904180ORO	22000	CS904230ORO	22300	1

New

## Accessories for REO - Electronic Overload Relay

Description	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
REO Relay Reset Cord - 400mm	CS904250000	710	1
REO Relay Separate Mounting Kit	CS963350000	265	1

## 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 60947-4-1

## 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 60947-4-1

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	3500
		2 - 5.5		MPR201BE020	3500
		4 - 11		MPR202BE040	4400
		8 - 22		MPR203BE080	4400
		16 - 44		MPR204BE160	5300
		32 - 88		MPR205BE320	5300
	110V AC	1 - 2.75		MPR200BB010	3500
		2 - 5.5		MPR201BB020	3500
		4 - 11		MPR202BB040	4400
		8 - 22		MPR203BB080	4400
		16 - 44		MPR204BB160	5300
		32 - 88		MPR205BB320	5300

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	7400
		2 - 5.5		MPR301BE020	7400
		4 - 11		MPR302BE040	8300
		8 - 22		MPR303BE080	8300
		16 - 44		MPR304BE160	9200
		32 - 88		MPR305BE320	9200
	110V AC	1 - 2.75		MPR300BB010	7400
		2 - 5.5		MPR301BB020	7400
		4 - 11		MPR302BB040	8300
		8 - 22		MPR303BB080	8300
		16 - 44		MPR304BB160	9200
		32 - 88		MPR305BB320	9200

Note: MPR200nX / MPR300 must sense Line current in case of Star-Delta Starter.

# Electronic Motor Protection Relay [8536]

New

## MPR300 with Fail safe logic

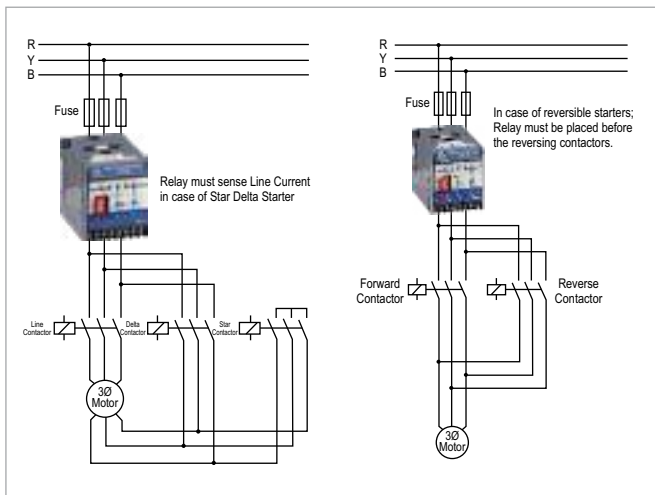
MPR300 with Fail safe logic will trip the Motor in case of Aux. supply failure



Model	Aux. Supply	Thermal Over load range	Device Code	Cat. No.	M.R.P. (₹) Per Unit
MPR300	240 VAC	1 - 2.75	49, 51LR, 64, 37, 46	<b>MPR300BF010</b>	<b>7400</b>
		2 - 5.5		<b>MPR301BF020</b>	<b>7400</b>
		4 - 11		<b>MPR302BF040</b>	<b>8300</b>
		8 - 22		<b>MPR303BF080</b>	<b>8300</b>
		16 - 44		<b>MPR304BF160</b>	<b>9200</b>
		32 - 88		<b>MPR305BF320</b>	<b>9200</b>

**Note :** MPR300 must sense line current in case of Star-Delta Starter.

## 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

## Compact Motor Protection Relay - MM10

### Features:

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



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	<b>MM10240E005</b>	<b>25000</b>

New

## MC2 - 30M / MC2 - 30MW

### Comprehensive Motor Protection Relay for Medium and Large Sized Induction Motors

- Modbus RTU / IEC870-5-103 Communication Protocol
- MC2-30M offers Current based protections whereas, MC2-30MW offers Current + Voltage based protections



Product	Aux. Supply	CT Secondary	Cat. No.	M.R.P. (₹) Per Unit
MC2-30M	24 to 110VAC/DC	1 / 5 Ampere Site selectable	<b>MC230MAOOO</b>	<b>90000</b>
	80 to 220VAC/DC		<b>MC230MBOOO</b>	<b>90000</b>
MC2-30MW	24 to 110VAC/DC		<b>MC230MWAOO</b>	<b>100000</b>
	80 to 220VAC/DC		<b>MC230MWBOO</b>	<b>100000</b>

# Your partner in digital transformation



## iMMR - Intelligent Motor Management Relay

Display Unit



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



iMMR Main Unit



CT Unit



### Intelligent MCC's for enhanced plant efficiency and safety

#### TI - Motor Control Center

- Modular MCC's designed as per IEC 61439-1 & 2
- Internal arc resistance design of 70kA- 500msec.

#### 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)





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

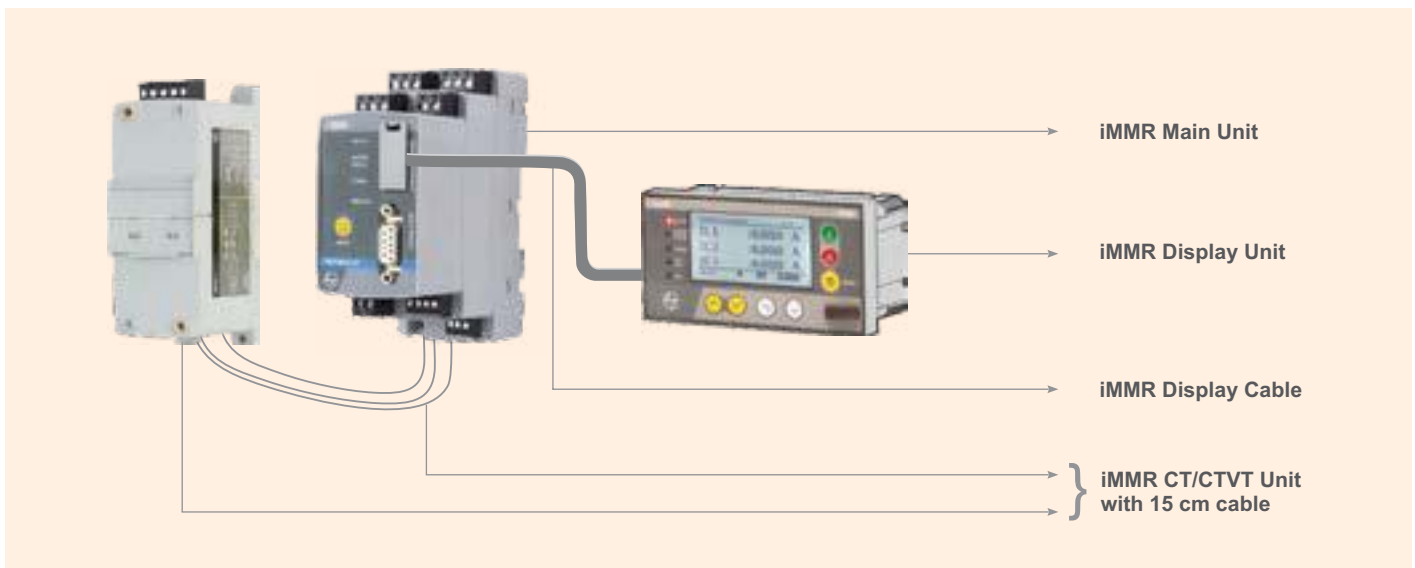
"Besides control, protection and diagnostics, iMMR provides accurate real time data for analytics and insights into the performance of plant and process"

**Features**

- Comprehensive Current & Voltage based Protections
- 20 nos. of last trip records, 100 event records and 20 IRF Records are available
- Preprogrammed Starter logics reduces manufacturing and commissioning time
- Software iMMR Suite is available for Easy and effective configuration and monitoring
- Modbus RTU, Profibus-DP protocol for Seamless integration with SCADA

Product	Description	Cat. No.	M.R.P. (₹) Per Unit
iMMR Main Unit	iMMR MODBUS RTU 85-265 VAC/DC	CS912440000	16000
	iMMR PROFIBUS / Modbus TCP IP	Available On Request	
CT Unit / CT+VT Unit	CT1 (0.3-3A) with 15 cm cable	CS912450000	4500
	CT2 (2.5-25A) with 15 cm cable	CS912460000	4500
	CT1 (0.3-3A) + VT with 15 cm cable	CS912490000	8000
	CT2 (2.5-25A) + VT with 15 cm cable	CS912500000	8000
	For current > 25 Amp: CT3 and CT4	Available On Request	
Display Unit	iMMR Display unit without cable	CS912530000	10000
	iMMR Display Cable - 1 meter	XK131280000	900
	iMMR Display Cable - 2 meter	XK131290000	1300
Optional CT Cable	iMMR CT / CTVT Cable - 0.5 meter	Available On Request	

**Selection Guide**



# Motor Protection Circuit Breakers [8536]

## Rocker Type

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

## Rotary Type

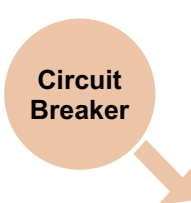
- MOG-H1M: upto 32A
- MOG-H2M: 32A-63A
- Short circuit protection
- Icu=100kA upto 13A & Icu=50kA from 16A-63A

## Rotary Type


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

- ✓ Short circuit protection
- ✓ Over current protection

**Circuit Breaker**




- ✓ 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

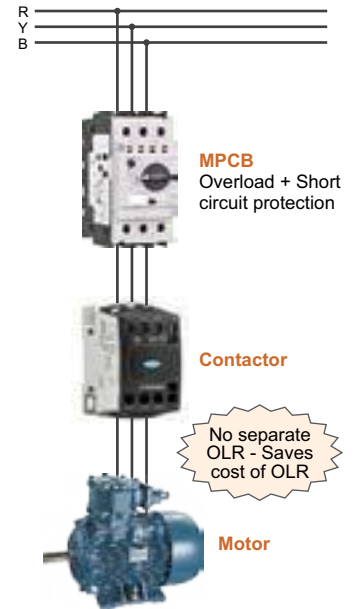


**MPCB**

- ✓ Overload protection
- ✓ Phase loss protection
- ✓ Wide range of current adjustment dial
- ✓ Ambient temperature compensation

**Thermal Overload Relay**





## 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	2320	1
0.25	0.06	0.16 - 0.25	3.3	ST418900000	2320	1
0.40	0.09	0.25 - 0.40	5.2	ST418910000	2320	1
0.63	0.12	0.40 - 0.63	8.2	ST418920000	2630	1
1.00	0.25	0.63 - 1.00	13	ST418930000	2630	1
1.60	0.55	1.00 - 1.60	20.8	ST418940000	2650	1
2.50	0.75	1.60 - 2.50	32.5	ST418950000	2650	1
4.00	1.50	2.50 - 4.00	52	ST418960000	2745	1
6.30	2.20	4.00 - 6.30	81.9	ST418970000	2745	1
10.00	4.00	6.30 - 10.00	130	ST418980000	2935	1
13.00	5.40	9.00 - 13.00	169	ST418990000	3305	1
16.00	7.50	11.00 - 16.00	208	ST419000000	3575	1
20.00	9.00	14.00 - 20.00	260	ST419010000	3765	1
25.00	12.50	19.00 - 25.00	325	ST419020000	3960	1
32.00	15.00	24.00 - 32.00	416	ST419030000	6910	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	3035	1
0.25	0.06	0.16 - 0.25	3.3	ST419050000	3035	1
0.40	0.09	0.25 - 0.40	5.2	ST419060000	3035	1
0.63	0.12	0.40 - 0.63	8.2	ST419070000	3390	1
1.00	0.25	0.63 - 1.00	13	ST419080000	3390	1
1.60	0.55	1.00 - 1.60	20.8	ST419090000	3495	1
2.50	0.75	1.60 - 2.50	32.5	ST419100000	3495	1
4.00	1.50	2.50 - 4.00	52	ST419110000	3565	1
6.30	2.20	4.00 - 6.30	81.9	ST419120000	3595	1
10.00	4.00	6.30 - 10.00	130	ST419130000	3830	1
13.00	5.40	9.00 - 13.00	169	ST419140000	4245	1
16.00	7.50	11.00 - 16.00	208	ST419150000	4525	1
20.00	9.00	14.00 - 20.00	260	ST419160000	5025	1
25.00	12.50	19.00 - 25.00	325	ST419170000	5125	1
32.00	15.00	24.00 - 32.00	416	ST419180000	8320	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	2725	1
0.25	0.06	3.3	ST419240000	2725	1
0.40	0.09	5.2	ST419250000	2725	1
0.63	0.12	8.2	ST419260000	3140	1
1.00	0.25	13	ST419270000	3140	1
1.60	0.55	20.8	ST419280000	3140	1
2.50	0.75	32.5	ST419290000	3140	1
4.00	1.50	52	ST419300000	3170	1
6.30	2.20	81.9	ST419310000	3170	1
10.00	4.00	130	ST419320000	3295	1
13.00	5.40	169	ST419330000	3295	1
16.00	7.50	208	ST419340000	3295	1
20.00	9.00	260	ST419350000	3340	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	9615	1
40.00	20.00	28.00 - 40.00	520	ST419200000	10705	1
50.00	25.00	35.00 - 50.00	650	ST419210000	13230	1
63.00	34.00	45.00 - 63.00	819	ST419220000	13590	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	9240	1
40.00	20.00	520	ST419390000	9415	1
50.00	25.00	650	ST419400000	9635	1
63.00	34.00	819	ST419410000	9810	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	450	10
F1/F2	Auxiliary Contact Front mtg. 1NC	ST419430000	450	10
L	Auxiliary Contact Left side mtg. 2NO	ST419440000	625	1
L	Auxiliary Contact Left side mtg. 1NO + 1NC	ST419450000	625	1
L	Auxiliary Contact Left side mtg. 2NC	ST419460000	625	1
F2	Trip Alarm Contact Front mtg. 1NO	ST419470000	805	10
F2	Trip Alarm Contact Front mtg. 1NC	ST419480000	805	10
L	Auxiliary + Alarm Left side mtg. 2NO	ST419490000	860	1
L	Short circuit alarm Left side mtg. 1NO + 1NC	ST419500000	860	1
R	Shunt trip 24V DC	ST419510000	1650	1
R	Shunt trip 110V, 50Hz	ST419520000	1740	1
R	Shunt trip 230V, 50Hz	ST429520000	1740	1
R	Under Voltage release, 110V, 50Hz	ST419530000	1740	1
R	Under Voltage release, 415V, 50Hz	ST419540000	1740	1
-	External operating handle, (Black) Frame 1	ST419550000	1000	1
-	External operating handle, (Black) Frame 2	ST419560000	1000	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



## Complete your panel with our panel accessories



**Rotary Switches &  
Cable Ducts**



**Timing Devices &  
Supply Monitors**



**Modular Remote  
Control Units**



**Digital Panel  
Meters**

For Cam operated Rotary switches, Cable ducts, Load break switches, Timers, Time switches, Supply monitors, Ø22.5 mm range of Modular remote control & Indicating units please refer Panel Accessories Price List.

For Digital Panel Meter details please refer Pg.72

**Customer Interaction Center (CIC)**

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# 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	4185	1
15.0	11.0	14 - 23	MN 25 DOL	SS94352	6400	1
20.0	15.0	20 - 33	MN 32 DOL	SS94353	10325	1
30.0	22.5	30 - 50	MN 45 DOL	SS94017	17665	1
45.0	33.5	45 - 75	MN 65 DOL	SS94018	24185	1
30.0	22.5	28 - 42	ML 3 DOL	SS90722	21705	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	14100	1
30.0	22.5	14 - 23	MN 25 FASD	SS94364	15765	1
40.0	30.0	20 - 33	MN 32 FASD	SS94366	25940	1
50.0	37.5	30 - 50	MN 45 FASD	SS94021	41660	1
75.0	55.0	45 - 75	MN 65 FASD	SS94022	69030	1
90.0	67.5	45 - 75	MN 80 FASD	SS94705	75455	1
150.0	110.0	66 - 110	MN 110 FASD	SS94706	98770	1
180.0	132.0	90 - 150	MN 140 FASD	SS94707	103385	1
50.0	37.5	28 - 42	ML3 FASD	SS90730	52330	1
75.0	55.0	45 - 75	ML4 FASD	SS90913	89685	1
125.0	90.0	66 - 110	ML6 FASD	SS90923	147045	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	130	20
MN DOL/FASD Push Button	SS939410000	225	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	1765	1
12 - 120 secs.	ST803290000	1765	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 Agricultural Electrical Product Pricelist for Agricultural Electrical Product Range



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# Digital Enabled Smart Agriculture



- \* Digital Products for effective monitoring & remote operation
- \* Agri products for all seasons and all crops
- \* Complete protection from all faults
- \* Maintenance free product life

# 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>72750</b>	1
Enclosed ATS, Frame 2, 160A	160A	<b>CK90162BSOO</b>	<b>78760</b>	1
Enclosed ATS, Frame 2, 200A	200A	<b>CK90163BSOO</b>	<b>85330</b>	1
Enclosed ATS, Frame 3, 250A	250A	<b>CK90164BSOO</b>	<b>97540</b>	1
Enclosed ATS, Frame 3, 315A	315A	<b>CK90165BSOO</b>	<b>104330</b>	1
Enclosed ATS, Frame 4, 400A	400A	<b>CK90166BSOO</b>	<b>115650</b>	1
Enclosed ATS, Frame 4, 630A	630A	<b>CK90167BSOO</b>	<b>140450</b>	1

Chapter ID [8537]

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



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# 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	4940	CO106300S00	7410	-	-	1		
	63	CO1-63	CO10630000D ▲	4760							
	100	CO1-100	CO110000000	6570			CO110000S00	9450		-	-
	100	CO1-100	CO11000000D ▲	6240							
	125	CO1-125	CO112500000	8510			CO112500S00	11790		-	-
Fr 2	125	CO2-125	CO212500000	10320	CO212500S00	14420	CK90161B000	37160	1		
	160	CO2-160	CO216000000	10860	CO216000S00	15370	CK90162B000	42540	1		
	200	CO2-200	CO22000000A	13180	CO220000S00	17770	CK90163B000	44260	1		
Fr 3	250	CO3-250	CO325000000	19070	CO325000S00	24700	CK90164B000	54620	1		
	315	CO3-315	CO331500000	19870	CO331500S00	25890	CK90165B000	57120	1		
Fr 4	400	CO4-400	CO440000000	29320	CO440000S00	37740	CK90166B000	68780	1		
	630	CO4-630	CO463000000	34370	CO463000S00	43740	CK90167B000	78420	1		
Fr 5	630	CO5-630 <sup>α</sup>	CO563000000 <sup>α</sup>	39620	-	-	CK90168B000	84490	1		
	800	CO5-800	CO580000000	48910	CO580000S00	71500	CK90169B000	112990	1		
	1000	CO5-1000	CO510000000	86520	CO510000S00	114640	CK90170B000	148190	1		
Fr 6	1250	CO6-1250	CO612500000	115460	-	-	CK90081B000	183080	1		
	1600	CO6-1600	CO616000000	136540	-	-	CK90082B000	224760	1		
	2000	CO6-2000	CO620000000	196540	-	-	CK90083B000	263590	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	410	1
	CO2-(125-200A)	CX200020000	770	1
	CO3-(250-315A)	CX300020000	1100	1
	CO4-(400-630A)	CX400020000	1170	1
	CO5-(630-1000A)	CX500020000	1330	1
	CO6-(1250-2000A)	CX600020000	1470	1
Operating Handle Kit (handle + shaft + center bush + bush clip)	CO1-(63-125A)	CX100010000	670	1
	CO2-(125-200A)	CX300010000	1310	1
	CO3-(250-315A)	CK903920000	1460	1
	CO4-(400-630A)	CX400010000	1500	1
	CO5-(630-1000A)	CX500010000	1610	1
Operating Handle	CO6-(1250-2000A)	CX600010000	1830	1
Castell Type Lock <sup>§</sup>	CO-(125-1000A)	CX400040000	2420	1
	CO6-(1250-2000A)	CX600040000	2420	1
Output shorting link	CO1-(63-125A) Top Side	CX10005000T	710	1
	CO1-(63-125A) Bottom Side	CX10005000B	710	1
Operating Handle for Motorised Changeover	C/O Frame 2 & 3 (125-315A)	CK903740000	1280	1
	C/O Frame 4 & 5 (400-1000A)	CK903780000	1610	1
	C/O Frame 6 (1250-2000A)	CK906450000	4000	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	17160	1
	AuXC - 2000 Controller with wire harness	AuXC - 2000 <sup>β</sup> wire harness	ATC200000000	25085
Control Accessories	Illuminated Push Button assembly with Wire harness	CK900990000	3500	1
		CK901950000	3490	1

<sup>β</sup> 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	2070	1
	HN Size 000	CO2-125	CX212500ODO	4040	1
	HN Size 00	CO2-160	CX216000ODO	5740	1
	HN Size 1	CO3-250	CX325000ODO	7850	1
	HN Size 1	CO3-315	CX331500ODO	8220	1
	HN Size 2	CO4-400	CX440000ODO	11800	1
	HN Size 3	CO5-630	CX563000ODO	23760	1
	HN Size 3	CO5-800	CX580000ODO	27030	1

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

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

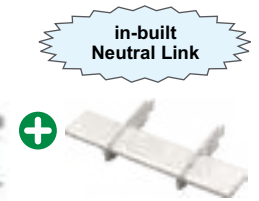
- Range 32A to 800A, 415V, AC 23A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Terminal Shrouds on both sides and Phase Barriers included
- Telescopic shaft for depth adjustment
- TPN SDF has isolable neutral
- 4P SDF has Switched Neutral Pole and is 100% rated
- Door interlock & padlock facility



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



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



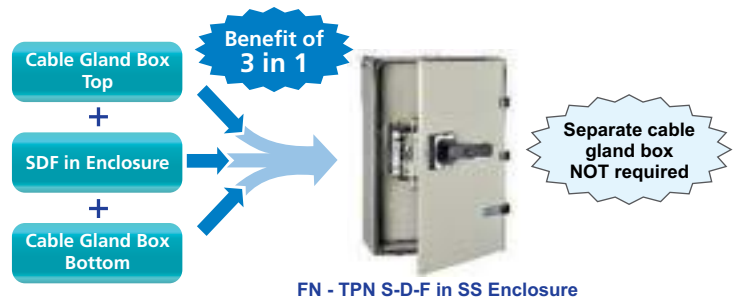
Size	Rated Current (A)	Suitable HRC fuse-link		Open Execution Type FN (TPN) S-D-F suitable for DIN fuse-link			Std. Pkg. (Nos.)	Open Execution Type FN S-D-F suitable for DIN fuse-link (4P)			Std. Pkg. (Nos.)
		Type	Range (A)	Type	Cat. No.	M.R.P. (₹) Per Unit		Type	Cat. No.	M.R.P. (₹) Per Unit	
Fr 1	32	HF Size 14x51	2 to 32	FN 32 TPN / FP	SK95518	2300	1	FN 32 TPN/FP	SK95518	2300	1
	32	HF Size 14x51	2 to 32	FN 32 TPN / FP CE*	SK95703*	2020	1	FN 32 TPN/FP CE*	SK95703	2020	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP	SK95421	3200	1	FN 63 TPN/FP	SK95421	3200	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK95704*	2850	1	FN 63 TPN/FP CE*	SK95704	2850	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK95568	6230	1	FN 100 FP	SK90496	7050	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK95001	8310	1	FN 125 FP	SK90497	8940	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK95713	8860	1	FN 160 FP	SK90498	9980	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK95418	11260	1	FN 200 FP	SK90471	12670	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK95642	13290	1	FN 250 FP	SK90472	14810	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK95461	16370	1	FN 315 FP	SK90473	18270	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK95481	19800	1	FN 400 FP	SK90480	21970	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK95521	31880	1	FN 630 FP	SK90481	35200	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK95679	34580	1	FN 800 FP	SK90482	38460	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



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*	5240	1
	63	HF Size 14x51	2 to 63	FN 63 TPN / FP CE*	SK90484*	6260	1
Fr 2	100	HN Size 000/00	63 to 100	FN 100 TPN	SK90485	10180	1
	125	HN Size 000/00	63 to 125	FN 125 TPN	SK90486	12030	1
	160	HN Size 000/00	63 to 160	FN 160 TPN	SK90487	12880	1
Fr 3	200	HN Size 0	80 to 200	FN 200 TPN	SK90488	17650	1
	250	HN Size 1	125 to 250	FN 250 TPN	SK90489	19930	1
Fr 4	315	HN Size 1	125 to 315	FN 315 TPN	SK90490	23020	1
	400	HN Size 2	200 to 400	FN 400 TPN	SK90491	26150	1
Fr 5	630	HN Size 3	315 to 630	FN 630 TPN	SK90492	42290	1
	800	HN Size 3	315 to 800	FN 800 TPN	SK90493	45180	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. 32 for Switch-Disconnectors

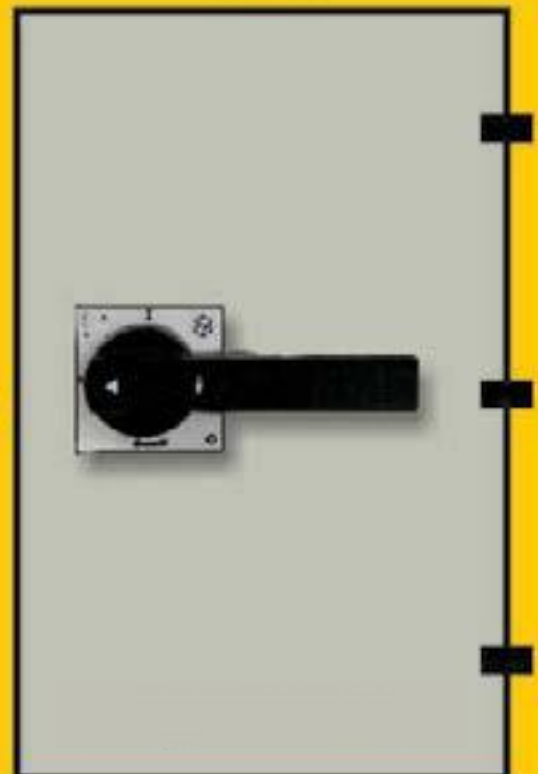
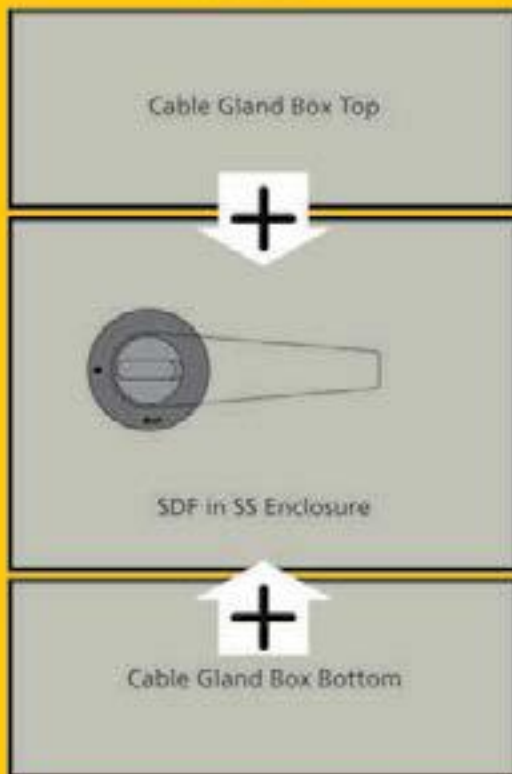
# FN TPN SDF and C-line Manual Changeover in Sheet Steel Enclosure

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!

