



With effect from 1st March 2015

Low Voltage Products Price list

ABB low voltage products

ABB is a global leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. ABB in India serves customers in process, manufacturing and consumer industries, utilities, the oil & gas sector and infrastructure markets through a wide manufacturing and marketing network.

ABB, a market leader in low voltage products and applications offers the widest range of high quality products and systems, backed by in-depth application know-how. In putting together its portfolio, ABB has taken care to address not only the core technologies but also systems and services that support customers throughout the life cycle of the product.

ABB's product range serves the diverse needs of customers, offering value for money and high levels of quality and reliability. These products are backed by the technological expertise of ABB's centres of excellence across the globe, each of which excel in a specific range of low voltage products.

ABB's low voltage products offering in India are designed, manufactured and tested in-house in conformance with requirements of the ISO 9000 series. These products conform to the latest IEC standards, EN specifications, national standards such as IS, BS, VDE, etc., in addition to the "CE" mark.

Low Voltage Products

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Low Voltage Products

Breakers and Switches

Breakers and Switches

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ABB's comprehensive range of breakers and switches

The range of ABB breakers and switches ranks amongst the most extensive on the market with a full range of innovative solutions for various applications, helping to optimise resources, reduce energy costs, boost productivity.

- Moulded case circuit breakers
- Air circuit breakers
- HRC fuse & Fuse base
- Switch disconnecter fuse

- Switch disconnectors
- Changeover switches - Manual & Motorized
- Auto transfer switches
- Cam switches
- Cable distribution cabinet - Kabeldon
- Fuse gear - Easyline and Inline (Fuse switch disconnecter)
- Switch disconnecter for DC application
- Photovoltaic MCCBs

1



ArTu. Born certified.

Fully checked and certified (IEC 60439-1 and IEC 61439-1 and 2 Standard) by an external independent organisation (AcaeLovag), the ArTu switchgear is a synonym of safety and quality. The certification is the fruit of severe tests carried out on the whole configuration, consisting of metalwork structures, circuit-breakers and busbar system.

The ArTu K series switchgear is ideal for primary distribution switchgear (PowerCenter type) upto 6300A with air and moulded-case circuit-breakers and any internal segregations up to Form 4, and for floor-mounted secondary distribution switchgear with moulded-case and modular circuit-breakers. The switchgear have been tested for Internal Arc and Seismic.



Emax - Low voltage air circuit breakers

- CT (Rogowski coil) range of 400 - 6300A (E1,E2,E3,E4 and E6) with breaking capacity range of 42-150KA
- Configured breakers are now available in E1, E2 and E3 frames
- SACE Emax circuit-breakers and their accessories conform to the international IEC 60947, EN 60947 CEI EN 60947 and IEC 61000 standards and comply with following EC directives "Low Voltage Directive" (LVD) no 73/23 EEC
- "Electromagnetic Compatibility Directive" (EMC) nr. 89/336 EEC
- Complete range of common accessories
- Double insulation
- Same height and depth for the whole range
- Protection releases provide complete set of standard protection function, advanced protection functions, Measurement functions
- Optional modules (measurements, signalling, communication, wireless com) to upgrade the protection releases
- Neutral protection from OFF to 200%
- Interchangeability of releases
- Low voltage switch disconnectors and automatic circuit breakers for direct current applications is available up to 5000A, 1000VDC

Note : Please contact the nearest sales office for the prices



Faults: no problem



Extremely simple



Completely new protection releases



Modularity

Emax - Low voltage air circuit breakers

1

Configured breakers*		Ordering code for Emax - 3 pole		
		PR121 LI	PR121 LSIG	PR122 LSIG
E1 - Withdrawable fixed part - WFP - HR-HR		1SDA059666R1		
E1 - 50KA -Withdrawable moving part - WMP	800 A Manual	1SDA055712R1	1SDA055714R1	1SDA055717R1
	1000 A Manual	1SDA059214R1	1SDA059222R1	1SDA059234R1
	1250 A Manual	1SDA055744R1	1SDA055746R1	1SDA055749R1
	1600 A Manual	1SDA055776R1	1SDA055778R1	1SDA055781R1

Configured breakers*		Ordering code for Emax - 4 pole		
		PR121 LI	PR121 LSIG	PR122 LSIG
E1 - Withdrawable Fixed Part - WFP - HR-HR		1SDA059762R1		
E1 - 50KA -Withdrawable moving part - WMP	800 A Manual	1SDA055720R1	1SDA055722R1	1SDA055725R1
	1000 A Manual	1SDA059216R1	1SDA059224R1	1SDA059236R1
	1250 A Manual	1SDA055752R1	1SDA055754R1	1SDA055757R1
	1600 A Manual	1SDA055784R1	1SDA055786R1	1SDA055789R1

Configured breakers*		Ordering code for Emax - 3 Pole		
		PR121 LI	PR121 LSIG	PR122 LSIG
E2 - Withdrawable fixed part - WFP-HR-HR		1SDA059667R1		
E2 - 65KA -Withdrawable moving part - WMP	2000 A Manual	1SDA055936R1	1SDA055938R1	1SDA055941R1

Configured breakers*		Ordering code for Emax - 4 Pole		
		PR121 LI	PR121 LSIG	PR122 LSIG
E2S - Withdrawable fixed part - WFP-HR-HR		1SDA059763R1		
E2S - 65KA -Withdrawable moving part - WMP	2000 A Manual	1SDA055944R1	1SDA055946R1	1SDA055949R1

Configured breakers*		Ordering code for Emax - 3 Pole		
		PR121 LI	PR121 LSIG	PR122 LSIG
E3 - Withdrawable fixed part - WFP - HR-HR		1SDA059669R1		
E3 - 65KA -Withdrawable moving part - WMP	2500 A Manual	1SDA056128R1	1SDA056130R1	1SDA056133R1
	3200 A Manual	1SDA056160R1	1SDA056162R1	1SDA056165R1