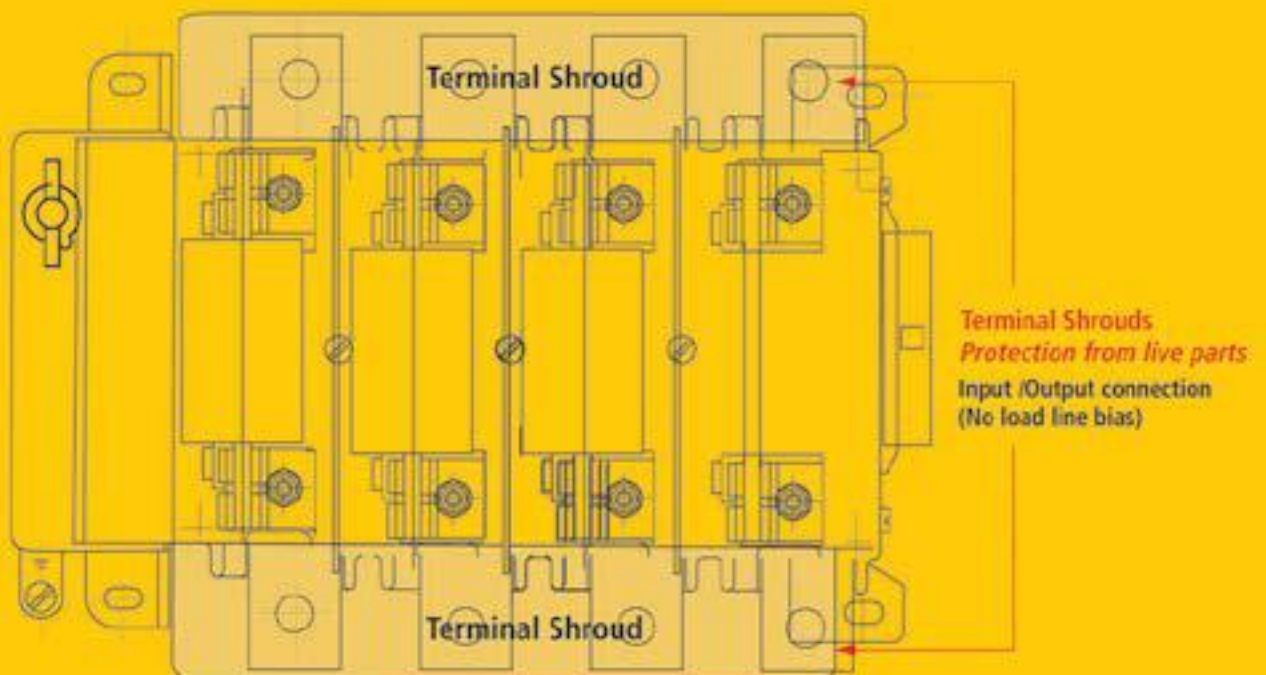
Telescopic Shafts :  
Flexibility for fine  
adjustment in depth

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	<b>SK95594</b>	<b>1870</b>	1
	63	HF Size 14x51	FN 63 2P	<b>SK95595</b>	<b>2600</b>	1
Fr 2	100	HN Size 000/00	FN 100 2P	<b>ST35086</b>	<b>4770</b>	1
	125	HN Size 000/00	FN 125 2P	<b>ST35087</b>	<b>6550</b>	1
	160	HN Size 000/00	FN 160 2P	<b>ST35088</b>	<b>6830</b>	1
Fr 3	200	HN Size 0	FN 200 2P	<b>ST35089</b>	<b>8700</b>	1
	250	HN Size 1	FN 250 2P	<b>ST31674</b>	<b>10470</b>	1
Fr 4	315	HN Size 1	FN 315 2P	<b>ST38930</b>	<b>13680</b>	1
	400	HN Size 2	FN 400 2P	<b>ST31676</b>	<b>15710</b>	1
Fr 5	630	HN Size 3	FN 630 2P	<b>ST35090</b>	<b>26340</b>	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	<b>SK95653</b>	<b>2090</b>	1
	63	A1L	FN 63 TPN	<b>SK95651</b>	<b>2920</b>	1
Fr 2	100	A4	FN 100 TPN	<b>SK95570</b>	<b>5890</b>	1
	125	A4	FN 125 TPN	<b>SK95009</b>	<b>7760</b>	1
	160	A4	FN 160 TPN	<b>SK95714</b>	<b>8490</b>	1
Fr 3	200	B1 / B2	FN 200 TPN	<b>SK95588</b>	<b>11290</b>	1
	250	B2 / B3	FN 250 TPN	<b>SK95682</b>	<b>13410</b>	1
Fr 4	315	B3	FN 315 TPN	<b>SK95590</b>	<b>16590</b>	1
	400	B4	FN 400 TPN	<b>SK95591</b>	<b>19870</b>	1
Fr 5	630	C2	FN 630 TPN	<b>SK95592</b>	<b>32020</b>	1

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

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

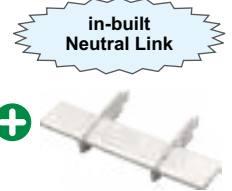
- Range 32A to 800A, 415V, **AC 23A**
- TPN and 4P version
- Suitable for Cylindrical / DIN fuse-link
- Telescopic shaft for depth adjustment
- DIN rail mounting up to 100A
- Conforms to IEC 60947-3, IS/IEC 60947-3
- Door interlock & padlock facility
- FNX 4-Pole with in-built Neutral Link



FNX TPN S-D-F



FNX 4P S-D-F



in-built Neutral Link

Size	Rated Current (A)	Suitable fuse-link type	Range (A)	Open Execution Type FNX (TPN) S-D-F suitable for DIN fuse-link				Open Execution Type FNX (4P) S-D-F suitable for DIN fuse-link				Std. Pkg. (Nos.)
				Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	Type	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)	
Fr 1	32	HF Size 14x51	2 to 32	FNX 32 TPN / FP	<b>SK96903</b>	*	1	FNX 32 TPN / FP	<b>SK96903</b>	*	1	
	63	HF Size 14x51	2 to 63	FNX 63 TPN / FP	<b>SK96904</b>	*	1	FNX 63 TPN / FP	<b>SK96904</b>	*	1	
Fr 2	100	HN Size 000	63 to 100	FNX 100 TPN / FP	<b>SK96906</b>	*	1	FNX 100 TPN / FP	<b>SK96906</b>	*	1	
Fr 3	125	HN Size 000/00	63 to 125	FNX 125 TPN	<b>SK95806</b>	*	1	FNX 125 FP	<b>SK95814</b>	*	1	
	160	HN Size 000/00	63 to 160	FNX 160 TPN	<b>SK95807</b>	*	1	FNX 160 FP	<b>SK95815</b>	*	1	
Fr 4	200	HN Size 0	80 to 200	FNX 200 TPN	<b>SK95808</b>	*	1	FNX 200 FP	<b>SK95816</b>	*	1	
	250	HN Size 1	125 to 250	FNX 250 TPN	<b>SK95809</b>	*	1	FNX 250 FP	<b>SK95817</b>	*	1	
Fr 5	315	HN Size 1	125 to 315	FNX 315 TPN	<b>SK95810</b>	*	1	FNX 315 FP	<b>SK95818</b>	*	1	
	400	HN Size 2	200 to 400	FNX 400 TPN	<b>SK95811</b>	*	1	FNX 400 FP	<b>SK95819</b>	*	1	
Fr 6	630	HN Size 3	315 to 630	FNX 630 TPN	<b>SK95812</b>	*	1	FNX 630 FP	<b>SK95820</b>	*	1	
	800	HN Size 3	315 to 800	FNX 800 TPN	<b>SK95813</b>	*	1	FNX 800 FP	<b>SK95821</b>	*	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	122	30
	4		SF90145	122	30
	6		SF90146	122	30
	8		SF90147	122	30
	10		SF90148	122	30
	16		SF90150	122	30
	20		SF90151	122	30
	25		SF90152	122	30
	32		SF90142	122	30
	40		SF90143	135	30
	50		SF90158	288	30
	63		SF90159	350	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	385	3
	80		SF94941	410	3
	100		SF94942	415	3
	125		SF94946	475	3
00	63	Suitable for Type FN 100/125/160 / FNX 125/160 S-D-F & for HB 160 Fuse base	SF94027	480	3
	80		SF94028	480	3
	100		SF94029	480	3
	125		SF94030	510	3
	160		SF94939	515	3
0	80	Suitable for Type FN 200 / FNX 200 S-D-F & for HB 250 Fuse base	SF94128	675	3
	100		SF94129	675	3
	125		SF94130	675	3
	160		SF94131	685	3
	200		SF94132	685	3
1	125	Suitable for Type FN 250/315 / FNX 250/315 S-D-F & for HB 250 Fuse base	SF94230	690	3
	160		SF94231	700	3
	200		SF94232	705	3
	250		SF94233	790	3
	315		SF94234	960	3
2	200	Suitable for Type FN 400 / FNX 400 S-D-F & for HB 800 Fuse base	SF94332	990	3
	250		SF94333	995	3
	315		SF94334	1040	3
	400		SF94335	1070	3
3	315	Suitable for Type FN 630/800 / FNX 630/800 S-D-F & for HB 800 Fuse base	SF94434	1500	1
	400		SF94435	1580	1
	500		SF94436	1690	1
	630		SF94437	1770	1
	800		SF94938	2190	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	230	10
63	HC 63	Fuse holder	HF	2-63	SK91043	260	10
160	HB 160	Fuse base	HN-Size 000 & 00	63-160	SK90405	400	12
250	HB 250	Fuse base	HN-Size 0 & 1	80-250	SK90406	920	3
800	HB 800	Fuse base	HN-Size 2 & 3	200-800	SK91051	1710	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	50	24
			4		ST30726	50	24
			6		ST30727	50	24
			10		ST30728	50	24
			16		ST30729	55	24
			20		ST30730	60	24
			25		ST30731	60	24
			32		ST30732	60	24
HQ	Offset	A1L	20	Suitable for type FN 32/63 S-D-F	ST34527	100	15
			25		ST34528	100	15
			32		ST34529	100	15
			50		ST35827	120	15
			63		ST35828	120	15
		A2	Suitable for type HK 32H/32B fuse base	4	ST30747	90	12
				6	ST30748	90	12
				10	ST30749	92	12
				16	ST30750	92	12
				20	ST30751	92	12
				25	ST30752	92	12
				32	ST30753	92	12
	A3	Suitable for type HK 63B/63H Fuse base	35	ST30759	130	12	
			50	ST30760	135	12	
			63	ST30761	145	12	
	A4	Suitable for type FN 100/125/160 S-D-F & for HK 125H/125B Fuse base	80	ST30767	265	12	
			100	ST30768	270	12	
			125	ST30769	295	12	
			160	ST35829	350	12	
	Centre Tag, 2 holes	B1	80	Suitable for type FN 200 S-D-F	ST30774	300	12
			100		ST30775	300	12
			125		ST30776	380	12
		B2	125	ST30777	425	3	
			160	ST30778	430	3	
			200	ST30779	435	3	
		B3	Suitable for type FN 250/315 S-D-F	250	ST30781	620	3
				315	ST30782	645	3
		B4	Suitable for type FN 400 S-D-F	355	ST30783	910	3
400				ST30784	955	3	
Centre Tag, 4 holes		C2	400	Suitable for type FN 630 S-D-F	ST30785	1750	1
			500		ST30786	1845	1
	630		ST30787		2025	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	140	12
	HD 20P	Both side busbar (Back)	F1	2-20	ST30773	210	12
	HD 20B	Top busbar & bottom cable	F1	2-20	ST30766	180	12
32	HD 32H	Both side cable (Front)	F1	2-32	ST30733	150	12
	HD 32P	Both side busbar (Back)	F1	2-32	ST30734	230	12
	HD 32B	Top busbar & bottom cable	F1	2-32	ST30735	200	12
	HK 32H	Both side cable (Front)	A2	4-32	ST30754	280	12
	HK 32B	Top busbar & bottom cable	A2	4-32	ST30755	350	12
63	HK 63H	Both side cable (Front)	A3	35-63	ST30762	360	6
	HK 63B	Top busbar & bottom cable	A3	35-63	ST30763	420	6
125	HK 125H	Both side cable (Front)	A4	80-125	ST30770	950	3
	HK 125B	Top busbar & bottom cable	A4	80-125	ST30771	1190	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	1710	1	FN 32 TPN / 4P	SK955410000	2290	1
	63	FN 63 2P	SK904190000	2250	1	FN 63 TPN / 4P	SK955400000	2970	1
Fr 2	100	FN 100 2P	SK904200000	4450	1	FN 100 TPN	SK955710000	5510	1
	125	FN 125 2P	SK904210000	5560	1	FN 125 TPN	SK954050000	6730	1
Fr 3	200	FN 200 2P	SK904500000	7980	1	FN 200 TPN	SK956070000	9900	1
	250	FN 250 2P	SK904540000	9490	1	FN 250 TPN	SK956830000	11670	1
Fr 4	315	FN 315 2P	SK904650000	12180	1	FN 315 TPN	SK956090000	13720	1
	400	FN 400 2P	SK904660000	13870	1	FN 400 TPN	SK956100000	17550	1
Fr 5	630	FN 630 2P	SK904670000	22380	1	FN 630 TPN	SK956110000	27100	1
	800	FN 800 2P	SK904680000	23460	1	FN 800 TPN	SK955510000	28380	1
	1000	FN 1000 2P	SK904690000	31310	1	FN 1000 TPN	SK957100000	41070	1
Fr 6	1000	-	-	-	-	C-Line SD 1000 4P <sup>§</sup>	COS10000040	50140	1
	1250	-	-	-	-	C-Line SD 1250 4P <sup>§</sup>	COS12500040	57030	1
	1600	-	-	-	-	C-Line SD 1600 4P <sup>§</sup>	COS16000040	79180	1
	2000	-	-	-	-	C-Line SD 2000 4P <sup>§</sup>	COS20000040	95710	1

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

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

## Spares & Accessories for type FN<sup>X</sup> [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	180	1
Insulated fuse pulling handle for Type HN fuse-link from 63A-800A	SF90126	650	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	820	1
Operating Handle	CXS6001	1830	1
Castell Type Lock <sup>§</sup>	CX60004	2420	1


§ Chapter ID [8301]

# 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	490	1	
	FN 100 / 125 / 160	SK91328	580	1	
	FN 200 / 250	SK91329	780	1	
	FN 315 / 400 / 630 / 800	SK91330 <sup>#</sup>	830	1	
2 <sup>nd</sup> Aux. Contact (1NO + 1NC)	FN 32 / 63	SK90670	530	1	
	FN 100 to FN 1000	SK90696	610	1	
Earthing Link	FN 32 to FN 1000 <sup>@</sup>	CK90396	470	1	
Terminal Shroud Kit	FN 32 / 63	SK91190	150	1	
	FN 100 / 125 / 160	SK91137	190	1	
	FN 200 / 250	SK91335	540	1	
	FN 315 / 400	SK91346	560	1	
	FN 630 / 800	SK91347 <sup>#</sup>	590	1	
Handle Assembly - A	FN 32 / 63	SK91257	420	1	
	FN 100 to FN 250	SK91258	900	1	
	FN 315 / 400 / 630 / 800	SK91259 <sup>#</sup>	1000	1	
Handle Assembly - B	FN 32 / 63	SK91277	420	1	
	FN 100 to FN 250	SK91278	900	1	
	FN 315 / 400 / 630 / 800	SK91279 <sup>#</sup>	1000	1	
Handle Assembly - CE	FN 32 / 63	SK91337	250	1	
Interphase Barrier Kit	FN 200	SK91343	380	1	
	FN 315 / 400	SK91344	400	1	
	FN 630 / 800	SK91345 <sup>#</sup>	410	1	
Castell Type Lock <sup>§</sup>	FN 100 / 125 / 160 / 200 / 250	A	SK00333	2310	1
		B	SK00334	2310	1
		C	SK00335	2310	1
		D	SK00336	2310	1
	FN 315 / 400 / 630 / 800	A	SK00345 <sup>#</sup>	2310	1
		B	SK00346 <sup>#</sup>	2310	1
		C	SK00347 <sup>#</sup>	2310	1
		D	SK00348 <sup>#</sup>	2310	1
Switched Neutral Kit <sup>#</sup>	FN 100 / 125 / 160	SK95233	4380	1	
	FN 200 / 250	SK95516	4670	1	
	FN 315 / 400	SK95517	5050	1	
	FN 630 / 800	SK95546 <sup>#</sup>	7090	1	

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

Communication  
Total Selectivity  
Advanced Protections  
Energy Metering

Choose the superhero. Choose  MCCB


 MCCBs



**Features**

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

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


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

 -DZ MCCBs



**Features**

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

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

**Why wait? Contact us today.**

**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)



## 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 : 10kA @ 250V DC (2P in series)	EM90982O0BO	1530	AC : 10kA @ 415V AC, 50 Hz/60 Hz DC : 10kA @ 250V DC (3P in series)	EM90983O0BO	2000	EM90984O0BO	2660	1
	20		EM90982O0CO	1530		EM90983O0CO	2000	EM90984O0CO	2660	1
	25		EM90982O0DO	1530		EM90983O0DO	2000	EM90984O0DO	2660	1
	32		EM90982O0EO	1530		EM90983O0EO	2000	EM90984O0EO	2660	1
	40		EM90982O0FO	1530		EM90983O0FO	2000	EM90984O0FO	2660	1
	50		EM90982O0GO	1530		EM90983O0GO	2000	EM90984O0GO	2660	1
	63		EM90982O0HO	1510		EM90983O0HO	1960	EM90984O0HO	2610	1
	80		EM90982O0JO ▲	1650		EM90983O0JO ▲	2150	EM90984O0JO ▲	2990	1
			EM90812O0JO	1510		EM90813O0JO	1960	EM90814O0JO	2610	1
	100		EM90982O0KO ▲	1650		EM90983O0KO ▲	2150	EM90984O0KO ▲	2990	1
			EM90812O0KO	1510		EM90813O0KO	1960	EM90814O0KO	2610	1
125	EM90982O0LO ▲	2340	EM90983O0LO ▲	3180	EM90984O0LO ▲	3960	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	585	1
<b>Shunt Release</b>			
Short Rated 110/240/415V AC	EM90520OMOO	735	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
2 Pole (upto 100A)	CM97785O002	225	Set of 4
3 Pole (upto 100A)	CM97785O000	330	Set of 6
4 Pole (upto 100A)	CM97921O000	520	Set of 8
<b>Rotary Handle</b>			
Direct ROM	EM90969O000	1050	1
Extended ROM	EM90970O000	1685	1
<b>SS Enclosure</b>			
Size I Enclosure for 3P & 4P	CM90996O000	1905	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. 43 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	CM90517OOCO	4390	CM90518OOCO	5670	1
	20-25		CM90517OODO	4390	CM90518OODO	5670	1
	25-32		CM90517OOEO	4390	CM90518OOEO	5670	1
	32-40		CM90517OOF0	4390	CM90518OOF0	5670	1
	40-50		CM90517OOGO	4390	CM90518OOGO	5670	1
	50-63		CM90517OOHO	4280	CM90518OOHO	5510	1
	63-80		CM90517OOJO	4280	CM90518OOJO	5510	1
	80-100		CM90517OOKO	4280	CM90518OOKO	5510	1
DU125D	100-125		CM90676OOLO	4970	CM90677OOLO	6470	1

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

## 2 Pole / 3 Pole / 4 Pole MCCBs

### DU100H/DU125H MCCBs



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

For DC application please refer catalogue

Type	Thermal Release Range (A)	Breaking Capacity Icu (kA)	2 Pole		Breaking Capacity Icu at 415V AC 50Hz. (kA)	3 Pole		4 Pole		Std. Pkg. (Nos.)
			Cat. No.	M.R.P. (₹) Per Unit		Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	
DU100H	16-20	AC : 65kA @ 240V AC, 50Hz	CM97898OOC2	3430	30	CM97894OOC2	4660	CM97933OOC2	6480	1
	20-25		CM97898OOD2	3430		CM97894OOD2	4660	CM97933OOD2	6480	1
	25-32		CM97898OEE2	3430		CM97894OEE2	4660	CM97933OEE2	6480	1
	32-40		CM97898OOF2	3430		CM97894OOF2	4660	CM97933OOF2	6480	1
	40-50	DC : 15kA @ 250V DC, (2P in Series) L/R < 15 msec.	CM97898OOG2	3430		CM97894OOG2	4660	CM97933OOG2	6480	1
	50-63		CM97898OOH2	3370		CM97894OOH2	4620	CM97933OOH2	6360	1
	63-80		CM97898OOJ2	3370		CM97894OOJ2	4620	CM97933OOJ2	6360	1
	80-100		CM97898OOK2	3370		CM97894OOK2	4620	CM97933OOK2	6360	1
DU125H	100-125		CM91198OOLO	4900		CM90678OOLO	5480	CM90679OOLO	7030	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	CM97886O000	910	1
2 C/O - Right	CM97887O000	1615	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM97888O000	910	1
2 C/O - Right	CM97889O000	1615	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM97890O000	1550	1
<b>Shunt Release</b>			
24V DC - Left	CM91402O400	1585	1
110V AC - Left	CM97883OAOO	1585	1
240/415V AC - Left	CM97883OMOO	1720	1
<b>Under Voltage Release</b>			
240V AC - Left	CM97892BOOO	2745	1

Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals</b>			
DU100H - 2 Pole	CM97785O002	225	Set of 4
DU125H - 2 Pole	CM91199O0LO	290	Set of 4
DU100D/DU100H - 3 Pole	CM97785O000	330	Set of 6
DU125D/DU125H - 3 Pole	CM90687O0LO	430	Set of 6
DU100D/DU100H - 4 Pole	CM97921O000	520	Set of 8
DU125D/DU125H - 4 Pole	CM90688O0LO	620	Set of 8
<b>Rotary Handle</b>			
DU100D/DU125D/ Direct ROM	CM97895O000	1145	1
DU100H/DU125H Extended ROM	CM97896O000	1500	1
<b>DIN rail kit</b>			
DU100D/DU125D/DU100H/DU125H	CM90944O000	120	1
<b>SS Enclosure</b>			
Size I Enclosure	CM90996O000	1905	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. 43 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	7480	CM90634OOMO	9630	1
	160-200					CM90631OONO	8910	CM90634OONO	11380	1
	200-250					CM90631OPO	9810	CM90634OPO	12890	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	5940	36	CM98062O000	8310	CM98065OOMO	10110	1
	160-200		CM90905OONO	6860		CM98061O000	10770	CM98065OONO	13890	1
	200-250		CM90905OPO	7690		CM98060O000	12370	CM98065OPO	15920	1
DU400N	250-320		CM90886O0QO	13680	50	CM98402O0QO	17400	CM98404O0QO	21450	1
	320-400		CM90886OORO	13680		CM98402OORO	17400	CM98404OORO	21450	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	910	1
2 C/O - Right	CM97887O000	1615	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM97888O000	910	1
2 C/O - Right	CM97889O000	1615	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM97890O000	1550	1
<b>Shunt Release</b>			
24V DC - Left	CM91402O400	1585	1
110V AC - Left	CM97883OAOO	1585	1
240/415V AC - Left	CM97883OMOO	1720	1
<b>Under Voltage Release</b>			
240V AC - Left	CM97892BOOO	2745	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	1155	Set of 4	
DU250C/DU250 - 3 Pole	ST98053O000	1460	Set of 6	
DU250C/DU250 - 4 Pole	CM92007O000	1920	Set of 8	
<b>Rotary Handle</b>				
DU250C/DU250	Direct ROM	CM98040O000	1190	1
	Extended ROM	CM98041O000	1675	1
<b>SS Enclosure</b>				
Size II Enclosure	CM91003O000	4375	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	1010	1
2 C/O	CM99802O000	1905	1
<b>Trip Alarm Contact</b>			
1 C/O - Right	CM99803O000	1070	1
<b>Auxiliary + Trip Alarm Contact</b>			
1 C/O + 1C/O - Right	CM99804O000	1910	1
<b>Shunt Release</b>			
110/240/415V AC, 110/220V DC	CM99805O000	2480@	1
24V DC	CM98976O400	2285@	1
<b>Under Voltage Release</b>			
240V AC - Left	CM99986BOOO	3385	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	1815	Set of 4
3 Pole	ST98065O000	2760	Set of 6
4 Pole	ST98066O000	3955	Set of 8
<b>Rotary Handle</b>			
Direct ROM	CM99860O000	1845	1
Extended ROM	CM99861O000	3170	1