Configured Breakers*		Ordering code for Emax - 4 Pole		
		PR121 LI	PR121 LSIG	PR122 LSIG
E3 - Withdrawable fixed part - WFP - HR-HR		1SDA059765R1		
E3 - 65KA -Withdrawable moving part - WMP	2500 A Manual	1SDA056136R1	1SDA056138R1	1SDA056141R1
	3200 A Manual	1SDA056168R1	1SDA056170R1	1SDA056173R1

* All the configured breaker will have accessories fitted from the factory

- Note:
1. Withdrawable fixed parts (WFP) and withdrawable moving parts (WMP) are to be ordered together for a draw out complete breaker
 2. To convert the breaker from manual operated (MDO or MF) to electrical operated (EDO or EF), please order MDO/EDO conversion kit which comprises of closing coil, opening coil and motor operator. Suitable operating voltage for the conversion kit has to be mentioned.
 3. For other current rating and breaking capacity ACB requirement, please contact our nearest sales office
 4. For frame E4 configure breaker will be available from April 2015, please contact our nearest sales office

Tmax moulded case circuit breakers

Tmax guarantee for reliable performance with smaller foot prints, easy installation and increased safety with double insulation.

The Tmax series are particularly suitable for secondary distribution in AC/DC and provides solution for every application

Scope:

Tmax series is offered in seven frame sizes with application in industrial, commercial and residential purposes. Available for both AC and DC networks of low voltage application. Tmax is suitable applications in

- Power distribution
- Motor protection application
- Generator application

Device range:

To meet different requirements, Tmax series is available in the following ranges:

- Automatic circuit breakers for AC & DC
- Automatic circuit breakers for advanced zone selectivity
- Automatic circuit breakers for motor protection

- Switch disconnectors
- Automatic circuit breakers for applications up to 1,150 V for AC and 1,000 V for DC

Available versions are 3P & 4P in fixed (T1 to T7), plug-in(T2 to T5) and withdrawable(T4 to T7).

Tmax circuit breakers are offered with standardized accessories providing flexibility to customers.

Tmax range is available in both thermo magnetic and electronic protection releases

Specific features:

Tmax is one of best circuit breaker in the industry when performance/size ratio is compared. The specially designed contact system and arc chutes guarantee let-through energy is limited in safe guarding downstream connected equipment.

Tmax circuit breakers offered in 7 frame sizes provides versatile functionality and flexibility to customers in selecting optimal rating based on performance requirement.



Tmax power distribution circuit breakers

1

Type	I _n (40° C)[A]	U _e [V]		Category	Release	I _{cu} (380 - 415 V AC) [kA]										
		AC	DC			16	25	36	50	70	85	100	120	150	200	
T1	160	690	500	A	TMD	B	C	N								
T2	160	690	500	A	MA (100 A) TMD MF (12,5 A) PR221DS			N	S	H	L					
T3	250	690	500	A	MA TMD TMG			N	S							
T4	250 320	690 1150	750 1000	A	MA (200 A) TMD (50 A) TMA (250 A) PR221DS PR222DS Ekip M PR223DS/EF			N	S	H		L		V		
T5	400 630	690 1150	750 1000	B (400 A) A (630 A)	TMA (500 A) TMG (500 A) PR221DS PR222DS Ekip M PR223DS/EF			N	S	H		L		V		
T6	630 800 1000	690 1150	750 1000	B (630A - 800 A) A (1000 A)	TMA (800 A) PR221DS PR222DS Ekip M PR223DS/EF			N	S	H		L		V		
T7	800 1000 1250 1600	690		B	PR231/P PR232/P PR331/P PR332/P				S	H		L		V		

Trip Units

Thermal magnetic trip units

- MA - Magnetic only trip unit with adjustable magnetic thresholds for motor protection
- TMF - Fixed thermal and fixed magnetic for power distribution
- TMD - Adjustable thermal (70-100%of I_n) and fixed magnetic (10 x I_n) for power distribution
- TMA - Adjustable thermal (70-100% of I_n) and adjustable magnetic (5-10 of I_n) for power distribution
- TMG - Adjustable thermal (70-100% of I_n) and low fixed magnetic (3 x I_n) for generator protection

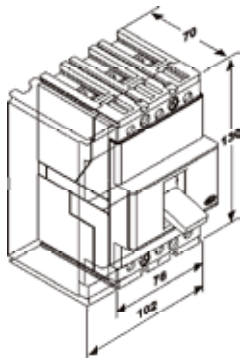
Microprocessor based electronic trip units

PR221	L = 0.40 - 1 of I _n	PR222	L = 0.4 - 1 of I _n	PR231	L = 0.4 - 1 of I _n	PR331	L = 0.4 - 1 of I _n
	S = 1 - 10 of I _n		S = 0.6 - 10 of I _n		S = 1 - 10 of I _n		S = 0.6 - 10 of I _n
	I = 1 - 10 of I _n		I = 1.5 - 12 of I _n		I = 1 - 12 of I _n		I = 1.5 - 15 of I _n
	G = 0.2 - 1 of I _n		G = 0.2 - 1 of I _n		G = 0.2 - 1 of I _n		G = 0.2 - 1 of I _n

PR 223 EF Early fault detection and prevention from T4 - T7. Details on request

Tmax power distribution circuit breakers

T1



Breaking Capacity at 415VAC

	Icu	Ics(Icu)
B	16KA	100%
C	25KA	100%
N	36KA	75%



TMD

In (A)	Poles	
16	3	
20		
25		
32		
40		
50		
63		
80		
100		
125		
160		
16		4
20		
25		
32		
40		
50		
63		
80		
100		
125		
160		

T1B 160 F FC Cu
Icu = 16KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA050870R1	6,110
1SDA050871R1	6,110
1SDA050872R1 ■	6,110
1SDA050873R1 ■	6,110
1SDA050874R1 ■	6,110
1SDA050875R1 ■	6,110
1SDA050876R1 ■	6,110
1SDA050877R1 ■	6,110
1SDA050878R1 ■	6,110
1SDA050879R1 ■	8,540
1SDA050880R1 ■	9,940
1SDA050881R1	8,430
1SDA050882R1	8,430
1SDA050883R1	8,430
1SDA050884R1	8,430
1SDA050885R1	8,430
1SDA050886R1	8,430
1SDA050887R1 ■	8,430
1SDA050888R1	8,430
1SDA050889R1 ■	8,430
1SDA050890R1 ■	10,700
1SDA050936R1 ■	14,370