Note: Phase Barriers are supplied along with all MCCBs  
All internal accessories & ROMs are common for 2P MCCBs  
@ - 'NO' of control contactor to be connected in series for DC control supply

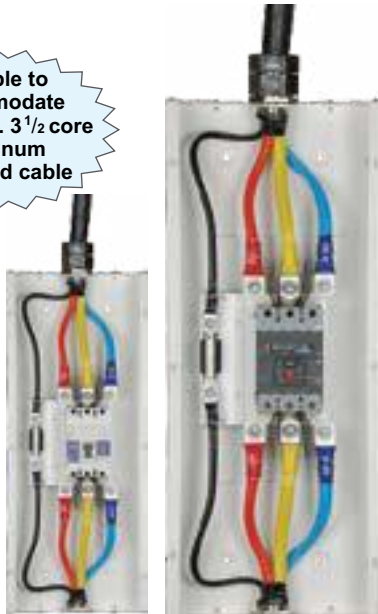
# SS Enclosure for MCCBs [8538]

## Perfect home for your MCCB

Separate cable gland box NOT required

Suitable to accommodate 185 sq. mm. 3 1/2 core Aluminum armoured cable

Suitable to accommodate 70 sq. mm. 3 1/2 core Aluminum armoured cable



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	1905	1
Size II Enclosure for DU250C/DU250/DN1	CM910030000	4375	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	8570	Built in CBCT	1
GF2	200 - 400A	ST277460000	12475	Built in CBCT	1
GF11	up to 800A	ST285940000	7875 #	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	7220	CM979190OC2OG	10020	1
	20-25		CM978930OD2OG	7220	CM979190OD2OG	10020	1
	25-32		CM978930OE2OG	7220	CM979190OE2OG	10020	1
	32-40		CM978930OF2OG	7220	CM979190OF2OG	10020	1
	40-50		CM978930OG2OG	7220	CM979190OG2OG	10020	1
	50-63		CM978930OH2OG	7090	CM979190OH2OG	9840	1
	63-80		CM978930OJ2OG	7090	CM979190OJ2OG	9840	1
	80-100		CM978930OK2OG	7090	CM979190OK2OG	9840	1
DN0-125D*	100-125		CM90680OOL0OG	8580	CM90681OOL0OG	11420	1
DN0-100C	16-20	25	CM916120OC0OG	7380	CM917120OC0OG	10410	1
	20-25		CM916120OD0OG	7380	CM917120OD0OG	10410	1
	25-32		CM916120OE0OG	7380	CM917120OE0OG	10410	1
	32-40		CM916120OF0OG	7380	CM917120OF0OG	10410	1
	40-50		CM916120OG0OG	7380	CM917120OG0OG	10410	1
	50-63		CM916120OH0OG	7240	CM917120OH0OG	10230	1
	63-80		CM916120OJ0OG	7240	CM917120OJ0OG	10230	1
	80-100		CM916120OK0OG	7240	CM917120OK0OG	10230	1
DN1-250C	100-125		CM90638OOL0	10740	CM90642OOL0	12770	1
	125-160		CM90638OOM0	13820	CM90642OOM0	16470	1
	160-200		CM90638OON0	18160	CM90642OON0	21130	1
	200-250		CM90638OOP0	21000	CM90642OOP0	24060	1

Kindly refer page no. 43 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. 45)  
 \* 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)



dsine 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	9680	DZ1F0016DXC1A	12150	1			
	14-20		DZ1T0020DXC1A	9680	DZ1F0020DXC1A	12150	1			
	17-25		DZ1T0025DXC1A	9680	DZ1F0025DXC1A	12150	1			
	22-32		DZ1T0032DXC1A	9680	DZ1F0032DXC1A	12150	1			
	27-40		DZ1T0040DXC1A	9680	DZ1F0040DXC1A	12150	1			
	34-50		DZ1T0050DXC1A	9680	DZ1F0050DXC1A	12150	1			
	43-63		DZ1T0063DXD1A	9550	DZ1F0063DXD1A	11990	1			
	54-80		DZ1T0080DXD1A	9550	DZ1F0080DXD1A	11990	1			
	67-100		DZ1T0100DXD1A	9550	DZ1F0100DXD1A	11990	1			
	84-125		DZ1T0125DXD1A	11000	DZ1F0125DXD1A	13720	1			
	108-160		DZ1T0160DXD1A	14500	DZ1F0160DXD1A	17380	1			
DN2-250D	100-125	36	CM92008OOL1OG	12650	CM92108OOL1OG	15780	1			
	125-160		CM92008OOM1OG	16680	CM92108OOM1OG	19990	1			
	160-200		CM92009OON1OG	19740	CM92109OON1OG	26130	1			
	200-250		CM92009OOP1OG	22160	CM92109OOP1OG	27450	1			
DN3B-400D	250-320		36	CM984010OQOOG	26970	CM984030OQOOG	32610	1		
	320-400			CM984010OROOG	26970	CM984030OROOG	32610	1		
DN3-400D	250-320			50	CM940050OQ1OG	*	CM941050OQ1OG	*	1	
	320-400				CM940050OR1OG	*	CM941050OR1OG	*	1	
DN3-630D	400-500				50	CM940060OS1OG	37480	CM941060OS1OG	46290	1
	500-630					CM940060OT1OG	37480	CM941060OT1OG	46290	1
DZ1-160N	11-16	50				DZ1T0016NXC1A	12830	DZ1F0016NXC1A	16040	1
	14-20					DZ1T0020NXC1A	12830	DZ1F0020NXC1A	16040	1
	17-25					DZ1T0025NXC1A	12830	DZ1F0025NXC1A	16040	1
	22-32					DZ1T0032NXC1A	12830	DZ1F0032NXC1A	16040	1
	27-40		DZ1T0040NXC1A			12830	DZ1F0040NXC1A	16040	1	
	34-50		DZ1T0050NXC1A			12830	DZ1F0050NXC1A	16040	1	
	43-63		DZ1T0063NXD1A	12600		DZ1F0063NXD1A	15750	1		
	54-80		DZ1T0080NXD1A	12600		DZ1F0080NXD1A	15750	1		
	67-100		DZ1T0100NXD1A	12600	DZ1F0100NXD1A	15750	1			
	84-125		DZ1T0125NXD1A	16050	DZ1F0125NXD1A	19170	1			
	108-160		DZ1T0160NXD1A	18200	DZ1F0160NXD1A	21970	1			
DN2-250N	100-125	50	CM92005OOL1OG	18460	CM92105OOL1OG	22050	1			
	125-160		CM92005OOM1OG	20930	CM92105OOM1OG	25270	1			
	160-200		CM92006OON1OG	22000	CM92106OON1OG	29990	1			
	200-250		CM92006OOP1OG	23800	CM92106OOP1OG	30730	1			
DN3-400N	250-320		70	CM940030OQ1OG	29400	CM941030OQ1OG	36050	1		
	320-400			CM940030OR1OG	29400	CM941030OR1OG	36050	1		
DN3-630N	400-500			70	CM940040OS1OG	40260	CM941040OS1OG	50740	1	
	500-630				CM940040OT1OG	40260	CM941040OT1OG	50740	1	
DN2-250S	100-125				70	CM92002OOL1OG	27700	CM92102OOL1OG	29650	1
	125-160					CM92002OOM1OG	29040	CM92102OOM1OG	32220	1
	160-200	CM92003OON1OG				32640	CM92103OON1OG	39110	1	
	200-250	CM92003OOP1OG				33670	CM92103OOP1OG	40530	1	
DN3-400S	250-320	70				CM940010OQ1OG	37050	CM941010OQ1OG	42700	1
	320-400					CM940010OR1OG	37050	CM941010OR1OG	42700	1
DN3-630S	400-500		70			CM940020OS1OG	49170	CM941020OS1OG	60820	1
	500-630					CM940020OT1OG	49170	CM941020OT1OG	60820	1

For DC application please refer catalogue

Kindly refer page no. 43 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/DY 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, DZ1-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>											
<b>36/50</b>	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	15750	DZ1F0040DXF1A	19800	1	
	16-63		DZ1T0063DXF1A	15750	DZ1F0063DXF1A	19800	1	
	25-100		DZ1T0100DXF1A	15750	DZ1F0100DXF1A	19800	1	
	40-160		DZ1T0160DXF1A	19930	DZ1F0160DXF1A	27700	1	
DN2-250D	16-40		CM920630000X1	18110	CM921550000X1	22370	1	
	25-63		CM920710000X1	18110	CM921540000X1	22370	1	
	40-100		CM920510000X1	18110	CM921530000X1	22370	1	
	63-160		CM920740000X1	22920	CM921520000X1	31300	1	
	100-250		CM920540000X1	27510	CM921510000X1	37700	1	
DN3-400D	160-400		CM930010000X1	35030	CM930030000X1	43240	1	
DN3-630D	250-630		CM930050000X1	39750	CM930070000X1	52180	1	
DZ1-160N#	10-40		50	DZ1T0040NXF1A	18770	DZ1F0040NXF1A	26020	1
	16-63			DZ1T0063NXF1A	18770	DZ1F0063NXF1A	26020	1
	25-100			DZ1T0100NXF1A	18770	DZ1F0100NXF1A	26020	1
	40-160			DZ1T0160NXF1A	24550	DZ1F0160NXF1A	32130	1
DN2-250N	16-40			CM920640000X1	21590	CM921600000X1	29400	1
	25-63	CM920720000X1		21590	CM921590000X1	29400	1	
	40-100	CM920520000X1		21590	CM921580000X1	29400	1	
	63-160	CM920750000X1		28230	CM921570000X1	36310	1	
	100-250	CM920550000X1		31470	CM921560000X1	40290	1	
DN3-400N	160-400	CM930020000X1		38330	CM930040000X1	49430	1	
DN3-630N	250-630	CM930060000X1		41690	CM930080000X1	54860	1	
DN4-1250N	320-800	CM960210000X1		61550	CM961110000X1	77510	1	
	400-1000	CM960220000X1		86140	CM961120000X1	124650	1	
	500-1250	CM960230000X1		107480	CM961130000X1	146700	1	
DN2-250S	16-40	70		CM920650000X1	24180	CM921650000X1	30750	1
	25-63			CM920730000X1	24180	CM921640000X1	30750	1
	40-100		CM920590000X1	24180	CM921630000X1	30750	1	
	63-160		CM920760000X1	32590	CM921620000X1	41560	1	
	100-250		CM920560000X1	36330	CM921610000X1	46180	1	
DN3-400S	160-400		CM940530000X1	46340	CM941530000X1	59600	1	
DN3-630S	250-630		CM940790000X1	48970	CM941790000X1	68130	1	
DN4-1250S	320-800		CM960250000X1	80090	CM961150000X1	101440	1	
	400-1000		CM960260000X1	108430	CM961160000X1	158180	1	
	500-1250		CM960270000X1	132700	CM961170000X1	180530	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. 45)

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		
DZ1-160D#	10-40	36	DZ1T0040DXH1A	28890	DZ1F0040DXH1A	33550	1	
	16-63		DZ1T0063DXH1A	28890	DZ1F0063DXH1A	33550	1	
	25-100		DZ1T0100DXH1A	28890	DZ1F0100DXH1A	33550	1	
	40-160		DZ1T0160DXH1A	33100	DZ1F0160DXH1A	41040	1	
DN2-250D	16-40		CM920630000AG	31780	CM921550000AG	36910	1	
	25-63		CM920710000AG	31780	CM921540000AG	36910	1	
	40-100		CM920510000AG	31780	CM921530000AG	36910	1	
	63-160		CM920740000AG	36410	CM921520000AG	45140	1	
	100-250		CM920540000AG	40290	CM921510000AG	49090	1	
DN3-400D	160-400		CM930010000AG	47770	CM930030000AG	55840	1	
DN3-630D	250-630		CM930050000AG	51550	CM930070000AG	63910	1	
DZ1-160N#	10-40		50	DZ1T0040NXH1A	31690	DZ1F0040NXH1A	37810	1
	16-63			DZ1T0063NXH1A	31690	DZ1F0063NXH1A	37810	1
	25-100			DZ1T0100NXH1A	31690	DZ1F0100NXH1A	37810	1
	40-160			DZ1T0160NXH1A	38190	DZ1F0160NXH1A	45520	1
DN2-250N	16-40			CM920640000AG	34860	CM921600000AG	41590	1
	25-63	CM920720000AG		34860	CM921590000AG	41590	1	
	40-100	CM920520000AG		34860	CM921580000AG	41590	1	
	63-160	CM920750000AG		42010	CM921570000AG	50070	1	
	100-250	CM920550000AG		43020	CM921560000AG	52310	1	
DN3-400N	160-400	CM930020000AG		50680	CM930040000AG	60440	1	
DN3-630N	250-630	CM930060000AG		55050	CM930080000AG	69690	1	
DN4-1250N	320-800	CM960210000AG		88230	CM961110000AG	105770	1	
	400-1000	CM960220000AG		110680	CM961120000AG	148100	1	
	500-1250	CM960230000AG		129670	CM961130000AG	167750	1	
DN2-250S	16-40	70		CM920650000AG	37110	CM921650000AG	44540	1
	25-63			CM920730000AG	37110	CM921640000AG	44540	1
	40-100		CM920590000AG	37110	CM921630000AG	44540	1	
	63-160		CM920760000AG	47450	CM921620000AG	54500	1	
	100-250		CM920560000AG	49780	CM921610000AG	63990	1	
DN3-400S	160-400		CM940530000AG	62080	CM941530000AG	77680	1	
DN3-630S	250-630		CM940790000AG	67220	CM941790000AG	94000	1	
DN4-1250S	320-800		CM960250000AG	99880	CM961150000AG	124910	1	
	400-1000		CM960260000AG	134190	CM961160000AG	181660	1	
	500-1250		CM960270000AG	159280	CM961170000AG	208990	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. 45)  
 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	24600
Cable (2m length)	CM011960000	1340
Power Supply Module	CL907220000	*
UNCO Module for Status Indication & Control through communication	CL908520000	11730

Current Metering & latest trip record

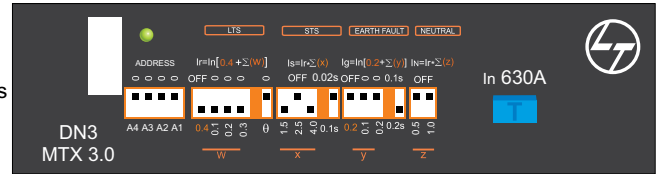


MTX2.0 with current metering module

d sine With Microprocessor Release MTX3.0 :



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



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

Note: dsine-V Version (Icu=Ics=100kA) MCCBs are available on request.  
 @ Motorised version available for DN2, DN3 and DN4 frames (please refer page No. 45)

Accessories for MTX3.0 [8538]

Modules for MTX3.0 release	Cat. No.	M.R.P. (₹) Per Unit
Communication Module	CM956800000	
Voltage Module	CM956850000	*
Display Module	CM956760000	
Power Supply Module	CL907220000	*
UNCO Module for Status Indication & Control through communication	CL908520000	11730

\* Price on request

MCCB with MTX3.0 release



MTX3.0 with all modules



d sine MCCBs for Motor back-up Protection:



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

**Cost effective solution for motor starter protection**

3 Pole					
Type	Current Rating (A)	Breaking Capacity Icu at 415V. AC, 50Hz. (kA)	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
DN0-100M	32	50	CM98944OOEO	5570	1
	40		CM98944OOF0	5570	1
	50		CM98944OOGO	5570	1
	63		CM98944OOHO	5570	1
	80		CM98944OOJO	5570	1
	100		CM98944OOKO	5570	1
New DZ1-160M	100		DZ1T0100NXM1A	7950	1
	125		DZ1T0125NXM1A	8090	1
	160		DZ1T0160NXM1A	9600	1
DN1-160M	100		CM90345OOKO	9130	1
	125		CM90345OOLO	9290	1
	160		CM90345OOMO	11030	1
DN2-250M	200		CM92171OONOG	14390	1
	250		CM92171OOP0OG	19240	1
DN3-400M	320		CM945160OQOOG	24320	1
	400		CM945160OR0OG	25520	1
DN3-630M	500		CM945150OSOOG	28090	1
	630		CM945150OTOOG	28570	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. 18  
 Add suffix as "OOOO" to all DZ1 cat. nos.



# 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

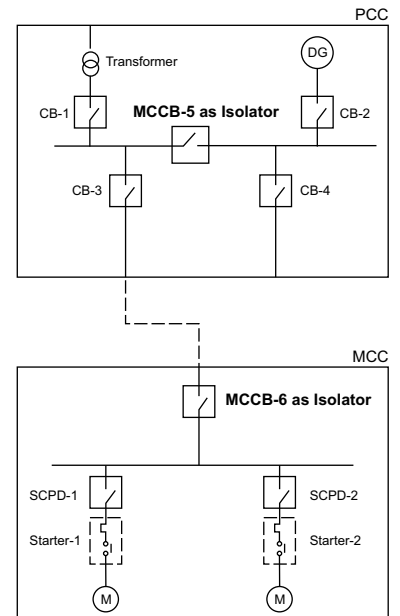
**d sine**  
dsine-M range

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	5710	CM90717OOEO	7410	1
	63	CM90716OOHO	5710	CM90717OOHO	7410	1
	100	CM90716OOKO	6820	CM90717OOKO	8620	1
	125	CM90716OOL0	7540	CM90717OOL0	9600	1
	160	CM90716OOMO	8150	CM90717OOMO	10230	1
DN2-250SD	200	CM96814OONOOG	16130	CM96815OONOOG	20910	1
	250	CM96802OOP0OG	17050	CM96803OOP0OG	22820	1
DN3B-400SD	320	CM984100OQOOG	25050	CM984120OQOOG	31890	1
	400	CM984100OR0OG	25050	CM984120OR0OG	31890	1
DN3-630SD	500	CM96806OOS0OG	28410	CM96807OOS0OG	38040	1
	630	CM96806OOT0OG	28410	CM96807OOT0OG	38040	1
DN4-1250SD	800	CM93041OOUO	61450	CM93042OOUO	77180	1
	1000	CM93041OOVO	81630	CM93042OOVO	104470	1
	1250	CM93041OOAO	108840	CM93042OOAO	137080	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	25085	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	88440	Add MRPs of Similar 2 MCCBs of DN2 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-400		105090	Add MRPs of Similar 2 MCCBs of DN3 of desired no. of Poles, Breaking Cap. & Release to arrive at ASTS Solution.
DN3-630		105735	

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	910	1
DN0, DN1 - 2 C/O - Right	CM97887O000	1615	1
<b>DZ1 - 1 C/O</b>	EM90110O000	910	1
DN2, DN3B, DN3, DN4 - 1 C/O	CM99801O000	1010	1
DN2, DN3B, DN3, DN4 - 2 C/O	CM99802O000	1905	1
<b>Trip Alarm Contact [8538]</b>			
DN0, DN1 - 1 C/O - Right	CM97888O000	910	1
DN0, DN1 - 2 C/O - Right	CM97889O000	1615	1
<b>DZ1 - 1 C/O</b>	EM90110O000	910	1
DN2, DN3B, DN3, DN4 - 1 C/O - Right	CM99803O000	1070	1
<b>Auxiliary 1 C/O + TAC 1 C/O [8538]</b>			
DN0, DN1 - Right	CM97890O000	1550	1
DN2, DN3B, DN3, DN4 - Right	CM99804O000	1910	1
<b>Shunt Release [8538]</b>			
DN0, DN1 - 24V DC - Left	CM91402O400	1585	1
DN0, DN1 - 110V AC - Left	CM97883OAOO	1585	1
DN0, DN1 - 240/415V AC - Left	CM97883OMOO	1720	1
<b>DZ1 - 240V AC<sup>§</sup></b>	EM90032OBOO	2415	
DN2, DN3B, DN3, DN4 - 110/240/415V AC, 110/220V DC	CM99805O000	2480@	1
DN2, DN3B, DN3 - 24V DC	CM98976O400	2285@	1
<b>Under Voltage Release [8538]</b>			
DN0, DN1 - 240V AC - Left	CM97892B000	2745	1
<b>DZ1 - 240V AC<sup>§</sup></b>	EM90031B000	3040	1
DN2, DN3B, DN3 - 240V AC - Left	CM99986B000	3385**	1
DN4 - 240V AC - Left	CM99906O000	4035**	1

@ - 'NO' of control contactor to be connected in series for DC control supply  
 \*\* Use these UV Cat. Nos. with Grey look 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	1690	1
<b>DZ1 - 100A, 160A</b>	EM90508O000	1690	1
DN2 - 40A	CM99946O000	1680	1
DN2 - 63A	CM99947O000	1680	1
DN2 - 100A	CM99948O000	1680	1
DN2 - 160A	CM99949O000	2405	1
DN2 - 250A	CM99950O000	2405	1
DN3 - 400A	CM99954O000	4490	1
DN3 - 630A	CM99955O000	4490	1
DN4 - 800A	CM99889O000	6890	1
DN4 - 1000A	CM99890O000	6890	1
DN4 - 1250A	CM99891O000	7640	1
<b>Adaptor kit for External Neutral CT [8538]</b>			
<b>DZ1-160 &amp; DN2-250</b>	CM99994O000	635	Set of 2
DN3 - 400	CM99995O000	1270	Set of 2
DN3 - 630	CM99997O000	1280	Set of 2
DN4 - 800	CM99996O000	2210	Set of 2
DN4 - 1000	CM90966O000	4670	Set of 4
DN4 - 1250	CM99998O000	7960	Set of 2
<b>Stored Energy Electrical Operating Mechanism</b>			
DN2-240V AC*		27040	
DN3-240V AC*		33910	
DN4-240V AC*		52270	

\* 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	1145	1
DN1 Direct ROM	CM98040O000	1190	1
<b>DZ1 Direct ROM</b>	EM90207O000	1230	1
DN2 Direct ROM	CM99829O000	1230	1
DN3B, DN3 Direct ROM	CM99860O000	1845	1
DN0 Extended ROM	CM97896O000	1500	1
DN1 Extended ROM	CM98041O000	1675	1
<b>DZ1 Extended ROM</b>	EM90209O000	1720	1
DN2 Extended ROM	CM99830O000	1940	1
DN3B, DN3 Extended ROM	CM99861O000	3170	1
DN4 Extended ROM	CM99884O000	3845	1
<b>Panel door mounted Key lock for Extended ROM # [8301]</b>			
Type 1	CM99958TO000	4900	1
Type 2	CM99958TO00A	4900	1
Type 3	CM99958TO00B	4900	1
Type 12	CM99958TO00C	4900	1
Type 23	CM99958TO00D	4900	1

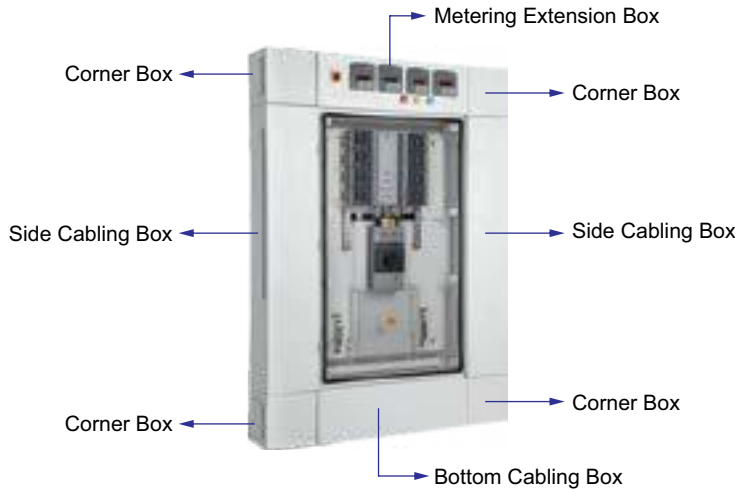
# - Can be used with dsine & DU new look extended ROM



Description	External		
	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
<b>Spreader Terminals [8538]</b>			
DN0-100 - 3 Pole	CM97785O000	330	Set of 6
DN0-125D - 3 Pole	CM90687O0LO	430	Set of 6
<b>DZ1 - 160 - 3 Pole</b>	EM90609O000	1460	Set of 6
DN1, DN2 - 250 - 3 Pole	ST98053O000	1460	Set of 6
DN3B/DN3-400 - 3 Pole	ST98065O000	2760	Set of 6
DN3-630 - 3 Pole	ST98054O000	3190	Set of 6
DN4-800 - 3 Pole	CM91161OOUO	6720	Set of 6
DN4-1000 - 3 Pole	CM91161OOVO	13440	Set of 12
DN4-1250 - 3 Pole	CM91161OOAO	26555	Set of 6
DN0-100 - 4 Pole	CM97921O000	520	Set of 8
DN0-125D - 4 Pole	CM90688O0LO	620	Set of 8
<b>DZ1 - 160 - 4 Pole</b>	EM90610O000	1920	Set of 8
DN1, DN2 - 250 - 4 Pole	CM92007O000	1920	Set of 8
DN3B/DN3-400 - 4 Pole	ST98066O000	3955	Set of 8
DN3-630 - 4 Pole	CM92004O000	4300	Set of 8
DN4-800 - 4 Pole	ST90362O000	8575	Set of 8
DN4-1000 - 4 Pole	CM90064OOVO	17150	Set of 16
DN4-1250 - 4 Pole	ST98058O000	33980	Set of 8
<b>Mechanical Interlock Kit - Base Plate [8538]</b>			
DN2-250	CM99731O000	5455	1
DN3-400	CM99732O000	8365	1
DN3-630	CM99854O000	9010	1
<b>DIN rail kit [8538]</b>			
DN0	CM90944O000	120	1