T1C 160 F FC Cu
Icu = 25KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
-	-
-	-
1SDA050894R1	6,430
1SDA050895R1 ■	6,430
1SDA050896R1 ■	6,430
1SDA050897R1 ■	6,430
1SDA050898R1 ■	6,430
1SDA050899R1 ■	6,430
1SDA050900R1 ■	6,430
1SDA050901R1 ■	9,940
1SDA050902R1 ■	13,230
-	-
-	-
1SDA050905R1	9,350
1SDA050906R1	9,350
1SDA050907R1	9,350
1SDA050908R1	9,350
1SDA050909R1 ■	9,350
1SDA050910R1	9,350
1SDA050911R1 ■	9,350
1SDA050912R1 ■	11,830
1SDA050937R1 ■	15,560

T1N 160 F FC Cu
Icu = 36KA, Ics = 75%(Icu)

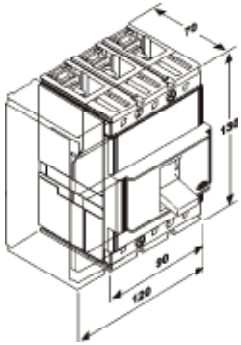
Ordering Code	M.R.P.(₹)
-	-
-	-
-	-
1SDA050917R1 ■	8,100
1SDA050918R1	8,100
1SDA050919R1	8,100
1SDA050920R1 ■	8,100
1SDA050921R1	8,100
1SDA050922R1 ■	8,100
1SDA050923R1 ■	10,700
1SDA050924R1 ■	14,040
-	-
-	-
-	-
1SDA050928R1	10,210
1SDA050929R1	10,210
1SDA050930R1	10,210
1SDA050931R1 ■	10,210
1SDA050932R1	10,210
1SDA050933R1 ■	10,210
1SDA050934R1 ■	12,960
1SDA050938R1 ■	17,010

■ Stock items

Tmax power distribution circuit breakers

T2

1



Breaking Capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%
H	70KA	100%



TMD

In (A)	Poles	T2N 160 F F Icu = 36KA, Ics = 100%(Icu)		T2S 160 F F Icu = 50KA, Ics = 100%(Icu)		T2H 160 F F Icu = 70KA, Ics = 100%(Icu)	
		Ordering Code	M.R.P.(₹)	Ordering Code	M.R.P.(₹)	Ordering Code	M.R.P.(₹)
1.6	3	1SDA050940R1	10,010	1SDA050984R1	12,230	1SDA051028R1	16,410
2		1SDA050941R1	10,010	1SDA050985R1	12,230	1SDA051029R1	16,410
2.5		1SDA050942R1	10,010	1SDA050986R1	12,230	1SDA051030R1	16,410
3.2		1SDA050943R1	10,010	1SDA050987R1	12,230	1SDA051031R1	16,410
4		1SDA050944R1	10,010	1SDA050988R1	12,230	1SDA051032R1	16,410
5		1SDA050945R1	10,010	1SDA050989R1	12,230	1SDA051033R1	16,410
6.3		1SDA050946R1	10,010	1SDA050990R1	12,230	1SDA051034R1	16,410
8		1SDA050947R1	10,010	1SDA050991R1	12,230	1SDA051035R1	16,410
10		1SDA050948R1	10,010	1SDA050992R1	12,230	1SDA051036R1	16,410
12.5		1SDA050949R1	10,010	1SDA050993R1	12,230	1SDA051037R1	16,410
16		1SDA050950R1	10,010	1SDA050994R1	11,610	1SDA051038R1	16,040
20		1SDA050951R1	9,290	1SDA050995R1	11,610	1SDA051039R1	16,040
25		1SDA050952R1 ■	9,290	1SDA050996R1 ■	11,610	1SDA051040R1	16,040
32		1SDA050953R1 ■	9,290	1SDA050997R1 ■	11,610	1SDA051041R1	16,040
40		1SDA050954R1	9,290	1SDA050998R1	11,610	1SDA051042R1	16,040
50		1SDA050955R1	9,290	1SDA050999R1	11,610	1SDA051043R1	16,040
63		1SDA050956R1 ■	9,290	1SDA051000R1 ■	11,610	1SDA051044R1	16,040
80		1SDA050957R1 ■	9,290	1SDA051001R1	11,610	1SDA051045R1	16,040
100		1SDA050958R1 ■	9,290	1SDA051002R1 ■	11,610	1SDA051046R1	16,040
125	1SDA050959R1 ■	10,530	1SDA051003R1 ■	14,760	1SDA051047R1	21,360	
160	1SDA050960R1 ■	14,140	1SDA051004R1 ■	18,420	1SDA051048R1	25,230	
1.6	4	1SDA050962R1	12,800	1SDA051006R1	15,790	1SDA051050R1	20,330
2		1SDA050963R1	12,800	1SDA051007R1	15,790	1SDA051051R1	20,330
2.5		1SDA050964R1	12,800	1SDA051008R1	15,790	1SDA051052R1	20,330
3.2		1SDA050965R1	12,800	1SDA051009R1	15,790	1SDA051053R1	20,330
4		1SDA050966R1	12,800	1SDA051010R1	15,790	1SDA051054R1	20,330
5		1SDA050967R1	12,800	1SDA051011R1	15,790	1SDA051055R1	20,330
6.3		1SDA050968R1	12,800	1SDA051012R1	15,790	1SDA051056R1	20,330
8		1SDA050969R1	12,800	1SDA051013R1	15,790	1SDA051057R1	20,330
10		1SDA050970R1	12,800	1SDA051014R1	15,790	1SDA051058R1	20,330
12.5		1SDA050971R1	12,800	1SDA051015R1	15,790	1SDA051059R1	20,330
16		1SDA050972R1	12,490	1SDA051016R1	15,430	1SDA051060R1	19,860
20		1SDA050973R1	12,490	1SDA051017R1	15,430	1SDA051061R1	19,860
25		1SDA050974R1	12,490	1SDA051018R1	15,430	1SDA051062R1	19,860
32		1SDA050975R1	12,490	1SDA051019R1	15,430	1SDA051063R1	19,860
40		1SDA050976R1	12,490	1SDA051020R1	15,430	1SDA051064R1	19,860
50		1SDA050977R1	12,490	1SDA051021R1	15,430	1SDA051065R1	19,860
63		1SDA050978R1 ■	12,490	1SDA051022R1 ■	15,430	1SDA051066R1	19,860
80		1SDA050979R1	12,490	1SDA051023R1	15,430	1SDA051067R1	19,860
100		1SDA050980R1 ■	12,490	1SDA051024R1 ■	15,430	1SDA051068R1	19,860
125	1SDA051115R1 ■	14,080	1SDA051117R1 ■	19,500	1SDA051119R1	24,400	
160	1SDA051116R1 ■	17,330	1SDA051118R1 ■	22,750	1SDA051120R1	30,430	

■ Stock items

Tmax power distribution circuit breakers

T2

PR221 DS-LS/I

In (A)	Poles
10	3
25	
63	
100	
160	
10	4
25	
63	
100	
160	

T2N 160 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA051123R1	16,300
1SDA051124R1	16,300
1SDA051125R1 ■	16,300
1SDA051126R1 ■	16,300
1SDA051127R1 ■	20,220
1SDA051128R1	21,150
1SDA051129R1	21,150
1SDA051130R1	21,150
1SDA051131R1	21,150
1SDA051613R1	27,860

T2S 160 F F Icu = 50KA, Ics = 100%(Icu)

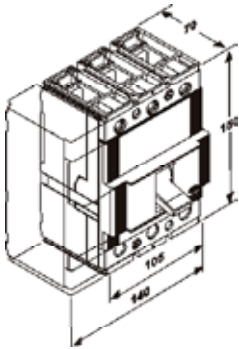
Ordering Code	M.R.P.(₹)
1SDA051133R1	19,600
1SDA051134R1	19,600
1SDA051135R1 ■	19,600
1SDA051136R1 ■	19,600
1SDA051137R1 ■	26,310
1SDA051138R1	24,760
1SDA051139R1	24,760
1SDA051140R1	24,760
1SDA051141R1	24,760
1SDA051614R1	34,560

T2H 160 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA051143R1	21,670
1SDA051144R1	21,670
1SDA051145R1	21,670
1SDA051146R1	21,670
1SDA051147R1	29,250
1SDA051148R1	27,670
1SDA051149R1	27,440
1SDA051150R1	27,440
1SDA051151R1	27,440
1SDA051615R1	37,400

1

T3



Breaking Capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	75%
S	50KA	50%



TMD

In (A)	Poles
200	3
250	
200	4
250	

T3N 250 F F Icu = 36KA, Ics = 75%(Icu)

Ordering Code	M.R.P.(₹)
1SDA051246R1 ■	17,200
1SDA051247R1 ■	19,800
1SDA051305R1 ■	22,000
1SDA051306R1 ■	25,000

T3S 250 F F Icu = 50KA, Ics = 50%(Icu)

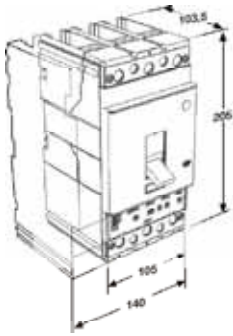
Ordering Code	M.R.P.(₹)
1SDA051268R1 ■	20,000
1SDA051269R1 ■	23,000
1SDA051309R1 ■	25,500
1SDA051310R1 ■	27,000

■ Stock items

Tmax power distribution circuit breakers

T4

1



Breaking Capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%
H	70KA	100%



T4 250 TMA

In (A)	Poles
80	3
100	
125	
160	
200	
250	4
80	
100	
125	
160	
200	
250	

T4N 250 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054174R1	19,800
1SDA054175R1	19,800
1SDA054176R1	20,300
1SDA054177R1	21,120
1SDA054178R1 ■	21,120
1SDA054179R1 ■	23,820
1SDA054183R1	25,900
1SDA054184R1	25,900
1SDA054271R1	25,900
1SDA054272R1	26,940
1SDA054273R1 ■	26,940
1SDA054274R1 ■	28,140

T4S 250 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054192R1	23,820
1SDA054193R1	23,820
1SDA054194R1	24,340
1SDA054195R1	24,340
1SDA054196R1 ■	24,340
1SDA054197R1 ■	26,000
1SDA054201R1	29,750
1SDA054202R1	29,750
1SDA054275R1	30,270
1SDA054276R1	30,270
1SDA054277R1 ■	30,270
1SDA054278R1 ■	31,310

T4H 250 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054210R1	28,400
1SDA054211R1	28,400
1SDA054212R1	28,760
1SDA054213R1	28,760
1SDA054214R1	28,760
1SDA054215R1	30,060
1SDA054219R1	36,770
1SDA054220R1	36,770
1SDA054279R1	37,290
1SDA054280R1	37,290
1SDA054281R1	37,860
1SDA054282R1	38,430

PR221 DS-LS/I

250	3
250	4

1SDA053999R1 ■	27,560
1SDA054011R1 ■	35,880

1SDA054023R1 ■	34,320
1SDA054035R1 ■	40,040

1SDA054047R1	35,880
1SDA054059R1	41,600

PR222DS/P-LSIG

100	3
160	
250	
100	4
160	
250	

1SDA054006R1 ■	39,520
1SDA054007R1 ■	39,520
1SDA054008R1 ■	39,520
1SDA054018R1	47,840
1SDA054019R1	47,840
1SDA054020R1 ■	47,840

1SDA054030R1 ■	41,080
1SDA054031R1 ■	41,080
1SDA054032R1 ■	41,080
1SDA054042R1	50,440
1SDA054043R1	50,440
1SDA054044R1 ■	50,440

1SDA054054R1	49,920
1SDA054055R1	49,920
1SDA054056R1	49,920
1SDA054066R1	60,320
1SDA054067R1	60,320
1SDA054068R1	60,320

PR223DS

160	3
250	
160	4
250	

1SDA059491R1	Upon Req.
1SDA059493R1	Upon Req.
1SDA059492R1	Upon Req.
1SDA059494R1	Upon Req.