Note: Phase Barriers are supplied along with MCCBs





### Range Highlights

- Sub Main Distribution Board (SMDB) with MCCB as incomer and MCCBs as outgoing devices
- Conforms to IEC 61439-2
- DEKRA and ASTA certified
- Rating up to 630 A
- Short-time withstand current
  - 250A & 400A SMDB - 36 kA 1s
  - 630A SMDB - 50 kA 1s
- Ingress protection - IP 43
- Choice in number of outgoing ways - 4, 8, 12 and 16
- Ready to use, off the shelf solution
- Suitable for [cd sine](#) 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	46900	637	670	208.5
SMDB - TN250D, O/G 100A 8 ways	DA20D1084CZZ0	-	8	57040	787	670	208.5
SMDB - TN250D, O/G 100A 12 ways	DA20D1124CZZ0	-	12	71750	937	670	208.5
SMDB - TN250D, O/G 100A 16 ways	DA20D1164CZZ0	-	16	84320	1087	670	208.5
SMDB - TN400D, O/G 100A 4 ways	DA40D1044CZZ0	-	4	52550	937	670	208.5
SMDB - TN400D, O/G 100A 8 ways	DA40D1084CZZ0	-	8	59880	1087	670	208.5
SMDB - TN400D, O/G 100A 12 ways	DA40D1124CZZ0	-	12	76990	1237	670	208.5
SMDB - TN400D, O/G 100A 16 ways	DA40D1164CZZ0	-	16	90750	1387	670	208.5
SMDB - TN630D, O/G 100A 8 ways	DA60D1084CZZ0	-	8	98530	1287	870	208.5
SMDB - TN630D, O/G 100A 12 ways	DA60D1124CZZ0	-	12	133070	1507	870	208.5
SMDB - TN630D, O/G 100A 16 ways	DA60D1164CZZ0	-	16	145860	1507	870	208.5
SMDB - TN630D, O/G 250A 4 ways	DA62D1044CZZ0	4	-	95960	1067	870	208.5
SMDB - TN630D, O/G 250A 8 ways	DA62D1084CZZ0	8	-	107480	1287	870	208.5
SMDB - TN630D, O/G 250A 12 ways	DA62D1124CZZ0	12	-	138190	1507	870	208.5
SMDB - TN630D, O/G 250A 16 ways	DA62D1164CZZ0	16	-	154820	1727	870	208.5
SMDB - TN630D, O/G COMBI 4 ways	DA6AD1044CZZ0	2	2	94040	1067	870	208.5
SMDB - TN630D, O/G COMBI 8 ways	DA6AD1084CZZ0	2	6	102360	1287	870	208.5
SMDB - TN630D, O/G COMBI 12 ways	DA6AD1124CZZ0	2	10	135620	1507	870	208.5
SMDB - TN630D, O/G COMBI 16 ways	DA6AD1164CZZ0	2	14	149700	1507	870	208.5

Incoming Device [8536]			
SMDB Type	Description	Cat. No.	M.R.P. (₹) Per Unit
TN250D*	DN1-250C 3 Pole MCCB - 160A	CM90638OOMO	13820
	DN1-250C 3 Pole MCCB - 200A	CM90638OONO	18160
	DN1-250C 3 Pole MCCB - 250A	CM90638OPO	21000
TN400D	DN3-400D 3 Pole MCCB - 320A	CM94005OOQ1OG	29130
	DN3-400D 3 Pole MCCB - 400A	CM94005OOR1OG	29130
TN630D	DN3-630D 3 Pole MCCB - 500A	CM94006OOS1OG	37480
	DN3-630D 3 Pole MCCB - 630A	CM94006OOT1OG	37480

Outgoing Device [8536]			
SMDB Type	Description	Cat. No.	M.R.P. (₹) Per Unit
TN250D, TN400D & TN630D	DN0-100C 3 Pole MCCB - 20A	CM91612OOCOOG	7380
	DN0-100C 3 Pole MCCB - 25A	CM91612OODOOG	7380
	DN0-100C 3 Pole MCCB - 32A	CM91612OOEOOG	7380
	DN0-100C 3 Pole MCCB - 40A	CM91612OOF0OG	7380
	DN0-100C 3 Pole MCCB - 50A	CM91612OOG0OG	7380
	DN0-100C 3 Pole MCCB - 63A	CM91612OOHOOG	7240
	DN0-100C 3 Pole MCCB - 80A	CM91612OOJOOG	7240
	DN0-100C 3 Pole MCCB - 100A	CM91612OOKOOG	7240
TN630D	DN1-250C 3 Pole MCCB - 160A	CM90638OOMO	13820
	DN1-250C 3 Pole MCCB - 200A	CM90638OONO	18160
	DN1-250C 3 Pole MCCB - 250A	CM90638OPO	21000

**Note:**

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

DN0, DU100D & DU100H MCCBs are suitable as outgoing devices up to 100 A  
 DN1-250N, 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	7610
	Bottom Cabling Box	CM904370000	7130
TN630D	Metering Extension Box	CM9106400TO	8020
	Bottom Cabling Box	CM910620000	7540
TN250D, TN400D & TN630D	Corner Box	CM910890000	2600
	Mounting base	CM702600000	3570



### 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	7290	CM910860DOO	7290
	-	8	CM910850FOO	9420	CM910860FOO	9420
	-	12	CM910850HOO	11290	CM910860HOO	11290
	-	16	CM910850KOO	13180	CM910860KOO	13180
TN400D	-	4	CM910870DOO	11290	CM910880DOO	11290
	-	8	CM910870FOO	13180	CM910880FOO	13180
	-	12	CM910870HOO	14430	CM910880HOO	14430
	-	16	CM910870KOO	16310	CM910880KOO	16310
TN630D	-	8	CM911200OFO	13670	CM911210OFO	13670
	-	12	CM911200OHO	15930	CM911210OHO	15930
	-	16				
	4	-	CM911200ODO	12250	CM911210ODO	12250
	8	-	CM911200OFO	13670	CM911210OFO	13670
	12	-	CM911200OHO	15930	CM911210OHO	15930
	16	-	CM911200OKO	17360	CM911210OKO	17360
	2	2	CM911200ODO	12250	CM911210ODO	12250
	2	6	CM911200OFO	13670	CM911210OFO	13670
	2	10	CM911200OHO	15930	CM911210OHO	15930
	2	14				



# Get the Aluminium Edge



## Presenting Ti – the new, design-verified aluminium busbar-based power distribution solution from L&T Electrical & Automation (E&A).

The new Ti range of panels is a power distribution solution from E&A, available with an Aluminum busbar option. Ti is a design verified solution complying with latest IEC-61439 standard and available up to 4000A rating. It offers unique blend of quality, safety and standardization. Ti offering through E&As authorized franchisee network further gives edge as cost competitiveness and localized support for all future needs.

The unique busbar arrangement reduces impedance and heat loss, thereby saving almost 40% energy over conventional systems.

Moreover, these systems feature a fully-compartmentalized design, with an option of aluminium or copper busbars – ensuring quicker delivery and easier installation.

So, the next time you require electrical distribution solutions for your project, get the aluminium edge with the design-verified Ti Range.

### Customer Interaction Center (CIC)

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



# Smart is in Connected Products



**SmartComm Power Management Solutions | Integration | Monitoring | Protection | Control | Reporting**

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

SmartComm PMS has built-in features of Energy Monitoring, Controlling and Monitoring Switchgears and Management functionality.

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



#### Key Features:

- Dashboards
- SLDs
- Reports
- Trends
- Alerts
- Web Clients
- OPC Driver
- Redundancy



#### 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)

**SmartComm**  
Power Management Solutions



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:

Air Circuit Breakers

**UW 1 08 N X D 1 2 9 0 0 | UW1 800N 3P ED 1.5G BotV**

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 55)

## OMEGA ACBs are offered with following standard features:

Air Circuit Breakers

**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)	CL604200000	
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-2 400-3200A H, 3200A N/S (Vertical / Horizontal)	CL609770000	
Frame-2 4000A S/H (Vertical)	CL604170000	
Frame-3 400-4000A H/V (Vertical)#	CL604180000	
Frame-3 5000A H/V (Vertical)#	CL603470000	
Frame-3 400-5000A H/V (Horizontal-Long)	CL603730000	

# : Please consider 4 terminal adaptors per phase.

# : 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	25085	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	CL906470000	
Power supply module	CL907220000	
Relay Module	CL907160000	
MODBUS Module	CL907090000	
Profibus Module	CL902950000	
Matrix Smart Card Module	CL907050000	
Power Metering Module (415V)	CL906490000	
Power Metering Module (690V)	CL906850000	
ZSI Module	CL907180000	
TCS Module	CL907190000	
EL Module	CL907200000	
REF Module	CL907210000	
Simulation Kit	CL907240000	

For Energy Management Communication Software Please contact the nearest branch office

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



Pre-Engineered Retrofit Solution  
Upgrade E&A CNCS ACB to OMEGA ACB



### Presenting the pre-engineered L&T Electrical & Automation (E&A) CNCS to OMEGA Retrofit kit

The E&A CNCS to OMEGA Retrofit kit is a pre-engineered solution which allows you to upgrade from the old CNCS ACB to the advanced E&A OMEGA ACB - with minimal modification. All installations are done by trained Engineers from the nearest E&A 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 HE ACBs for Harsh Environment

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

Please contact the nearest branch office for Details & product Selection



C-POWER HE Range

## Breaking Capacities Offered:

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

For technical & dimension details please refer product catalogue. 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	169980	SL96061	215270
SL96051	214980	SL96071	260270
SL96042	169980	SL96062	215270
SL96052	214980	SL96072	260270
SL96043	173630	SL96063	223410
SL96053	218630	SL96073	268410
SL96044	189850	SL96064	236440
SL96054	234850	SL96074	281440
SL96045	215920	SL96065	260930
SL96055	260920	SL96075	305930
SL96046	262930	SL96066	322950
SL96056	307930	SL96076	367950
SL96047	319180	SL96067	391690
SL96057	364180	SL96077	436690

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95331	163580	SL95351	208870
SL95341	208580	SL95361	253870
SL95332	163580	SL95352	208870
SL95342	208580	SL95362	253870
SL95333	167230	SL95353	217010
SL95343	212230	SL95363	262010
SL95334	183450	SL95354	230040
SL95344	228450	SL95364	275040
SL95335	209520	SL95355	254530
SL95345	254520	SL95365	299530
SL95336	256530	SL95356	316550
SL95346	301530	SL95366	361550
SL95337	312780	SL95357	385290
SL95347	357780	SL95367	430290

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	104110	SL95581	132630
SL95571	149110	SL95591	177630
SL95562	104110	SL95582	132630
SL95572	149110	SL95592	177630
SL95563	113700	SL95583	143400
SL95573	158700	SL95593	188400
SL95564	130910	SL95584	163650
SL95574	175910	SL95594	208650
SL95565	145220	SL95585	186680
SL95575	190220	SL95595	231680

Thermal-Magnetic DN1			
3 Pole		4 Pole	
Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
SL95481	97710	SL95501	126230
SL95491	142710	SL95511	171230
SL95482	97710	SL95502	126230
SL95492	142710	SL95512	171230
SL95483	107300	SL95503	137000
SL95493	152300	SL95513	182000
SL95484	124510	SL95504	157250
SL95494	169510	SL95514	202250
SL95485	138820	SL95505	180280
SL95495	183820	SL95515	225280

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	16100
Microprocessor based SR18G+D (LSING + Current Metering)	Add	11500
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	13000

**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	68370
SL957220000	68970
SL957230000	72990
SL957240000	74870
SL957250000	98070
SL957260000	103260
SL932970000	118490

# 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	273230	#	347810	#	266830	#	341410
		EDO	H	SL95321	318230	#	392810	#	311830	#	386410
1000A	65kA	MDO	H	SL95312	278190	#	363280	#	271790	#	356880
		EDO	H	SL95322	323190	#	408280	#	316790	#	401880
1250A	65kA	MDO	H	SL95313	309730	#	382940	#	303330	#	376540
		EDO	H	SL95323	354730	#	427940	#	348330	#	421540
1600A	65kA	MDO	H	SL95314	348550	#	421590	#	342150	#	415190
		EDO	H	SL95324	393550	#	466590	#	387150	#	460190
2000A	75kA	MDO	H	SL95315	372320	#	454920	#	365920	#	448520
		EDO	H	SL95325	417320	#	499920	#	410920	#	493520
2500A	75kA	MDO	H	SL95316	416000	#	497220	#	409600	#	490820
		EDO	H	SL95326	461000	#	542220	#	454600	#	535820
3200A	75kA	MDO	H2	SL94822	389230	SL94826	477720	SL94814	382830	SL94818	471320
		EDO	H2	SL94824	434230	SL94828	522720	SL94816	427830	SL94820	516320
4000A	75kA	MDO	H2	SL94823	479820	SL94827	622380	SL94815	473420	SL94819	615980
		EDO	H2	SL94825	524820	SL94829	667380	SL94817	518420	SL94821	660980
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	191470	#	248370	SL93005	185070	#	241970
				SL97636	210980	#	284430	SL93006	204580	#	278030

**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	16100
Microprocessor based SR18G+D (LSING + Current Metering)	Add	11500
Microprocessor based SR18Gi+D (LSING + Current metering + ZSI)	Add	13000
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	3960
Type BB	SL93148000B	3960
Type CC	SL93148000C	3960
Type DD	SL93148000D	3960
Lockable Trip Push Button kit (3 I/C & 2 B/C)	SL919360000	19800
<b>Locking of ACB in Isolated position (LIP) [8301]</b>		
Type A	SL93146000A	3960
Type B	SL93146000B	3960
Type C	SL93146000C	3960
Type D	SL93146000D	3960
<b>Locking of ACB in Any position (LAP) [8301]</b>		
Type A	SL93147000A	4240
Type B	SL93147000B	4240
Type C	SL93147000C	4240
Type D	SL93147000D	4240
<b>Racking Interlock [8301]</b>		
Type AA	SL93149000A	5460
Type BB	SL93149000B	5460
Type CC	SL93149000C	5460
Type DD	SL93149000D	5460
<b>Padlock [8301]</b>		
Racking Padlock Assembly	CL900250000	1850
<b>Other Accessories [8538]</b>		
Door Interlock	SL931500000	2910
Mechanical Operation Counter*	XM808370000	2870
Mounting Kit for Front Mounted Counter	SL958820000	1020
Spring Charge Indication Microswitch	SL960000000	2210

\* 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	4530	1
1600-2000 S1/1250-1600 C/800-1600 H	SL932820000	5500	1
2000 C	SL932840000	8120	1
2000 H/2500 C/H	SL932850000	8480	1
2500 S1	SL932890000	8480	1
3200 S1	SL932860000	10440	1
3200H2/H1, 4000H2/H	SL932880000	25320	1

Description	Cat. No.	M.R.P. (₹) Per Unit
<b>Shunt Release (SR) [8538]</b>		
Type EA : 24/48V DC	SL927180400	3100
Type EA : 110V DC	SL927180100	3100
Type EA : 220V DC	SL927180200	3100
Type EA1 : 110V AC	SL927180A00	3100
Type EA1 : 240V AC	SL927180B00	3100
Type EA1 : 415V AC	SL927180D00	3100
<b>Under Voltage Release (UVR) [8538]</b>		
Type MV : 24V DC	ST368770000	4470
Type MV : 240V AC	SL92720B000	4470
Type MV : 415V AC	SL92720D000	4470
<b>Earth Fault Release ( for DN1) [8538]</b>		
Type EF1 (10%, 20% In )	SL913400000	3950
Type EF2 (30%, 40%, 50% In)	SL913410000	3950
<b>Remote Fault Indication [8538]</b>		
AN1 Remote Annunciation Module for SR18G/SR18G+D/SR18Gi+D : 240V AC	SL946540000	8800
<b>Microswitches for Indication [8536]</b>		
Microswitch for Voltmetric Releases (2) each	SL927030000	2350
Microswitch for Common Indication of O/L & S/C (3) each	SL927040000	2350
Microswitch for Separate Indication of O/L & S/C (3) each (for DN1 release)	SL927050000	3920
Service Position Microswitch - Right (2)	SL931420000	1590
Service Position Microswitch - Left (2)	SL931430000	1590
Test or Isolated Position Microswitch - Right (2)	SL931440000	1590
Test or Isolated Position Microswitch - Left (2)	SL931450000	1590

### 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	11730	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	47700
Microprocessor based type SR18G+D	SL948120000	46200
Microprocessor based type SR18G	SL960300000	34700
Thermal-Magnetic Release type DN1	SL931520000	28300
Universal Test Kit	CL904620000	83600

### 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	5360	1
630 S1 Fix & Draw-out	ST374950000	5360	1
800 C/H/S1 Fix & Draw-out	SL018570000	5360	1
1000 C/H/S1 Fix & Draw-out	SL018580000	5360	1
1250 C/H/S1 Fix & Draw-out	SL905710000	6480	1
1600 C/H/S1 Fix & Draw-out	SL905720000	6480	1
2000 C/H Fix & Draw-out	SL905650000	7190	1
2000 S1 Draw-out	SL932100000	7190	1
2500 C/H Fix & Draw-out	SL905660000	7190	1
2500 S1 Draw-out			
3200 H2/H1 Draw-out	SL017400000	8270	1
4000 H2/H Draw-out	SL017390000	9920	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 Electrical & Automations HE range of Air Circuit Breakers (ACBs) and Switch-Disconnecter-Fuse (S-D-F) are designed to ensure that they operate at peak efficiency for their entire lifespan in harsh, Sulphur-rich 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

# Toughest Construction, Highest Dependability

Best in class LTXL Capacitors.  
Available in Cylindrical & Box Configurations



## Salient features :

- Industry's only Ultra Heavy Duty Capacitors in Cylindrical Configuration
- Proven Performance even under harsh Power Quality Conditions
- Highest Inrush Current Withstand Ability
- Highest Life with Optimised Space
- Maximum Ambient Temperature upto 70 °C
- Space Economy in APFC panels with cylindrical design

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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		Heavy Duty		Gas Filled	Super Heavy Duty	APP	LTXL Ultra Heavy Duty	
	Cylindrical	Box	Cylindrical	Box	Cylindrical	Cylindrical	Box	Cylindrical	Box
Over current withstand capability	1.5 x In	1.5 x In	1.8 x In	1.8 x In	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	0.5 W/kVAr	0.35 W/kVAr	0.35 W/kVAr	0.45 W/kVAr	0.5 W/kVAr	0.45 W/kVAr	0.35 W/kVAr
Peak Inrush current withstand capability	200 x In	200 x In	250 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	7500	8000	8000	15000	10000	18000	20000
Max. Temperature	55°C	55°C	55°C	55°C	55°C	65°C	55°C	65°C	70°C
Operating life	100000 hrs.	100000 hrs.	130000 hrs.	150000 hrs.	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	201
	1.2 to 27.7	480	212
	1.3 to 33.1	525	216
Box 1 to 6 kVAr - Series : LTBCF 7.5 to 33.1 kVAr - Series : LTBCD	1 to 30	440	271
	11.1 to 27.7	480	284
	13.2 to 33.1	525	290

### Heavy Duty Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCH	1 to 4	440 V	381
	5 to 15		350
	20 to 30		341
	5.5 to 16.6	480 V	361
	22.1 & 27.7		351
	6.6 to 16.6	525 V	367
	20 to 33.1		358
Box Series: LTBCH	1 to 4	440 V	500
	5 to 15		424
	20 to 50		415
	5.5 to 15	480 V	445
	20 to 27.7		436
	6.6 to 15	525 V	454
	20 to 33.1		443

### Gas Filled Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCN	3 & 4	440	404
	5 to 15		371
	20 & 25		360
	7.5 to 15	480	390
	20 to 30		378
	7.5 to 15	525	397
	20 to 33.1		385

### 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
5	440 V	LTBCM305B2	3495
7.5		LTBCM307B2	3890
8.33		LTBCM308B2	4120
10		LTBCM310B2	4575
12.5		LTBCM312B2	5260
15		LTBCM315B2	5955
20		LTBCM320B2	8000
25		LTBCM325B2	9375



## Super Heavy Duty Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series: LTCCR	3 to 5	440 V	408
	7.5 to 15		375
	20 & 25		364
	1.2 to 5.5	480 V	427
	11.1 & 15		394
	20 to 27.7		382
	1.3 to 5	525 V	434
	6.6 to 15		401
	20 to 33.3		389

## APP Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Box Series: LTBCP	5 to 15	440 V	703
	20 to 50		680
	5.5 to 13.8	480 V	739
	16.6 to 27.7		714
	6.6 & 13.2	525 V	753
	16.6 to 33.1		728

## LTXL - Ultra Heavy Duty Capacitors



Type	kVAr Rating	Voltage (V)	M.R.P. (₹) per kVAr
Cylindrical Series : LTCCU	5 to 15	440V	772
	20 & 25		759
	7.5 to 15	480V	811
	20		798
	7.5 to 15	525V	826
20	812		
Box Series: LTBCU	5 to 15	440V	912
	20 to 50		894
	7.5 to 15	480V	958
	20 to 30		939
	7.5 to 15	525V	976
	20 to 33.1		957

## Ordering Information for Capacitors

C - Cylindrical, B - Box

Duty: D/F – Standard\*

M - Standard duty Box with MCB & LED Indication

H - Heavy

N - Gas Filled

R - Super Heavy

P - APP

U - Ultra Heavy

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

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

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

L T C 3 2

Catalogue Number

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

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

- Copper & Aluminium wound reactors
- Lower operating losses
- 180% linearity\*
- Thermal cut off
- Better Harmonic Blocking Capability [Quality Factor > 35]



kVAr Rating	7% Copper Reactor		7% Aluminium Reactor		14% Copper Reactor		14% Aluminium Reactor	
	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
1	LTFR0701B2	7630	LTAL0701B2	5175	LTFR1401B2	11950	LTAL1401B2	8105
2	LTFR0702B2	8000	LTAL0702B2	5645	LTFR1402B2	13995	LTAL1402B2	10645
3	LTFR0703B2	8365	LTAL0703B2	6395	LTFR1403B2	15000	LTAL1403B2	11470
4	LTFR0704B2	8885	LTAL0704B2	6800	LTFR1404B2	15750	LTAL1404B2	12055
5	LTFR0705B2	9130	LTAL0705B2	7470	LTFR1405B2	17735	LTAL1405B2	12495
10	LTFR0710B2	14350	LTAL0710B2	10600	LTFR1410B2	27865	LTAL1410B2	17495
12.5	LTFR0712B2	15910	LTAL0712B2	11630	LTFR1412B2	30865	LTAL1412B2	19190
15	LTFR0715B2	17620	LTAL0715B2	12445	LTFR1415B2	34200	LTAL1415B2	20530
20	LTFR0720B2	20865	LTAL0720B2	14825	LTFR1420B2	40530	LTAL1420B2	24455
25	LTFR0725B2	22185	LTAL0725B2	15685	LTFR1425B2	43070	LTAL1425B2	25885
50	LTFR0750B2	35225	LTAL0750B2	24885	LTFR1450B2	68395	LTAL1450B2	41060
75	LTFR0775B2	52185	LTAL0775B2	37005	LTFR1475B2	101330	LTAL1475B2	61050
100	LTFR0700B2	71750	LTAL0700B2	50850	LTFR1400B2	139325	LTAL1400B2	83900