1SDA059499R1	Upon Req.
1SDA059501R1	Upon Req.
1SDA059500R1	Upon Req.
1SDA059502R1	Upon Req.

1SDA059507R1	Upon Req.
1SDA059509R1	Upon Req.
1SDA059508R1	Upon Req.
1SDA059510R1	Upon Req.

T4 320 PR221 DS-LS/I

320	3
320	4

T4N 320 F F Icu = 36KA, Ics = 100%(Icu)

1SDA054117R1 ■	31,720
1SDA054121R1	39,000

T4S 320 F F Icu = 50KA, Ics = 100%(Icu)

1SDA054125R1 ■	35,360
1SDA054129R1	44,720

T4H 320 F F Icu = 70KA, Ics = 100%(Icu)

1SDA054133R1	41,080
1SDA054137R1	51,480

■ Stock items

Tmax power distribution circuit breakers

T4

PR222DS/P-LSIG

In (A)	Poles
320	3
320	4

T4N 320 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054120R1 ■	46,800
1SDA054124R1	52,000

T4S 320 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054128R1 ■	47,840
1SDA054132R1	54,080

T4H 320 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054136R1	57,200
1SDA054140R1	64,480

PR223DS

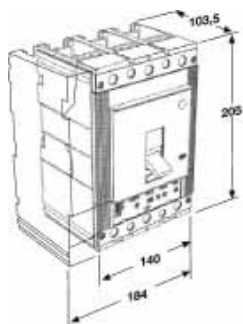
320	3
320	4

1SDA059495R1	Upon Req.
1SDA059496R1	Upon Req.

1SDA059503R1	Upon Req.
1SDA059504R1	Upon Req.

1SDA059511R1	Upon Req.
1SDA059512R1	Upon Req.

T5



Breaking capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%
H	70KA	100%



T5 400 TMA

In (A)	Poles
320	3
400	
320	4
400	

T5N 400 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054436R1 ■	28,680
1SDA054437R1 ■	28,680
1SDA054477R1	35,740
1SDA054478R1	35,740

T5S 400 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054440R1 ■	29,800
1SDA054441R1 ■	29,800
1SDA054479R1	37,080
1SDA054480R1	37,080

T5H 400 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054444R1	34,410
1SDA054445R1	34,410
1SDA054481R1	39,920
1SDA054482R1	39,920

PR221 DS-LS/I

400	3
400	4

1SDA054317R1 ■	33,870
1SDA054325R1 ■	42,060

1SDA054333R1 ■	37,130
1SDA054341R1 ■	48,050

1SDA054349R1	44,940
1SDA054357R1	56,180

PR222DS/P-LSIG

400	3
400	4

1SDA054323R1 ■	50,290
1SDA054331R1	58,850

1SDA054339R1 ■	52,430
1SDA054347R1	58,850

1SDA054355R1	65,170
1SDA054363R1	73,030

PR223DS

400	3
400	4

1SDA059531R1	Upon Req.
1SDA059532R1	Upon Req.

1SDA059537R1	Upon Req.
1SDA059538R1	Upon Req.

1SDA059543R1	Upon Req.
1SDA059544R1	Upon Req.

■ Stock items

Tmax power distribution circuit breakers

1

T5 630 TMA

In (A)	Poles
500	3
500	4

T5N 630 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054456R1 ■	32,050
1SDA054487R1	41,040

T5S 630 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054461R1 ■	34,830
1SDA054489R1	44,940

T5H 630 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054465R1	44,410
1SDA054491R1	53,930

PR221 DS-LS/I

630	3
630	4

1SDA054396R1 ■	36,060
1SDA054400R1	49,120

1SDA054404R1 ■	40,400
1SDA054408R1	53,500

1SDA054412R1	47,830
1SDA054416R1	62,390

PR222DS/P-LSIG

630	3
630	4

1SDA054399R1 ■	53,500
1SDA054403R1	62,060

1SDA054407R1 ■	55,640
1SDA054411R1	68,480

1SDA054415R1	67,410
1SDA054419R1	92,130

PR223DS

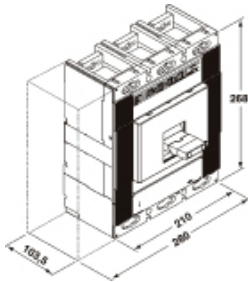
630	3
630	4

1SDA059533R1	Upon Req.
1SDA059534R1	Upon Req.

1SDA059539R1	Upon Req.
1SDA059540R1	Upon Req.

1SDA059545R1	Upon Req.
1SDA059546R1	Upon Req.

T6



Breaking Capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%
H	70KA	100%



T6 630 TMA

In (A)	Poles
630	3
630	4

T6N 630 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060202R1 ■	37,620
1SDA060210R1	45,100

T6S 630 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060204R1 ■	38,720
1SDA060211R1	49,720

T6H 630 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060206R1	46,120
1SDA060212R1	57,360

T6 800 TMA

In (A)	Poles
800	3
800	4

T6N 800 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060214R1 ■	48,580
1SDA060222R1	54,900

T6S 800 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060216R1 ■	50,940
1SDA060223R1	60,140

T6H 800 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060218R1	52,010
1SDA060224R1	62,490

■ Stock items

Tmax power distribution circuit breakers

PR221 DS-LS/I

In (A)	Poles
800	3
800	4

PR222DS/P-LSIG

800	3
800	4

PR223DS

800	3
800	4

T6 1000

PR221 DS-LS/I

In (A)	Poles
1000	3
1000	4

PR222DS/P-LSIG

1000	3
1000	4

PR223DS

1000	3
1000	4

Note: Extended front (EF) terminals are supplied as standard in T6 1000A MCCB

T6N 800 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060268R1 ■	58,320
1SDA060273R1	66,560

T6S 800 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060278R1 ■	65,380
1SDA060283R1	81,220

T6H 800 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060289R1	80,040
1SDA060294R1	99,090

1SDA060271R1 ■	86,570
1SDA060276R1	1,00,050

1SDA060281R1 ■	90,630
1SDA060286R1	1,02,400

1SDA060292R1	1,00,910
1SDA060297R1	1,18,770

1SDA060272R1	Upon Req.
1SDA060277R1	Upon Req.