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

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

## Selection of capacitors for detuned harmonic filter application

Step size 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)
1 kVAr	LTCCF, LTCCR	1.2 kVAr	1.3 kVAr	LTCCF, LTCCR	1.3 kVAr
2 kVAr	LTCCF, LTCCR	2.2 kVAr	2.6 kVAr	LTCCF, LTCCR	2.6 kVAr
3 kVAr	LTCCF, LTCCR	3.3 kVAr	3.9 kVAr	LTCCF, LTCCR	3.9 kVAr
4 kVAr	LTCCF	4.4 kVAr	5.3 kVAr	LTCCF	5.3 kVAr
	LTCCR		5 kVAr	LTCCR	5 kVAr
5 kVAr	LTCCF, LTCC, LTCCR, LTBC, LTBCP	5.5 kVAr	6.6 kVAr	LTCCF, LTCC, LTCCR, LTBC, LTBCP	6.6 kVAr
	LTCCN, LTCCU, LTBCU	7.5 kVAr	7.5 kVAr	LTCCN, LTCCU, LTBCU	7.5 kVAr
10 kVAr	LTCCD, LTCC, LTCCR, LTBCD, LTBC, LTBCP	11.1 kVAr	13.2 kVAr	LTCCD, LTCC, LTCCR, LTBCD, LTBC, LTBCP	13.2 kVAr
	LTCCN, LTCCU, LTBCU	12.5 kVAr	12.5 kVAr	LTCCN, LTCCU, LTBCU	12.5 kVAr
12.5 kVAr	LTCCN, LTCCR, LTCCU, LTBC, LTBCU	15 kVAr	15 kVAr	LTCCN, LTCCR, LTCCU, LTBC, LTBCU	15 kVAr
	LTCCD, LTCC, LTBCD, LTBCP	13.8 kVAr	16.6 kVAr	LTCCD, LTCC, LTBCD, LTBCP	16.6 kVAr
15 kVAr	LTCCN, LTCCR, LTCCU, LTBC, LTBCU	20 kVAr	20 kVAr	LTCCD, LTCCN, LTCC, LTCCR, LTCCU, LTBCD, LTBC, LTBCP, LTBCU	20 kVAr
	LTCCD, LTCC, LTBCD, LTBCP	16.6 kVAr			
20 kVAr	LTCCN, LTCCR, LTBC, LTBCU	25 kVAr	25 kVAr	LTCCN, LTCCR, LTBC, LTBCU	25 kVAr
	LTCCD, LTCC, LTBCD, LTBCP	22.1 kVAr	26.5 kVAr	LTCCD, LTCC, LTBCD, LTBCP	26.5 kVAr
	LTCCU	7.5 + 15 kVAr	2 x 12.5 kVAr	LTCCU	2x12.5 kVAr
25 kVAr	LTCCD, LTCC, LTCCR, LTBCD, LTBC, LTBCP	27.7 kVAr	33.1 kVAr	LTCCD, LTCCN, LTCC, LTCCR, LTBCD, LTBC, LTBCP, LTBCU	30 kVAr
	LTBCU, LTCCN	30 kVAr			
	LTCCU	12.5 + 15 kVAr			
50 kVAr	LTCCD, LTCC, LTCCR, LTBCD, LTBC, LTBCP	2 x 27.7 kVAr	2 x 33.1 kVAr	LTCCD, LTCCN, LTCC, LTCCR, LTBCD, LTBC, LTBCP, LTBCU	2 x 30 kVAr
	LTBCU, LTCCN	2 x 30 kVAr			
	LTCCU	2 x (12.5 + 15) kVAr			
100 kVAr	LTCCD, LTCC, LTCCR, LTBCD, LTBC, LTBCP	4 x 27.7 kVAr	4 x 33.1 kVAr	LTCCD, LTCCN, LTCC, LTCCR, LTBCD, LTBC, LTBCP, LTBCU	4 x 30 kVAr
	LTBCU, LTCCN	4 x 30 kVAr			
	LTCCU	4 x (12.5 + 15) kVAr			

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

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



MO C25



MO C50



MO C100

Size	kVAr Rating @ 440V, 3Ph, 50Hz	Type	Built-in Auxiliary Contacts	Cat. No.	M.R.P. (₹) Per Unit	Std. Pkg. (Nos.)
Fr 1	3	MO C3	1NO	CS96146	1835	1
	5	MO C5	1NO	CS96127	1920	1
	8.5	MO C8.5	1NO	CS96320	2155	1
	10	MO C10	1NO	CS96156	2340	1
	12.5	MO C12.5	1NO	CS96321	2405	1
	15	MO C15	1NO	CS90019	3225	1
	20	MO C20	1NO	CS90021	3655	1
	25	MO C25▲	1NO	CS96322	4135	1
Fr 2	30	MO C30\$	1NO	CS96148	6495	1
	40	MO C40	1NO	CS96147	11240	1
	50	MO C50	1NO	CS96324	11725	1
Fr 3	60	MO C60\$	1NO	CS96149	13615	1
	75	MO C75	1NO	CS96150	15710	1
	85	MO C85	1NO	CS96157	17270	1
	100	MO C100\$	1NO	CS96158	18645	1

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

- High Peak Inverse Voltage (PIV) - 2.2 kV
- Lower operating losses
- Auto thermal cut off
- Compact Design
- No moving parts
- LEDs for various status/fault indications



kVAr Rating	Cat. No.	M.R.P. (₹) Per Unit
10	LTSM10B2	20955
25	LTSM25B2	29895
50	LTSM50B2	34885

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 [8538]

### etaSMART - APFC Controller - 1 CT input

#### Features:

- Simple and Smart Controller
- Auto programming function available
- CT secondary - 1 / 5 Amp site selectable



2 & 4 Quadrant Operation for sites with / without Solar Plants

New

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

No. of O/P steps (for Thyristor switching)	Size	Cat. No.	Single CT input	Voltage Input	M.R.P. (₹) Per Unit
6	96 x 96	CS916130000	1/5 Amp	415 V	11500
8	144 x 144	CS916140000			13500
12	144 x 144	CS916150000			16600
15	144 x 144	CS916160000			19400

One separate relay contact is available for Alarm

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

No. of steps (For Contactor Switching)	Size	Cat. No.	Single CT input	Voltage Input	M.R.P. (₹) Per Unit
4	96 x 96	CS908840000	1/5 Amp	415 V	9000
6	96 x 96	CS908850000			11000
8	96 x 96	CS909020000			12900
12	144 x 144	CS909030000			15700
14	144 x 144	CS909040000			17200
16	144 x 144	CS909050000			19000

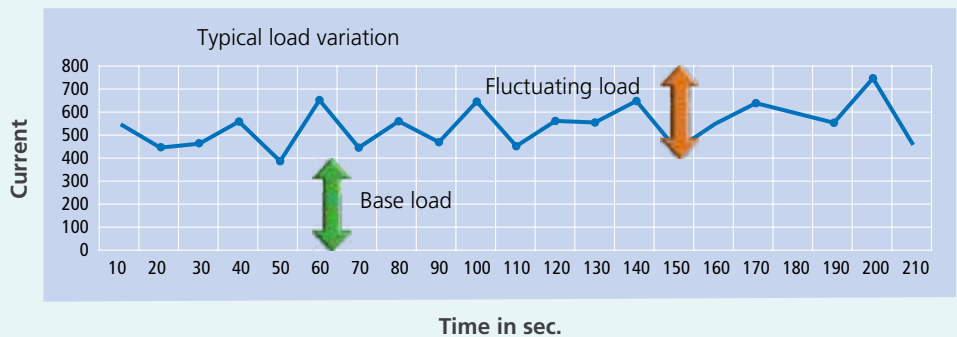
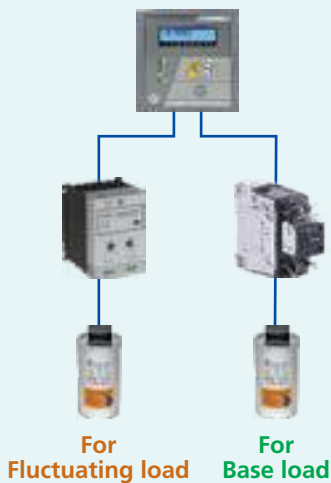
Last Two Contacts can be Programmed for Capacitor Switching / Alarm Function / Fan Control

**Performance  
meets economy**



## Automatic power factor control solutions

### etaULTRA 8T + 8R APFC Controller for Thyristor + Contactor Switching



'Thyristor + Contactor' based APFC Panels for **performance** and **economy**



#### etaULTRA 8T + 8R controller offers:

- 8 Transistor outputs for Thyristor switching and 8 Relay outputs for Contactor switching
- 3-Phase Current and Voltage measurement to compensate PF in unbalanced load
- 4 Quadrant measurement to take care of Sites with Solar plants
- Individual harmonics measurement up to 31st order
- 3-digit Power Factor setting to obtain higher Accuracy
- Communication through inbuilt MODBUS RS-485 Protocol

#### 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)



# APFC Controller [8538]

## 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



2 & 4 Quadrant Operation for sites with / without Solar Plants

Model Name	No. of steps (For Contactor switching)	No. of steps (For Thyristor switching)	Voltage Input	Cat No.	Size	M.R.P. (₹) Per Unit
etaULTRA 8R	8	0	110 / 415	CS910500000	144 x 144	19000
etaULTRA 16R	16	0		CS910510000		25000
etaULTRA 8T+2R	2	8		CS910520000		19000
etaULTRA 14T+2R	2	14		CS910530000		25000
etaULTRA 8T+8R	8	8		CS910540000		19000

New

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



2 & 4 Quadrant Operation for sites with / without Solar Plants

### etaCON M Optional Plug-in Modules

Description	Model	Cat. No.	M.R.P. (₹) Per Unit
2 Steps Plug-in Module	2 Relays NO	ETACONEXP2R	1900
3 Steps Plug-in Module	3 Relays NO	ETACONEXP3R	2800
RS485 Plug-in Module	RS485 Plug-in Module	ETACONRS485	10000

Any 1 Plug-in module can to be added to ETACONM003R  
Any 1 Plug-in module can to be added to ETACONM005R  
Any 2 Plug-in modules can to be added to ETACONM008R

## 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	11500
5 Step APFC Controller (96 x96)			ETACONM005R	13400
8 Step APFC Controller (144 x144)			ETACONM008R	16900

# Active Harmonic Filter (AHF) [8543]

- Reduces THD within IEEE - 519 limits
- Dynamic correction of THD
- Improves both distortion & displacement Power Factor
- 3 Phase 3 Wire AHF to be used where 3<sup>rd</sup> Harmonic Mitigation is not required
- 3 Phase 4 Wire AHF to be used where 3<sup>rd</sup> Harmonic Mitigation is required
- Modular Design allowing for future expansion
- Ease of Monitoring using Touch Screen HMI
- Flexibility of Configuration in both open loop (load side sensing) & closed loop (source side sensing)



Filter Rating (A)	3 Phase 3 wire AHF Without Neutral Compensation		3 Phase 4 wire AHF With Neutral Compensation	
	Cat. No.*	M.R.P. (₹) Per Unit	Cat. No.*	M.R.P. (₹) Per Unit
30	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			

\* Standard CAT. No. Configuration

Contact your nearest sales office for customised solutions:

Customisable Options Available:

IP Class : IP20/IP40/IP42

Cable Entry : Bottom / Top / Additional Cable Alley

Communication : MODBUS RS485 Protocol Available

# Type Tested APFC Panels – Safe, Reliable and Smart solution to maintain Power Factor

## Type tested and certified design

- Engineered to the highest standards - Type tested as per IEC 61439-1&2, IEC61921 & IS13947
- Ingress Protection up to IP42 as per IEC 60529, IS2147 to protect equipment under harsh environments

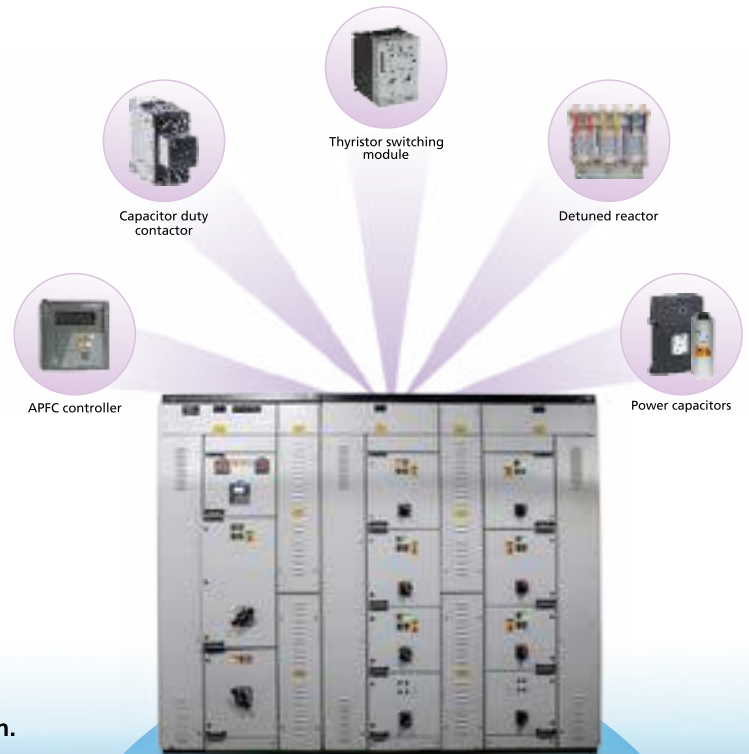
## Reliable

- Worry free PF management with 4 quadrant PF controller
- Certified for better thermal management as per IEC 61921
- Design verified assemblies of both constructional & permanence requirements
- Separate section for detuned reactors, capacitors & switchgear ensures longer life of components & less worry on maintenance

## Safety

- Form 3B separation (compartmentalized design for switchgear)
- Bus bars with more clearance than prescribed in standards
- A minimum of IP2X degree of protection even when the doors / covers in open condition
- Earthing of each and every door and structural members
- Zero stray voltage on doors & covers ensures both operator & equipment safety

**Hybrid Harmonic Filters (AHF + APFC) can also be offered.  
Contact our nearest sales office for such customized solution.**



## Suggested Step Ratings for APFC Panels

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

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

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

## 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	18000
		4 NO		MC31ANX4000	

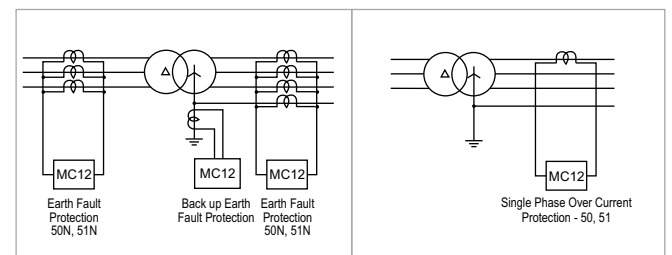
## Single Pole Over Current or Earth Fault Relay

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	13000
		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	20000
		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	22500
		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	24500

## 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	8000
	88 - 264 V AC/ DC	TCS01NXB000	

## MV12

### 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
MV12	20 - 110V AC/DC	27 or 59	<b>MV12AA00X00</b>	<b>13000</b>
	88 - 264V AC/DC		<b>MV12AB00X00</b>	

## MC2-30T

### Comprehensive Over Current & Earth Fault Protection Relay with Auto reclosing

- Modbus RTU / IEC870-5-103 Communication Protocol
- Protections offered: 46, 49, 50, 51, 50N, 51N, 51BF, 74TCS, 79



Product	Description	Cat. No.	M.R.P. (₹) Per Unit
MC2-30T	MC2 30T, Aux. supply 24 to 110VAC/DC	<b>MC230TA000</b>	<b>90000</b>
	MC2 30T, Aux. supply 80 to 220VAC/DC	<b>MC230TB000</b>	

\* Available on request only

## MC2-30V

### Three Phase Voltage & Frequency Relay with df/dt protection

- Modbus RTU / IEC870-5-103 Communication Protocol
- Protections offered: 27, 59, 59Vo, 81, df/dt, 74



Product	Description	Cat. No.	M.R.P. (₹) Per Unit
MC2-30V	MC2 30V, Aux. supply 24 to 110VAC/DC	<b>MC230VA000</b>	<b>100000</b>
	MC2 30V, Aux. supply 80 to 220VAC/DC	<b>MC230VB000</b>	

\* Available on request only

## Lockout Relay - LocR

### Features:

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



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

\* Available on request only

## Auxiliary Relay - AuxR

### Features:

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



Description	Output contacts	Reset Contacts	Reset Flag	Coil Voltage	Cat. No.	M.R.P. (₹) Per Unit
Single element Auxiliary relay	4 N/O	Hand	Hand	24VDC	<b>A1H40DC024X</b>	<b>5000</b>
				110VDC	<b>A1H40DC110X</b>	
				220VDC	<b>A1H40DC220X</b>	
				230VAC	<b>A1H40AC230X</b>	
Single element Auxiliary relay	2 N/O + 2 N/C	Auto	Hand	24VDC	<b>A1A22DC024X</b>	<b>5000</b>
				110VDC	<b>A1A22DC110X</b>	
				220VDC	<b>A1A22DC220X</b>	
				230VAC	<b>A1A22AC230X</b>	

\* Available on request only



## 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	1477
1P LCD Meter 5-30A with BOX	WM101BC5DL0BOX	1977
1P LCD Meter 5-30A with OPTICAL PORT	WM101BC5DDH	2029
1P LCD Meter 5-30A with Optical port + BOX	WM101BC5DDHBOX	2528
1P LCD Meter 10-60A	WM101BC7DL0	1748
1P LCD Meter 10-60A with BOX	WM101BC7DL0BOX	2204
1P LCD Meter 10-60A with Optical Port	WM101BC7DDH	2235
1P LCD Meter 10-60A with Optical Port + BOX	WM101BC7DDHBOX	2570

## 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	4678
3Ph 4 W kWh Dir base mtg 240V 5- 30 A Acc 1	WR301BC4D20	3919
3Ph 4 W kWh Dir base mtg 240V 10- 40 A Acc 1	WR301BC6D20	4035
3Ph 4 W kWh Dir base mtg 240V 10- 60 A Acc 1	WR301BC7D10	5110
3Ph 4 W kWh Dir base mtg 240V 20- 100 A Acc 1	WR301BC8D10	7410

## Trivector Meter Class 0.5s

Model ER300P Class 0.5s (Base Mounting)

- Inform CT/PT ratio while ordering
- DLMS (IS 15959) Protocol meters is available on request



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V ( L-L) 1 A Class 0.5s BM	WR300BB1200	22395
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.5s BM	WR300BB5200	22395
3Ph, 4W TVM 240V ( L-N) 5 A Class 0.5s BM	WR300BC5200	20639
3Ph, 4W TVM 110V ( L-L) 1 A Class 0.5s BM RS 485 Modbus	WR300BB12RS	26874
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.5s BM RS 485 Modbus#	WR300BB52RS	26874
3Ph, 4W TVM 240V ( L-N) 5 A CI 0.5s BM RS 485 Modbus	WR300BC52RS	24767

# - available on request only

## 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	6971
3Ph, 4W TVM 240 V 10 - 60A BM RS 485 Modbus*	WR300BC73RS485	9944
3Ph, 4W TVM 240 V 10 - 60A BM with Hinge type Box	WR300BC73BOXH	8635

\*- Available on request only & minimum order quantity is 100 Nos

## Trivector Meter Class 0.2s

Model ER300P Class 0.2s (Base Mounting)

- Inform CT/PT ratio while ordering
- DLMS (IS 15959) Protocol meters is available on request



Description	Cat. No.	M.R.P. (₹) Per Unit
3Ph, 4W TVM 110V ( L-L) 1 A Class 0.2s BM	WR300BB1100	54335
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.2s BM	WR300BB5100	54335
3Ph, 4W TVM 110V ( L-L) 1 A Class 0.2s BM RS485 Modbus	WR300BB11RS	57963
3Ph, 4W TVM 110V ( L-L) 5 A Class 0.2s BM RS485 Modbus	WR300BB51RS	57963

## Pre-Payment & Smart Meter Solutions<sup>§</sup>



For Pre-payment (IS 15884) and Smart Meter (IS 16444) solutions please contact our nearest Branch

## Net Meters<sup>§</sup>



Net Meters for solar roof top application & solar generation plant

## ORION (40-200A)<sup>§</sup>



Combine CT Meter - Thread Through Meter (Meter + CT+ Modem)

§ For more details please contact nearest branch

## Meter Reading Instrument

[8471]



Description	Cat. No.	M.R.P. (₹) Per Unit
Meter Reading Instrument - (16.5 MB)	990MRIXX000	115779
Meter Optical port to USB cable	990PCXXUSB	1386

# The Energy Management System that fosters energy efficiency



Your trusted partner for the continued growth of your business – L&T Electrical & Automation (E&A) – 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.

## SmartComm Energy Management System Software

- Simple and powerful energy monitoring software with multiple benefits that empowers the user to save money
- Glimpse of all entire energy consumption in the plant through dashboard
- Provision to generate multiple report types
- On-premise server or Web based access with cloud solution provision

## 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
- Analog, Digital inputs and outputs, Data logging options

For our DPM programming videos and more details on Energy Management Solutions please scan the QR code or click here



## Our metering solutions include:

- Single function meters
- VAF + PF meters
- Energy meters
- Dual Source meters
- Basic Multifunction meters
- Advanced Multifunction meters
- MD Controller

## Customer Interaction Center (CIC)

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

## Single Function Meters [9030]

### 1xxx Series

#### Features

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



Description	Cat. No.	M.R.P. (₹) Per Unit
1Ph LED Ammeter CI 1	<b>WL1110100000</b>	<b>890</b>
1Ph LED Voltmeter CI 1	<b>WL1120100000</b>	<b>890</b>
3Ph LED Ammeter CI 1	<b>WL1310100000</b>	<b>1315</b>
3Ph LED Voltmeter CI 1	<b>WL1320100000</b>	<b>1315</b>
LED Freq meter CI 0.2	<b>WL1130400000</b>	<b>890</b>
1Ph LED Ammeter CI 0.5	<b>WL1110200000</b>	<b>1195</b>
1Ph LED Voltmeter CI 0.5	<b>WL1120200000</b>	<b>1195</b>
3Ph LED Ammeter CI 0.5	<b>WL1310200000</b>	<b>1585</b>
3Ph LED Voltmeter CI 0.5	<b>WL1320200000</b>	<b>1585</b>

## 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	<b>WL4110100000</b>	<b>2290</b>
VAF + PF meter with RS485, CI 1	<b>WL4110110000</b>	<b>2865</b>
VAF + PF meter, CI 0.5	<b>WL4110200000</b>	<b>2630</b>
VAF + PF meter with RS485, CI 0.5	<b>WL4110210000</b>	<b>3185</b>

## Counter type Energy Meter [9030]

### 4030 Series

#### Features

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



Description	Cat. No.	M.R.P. (₹) Per Unit
kWh Counter type meter CI 1 (3Ph 4W 240V 5A)	<b>WL4030100000</b>	<b>3430</b>

## Energy Meters [9030]

### 4000 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
- Auto scaling of Kilo, Mega and Giga
- Parameters: Site selectable kWh / kVA / PF / W, Old energy

kWh or kVAh  
is site selectable



Energy display  
in kWh in its  
lifetime#

Description	Cat. No.	M.R.P. (₹) Per Unit
kWh LED meter CI 1	<b>WL4000100000</b>	<b>2550</b>
kWh LED meter CI 1 with RS485	<b>WL4000110000</b>	<b>3010</b>
kWh LED meter CI 0.5	<b>WL4000200000</b>	<b>3235</b>
kWh LED meter CI 0.5 with RS485	<b>WL4000210000</b>	<b>3685</b>
kWh LCD meter CI 1	<b>WC4000100000</b>	<b>2880</b>
kWh LCD meter CI 1 with RS485	<b>WC4000110000</b>	<b>3345</b>
kWh LCD meter CI 0.5	<b>WC4000200000</b>	<b>3570</b>
kWh LCD meter CI 0.5 with RS485	<b>WC4000210000</b>	<b>4040</b>

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

## DIN Basic Multifunction Meters [9030]

### 4000 Series

#### Features

- DIN mounting whole current operated meter
- Accuracy Class 1.0
- Inbuilt analytics with energy consumption 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	<b>WD4000101000</b>	<b>2350</b>
Energy meter 3P 10-60A CI 1 DIN	<b>WD4000103000</b>	<b>5335</b>
Energy meter RS485 module	<b>WD400010RS00</b>	<b>2350</b>
Energy meter Wi-Fi module	<b>WD400010WFO0</b>	<b>9500</b>



## Dual Source Basic MFM [9030]

### 4040 Series

#### Features

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

kWh or kVAh  
is site selectable



LCD offers better readability  
of parameters

Description	Cat. No.	M.R.P. (₹) Per Unit
Dualsource LED meter CI1	WL4040100000	4055
Dualsource LED meter CI1 with RS485	WL4040110000	5015
Dualsource LED meter CI0.5	WL4040200000	4820
Dualsource LED meter CI0.5 with RS485	WL4040210000	5930
Dualsource LCD meter CI1	WC4040100000	4465
Dualsource LCD meter CI1 with RS485	WC4040110000	5455
Dualsource LCD meter CI0.5	WC4040200000	5240
Dualsource LCD meter CI0.5 with RS485	WC4040210000	6290

## Basic Multifunction Meters [9030]

### 4400 Series

#### Features

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



LCD offers better readability  
of parameters

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4400 LED meter CI 1	WL4400100000	3980
MFM 4400 LED meter CI 1 with RS485	WL4400110000	4920
MFM 4400 LED meter CI 0.5 with RS485	WL4400210000	5815
MFM 4400 LED meter CI 0.5S with RS485	WL4400310000	5875
MFM 4400 LCD meter CI 1	WC4400100000	4385
MFM 4400 LCD meter CI 1 with RS485	WC4400110000	5355

## Basic Multifunction Meters [9030]

### 4405 Series

#### Features

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

All parameters  
of 4400 series  
in 3 line  
LED display



Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4405 LED meter CI 1	WL4405100000	5400
MFM 4405 LED meter CI 1 with RS485	WL4405110000	6400
MFM 4405 LED meter CI 0.5 with RS485	WL4405210000	7360
MFM 4405 LED meter CI 0.5S with RS485	WL4405310000	7420

## Multifunction Meters [9030]

#### Features

- Accuracy Class 1.0, 0.5, 0.5S, 0.2, 0.2S
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- 128 samples / cycle
- My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters
- Dedicated buttons available for direct access to Basic, Power and Energy parameters

True and  
Displacement  
PF available

Constant Wh viewing in LCD  
MFM even in auto scroll mode.  
LCD offers better readability  
of parameters



### 4410 Series

- Parameters: V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Phase angle, Interrupts, THD, Events (High-Low), Neutral Current, K Factor

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4410 LED meter CI 1	WL4410100000	7420
MFM 4410 LED meter CI 1 with RS485	WL4410110000	8485
MFM 4410 LED meter CI 0.5 with RS485	WL4410210000	10075
MFM 4410 LED meter CI 0.5S with RS485	WL4410310000	11135
MFM 4410 LED meter CI 0.2 with RS485	WL4410410000	13255
MFM 4410 LED meter CI 0.2S with RS485	WL4410510000	16965
MFM 4410 LCD meter CI 1	WC4410100000	8725
MFM 4410 LCD meter CI 1 with RS485	WC4410110000	9810
MFM 4410 LCD meter CI 0.5 with RS485	WC4410210000	11445
MFM 4410 LCD meter CI 0.5S with RS485	WC4410310000	12535
MFM 4410 LCD meter CI 0.2 with RS485	WC4410410000	14715
MFM 4410 LCD meter CI 0.2S with RS485	WC4410510000	18525