1SDA060282R1	Upon Req.
1SDA060287R1	Upon Req.

1SDA060293R1	Upon Req.
1SDA060298R1	Upon Req.

T6N 1000 E F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060537R1	89,460
1SDA060542R1	1,29,470

T6S 1000 E F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060547R1	96,520
1SDA060556R1	1,35,360

T6H 1000 E F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060561R1	1,15,350
1SDA060566R1	1,64,780

1SDA060540R1	1,17,700
1SDA060545R1	1,56,550

1SDA060554R1	1,29,470
1SDA060559R1	1,64,780

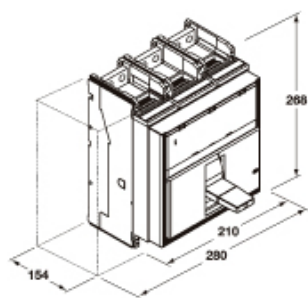
1SDA060564R1	1,58,900
1SDA060569R1	2,00,090

1SDA060541R1	Upon Req.
1SDA060546R1	Upon Req.

1SDA060555R1	Upon Req.
1SDA060560R1	Upon Req.

1SDA060565R1	Upon Req.
1SDA060573R1	Upon Req.

T7



Breaking Capacity at 415VAC

	Icu	Ics(Icu)
S	50KA	100%
H	70KA	100%



T7 1250

PR231/P LS/I

In (A)	Poles
1250	3
1250	4

PR331/P LSIG

1250	3
1250	4

T7S 1250 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062866R1	1,32,500
1SDA062874R1	1,66,420

1SDA062868R1	1,70,350
1SDA062876R1	1,89,210

T7H 1250 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062898R1	1,74,270
1SDA062906R1	2,08,190

1SDA062900R1	1,98,120
1SDA062908R1	2,33,730

■ Stock items

Tmax power distribution circuit breakers

PR332/P LSIG

In (A)	Poles
1250	3
1250	4

T7S 1250 F F

Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062871R1	1,77,020
1SDA062879R1	2,02,040

T7H 1250 F F

Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062903R1	2,12,110
1SDA062911R1	2,46,030

T7 1600

PR231/P LS/I

In (A)	Poles
1600	3
1600	4

T7S 1600 F F

Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062994R1	1,52,540
1SDA063002R1	1,83,170

T7H 1600 F F

Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA063026R1	1,91,440
1SDA063034R1	2,30,980

PR331/P LSIG

1600	3
1600	4

1SDA062996R1	1,77,020
1SDA063004R1	2,08,190

1SDA063028R1	2,17,090
1SDA063036R1	2,52,710

PR332/P LSIG

1600	3
1600	4

1SDA062999R1	1,92,080
1SDA063007R1	2,21,010

1SDA063031R1	2,29,920
1SDA063039R1	2,70,300

Note : For further ratings on generator protection. Please contact our nearest sales office

Tmax power distribution circuit breakers

T7

T7 1250M PR231/P LS/I

In (A)	Poles
1250	3
1250	4

T7S 1250M F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062882R1	1,52,540
1SDA062889R1	170,100

T7H 1250M F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA062914R1	1,93,140
1SDA062922R1	2,32,140

PR331/P LSIG

1250	3
1250	4

1SDA062884R1	1,78,080
1SDA062892R1	2,07,020

1SDA062916R1	2,19,850
1SDA062924R1	2,57,690

PR332/P LSIG

1250	3
1250	4

1SDA062887R1	1,89,210
1SDA062895R1	2,19,850

1SDA062919R1	2,30,980
1SDA062927R1	2,71,580

Note : For Motorizable T7 M frame, please order along with above code, motor operator, shunt opening coil & shunt closing coil of required voltage.

T7 1600M PR231/P LS/I

In (A)	Poles
1600	3
1600	4

T7S 1600M F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA063010R1	1,69,180
1SDA063018R1	2,04,270

T7H 1600M F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA063042R1	2,15,930
1SDA063050R1	2,58,220

PR331/P LSIG

1600	3
1600	4

1SDA063012R1	1,94,300
1SDA063020R1	2,29,920

1SDA063044R1	2,39,880
1SDA063052R1	2,83,870

PR332/P LSIG

1600	3
1600	4

1SDA063015R1	2,07,020
1SDA063023R1	2,41,050

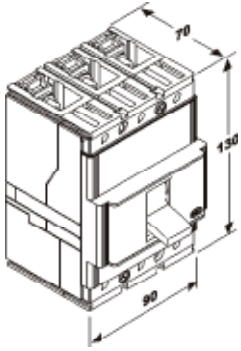
1SDA063047R1	25,2710
1SDA063055R1	29,6700

Note : For Motorizable T7 M frame, please order along with above code, motor operator, shunt opening coil & shunt closing coil of required voltage.

Tmax motor protection circuit breaker

T2

1



Breaking capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%
H	70KA	100%



T2 160 MF

In (A)	Poles
1	3
1.6	
2	
2.5	
3.2	
4	
5	
6.5	
8.5	
11	
12.5	

T2N 160 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA053110R1	12,380
1SDA053111R1	12,380
1SDA053112R1	12,380
1SDA0531131R1	12,380
1SDA053114R1	12,380
1SDA053115R1	12,380
1SDA053116R1	12,380
1SDA053117R1	12,380
1SDA053118R1	12,380
1SDA053119R1	12,380
1SDA053120R1	12,380

T2S 160 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA053121R1	13,410
1SDA053122R1	13,410
1SDA053123R1	13,410
1SDA053124R1	13,410
1SDA053125R1	13,410
1SDA053126R1	13,410
1SDA053127R1	13,410
1SDA053128R1	13,410
1SDA053129R1	13,410
1SDA053130R1	13,410
1SDA053131R1	13,410

T2H 160 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA053132R1	14,560
1SDA053133R1	14,450
1SDA053134R1	14,560
1SDA053135R1	14,560
1SDA053136R1	14,450
1SDA053137R1	14,450
1SDA053138R1	14,450
1SDA053139R1	14,450
1SDA053140R1	14,560
1SDA053141R1	14,450
1SDA053142R1	14,450

MA

In (A)	Poles
20	3
32	
52	
80	
100	

Ordering Code	M.R.P.(₹)
1SDA051207R1	12,380
1SDA051208R1	12,380
1SDA051209R1	12,380
1SDA051210R1	12,380
1SDA051211R1	12,380

Ordering Code	M.R.P.(₹)
1SDA051216R1	13,410
1SDA051217R1	13,410
1SDA051218R1	13,410
1SDA051219R1	13,410
1SDA051220R1	13,410

Ordering Code	M.R.P.(₹)
1SDA051224R1	14,450
1SDA051225R1	14,450
1SDA051226R1	14,450
1SDA051227R1	14,450
1SDA051228R1	14,450

PR221 DS-I

In (A)	Poles
10	3
25	
63	
100	
160	

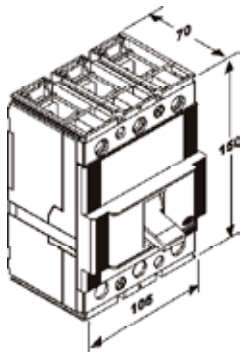
Ordering Code	M.R.P.(₹)
1SDA051163R1	16,300
1SDA051164R1	16,300
1SDA051165R1	16,300
1SDA051166R1	16,300
1SDA051168R1	20,220

Ordering Code	M.R.P.(₹)
1SDA051174R1	19,600
1SDA051175R1	19,600
1SDA051176R1	19,600
1SDA051177R1	19,600
1SDA051178R1	26,310

Ordering Code	M.R.P.(₹)
1SDA051184R1	20,630
1SDA051185R1	20,630
1SDA051186R1	20,630
1SDA051187R1	20,630
1SDA051188R1	27,860

Tmax motor protection circuit breaker

T3



Breaking capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	75%
S	50KA	50%



T3 250 MA

In (A)	Poles
100	3
125	
160	
200	

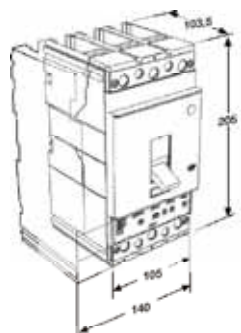
T3N 250 F F Icu = 36KA, Ics = 75%(Icu)

Ordering Code	M.R.P.(₹)
1SDA051315R1	14,010
1SDA051316R1	14,100
1SDA051317R1	15,050
1SDA051318R1	16,090

T3S 250 F F Icu = 50KA, Ics = 50%(Icu)

Ordering Code	M.R.P.(₹)
1SDA051320R1	14,570
1SDA051321R1	15,050
1SDA051322R1	15,610
1SDA051323R1	16,560

T4



Breaking capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%



T4 250 MA

In (A)	Poles
125	3
160	
200	

T4N 250 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054298R1	25,800
1SDA054299R1	25,800
1SDA054300R1	25,800

T4S 250 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054304R1	27,040
1SDA054305R1	28,080
1SDA054306R1	29,120

PR221 DS-I

In (A)	Poles
250	3
320	

T4N 250 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054002R1	30,890
1SDA054118R1	33,800

T4S 250 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054026R1	33,500
1SDA054126R1	36,500

T4H 250 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054050R1	40,200
1SDA054134R1	44,000

Ekip M-LRIU

In (A)	Poles
100	3
160	
200	

T4N 250 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054522R1	42,830
1SDA054523R1	44,520
1SDA054524R1	44,930

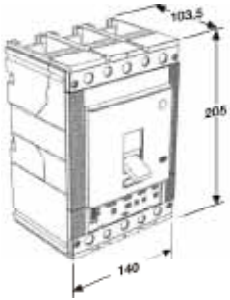
T4S 250 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054525R1	55,960
1SDA054526R1	57,100
1SDA054527R1	58,240

Tmax motor protection circuit breaker

T5

1



Breaking capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%



T5 400 PR221 DS-I

In (A)	Poles
400	3

T5N 400 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054319R1	33,870

T5S 400 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054335R1	37,130

T5H 400 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054351R1	44,940

Ekip M-LRIU

In (A)	Poles
320	3
400	3

T5N 400 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054551R1	54,570
1SDA054552R1	54,570

T5S 400 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054553R1	61,210
1SDA054554R1	61,210

T5 630 PR221 DS-I

In (A)	Poles
630	3

T5N 630 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054397R1	36,060

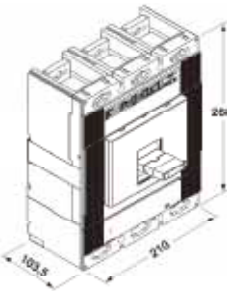
T5S 630 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054405R1	40,400

T5H 630 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA054413R1	47,830

T6



Breaking capacity at 415VAC

	Icu	Ics(Icu)
N	36KA	100%
S	50KA	100%
H	70KA	100%



T6 800 PR221 DS-I

In (A)	Poles
800	3

T6N 800 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060269R1	58,320

T6S 800 F F Icu = 50KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060279R1	65,380

T6H 800 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060290R1	80,040

Ekip M-LRIU

In (A)	Poles
800	3

Ordering Code	M.R.P.(₹)
1SDA060311R1	76,720

Ordering Code	M.R.P.(₹)
1SDA060312R1	83,890

Ordering Code	M.R.P.(₹)
1SDA060313R1	97,420

T6 1000 PR221 DS-I

In (A)	Poles
1000	3

T6N 1000 F F Icu = 36KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060538R1	89,460