## 4420 Series Max Demand Indicator (without Real time clock)

Parameters:

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

2 Relay outputs for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4420 LED meter CI 1	WL4420100000	10925
MFM 4420 LED meter CI 1 with RS485	WL4420110000	11965
MFM 4420 LED meter CI 0.5 with RS485	WL4420210000	13530
MFM 4420 LED meter CI 0.5S with RS485	WL4420310000	14570
MFM 4420 LED meter CI 0.2 with RS485	WL4420410000	16650
MFM 4420 LED meter CI 0.2S with RS485	WL4420510000	20290
MFM 4420 LCD meter CI 1	WC4420100000	12535
MFM 4420 LCD meter CI 1 with RS485	WC4420110000	13630
MFM 4420 LCD meter CI 0.5 with RS485	WC4420210000	15265
MFM 4420 LCD meter CI 0.5S with RS485	WC4420310000	16345
MFM 4420 LCD meter CI 0.2 with RS485	WC4420410000	18525
MFM 4420 LCD meter CI 0.2S with RS485	WC4420510000	22345

For Max Demand Controller (with Real time clock) please refer 6000 series

## 4430 Series MFM for IE

Parameters:

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

2 Relay outputs for MD Alarm

Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 4430 LED meter CI 1	WL4430100000	15360
MFM 4430 LED meter CI 1 with RS485	WL4430110000	16350
MFM 4430 LED meter CI 0.5 with RS485	WL4430210000	17835
MFM 4430 LED meter CI 0.5S with RS485	WL4430310000	18825
MFM 4430 LED meter CI 0.2 with RS485	WL4430410000	20810
MFM 4430 LED meter CI 0.2S with RS485	WL4430510000	24280
MFM 4430 LCD meter CI 1	WC4430100000	16350
MFM 4430 LCD meter CI 1 with RS485	WC4430110000	17340
MFM 4430 LCD meter CI 0.5 with RS485	WC4430210000	18825
MFM 4430 LCD meter CI 0.5S with RS485	WC4430310000	19815
MFM 4430 LCD meter CI 0.2 with RS485	WC4430410000	21795
MFM 4430 LCD meter CI 0.2S with RS485	WC4430510000	25270

## 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	13680
MFM 4440 LED meter CI 0.5 with RS485	WL4440210000	15380
MFM 4440 LED meter CI 0.2 with RS485	WL4440410000	18805
MFM 4440 LCD meter CI 1 with RS485	WC4440110000	14820
MFM 4440 LCD meter CI 0.5 with RS485	WC4440210000	16525
MFM 4440 LCD meter CI 0.2 with RS485	WC4440410000	19945

## 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

True and Displacement PF available

Parameters:

- V, A, F, kW, KVA, kVAR, kWh, kVAh, kVArh, PF, Runhr, Onhr, Interupts, Phase angle, THD, Neutral current, Max Demand (with RTC) K Factor
- Bi-directional (Import-Export)
- Events (high-low) with time stamp
- Individual Harmonics upto 31st.
- My favourite page in LCD multifunction meters site selectable for kWh + 2 parameters

Constant Wh viewing in LCD MFM even in auto scroll mode. LCD offers better readability of parameters



Description	Cat. No.	M.R.P. (₹) Per Unit
MFM 5000 LED meter CI 1 with RS485	WL5000110000	29755
MFM 5000 LED meter CI 1 with Ethernet	WL5000120000	33810
MFM 5000 LED meter CI 0.5 with Ethernet	WL5000220000	35260
MFM 5000 LED meter CI 0.5S with Ethernet	WL5000320000	36225
MFM 5000 LCD meter CI 1 with RS485	WC5000110000	30725
MFM 5000 LCD meter CI 1 with Ethernet	WC5000120000	34775
MFM 5000 LCD meter CI 0.5 with RS485	WC5000210000	32170
MFM 5000 LCD meter CI 0.5S with RS485	WC5000310000	33140
MFM 5000 LCD meter CI 0.5 with Ethernet	WC5000220000	36225
MFM 5000 LCD meter CI 0.5S with Ethernet	WC5000320000	37190
MFM 5000 LCD meter CI 0.2 with RS485	WC5000410000	35070
MFM 5000 LCD meter CI 0.2S with RS485	WC5000510000	38450
MFM 5000 LED meter CI 1 RS485 2A/O	WL5000110BOO	32165
MFM 5000 LED meter CI 0.5 RS485 2D/I	WL5000210OBO	33615
MFM 5000 LED meter CI 0.5 RS485 4D/O	WL5000210OOD	34580
MFM 5000 LCD meter CI 1 RS485 2A/O	WC5000110BOO	33135
MFM 5000 LCD meter CI 0.5 RS485 2D/I	WC5000210OBO	34580
MFM 5000 LCD meter CI 0.5 RS485 4D/O	WC5000210OOD	35550
MFM 5000 LCD meter CI 1 + RS485, 1AO, 1DO	WC5000110AOA	33350

5000 series with Digital outputs are preconfigured for I - THD% at 8% and True PF at 0.98.

Meter can be site selected for parameters and values - A THD, V THD, VA, W, under PF, under/over (VLL, A, F) with programmable trip time (1 to 180 sec) to protect the equipments from electrical abnormalities.

Parameters	Data Log Interval			
	15 Min	30 Min	45 Min	60 Min
No. of Days				
1	10230	20460	30690	40920
2	6820	13640	20460	27280
4	4092	8184	12276	16368
9	2046	4092	6138	8184
14	1364	2728	4092	5456
29	682	1364	2046	2728

# Advanced Multifunction Meters [9030]

## 5010 Series

True and Displacement PF available

### 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	11155
MFM 5010 LED meter CI 1 with RS485	WL5010110000	12170
MFM 5010 LED meter CI 0.5S	WL5010300000	13690
MFM 5010 LED meter CI 0.5S with RS485	WL5010310000	14705
MFM 5010 LED meter CI 0.2 with RS485	WL5010410000	16735

# Maximum Demand Controller [9030]

## 6000 Series

### Features

- Accuracy Class 1.0, 0.5S
- Input voltage measurement range 50-520 VAC (P-P)
- Aux supply 80-300 VAC/DC
- CT secondary site selectable 1A / 5A
- Flush mounting 96 x 96 mm
- CT/PT site programmable
- Datalog (8MB)
- 4 relay outputs for Max. demand controller
- Time of Day (TOD) 6 slots available
- Block/sliding window site selectable
- Running demand, max demand, prediction demand in single page window
- Individual harmonics upto 31st

8MB Datalog preconfigured for 9 parameters including kWh, Running demand and Max Demand for 15 mins interval

Parameters:

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



True and Displacement PF available

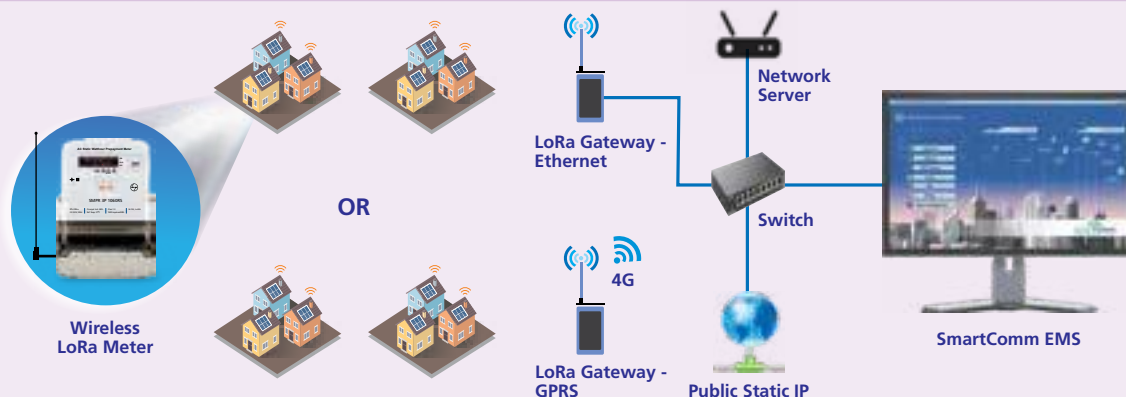
Description	Cat. No.	M.R.P. (₹) Per Unit
MDC 6000 LED meter CI 1 with RS485	WL6000110000	26405
MDC 6000 LED meter CI 0.5S with RS485	WL6000310000	28945
MDC 6000 LCD meter CI 1 with RS485	WC6000110000	27420
MDC 6000 LCD meter CI 0.5S with RS485	WC6000310000	29960

# Prepaid Metering Solutions with SmartComm EMS [9030]



- Dual source meters by default
- Class 1 accuracy as per IS 15884
- Ratings : 1P (10-60A) : 3P (10-60A, 20-80A, CT operated)
- Parameters: V, A, PF, W, VA, Wh - EB, DG
- Communication: Wired (Modbus RS485) or Wireless (LoRaWAN)
- Facility for connection or disconnection of electric supply based on the credit balance in the meter through relay
- Server maintained at site itself
- Optional
  - In RS485 model upto 4DI for water and gas meter
  - In LoRaWAN model upto 2DI for water and gas meters
- Wireless postpaid or prepaid metering solutions for large townships on SmartComm EMS Platform available.
- With LoRaWAN technology, meters upto 1 km approx from LoRa Gateway can be monitored without Line of sight.
- Prices available on request.

## Connect large townships with wireless energy meters on IoT based SmartComm EMS





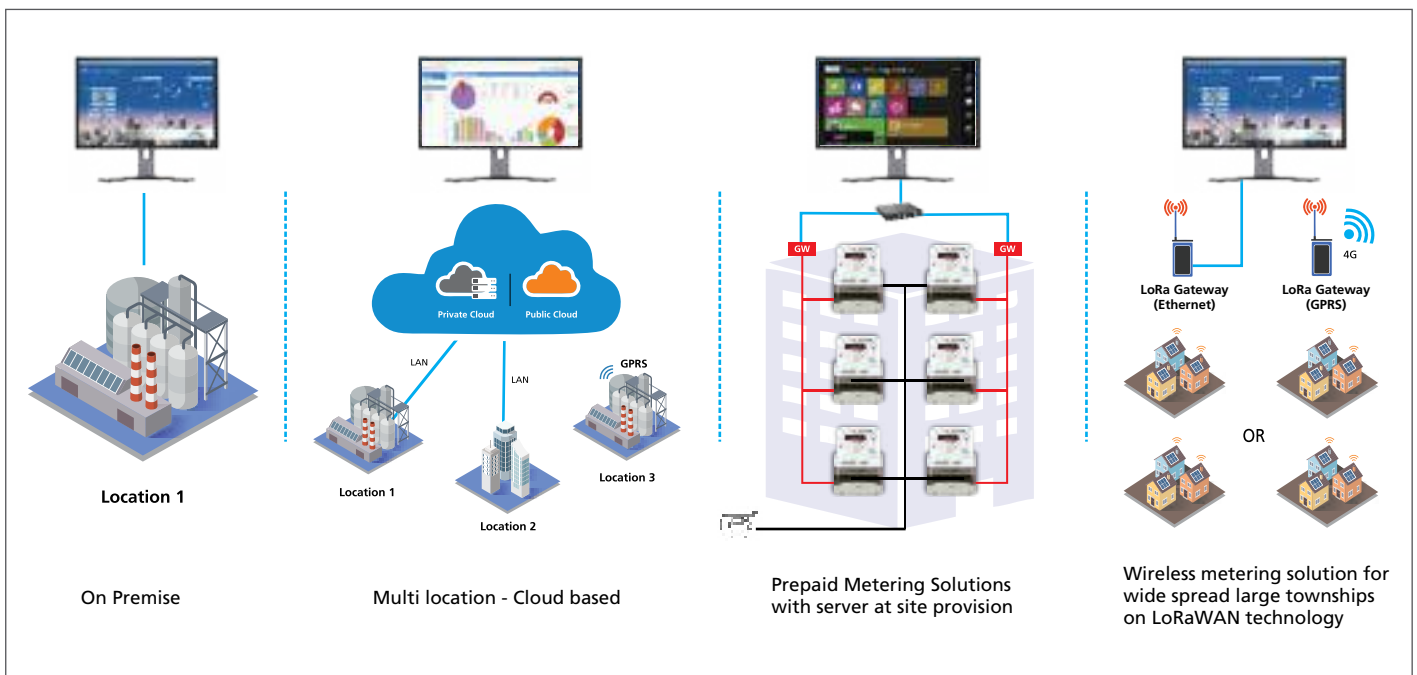
## SmartComm EMS

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

### Features:

- Glimpse of 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
- E&A meters preconfigured in the software
- Monitor ON, OFF, Trip, Ready to close status of circuit breaker through E&A's UNCO module with on premise solution
- Control Circuit breaker ON & OFF, provision for breaker On & Trip counter, last 20 trips date & time stamp with on premise solution
- Email & SMS notification
- SmartComm EMS license ordering is based on number of nodes i.e meters / UNCO module to be connected in the system.

Please scan the QR code and fill in the details on the webpage ([www.intebg.com/ems](http://www.intebg.com/ems)) to schedule a demo of SmartComm EMS to get started on your Energy Management journey.



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



Integrate your pumping solution  
with **EMX4** soft starters  
streamlined setup process



**PRODUCT RANGE:  
24A to 1250A**



#### **Features :**

- Inbuilt Real Time Clock (RTC)
- Compact Design - Saves valuable space in panel
- On-board USB provides quick setup and backup
- Extensive voltage range - 200VAC to 525VAC, 380VAC to 690VAC
- IE3 Compatible and 99% energy efficient when running
- Smart cards Analog output Optional features for advanced applications
- Communication options: DeviceNet, Ethernet/IP, Modbus RTU, Modbus TCP, Profibus, Profinet

#### **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)



Human Machine Interface

# iXP2 Series

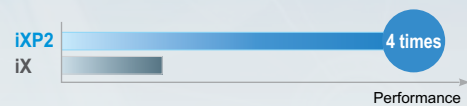
Intelligent XT Panel



iXP2 provides optimal performance for all industrial sites.

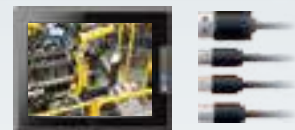
- **Dual-Core CPU offers high-speed communication and processing**

Better performance than ever with enhanced serial communication, CPU processing, memory access and vector/raster graphic processing



- **Multiple interface methods to cope with the Internet of Things**

Ethernet 2ch., HDMI / Audio output, USB host / device, multimedia (video)



- **Robust IP66 aluminum frame**

Reinforced protection against water and dust. Conforms to NEMA 4X standard.



- **Screen gesture**

Flick to change screens.  
No extra switching button is needed to change screens.



- **Object gesture**

Select the object you want and then swipe and flick it.

**Object list**

- Logging trend graph
- View logging history
- View history alarms



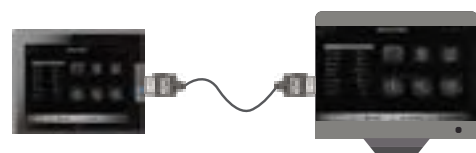
- **Multi-touch**

Use multi-touch to protect your system from undesired errors.



- **Dual monitor mode and extension mode**

Increase your convenience by duplicating or extending your screens.



# AC Drive Solutions from L&T Electrical & Automation

Based on experience. Backed by commitment.



## Hx2000 HVAC Drive

Hx2000 AC drive adds a new dimension to our AC Drive Solutions.

Built to 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

#### 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)

# AC Drives [8504]



## New Series Nx2000 & Nx2000+



- Range: 0.2 kW to 11 kW
- Simplified sensorless vector control
- Built-in EMC filter to meet IEC 61800-3
- Built-in Potentiometer
- DIN Rail mounting for Side-by-Side installation
- Built-in PID
- Built-in Brake Control
- Conformal Coating complying to IEC 60721-3-3 class 3C3 Avg.
- Built-in RS485 Modbus RTU
- Interface:  
Nx2000: 5DI, 2DO (R), 2AI (V & V/I), 1AO (V)  
Nx2000+: 5DI, 2DO (R), 2AI (V & I), 1AO (V)

Input Voltage	Description	Cat. No.	M.R.P. (₹) Per Unit
Single Phase 230VAC	Nx2000 230V 1Ph Drive 0.20 kW (HD)	LTVF-N101P4BAA	*
	Nx2000 230V 1Ph Drive 0.40 kW (HD)	LTVF-N102P4BAA	*
	Nx2000 230V 1Ph Drive 0.75 kW (HD)	LTVF-N104P2BAA	*
	Nx2000 230V 1Ph Drive 1.50 kW (HD)	LTVF-N107P5BAA	*
	Nx2000 230V 1Ph Drive 2.20 kW (HD)	LTVF-N110P0BAA	*
Three Phase 230VAC	Nx2000+ 230V Drive 0.40kW(HD)/0.75kW(ND)	LTVF-N203P1BAA	*
	Nx2000+ 230V Drive 0.75kW(HD)/1.50kW(ND)	LTVF-N206P0BAA	*
	Nx2000+ 230V Drive 1.50kW(HD)/2.20kW(ND)	LTVF-N209P6BAA	*
	Nx2000+ 230V Drive 2.20kW(HD)/3.70kW(ND)	LTVF-N212P0BAA	*
	Nx2000+ 230V Drive 4.00kW(HD)/5.50kW(ND)	LTVF-N218P0BAA	*
	Nx2000+ 230V Drive 5.50kW(HD)/7.50kW(ND)	LTVF-N230P0BAA	*
	Nx2000+ 230V Drive 7.50kW(HD)/11.0kW(ND)	LTVF-N240P0BAA	*
Three Phase 415VAC	Nx2000+ 415V Drive 0.40kW(HD)/0.75kW(ND)	LTVF-N402P0BAA	*
	Nx2000+ 415V Drive 0.75kW(HD)/1.50kW(ND)	LTVF-N403P1BAA	*
	Nx2000+ 415V Drive 1.50kW(HD)/2.20kW(ND)	LTVF-N405P1BAA	*
	Nx2000+ 415V Drive 2.20kW(HD)/3.70kW(ND)	LTVF-N406P9BAA	*
	Nx2000+ 415V Drive 4.00kW(HD)/5.50kW(ND)	LTVF-N410P0BAA	*
	Nx2000+ 415V Drive 5.50kW(HD)/7.50kW(ND)	LTVF-N416P0BAA	*
	Nx2000+ 415V Drive 7.50kW(HD)/11.0kW(ND)	LTVF-N423P0BAA	*

Note: \* For prices please contact nearest branch office

## 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]

Drive Model	Description	Cat. No.	M.R.P. (₹) Per Unit
Nx2000	Nx2000 Remote Keypad with 3m cable	LTOP-DOP-51	*
Nx2000+	Nx2000+ Remote Keypad with 3m cable	LTOP-DOP-52	*
	CANOpen Comm Card for Nx2000+	LTCI-CAN-NP	*
	Eth.IP/Mod.TCP/RAPIDnet Opt for Nx2000+	LTCI-ETH-NP	*
	Profibus-DP Comm Card for Nx2000+	LTCI-PDP-NP	*
Sx2000	Sx2000 Remote Keypad with 3m cable	LTOP-DOP-150	*
	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	*
	Ethernet IP - Modbus TCP Communication card	LTCI-ETH-S.	*
Fx2000	LCD Digital Operator	LTOP-DOP-200	*
	I/O Expansion Card 1 for Fx2000	LTIO-EX1-F	*
	I/O Expansion Card 2 for Fx2000	LTIO-EX2-F	*
	Synchronization Option Card	LTCN-SYN-F	*
	Position control option card for Fx2000	LTCN-PCN-F	*
	Incremental card for Open collector and Line Driver Encoder	LTEN-INC-F	*
	Profibus-DP Communication Interface card	LTCI-PDP-F	*
	Profinet option card for Fx2000	LTCI-PFN-F	*
	Application Development PLC Option card	LTAD-PLC-F	*
	CANOpen Communication Interface card	LTCI-CAN-F	*
	DeviceNet Communication Interface card	LTCI-DEN-F	*
	Ethernet IP/Modbus TCP Communication Interface card	LTCI-ETH-F	*
Hx2000	I/O Expansion Card for Hx2000	LTIO-EXP-H	*
	I/O Expansion Card 2 for Hx2000	LTIO-EXP2-H	*
DBU for Sx2000, Fx2000	Dynamic Braking Unit for 11 - 15kW	LTDBU-0150-4	*
	Dynamic Braking Unit for 18.5 - 22kW	LTDBU-0220-4	*
	Dynamic Braking Unit for 30 - 37kW	LTDBU-0370-4	*
	Dynamic Braking Unit for 45 - 55kW	LTDBU-0550-4	*
	Dynamic Braking Unit for 75kW	LTDBU-0750-4	*
	Dynamic Braking Unit for 75kW 100% ED	LTDBU-075H-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.



# Digital Soft Starters [8504]

## CSX Soft Starters



## CSXi Soft Starters



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

### Note:

\* For prices please contact nearest branch office

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

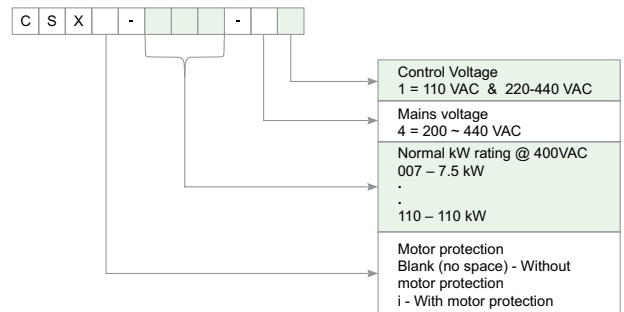
For proper sizing of soft starter based on the application parameters please use Winstart Software.

## Optional Modules/Cards for CSX / CSXi / EMX4



Description	Cat. No.	M.R.P. (₹) Per Unit
Modbus Interface	PIM-MB-01	*
Profibus Interface	PIM-PB-01	*
DeviceNet Interface	PIM-DN-01	*
USB Interface	PIM-USB-01	*
Modbus TCP Module	PIM-MT-01	*
Ethernet IP Module	PIM-EI-01	*
Profinet Module	PIM-PN-01	*
DeviceNet Card, EMX4	PIC-DN-01	*
Ethernet IP Card, EMX4	PIC-EI-01	*
Modbus RTU Card, EMX4	PIC-MB-01	*
Modbus TCP Card, EMX4	PIC-MT-01	*
Profibus Card, EMX4	PIC-PB-01	*
Profinet Card, EMX4	PIC-PN-01	*
Remote Keypad Card, EMX4	PIC-RC-01	*
Remote Keypad Card & Keypad EMX4	PIC-RC-02	*
Remote Keypad, EMX4 with cable & mounting	PIC-RK-01	*
Smart Control Card Pump Application, EMX4	SCC-PC-01	*
Ground Fault + Ethernet IP Card EMX4	PIC-EI-02	*
Ground Fault + Modbus RTU Card EMX4	PIC-MB-02	*
Ground Fault + Modbus TCP Card EMX4	PIC-MT-02	*
Ground Fault + Profinet Card EMX4	PIC-PN-02	*

### Ordering Information for CSX Series Soft Starter



### CSX Soft Starters : For Standard Applications

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

### CSXi Soft Starters : For standard applications

- Inbuilt Bypass Contactor
- Soft start / Soft stop / Adjustable current limit
- Essential motor protections against
  - Overload
  - Single phasing
  - Instantaneous overcurrent
  - Phase sequence reversal
  - Abnormality in supply
  - Unbalanced current
- Thermistor protection through PTC
- Excess start time setting
- Communication options available
- PC Interface as optional

### We recommend the use of :

1. Line Contactor : This will isolate and protect the soft starter SCR's from any voltage transient while it's not in operation.
2. Bypass Contactor (For models without built-in bypass) : This will bypass and protect the soft starter SCR's while in running state from Current and Voltage transient's.
3. Semiconductor fuses : This will protect the starter SCR's during starting and stopping states from current transient's and excess I<sup>2</sup>T.

### Note:

EMX3 soft starters will be available till stock lasts

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

# XLB Series PLC - CPU



- Processing speed: 0.06μs/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

Category	Description	Cat. No.	M.R.P. (₹) Per Unit
E - Series	AC 110~220V, 6P DC Input, 4P TR (NPN) output	LTPCM-DN10E1	*
	AC 110~220V, 6P DC Input, 4P Relay output	LTPCM-DR10E1	*
	AC 110~220V, 8P DC Input, 6P TR(NPN) output	LTPCM-DN14E1	*
	AC 110~220V, 8P DC Input, 6P Relay output	LTPCM-DR14E1	*
	AC 110~220V, 12P DC Input, 8P TR(NPN) output	LTPCM-DN20E1	*
	AC 110~220V, 12P DC Input, 8P Relay output	LTPCM-DR20E1	*
	AC 110~220V, 18P DC Input, 12P TR(NPN) output	LTPCM-DN30E1	*
CPU S - Series	AC 110~220V, 18P DC Input, 12P Relay output	LTPCM-DR30E1	*
	AC 110~220V, 12P DC Input, 8P TR(NPN) output	LTPCM-DN20S1	*
	AC 110~220V, 12P DC Input, 8P Relay output	LTPCM-DR20S1	*
	AC 110~220V, 18P DC Input, 12P TR(NPN) output	LTPCM-DN30S1	*
	AC 110~220V, 18P DC Input, 12P Relay output	LTPCM-DR30S1	*
	AC 110~220V, 24P DC Input, 16P TR(NPN) output	LTPCM-DN40S1	*
	AC 110~220V, 24P DC Input, 16P Relay output	LTPCM-DR40S1	*
U - Series	AC 110~220V, 36P DC Input, 24P TR(NPN) output	LTPCM-DN60S1	*
	AC 110~220V, 36P DC Input, 24P Relay Output	LTPCM-DR60S1	*
	AC 110~220V, 16P DC Input, 16P TR(NPN) output	LTPCM-DN32UB	*
	AC 110~220V, 16P DC Input, 16P TR(NPN) output	LTPCM-DN32UA	*
	AC 110~220V, 16P DC Input, 16P TR(NPN) output	LTPCM-DN32UP	*
	DC 24V, 16P DC Input, 16P TR(NPN) output	LTPCM-DN32UB/DC	*
	DC 24V, 16P DC Input, 16P TR(NPN) output	LTPCM-DN32UA/DC	*
HPL - Series	DC 24V, 16P DC Input, 16P TR(NPN) output	LTPCM-DN32UP/DC	*
	DC 24V, 16P DC Input, 16 Point TR (NPN) output	LTPCM-DN32HPL	*

# XT Series HMI

- 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

Category	Description	Cat. No.	M.R.P. (₹) Per Unit
b-XT Series	4.1" Mono green LCD,DC24V	LTOP-B04DSAA	*
	4.1" Mono green LCD,DC24V,RTC	LTOP-B04DSAR	*
s-XT Series	4" TFT, Ethernet, DC24V	LTOP-S04EDAA	*
	7" TFT, Serial, DC24V	LTOP-S07SDAA	*
	7" TFT, Ethernet, DC24V	LTOP-S07EDAA	*
	10.2" TFT, Ethernet, DC24V	LTOP-S10EDAA	*
i-XT Series	8.4" TFT, Ethernet, DC24V	LTOP-I08EDAA	*
	10.4" TFT, Ethernet,DC12/24V	LTOP-I10EDAA	*
	12.1" TFT, Ethernet, DC12/24V	LTOP-I12EDAA	*
	15" TFT, Ethernet, DC12/24V	LTOP-I15EDAA	*
iXP2 Series	i-XP2 10.4" TFT,DC24V,WinCE	LTOP-A10EDAA	*
	i-XP2 12.1" TFT,DC24V,WinCE	LTOP-A12EDAA	*
	i-XP2 15" TFT,DC24V,WinCE	LTOP-A15EDAA	*



# Experience the robust performance of our ACCL

## Single Phase ACCL



Mains rating : 30A

Genset rating : 1.5A to 30A

## Three Phase ACCL With MCX contactors inside

Range : 32A to 125A



Settable overload current limit at DG side



Separate power consumption monitoring for Mains & Genset



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



To Experience Scan or Click



### 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

# 2 Sec Termination

'Quick Connect' MCBs for faster installation



Time Saver



To Experience Scan or Click

## All-Rounder RCDs

Specially designed Adi RCCBs and RCBOs ensure **Safe** and **Reliable** protection for **All Applications** in AC networks with Pulsating DC along with Harmonics



AC



Type A



Harmonics



Added Immunity

To Experience Scan or Click



Customer Interaction Center (CIC)

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

# Miniature Circuit Breaker (MCB) [8536]

## Range Highlights

- True contact indication for individual pole
- Label holder facility for all configurations
- Conforms to IS/IEC 60898 - 10kA
- Conforms to IEC 60947 - 2
  - 15kA C-curve till 40 A
  - 10kA C-curve for 50A, 63A
- Available in B, C & D curves
- Low watt loss - almost 50% of the values prescribed by IS/IEC 60898
- Trip free mechanism
- Design based on advanced current limiting hammer trip mechanism
- No Line-Load bias
- Suitable for accessory fitment

Rating	Modules 1 Mod = 17.5 mm	B-Curve Cat. No.	M.R.P. (₹) Per Unit	C-Curve Cat. No.	M.R.P. (₹) Per Unit	D-Curve Cat. No.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>							
0.5A	1	-	-	BB10E50C	410	BB10E50D	415
1A	1	-	-	BB10010C	410	BB10010D	415
2A	1	-	-	BB10020C	410	BB10020D	415
3A	1	-	-	BB10030C	410	BB10030D	415
4A	1	-	-	BB10040C	410	BB10040D	415
6A	1	BB10060B	256	BB10060C	256	BB10060D	340
10A	1	BB10100B	256	BB10100C	256	BB10100D	340
16A	1	BB10160B	256	BB10160C	256	BB10160D	340
20A	1	BB10200B	256	BB10200C	256	BB10200D	340
25A	1	BB10250B	256	BB10250C	256	BB10250D	340
32A	1	BB10320B	256	BB10320C	256	BB10320D	340
40A	1	BB10400B	585	BB10400C	585	BB10400D	625
50A	1	BB10500B	585	BB10500C	585	BB10500D*	625
63A	1	BB10630B	585	BB10630C	585	BB10630D*	625



## Double Pole (DP)

0.5A	2	-	-	BB20E50C	1120	BB20E50D	1130
1A	2	-	-	BB20010C	1120	BB20010D	1130
2A	2	-	-	BB20020C	1120	BB20020D	1130
3A	2	-	-	BB20030C	1120	BB20030D	1130
4A	2	-	-	BB20040C	1120	BB20040D	1130
6A	2	BB20060B	800	BB20060C	800	BB20060D	820
10A	2	BB20100B	800	BB20100C	800	BB20100D	820
16A	2	BB20160B	800	BB20160C	800	BB20160D	820
20A	2	BB20200B	800	BB20200C	800	BB20200D	820
25A	2	BB20250B	800	BB20250C	800	BB20250D	820
32A	2	BB20320B	800	BB20320C	800	BB20320D	820
40A	2	BB20400B	1290	BB20400C	1290	BB20400D	1340
50A	2	BB20500B	1290	BB20500C	1290	BB20500D*	1340
63A	2	BB20630B	1290	BB20630C	1290	BB20630D*	1340



## Three Pole (TP)

0.5A	3	-	-	BB30E50C	1650	BB30E50D	1695
1A	3	-	-	BB30010C	1650	BB30010D	1695
2A	3	-	-	BB30020C	1650	BB30020D	1695
3A	3	-	-	BB30030C	1650	BB30030D	1695
4A	3	-	-	BB30040C	1650	BB30040D	1695
6A	3	BB30060B	1295	BB30060C	1295	BB30060D	1350
10A	3	BB30100B	1295	BB30100C	1295	BB30100D	1350
16A	3	BB30160B	1295	BB30160C	1295	BB30160D	1350
20A	3	BB30200B	1295	BB30200C	1295	BB30200D	1350
25A	3	BB30250B	1295	BB30250C	1295	BB30250D	1350
32A	3	BB30320B	1295	BB30320C	1295	BB30320D	1350
40A	3	BB30400B	1990	BB30400C	1990	BB30400D	2085
50A	3	BB30500B	1990	BB30500C	1990	BB30500D*	2085
63A	3	BB30630B	1990	BB30630C	1990	BB30630D*	2085



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

\* For details, please contact nearest branch office

# Miniature Circuit Breaker (MCB) [8536]

Rating	Modules 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	-	-	BB40E50C	2070	BB40E50D	2075
1A	4	-	-	BB40010C	2070	BB40010D	2075
2A	4	-	-	BB40020C	2070	BB40020D	2075
3A	4	-	-	BB40030C	2070	BB40030D	2075
4A	4	-	-	BB40040C	2070	BB40040D	2075
6A	4	BB40060B	1745	BB40060C	1745	BB40060D	1785
10A	4	BB40100B	1745	BB40100C	1745	BB40100D	1785
16A	4	BB40160B	1745	BB40160C	1745	BB40160D	1785
20A	4	BB40200B	1745	BB40200C	1745	BB40200D	1785
25A	4	BB40250B	1745	BB40250C	1745	BB40250D	1785
32A	4	BB40320B	1745	BB40320C	1745	BB40320D	1785
40A	4	BB40400B	2500	BB40400C	2500	BB40400D	2630
50A	4	BB40500B	2500	BB40500C	2500	BB40500D*	2630
63A	4	BB40630B	2500	BB40630C	2500	BB40630D*	2630

Note: Standard Pack Quantity for MCB : SP - 12 Nos., DP - 6 Nos., TP - 4 Nos., FP - 3 Nos.  
\* For details, please contact nearest branch office

## DC MCBs as per IEC 60947-2 [8536]

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

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>			
0.5A	1	BB10E5DC	590
1A	1	BB1001DC	590
2A	1	BB1002DC	590
3A	1	BB1003DC	590
4A	1	BB1004DC	590
6A	1	BB1006DC	510
10A	1	BB1010DC	510
16A	1	BB1016DC	510
20A	1	BB1020DC	510
25A	1	BB1025DC	510
32A	1	BB1032DC	510
40A	1	BB1040DC	670
50A	1	BB1050DC	670
63A	1	BB1063DC	670

### Double Pole (DP)

0.5A	2	BB20E5DC	1255
1A	2	BB2001DC	1255
2A	2	BB2002DC	1255
3A	2	BB2003DC	1255
4A	2	BB2004DC	1255
6A	2	BB2006DC	1105
10A	2	BB2010DC	1105
16A	2	BB2016DC	1105
20A	2	BB2020DC	1105
25A	2	BB2025DC	1105
32A	2	BB2032DC	1105
40A	2	BB2040DC	1495
50A	2	BB2050DC	1495
63A	2	BB2063DC	1495

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

Rating	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>			
0.5A	1	BJ10E5DC	725
1A	1	BJ1001DC	725
2A	1	BJ1002DC	725
3A	1	BJ1003DC	725
4A	1	BJ1004DC	725
6A	1	BJ1006DC	595
10A	1	BJ1010DC	595
16A	1	BJ1016DC	595
20A	1	BJ1020DC	595
25A	1	BJ1025DC	595
32A	1	BJ1032DC	595
40A	1	BJ1040DC	820

### Double Pole (DP)

0.5A	2	BJ20E5DC	1520
1A	2	BJ2001DC	1520
2A	2	BJ2002DC	1520
3A	2	BJ2003DC	1520
4A	2	BJ2004DC	1520
6A	2	BJ2006DC	1285
10A	2	BJ2010DC	1285
16A	2	BJ2016DC	1285
20A	2	BJ2020DC	1285
25A	2	BJ2025DC	1285
32A	2	BJ2032DC	1285
40A	2	BJ2040DC	1825

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



## New Solar Combo MCBs [8536]

Description	Modules 1 Mod = 17.5mm	Cat. No.	M.R.P. (₹) Per Unit
1 AC 16A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB	2+2	SC221616	1615
1 AC 25A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB	2+2	SC222516	1615
1 AC 32A DP MCB <sup>^</sup> + 1 DC 16A DP 500V MCB	2+2	SC223216	1615
1 AC 32A DP MCB <sup>^</sup> + 1 DC 32A DP 500V MCB	2+2	SC223232	1615

<sup>^</sup>AC MCB with C-Curve



# Solar Combo MCBs

Complete Protection for Solar Rooftop Installations

**Combo Pack**

Tested for Reliable  
Performance



**DC MCB**



**AC MCB**

- [1 DP DC (500V) MCB] + [1 DP AC MCB] in a combo pack
- Provides complete protection for DC and AC sides of solar rooftop installations
- DC MCB : 10kA as per IEC 60947-2
- AC MCB : 10kA as per IS/IEC 60898-1

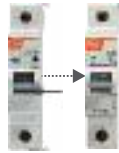


Customer Interaction Center (CIC)

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

# Miniature Circuit Breaker (MCB) [8536]

## Auxiliary & Accessories for Exora MCBs [8538]



Description	Cat. No.	M.R.P. (₹) Per Unit
Auxiliary Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod	<b>BZA11006</b>	<b>775</b>
Shunt Release - 240V AC, 1 Mod	<b>BZS00240</b>	<b>2110</b>
Trip Alarm Contact - 6A, 240V AC, (1NO+1NC), 0.5 Mod	<b>BZT11006</b>	<b>905</b>

## MCBs (Miniature Circuit Breakers): Quick Connect [8536]

- Conforms to IS/IEC 60898 - 10kA
- Available in SP, DP, TP, FP, SPN & TPN version



Rating	Module	B Curve Cat. Nos.	M.R.P. (₹) Per Unit	C Curve Cat. Nos.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>					
6A	1	<b>AU10Q10063B</b>	<b>300</b>	<b>AU10Q10063C</b>	<b>300</b>
10A	1	<b>AU10Q10103B</b>	<b>300</b>	<b>AU10Q10103C</b>	<b>300</b>
16A	1	<b>AU10Q10163B</b>	<b>300</b>	<b>AU10Q10163C</b>	<b>300</b>
20A	1	<b>AU10Q10203B</b>	<b>300</b>	<b>AU10Q10203C</b>	<b>300</b>

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

## 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

Rating	Module	C Curve Cat. No.	M.R.P. (₹) Per Unit
<b>Single Pole (SP)</b>			
80A	1.5	<b>AU15S10803C</b>	<b>2230</b>
100A	1.5	<b>AU15S11003C</b>	<b>2495</b>
125A	1.5	<b>AU15S11253C</b>	<b>2685</b>
<b>Double Pole (DP)</b>			
80A	3	<b>AU15S20803C</b>	<b>4935</b>
100A	3	<b>AU15S21003C</b>	<b>5265</b>
125A	3	<b>AU15S21253C</b>	<b>5795</b>
<b>Three Pole (TP)</b>			
80A	4.5	<b>AU15S30803C</b>	<b>7790</b>
100A	4.5	<b>AU15S31003C</b>	<b>8305</b>
125A	4.5	<b>AU15S31253C</b>	<b>9215</b>
<b>Four Pole (FP)</b>			
80A	6	<b>AU15S40803C</b>	<b>10170</b>
100A	6	<b>AU15S41003C</b>	<b>10580</b>
125A	6	<b>AU15S41253C</b>	<b>11975</b>

- Suitable for Isolation
- Protection Degree - IP 20
- Availability of wide Range of Site Mountable Accessories



D Curve Cat. No.	M.R.P. (₹) Per Unit
<b>AU15S10803D</b>	<b>2485</b>
<b>AU15S11003D</b>	<b>2785</b>
<b>AU15S11253D</b>	<b>3015</b>
<b>Double Pole (DP)</b>	
<b>AU15S20803D</b>	<b>5520</b>
<b>AU15S21003D</b>	<b>5885</b>
<b>AU15S21253D</b>	<b>6470</b>
<b>Three Pole (TP)</b>	
<b>AU15S30803D</b>	<b>8705</b>
<b>AU15S31003D</b>	<b>9270</b>
<b>AU15S31253D</b>	<b>10285</b>
<b>Four Pole (FP)</b>	
<b>AU15S40803D</b>	<b>11340</b>
<b>AU15S41003D</b>	<b>11820</b>
<b>AU15S41253D</b>	<b>13375</b>

# RCCB (Residual Current Circuit Breaker) [8536]

### Range Highlights

- Conforms to IS 12640 (Part 1) / IEC 61008-1
- RCCBs are available in DP and FP versions from 25 to 100A ratings with 30 mA, 100 mA and 300 mA sensitivity



- Truly current operated - operation even at nominal voltage
- Operates on Core Balance Current Transformer (CBCT) principle
- 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	<b>BG202503</b>	<b>2895</b>
	100 mA	2	<b>BG202510</b>	<b>3000</b>
	300 mA	2	<b>BG202530</b>	<b>3000</b>
40A	30 mA	2	<b>BG204003</b>	<b>3240</b>
	100 mA	2	<b>BG204010</b>	<b>3430</b>
	300 mA	2	<b>BG204030</b>	<b>3430</b>
63A	30 mA	2	<b>BG206303</b>	<b>4045</b>
	100 mA	2	<b>BG206310</b>	<b>4140</b>
	300 mA	2	<b>BG206330</b>	<b>4140</b>
100A	30 mA	2	<b>BG210003</b>	<b>7050</b>
	100 mA	2	<b>BG210010</b>	<b>7145</b>
	300 mA	2	<b>BG210030</b>	<b>7145</b>

Rating	Sensitivity	Modules 1 Mod = 17.5 mm	Cat. No.	M.R.P. (₹) Per Unit
<b>Four Pole (FP)</b>				
25A	30 mA	4	<b>BG402503</b>	<b>3825</b>
	100 mA	4	<b>BG402510</b>	<b>3935</b>
	300 mA	4	<b>BG402530</b>	<b>3935</b>
40A	30 mA	4	<b>BG404003</b>	<b>3860</b>
	100 mA	4	<b>BG404010</b>	<b>4000</b>
	300 mA	4	<b>BG404030</b>	<b>4000</b>
63A	30 mA	4	<b>BG406303</b>	<b>4370</b>
	100 mA	4	<b>BG406310</b>	<b>4585</b>
	300 mA	4	<b>BG406330</b>	<b>4585</b>
100A	30 mA	4	<b>BG410003</b>	<b>7550</b>
	100 mA	4	<b>BG410010</b>	<b>7685</b>
	300 mA	4	<b>BG410030</b>	<b>7685</b>

# 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	<b>AURAD202503</b>	<b>4610</b>
	100mA	2	<b>AURAD202510</b>	<b>4820</b>
	300mA	2	<b>AURAD202530</b>	<b>4820</b>
40A	30mA	2	<b>AURAD204003</b>	<b>4895</b>
	100mA	2	<b>AURAD204010</b>	<b>4970</b>
	300mA	2	<b>AURAD204030</b>	<b>4970</b>
63A	30mA	2	<b>AURAD206303</b>	<b>5720</b>
	100mA	2	<b>AURAD206310</b>	<b>5830</b>
	300mA	2	<b>AURAD206330</b>	<b>5830</b>
100A	30mA	2	<b>AURAD210003</b>	<b>8455</b>

Rating	Sensitivity	Module	CAT Nos.	M.R.P. (₹) Per Unit
<b>4P Adi</b>				
25A	30mA	4	<b>AURAD402503</b>	<b>5575</b>
	100mA	4	<b>AURAD402510</b>	<b>5680</b>
	300mA	4	<b>AURAD402530</b>	<b>5680</b>
40A	30mA	4	<b>AURAD404003</b>	<b>5785</b>
	100mA	4	<b>AURAD404010</b>	<b>5880</b>
	300mA	4	<b>AURAD404030</b>	<b>5880</b>
63A	30mA	4	<b>AURAD406303</b>	<b>6300</b>
	100mA	4	<b>AURAD406310</b>	<b>6430</b>
	300mA	4	<b>AURAD406330</b>	<b>6430</b>
100A	30mA	4	<b>AURAD410003</b>	<b>10035</b>
	300mA	4	<b>AURAD410030</b>	<b>10035</b>

# 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
<b>Double Pole (DP)</b>			<b>Three Pole (TP)</b>			<b>Four Pole (FP)</b>			
40A	2	<b>BF204000</b>	<b>485</b>	3	<b>BF304000</b>	<b>850</b>	4	<b>BF404000</b>	<b>1095</b>
63A	2	<b>BF206300</b>	<b>625</b>	3	<b>BF306300</b>	<b>985</b>	4	<b>BF406300</b>	<b>1140</b>
80A	2	<b>BF208000</b>	<b>795</b>	3	<b>BF308000</b>	<b>1085</b>	4	<b>BF408000</b>	<b>1285</b>
100A	2	<b>BF210000</b>	<b>835</b>	3	<b>BF310000</b>	<b>1150</b>	4	<b>BF410000</b>	<b>1385</b>

**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



Description	I <sub>max</sub>	Configuration	Module	Cat. No.	M.R.P. (₹) Per Unit
Type 1+2, I <sub>imp</sub> 12.5kA	50kA	1P+N	2	<b>AUSP121PN50</b>	<b>8775</b>
		3P+N	4	<b>AUSP123PN50</b>	<b>16800</b>
Type 2	40kA	1P+N	1	<b>AUSP021PN40</b>	<b>5480</b>
		3P+N	2	<b>AUSP023PN40</b>	<b>10960</b>
Type 2	15kA	1P+N	1	<b>AUSP021PN15</b>	<b>4385</b>
		3P+N	2	<b>AUSP023PN15</b>	<b>8625</b>
Type 1+2, I <sub>imp</sub> 8kA	100kA	1P+N	2	<b>AUSP121PN100</b>	<b>7890</b>
		3P+N	4	<b>AUSP123PN100</b>	<b>15495</b>
Type 2	70kA	1P+N	2	<b>AUSP021PN70</b>	<b>8770</b>
		3P+N	4	<b>AUSP023PN70</b>	<b>14615</b>

## 800V Solar Application

Description	Configuration	Module	Cat. No.	M.R.P. (₹) Per Unit
<b>New</b> Type 2, I <sub>max</sub> 40kA	3P	4	<b>AUSP023P40-1500</b>	<b>12500</b>



**Extend SPD life with Spare Cartridges**

Description	Cat. No.	M.R.P. (₹) Per Unit
Cartridge for AUSP021PN15	<b>AUSC021PN15</b>	<b>2195</b>
Cartridge for AUSP021PN40	<b>AUSC021PN40</b>	<b>2740</b>
Cartridge for AUSP021PN70 / AUSP023PN70	<b>AUSC021PN70</b>	<b>2925</b>
Cartridge for AUSP023PN15	<b>AUSC023PN15</b>	<b>2875</b>
Cartridge for AUSP023PN40	<b>AUSC023PN40</b>	<b>3655</b>
Cartridge for AUSP121PN100 / AUSP123PN100	<b>AUSC121PN100</b>	<b>4385</b>
Cartridge for AUSP121PN50 / AUSP123PN50	<b>AUSC121PN50</b>	<b>4735</b>



# 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	4285
	30mA	2	AUF3C200603	4285
	100mA	2	AUF3C200610	4375
	300mA	2	AUF3C200630	4425
10A	10mA	2	AUF3C201001	4285
	30mA	2	AUF3C201003	4285
	100mA	2	AUF3C201010	4375
	300mA	2	AUF3C201030	4425
16A	10mA	2	AUF3C201601	4285
	30mA	2	AUF3C201603	4285
	100mA	2	AUF3C201610	4375
	300mA	2	AUF3C201630	4425
20A	30mA	2	AUF3C202003	4285
	100mA	2	AUF3C202010	4375
	300mA	2	AUF3C202030	4425
25A	30mA	2	AUF3C202503	4285
	100mA	2	AUF3C202510	4375
	300mA	2	AUF3C202530	4425
32A	30mA	2	AUF3C203203	4285
	100mA	2	AUF3C203210	4375
	300mA	2	AUF3C203230	4425
40A	30mA	2	AUF3C204003	4285
	100mA	2	AUF3C204010	4375
	300mA	2	AUF3C204030	4425
63A	30mA	4	AUF3C206303	5390
	100mA	4	AUF3C206310	5715
	300mA	4	AUF3C206330	5760
<b>4P AC</b>				
16A	30mA	7.5	AUF3C401603	4875
	100mA	7.5	AUF3C401610	5425
	300mA	7.5	AUF3C401630	5535
20A	30mA	7.5	AUF3C402003	4875
	100mA	7.5	AUF3C402010	5425
	300mA	7.5	AUF3C402030	5535
25A	30mA	7.5	AUF3C402503	4875
	100mA	7.5	AUF3C402510	5425
	300mA	7.5	AUF3C402530	5535
32A	30mA	7.5	AUF3C403203	5035
	100mA	7.5	AUF3C403210	5430
	300mA	7.5	AUF3C403230	5545
40A	30mA	7.5	AUF3C404003	5110
	100mA	7.5	AUF3C404010	5430
	300mA	7.5	AUF3C404030	5565
63A	30mA	7.5	AUF3C406303	6125
	100mA	7.5	AUF3C406310	6240
	300mA	7.5	AUF3C406330	6240
80A	30mA	12	AUF3C408003	23090
	100mA	12	AUF3C408010	23605
	300mA	12	AUF3C408030	23605
100A	30mA	12	AUF3C410003	24685
	100mA	12	AUF3C410010	25275
	300mA	12	AUF3C410030	25275

## Type-Adi

Rating	Sensitivity	Module	CAT Nos.	M.R.P. (₹) Per Unit
<b>2P Adi</b>				
6A	30mA	2	AUF3D200603	5650
	100mA	2	AUF3D200610	6220
	300mA	2	AUF3D200630	6455
10A	30mA	2	AUF3D201003	5650
	100mA	2	AUF3D201010	6220
	300mA	2	AUF3D201030	6455
16A	30mA	2	AUF3D201603	5650
	100mA	2	AUF3D201610	6220
	300mA	2	AUF3D201630	6455
20A	30mA	2	AUF3D202003	5650
	100mA	2	AUF3D202010	6220
	300mA	2	AUF3D202030	6455
25A	30mA	2	AUF3D202503	5650
	100mA	2	AUF3D202510	6220
	300mA	2	AUF3D202530	6455
32A	30mA	2	AUF3D203203	5650
	100mA	2	AUF3D203210	6220
	300mA	2	AUF3D203230	6455
40A	30mA	2	AUF3D204003	5650
	100mA	2	AUF3D204010	6220
	300mA	2	AUF3D204030	6455
63A	30mA	4	AUF3D206303	6890
	100mA	4	AUF3D206310	7290
	300mA	4	AUF3D206330	7350
<b>4P Adi</b>				
16A	30mA	7.5	AUF3D401603	6225
	100mA	7.5	AUF3D401610	6925
	300mA	7.5	AUF3D401630	7065
20A	30mA	7.5	AUF3D402003	6225
	100mA	7.5	AUF3D402010	6925
	300mA	7.5	AUF3D402030	7065
25A	30mA	7.5	AUF3D402503	6225
	100mA	7.5	AUF3D402510	6925
	300mA	7.5	AUF3D402530	7065
32A	30mA	7.5	AUF3D403203	6425
	100mA	7.5	AUF3D403210	6930
	300mA	7.5	AUF3D403230	7075
40A	30mA	7.5	AUF3D404003	6525
	100mA	7.5	AUF3D404010	6930
	300mA	7.5	AUF3D404030	7105
63A	30mA	7.5	AUF3D406303	7815
	100mA	7.5	AUF3D406310	7970
	300mA	7.5	AUF3D406330	7970
80A	30mA	12	AUF3D408003	23090
	100mA	12	AUF3D408010	23605
	300mA	12	AUF3D408030	23605
100A	30mA	12	AUF3D410003	24685
	100mA	12	AUF3D410010	25275
	300mA	12	AUF3D410030	25275

\* For technical details, please contact nearest 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 EB/DG	Module	CAT Nos.	M.R.P. (₹) Per Unit
30A/1.5A	4	AUCL010301E5	2310
30A/2.5A	4	AUCL010302E5	2310
30A/3A	4	AUCL01030003	2310
30A/4A	4	AUCL01030004	2310
30A/5A	4	AUCL01030005	2310
30A/6A	4	AUCL01030006	2310
30A/8A	4	AUCL01030008	2310
30A/10A	4	AUCL01030010	2310
30A/12A	4	AUCL01030012	2310
30A/15A	4	AUCL01030015	2310
30A/20A	4	AUCL01030020	2310
30A/30A	4	AUCL01030030*	2310

\* 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) EB/DG	Cat. No.	M.R.P. (₹) Per Unit
32A / 32A	AUCL03032032	8960
40A / 32A	AUCL03040032	9410
40A / 40A	AUCL03040040	10190
50A / 50A	AUCL03050050	14110
63A / 50A	AUCL03063050	16015
63A / 63A	AUCL03063063	18145
80A / 80A	AUCL03080080	25255
125A / 125A	AUCL03125125	42505

For 3 Phase ACCL programming video please scan the QR code or click here



## Changeover Switches [8536]

#### Range Highlights

- Conforms to IEC 60947-3 and IS/IEC 60947-3
- Available in 3 positions (I-O-II) with centre off position
- Utilization category AC-22A



Rating	Module	Cat. No.	M.R.P. (₹) Per Unit
<b>Double Pole</b>			
25A	2	AUC00202500	1455
40A	2	AUC00204000	2225
63A	3	AUC00206300	2590
<b>Four Pole</b>			
40A	4	AUC00404000	3835
63A	6	AUC00406300	4350

## Indicating Lights [8531]



Description	Module	Cat. No.	M.R.P. (₹) Per Unit
RED	1	AUIL01RED00	940
YELLOW	1	AUIL01YEL00	940
BLUE	1	AUIL01BLU00	940
GREEN	1	AUIL01GRE00	940
RED-YELLOW-BLUE	1	AUIL01RYB00	1140

## Modular Contactors [8536]

#### Range Highlights

- Wide Range of Current Ratings:
  - 25A, 40A and 63A
- Conforms to:
  - IEC 61095, EN 61095
  - IEC 60947-4-1, EN 60947-4-1
  - IEC 60947-5-1
- Protection Degree IP 20



Description (AC-1)	Module	Cat. No.	M.R.P. (₹) Per Unit
25A-1NO	1	AUMC1002501	1580
25A-2NO	1	AUMC2002501	1975
40A-2NO	3	AUMC2004003	3390
40A-3NO	3	AUMC3004003	4855
40A-4NO	3	AUMC4004003	5700
63A-2NO+2NC	3	AUMC2206303	6025
63A-3NO	3	AUMC3006303	6175
63A-4NO	3	AUMC4006303	6795
<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	830
AUX/TAC*	1NO+1NC	0.5	240V AC, 24V DC	AUATAC240	970
Undervoltage Release	-	1	240V AC	AUUVAC240	1965
	-	1	24V DC	AUUVDC024	1965
Overvoltage Release	-	1	240V AC	AUOVAC240	2425
Shunt Release	-	1	240V AC	AUSRAC240	2250
	-	1	24V DC	AUSRDC024	2250
Padlock-Suitable for Lock Hasp 3.5 - 5 mm dia. max	Suitable for 1Pole=1Mod devices: RCCBs, RCBOs, Changeover Switches up to 40A			AUPD01	445
	Suitable for 1Pole-1.5Mod devices: MCBs 80A-125A, Changeover Switch 63A			AUPD02	505



Note: Standard Pack Quantity for Padlock - 2 Nos.

\* For 80A-125A MCBs please contact nearest branch office



# 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	4175
Analog time switch	3	AUTS03ANA00	5075
Digital time switch	2	AUTS02DIG00	3260
Astro time switch	2	AUTS02AST00	5475

## 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	2350
Three Phase (10-60A)	7	WD4000103000	5335

## EXORA DBs

*Specially Designed*

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



> To experience Scan or click



## 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 nearest branch office



**Highlights**

- Conforms to IS 8623-1 & 3, IEC 61439-1 & 3
- IK 08-for single door DBs, IK 09-for double door DBs
- Available in CRCA sheet steel, RAL9003, powder coated
- Ready to use DBs - Provided with 100A insulated phase bus-bar | neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | color-coded interconnecting wire set | cable ties | blanking plates and circuit identification label
- With provision for DP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing



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

Description	No. of Modules		Cat. Nos.	M.R.P. (₹) Per Unit
	Incomer	Outgoing		
<b>IP 30 - Single Door</b>				
4 way	2	2	DBSPN004SD	1290
6 way	2	4	DBSPN006SD	1370
8 way	2	6	DBSPN008SD	1585
12 way	2	10	DBSPN012SD	1870
16 way	2	14	DBSPN016SD	2320
18 way	2	16	DBSPN018SD	2730
<b>IP 43 - Metal Door</b>				
4 way	2	2	DBSPN004DD	1715
6 way	2	4	DBSPN006DD	1980
8 way	2	6	DBSPN008DD	2120
12 way	2	10	DBSPN012DD	2555
16 way	2	14	DBSPN016DD	3230
18 way	2	16	DBSPN018DD	3500
<b>IP 43 - Glazed Door</b>				
4 way	2	2	DBSPN004GD	2245
6 way	2	4	DBSPN006GD	2395
8 way	2	6	DBSPN008GD	2605
12 way	2	10	DBSPN012GD	3170
16 way	2	14	DBSPN016GD	3940
18 way	2	16	DBSPN018GD	4210
<b>IP 54 - Metal Door</b>				
4 way	2	2	DBSPN00454	5820
6 way	2	4	DBSPN00654	6495
8 way	2	6	DBSPN00854	6905
12 way	2	10	DBSPN01254	7905
16 way	2	14	DBSPN01654	8830
18 way	2	16	DBSPN01854	9025

**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	3330
6 way	4	6+6+6	DBTPE006SD	4090
4 way	8	4+4+4	DBTPN004SD	3530
6 way	8	6+6+6	DBTPN006SD	4365
8 way	8	8+8+8	DBTPN008SD	5155
12 way	8	12+12+12	DBTPN012SD	7425
16 way	8	16+16+16	DBTPN016SD	9150
<b>IP 43 - Metal Door</b>				
4 way	4	4+4+4	DBTPE004DD	3970
6 way	4	6+6+6	DBTPE006DD	4910
4 way	8	4+4+4	DBTPN004DD	4195
6 way	8	6+6+6	DBTPN006DD	5225
8 way	8	8+8+8	DBTPN008DD	6270
12 way	8	12+12+12	DBTPN012DD	9390
16 way	8	16+16+16	DBTPN016DD	11640
<b>IP 43 - Glazed Door</b>				
4 way	4	4+4+4	DBTPE004GD	5280
6 way	4	6+6+6	DBTPE006GD	6425
4 way	8	4+4+4	DBTPN004GD	5610
6 way	8	6+6+6	DBTPN006GD	6790
8 way	8	8+8+8	DBTPN008GD	8065
12 way	8	12+12+12	DBTPN012GD	12365
16 way	8	16+16+16	DBTPN016GD	14835
<b>IP 54 - Metal Door</b>				
4 way	4	4+4+4	DBTPE00454	13185
6 way	4	6+6+6	DBTPE00654	15830
4 way	8	4+4+4	DBTPN00454	13940
6 way	8	6+6+6	DBTPN00654	16780
8 way	8	8+8+8	DBTPN00854	18350
12 way	8	12+12+12	DBTPN01254	25860
16 way	8	16+16+16	DBTPN01654	31040





**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	7185
6 way	8	2+2+2	6+6+6	DBHPI006DD	8575
8 way	8	2+2+2	8+8+8	DBHPI008DD	10285
12 way	8	2+2+2	12+12+12	DBHPI012DD	14060
16 way	8	2+2+2	16+16+16	DBHPI016DD	16870
<b>IP 54 - Metal Door</b>					
4 way	8	2+2+2	4+4+4	DBHPI00454	16550
6 way	8	2+2+2	6+6+6	DBHPI00654	19720
8 way	8	2+2+2	8+8+8	DBHPI00854	21770
12 way	8	2+2+2	12+12+12	DBHPI01254	30910



**Tier PPI DBs**

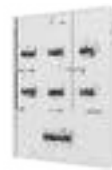
IP 43 - Metal Door

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	8970
8 way	8	2+2+2	8+8+8	DBTPI008DD	11250
10 way	8	2+2+2	10+10+10	DBTPI010DD	11795
12 way	8	2+2+2	12+12+12	DBTPI012DD	12605
16 way	8	2+2+2	16+16+16	DBTPI016DD	14000
12 way	MCCB*	2+2+2	12+12+12	DBTPL012DD	13365

\* 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	9710
6 way	8	4+4+4	6+6+6	DBPSG006SD	10550
8 way	8	4+4+4	8+8+8	DBPSG008SD	11350
12 way	8	4+4+4	12+12+12	DBPSG012SD	13065
<b>IP 43 - Metal Door</b>					
4 way	8	4+4+4	4+4+4	DBPSG004DD	11065
6 way	8	4+4+4	6+6+6	DBPSG006DD	12475
8 way	8	4+4+4	8+8+8	DBPSG008DD	13915
12 way	8	4+4+4	12+12+12	DBPSG012DD	17345



**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	13595
6 way	MCCB	4+4+4	6+6+6	DBPGL006SD	15650
8 way	MCCB	4+4+4	8+8+8	DBPGL008SD	17975
<b>IP 43 - Metal Door</b>					
4 way	MCCB	4+4+4	4+4+4	DBPGL004DD	15220
6 way	MCCB	4+4+4	6+6+6	DBPGL006DD	17405
8 way	MCCB	4+4+4	8+8+8	DBPGL008DD	20130
12 way	MCCB	4+4+4	12+12+12	DBPGL012DD	22700

\* 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 3 nos. of 63A E&A rotary switches | 3 nos. of rocker switches for phase identification | 100A insulated phase bus-bars | neutral bar/s with shroud/s | 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	12890
6 way	8	6+6+6	DBPSR006SD	13700
8 way	8	8+8+8	DBPSR008SD	15180
10 way	8	10+10+10	DBPSR010SD	15750
12 way	8	12+12+12	DBPSR012SD	16735
<b>IP 43 - Metal Door</b>				
4 way	8	4+4+4	DBPSR004DD	15015
6 way	8	6+6+6	DBPSR006DD	15255
8 way	8	8+8+8	DBPSR008DD	16340
10 way	8	10+10+10	DBPSR010DD	17460
12 way	8	12+12+12	DBPSR012DD	18405

### 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 - neutral bar/s with shroud/s | earth bar/s | sticking saddles | cement spill protector | cable ties | circuit identification labels
- With provision to mount modular devices as per requirement



IP 43 - Metal Door

IP 43 - Glazed Door

Description	No. of Modules Per Row	Cat. Nos.	M.R.P. (₹) Per Unit
<b>IP 43 - Metal Door</b>			
2 Row 28 Module	14	DBROW228DD	5340
3 Row 42 Module	14	DBROW342DD	6405
4 Row 56 Module	14	DBROW456DD	7055
4 Row 64 Module	16	DBROW464DD	8095
<b>IP 43 - Glazed Door</b>			
2 Row 28 Module	14	DBROW228GD	5800
3 Row 42 Module	14	DBROW342GD	7110
4 Row 56 Module	14	DBROW456GD	8060
4 Row 64 Module	16	DBROW464GD	8835

## 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	320	5
SP 56 Mod	BSP56	1220	5
DP 12 Mod	BDP12	530	5
TP 12 Mod	BTP12	570	5
FP 12 Mod	BFP12	1130	5
End Caps for SP	ECP01	20	10
End Caps for DP/TP	ECP03	40	10
End Caps for FP	ECP04	70	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	20	10
Half Module	BKP05	20	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	565	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

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- 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



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	9595
6 way	8	6+6+6	DBVTM006SD	10470
8 way	8	8+8+8	DBVTM008SD	11700
12 way	8	12+12+12	DBVTM012SD	16860
16 way	8	16+16+16	DBVTM016SD	19545
<b>IP 43 - Metal Door</b>				
4 way	8	4+4+4	DBVTM004DD	10300
6 way	8	6+6+6	DBVTM006DD	11950
8 way	8	8+8+8	DBVTM008DD	13485
12 way	8	12+12+12	DBVTM012DD	18285
16 way	8	16+16+16	DBVTM016DD	21810
<b>IP 43 - Glazed Door</b>				
4 way	8	4+4+4	DBVTM004GD	13830
6 way	8	6+6+6	DBVTM006GD	15320
8 way	8	8+8+8	DBVTM008GD	17580
12 way	8	12+12+12	DBVTM012GD	23625
16 way	8	16+16+16	DBVTM016GD	24895
<b>IP 54 - Metal Door</b>				
4 way	8	4+4+4	DBVTM00454	21465
6 way	8	6+6+6	DBVTM00654	23635
8 way	8	8+8+8	DBVTM00854	25975
12 way	8	12+12+12	DBVTM01254	34030
16 way	8	16+16+16	DBVTM01654	37415

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	10775
6 way	MCCB	6+6+6	DBVTL006SD	11705
8 way	MCCB	8+8+8	DBVTL008SD	12750
12 way	MCCB	12+12+12	DBVTL012SD	19255
16 way	MCCB	16+16+16	DBVTL016SD	22355
<b>IP 43 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTL004DD	12450
6 way	MCCB	6+6+6	DBVTL006DD	14160
8 way	MCCB	8+8+8	DBVTL008DD	15510
12 way	MCCB	12+12+12	DBVTL012DD	21205
16 way	MCCB	16+16+16	DBVTL016DD	24720
<b>IP 43 - Glazed Door</b>				
4 way	MCCB	4+4+4	DBVTL004GD	14750
6 way	MCCB	6+6+6	DBVTL006GD	16710
8 way	MCCB	8+8+8	DBVTL008GD	18850
12 way	MCCB	12+12+12	DBVTL012GD	25120
16 way	MCCB	16+16+16	DBVTL016GD	28315
<b>IP 54 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTL00454	25335
6 way	MCCB	6+6+6	DBVTL00654	28630
8 way	MCCB	8+8+8	DBVTL00854	31000
12 way	MCCB	12+12+12	DBVTL01254	39815
16 way	MCCB	16+16+16	DBVTL01654	46805

\* 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

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	14150
6 way	MCCB	6+6+6	DBVTH006SD	14850
8 way	MCCB	8+8+8	DBVTH008SD	16325
12 way	MCCB	12+12+12	DBVTH012SD	23060
16 way	MCCB	16+16+16	DBVTH016SD	27785
<b>IP 43 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTH004DD	15515
6 way	MCCB	6+6+6	DBVTH006DD	17625
8 way	MCCB	8+8+8	DBVTH008DD	19385
12 way	MCCB	12+12+12	DBVTH012DD	24585
16 way	MCCB	16+16+16	DBVTH016DD	31530
<b>IP 54 - Metal Door</b>				
4 way	MCCB	4+4+4	DBVTH00454	31650
6 way	MCCB	6+6+6	DBVTH00654	34560
8 way	MCCB	8+8+8	DBVTH00854	35745
12 way	MCCB	12+12+12	DBVTH01254	41850
16 way	MCCB	16+16+16	DBVTH01654	47580

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

## 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	1665
20 A, 2 Pin + SC <sup>^</sup>	P + N	1	DBMPS120SD	1790
20 A, 2 Pin + SC <sup>^</sup>	P + N	2	DBMPS220SD	1945
20 A, 3 Pin + SC <sup>^</sup>	3P	3	DBMPS320SD	3295
32 A, 3 Pin + SC <sup>^</sup>	3P	3	DBMPS332SD	3895
32 A, 3 Pin + SC <sup>^</sup>	3P	4	DBMPS432SD	4145
63 A, 5 Pin + SC <sup>^</sup>	3P+N+E	4	DBMPS463SD	14045
<b>Plastic Plug &amp; Sockets</b>				
16 A, 3 Pin	P+N+E	2	DBPPS316SD	2725
32 A, 3 Pin	P+N+E	4	DBPPS332SD	2945
32 A, 5 Pin	3P+N+E	8	DBPPS532SD	4915
63 A, 5 Pin	3P+N+E	8	DBPPS563SD	12425

## Metal Plug [8536]



Description	No. of Pins	Cat. Nos.	M.R.P. (₹) Per Unit
10 A, 2 Pin + SC <sup>^</sup>	P + N	MPS210P	165
20 A, 2 Pin + SC <sup>^</sup>	P + N	MPS220P	170
20 A, 3 Pin + SC <sup>^</sup>	3P	MPS320P	230
32 A, 3 Pin + SC <sup>^</sup>	3P	MPS332P	430

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	165
20 A, 2 Pin + SC <sup>^</sup>	P + N	MPS220S	190
20 A, 3 Pin + SC <sup>^</sup>	3P	MPS320S	255
32 A, 3 Pin + SC <sup>^</sup>	3P	MPS332S	430

<sup>^</sup> SC-Scraping Earth

Note: Standard pack quantity - 20 nos.

# 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	670
3 way	3	DBENC003SD	670
4 way	4	DBENC004SD	670
6 way	6	DBENC006SD	1000



# 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	DBSPN006DDTV	3715
	8 way	2	6	DBSPN008DDTV	3995
	12 way	2	10	DBSPN012DDTV	4940
	16 way	2	14	DBSPN016DDTV	5700
	18 way	2	16	DBSPN018DDTV	7000
TPN	4 way	8	4+4+4	DBTPN004DDTV	7240
	6 way	8	6+6+6	DBTPN006DDTV	8360
	8 way	8	8+8+8	DBTPN008DDTV	9920

# 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	DBSPN004CB	730
CEB-SPN Double Door, 6 way	DBSPN006CB	780
CEB-SPN Double Door, 8 way	DBSPN008CB	875
CEB-SPN Double Door, 12 way	DBSPN012CB	975
CEB-SPN Double Door, 16 way	DBSPN016CB	1375
CEB-SPN Double Door, 18 way	DBSPN018CB	1420
<b>CEB for TPN DBs</b>		
CEB-TPN Double Door, 4 way	DBTPN004CB	1040
CEB-TPN Double Door, 6 way	DBTPN006CB	1385
CEB-TPN Double Door, 8 way	DBTPN008CB	1900
CEB-TPN Double Door, 12 way	DBTPN012CB	2840
CEB-TPN Double Door, 16 way	DBTPN016CB	2870
CEB-TPE Double Door, 4 way	DBTPE004CB	1000
CEB-TPE Double Door, 6 way	DBTPE006CB	1340
<b>CEB for Horizontal PPI DBs</b>		
CEB-Horz. PPI Double Door, 4 way	DBHPI004CB	1460
CEB-Horz. PPI Double Door, 6 way	DBHPI006CB	1905
CEB-Horz. PPI Double Door, 8 way	DBHPI008CB	2290
CEB-Horz. PPI Double Door, 12 way	DBHPI012CB	2865
CEB-Horz. PPI Double Door, 16 way	DBHPI016CB	3120
<b>CEB for Tier PPI DBs</b>		
CEB-Tier PPI Double Door, 6 way	DBTPI006CB	1330
CEB-Tier PPI Double Door, 8 way	DBTPI008CB	1390
CEB-Tier PPI Double Door, 10 way	DBTPI010CB	1685
CEB-Tier PPI Double Door, 12 way	DBTPI012CB	2065
CEB-Tier PPI Double Door, 16 way	DBTPI016CB	2195
CEB-Tier PPI Double Door, 12 way MCCB incomer	DBTPL012CB	2200

Description	Cat. Nos.	M.R.P. (₹) Per Unit
<b>CEB for VTPN DBs</b>		
CEB-VTPN Double Door, Modular Incomer	DBVTMXXCB	975
CEB-VTPN Double Door, MCCB Incomer	DBVTXXXCB	3480
<b>CEB for FLEXI DBs</b>		
CEB for Flexi DBs with 14 Modules per Row	DBROWX14CB	970
CEB for Flexi DBs with 16 Modules per Row	DBROWX16CB	1180
<b>CEB for Phase Segregated DBs</b>		
CEB-PSG Double Door, 4 way	DBPSG004CB	2535
CEB-PSG Double Door, 6 way	DBPSG006CB	3020
CEB-PSG Double Door, 8 way	DBPSG008CB	3350
CEB-PSG Double Door, 12 way	DBPSG012CB	3720
<b>CEB for Phase Selector DBs</b>		
CEB-Phase Selector Double Door, 4 way	DBPSR004CB	1060
CEB-Phase Selector Double Door, 6 way	DBPSR006CB	1195
CEB-Phase Selector Double Door, 8 way	DBPSR008CB	1940
CEB-Phase Selector Double Door, 10 way	DBPSR010CB	2235
CEB-Phase Selector Double Door, 12 way	DBPSR012CB	2420

# Selection as per Type 2 Co-ordination

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



Access E&A's Knowledge Portal from [www.lntebg.com/KP](http://www.lntebg.com/KP)



L&T Electrical & Automation,  
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  
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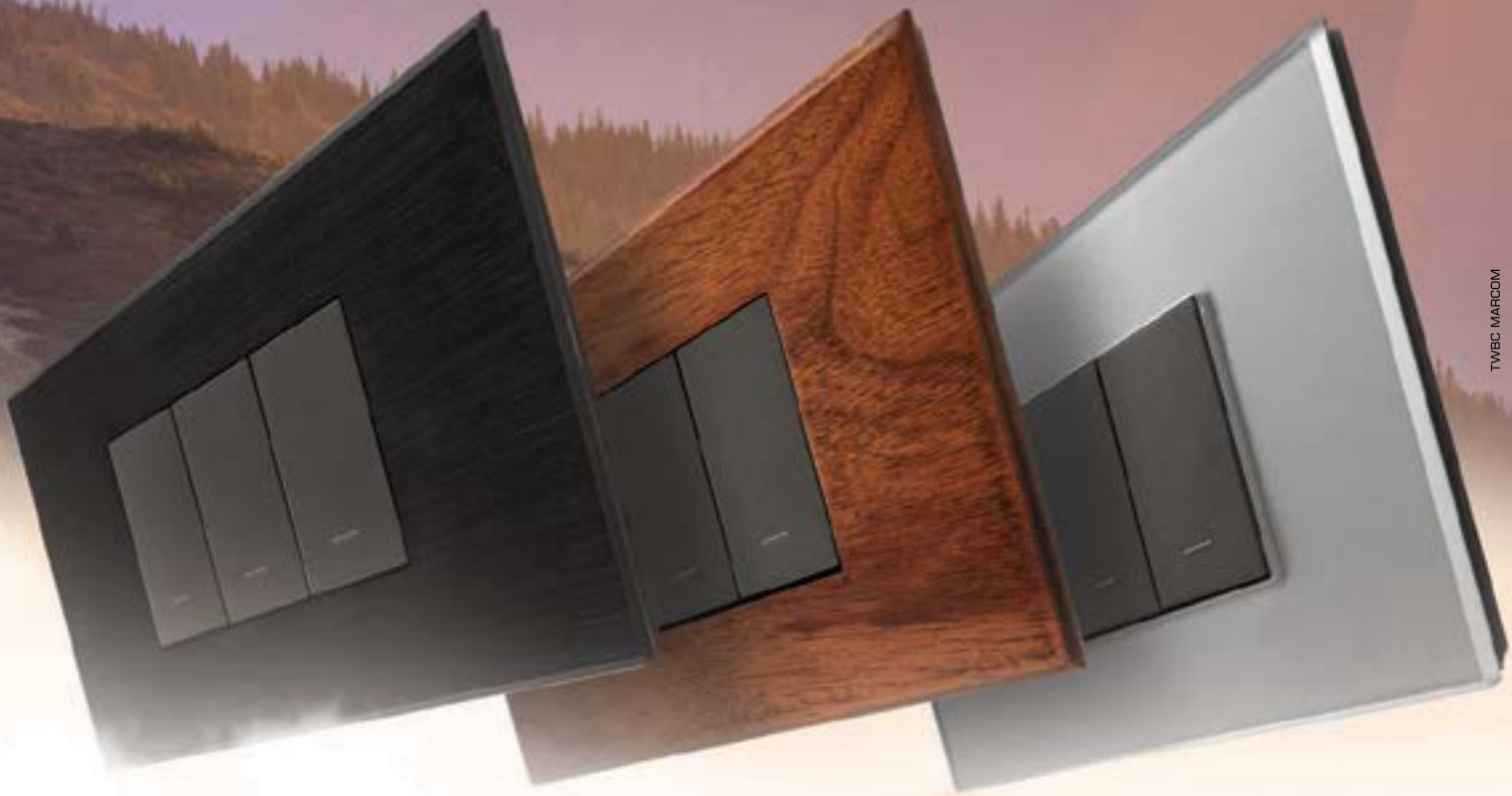
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# Discontinued Products/Suggested Alternate Products

Product Group	Discontinued Products	Suggested Alternate Products
MCCB	DTH800 3P & Acc	 DN4-1250N 800A 3P & Acc
Soft Starters	EMX3	EMX4

## 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.

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\* Proof of purchase to be retained to avail warranty

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