T6S 1000 F F Icu = 50KA, Ics = 100%(Icu)

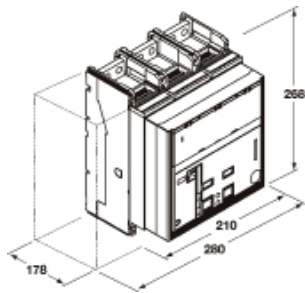
Ordering Code	M.R.P.(₹)
1SDA060548R1	96,520

T6H 1000 F F Icu = 70KA, Ics = 100%(Icu)

Ordering Code	M.R.P.(₹)
1SDA060562R1	1,11,820

Tmax motor protection circuit breaker

T7



Breaking Capacity at 415VAC

	Icu	Ics
S	50KA	100%
H	70KA	100%



T7 1250 PR231/P I

In (A)	Poles
1250	3
1250	4

T7S 1250 F F Icu = 50KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA062865R1	1,25,830
1SDA062873R1	1,63,670

T7H 1250 F F Icu = 70KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA062897R1	1,73,100
1SDA062905R1	2,07,020

T7 1600 PR231/P I

In (A)	Poles
1600	3
1600	4

T7S 1600 F F Icu = 50KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA062993R1	1,51,370
1SDA063001R1	1,81,480

T7H 1600 F F Icu = 70KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA063025R1	1,90,380
1SDA063033R1	2,28,220

T7 1250M PR231/P I

In (A)	Poles
1250	3
1250	4

T7S 1250M F F Icu = 50KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA062881R1	1,41,410
1SDA062889R1	1,80,310

T7H 1250M F F Icu = 70KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA062913R1	1,92,080
1SDA062921R1	2,30,980

T7 1600M PR231/P I

In (A)	Poles
1600	3
1600	4

T7S 1600M F F Icu = 50KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA063009R1	1,68,120
1SDA063017R1	2,02,040

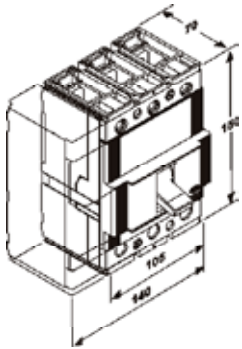
T7H 1600M F F Icu = 70KA, Ics = 100%

Ordering Code	M.R.P.(₹)
1SDA063041R1	2,14,870
1SDA063049R1	2,57,690

Tmax generator protection circuit breaker

T3

1



Breaking Capacity at 415VAC

	Icu	Ics
N	36KA	75%
S	50KA	50%



T3 TMG

In (A)	Poles
200	3
250	3
200	4
250	4

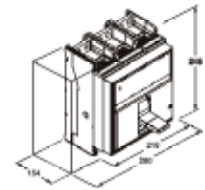
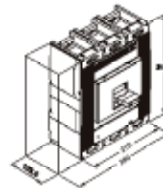
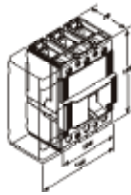
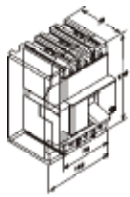
T3N 250 F F Icu = 36KA, Ics = 75%

Ordering Code	M.R.P.(₹)
1SDA055110R1	15,900
1SDA055111R1	18,450
1SDA055117R1	20,820
1SDA055118R1	23,650

T3S 250 F F Icu = 50KA, Ics = 50%

Ordering Code	M.R.P.(₹)
1SDA055124R1	18,920
1SDA055125R1	21,760
1SDA055131R1	24,130
1SDA055132R1	25,550

Tmax switch disconnecter



1

T1D - Fixed (F), I_{cn} (1s) = 2,2 kA

T1D 160 F FC Cu

Poles	In(A)	Ordering Code	M.R.P.(₹)
3	160	1SDA051325R1	7,890
4	160	1SDA051326R1	11,560

T3D - Fixed (F), I_{cn} (1s) = 3.6 kA

T3D 250 F F

Poles	In(A)	Ordering Code	M.R.P.(₹)
3	250	1SDA051327R1	17,400
4	250	1SDA051328R1	20,800

T4D- Fixed (F), I_{cn} (1s) = 3,6 kA

T4D 250 F F

Poles	In(A)	Ordering Code	M.R.P.(₹)
3	250	1SDA057172R1	19,870
4	250	1SDA057173R1	26,420

T4D 320 F F

In(A)	Ordering Code	M.R.P.(₹)
320	1SDA054597R1	22,160
320	1SDA054598R1	29,120

T5D- Fixed (F) , I_{cn} (1s) = 3,6 kA

T5D 400 F F

Poles	In(A)	Ordering Code	M.R.P.(₹)
3	400	1SDA054599R1	24,610
4	400	1SDA054600R1	31,250

T5D 500 F F

In(A)	Ordering Code	M.R.P.(₹)
500	1SDA054601R1	29,960
500	1SDA054602R1	38,200

T6D - Fixed (F), I_{cn} (1s) = 15 kA

T6D 630 F F

Poles	In(A)	Ordering Code	M.R.P.(₹)
3	630	1SDA060343R1	33,920
4	630	1SDA060344R1	40,770

T6D 800 F F

In(A)	Ordering Code	M.R.P.(₹)
800	1SDA060345R1	37,450
800	1SDA060346R1	61,210

T6D 1000 E F

In(A)	Ordering Code	M.R.P.(₹)
1000	1SDA060594R1	65,270
1000	1SDA060595R1	81,540

T7D- Fixed (F), I_{cn} (1s) = 20 kA

T7D 1000 F F

Poles	In(A)	Ordering Code	M.R.P.(₹)
3	1000	1SDA062032R1	74,100
4	1000	1SDA062033R1	94,450

T7D 1250 F F

In(A)	Ordering Code	M.R.P.(₹)
1250	1SDA062036R1	1,00,920
1250	1SDA062037R1	1,24,130

T7D 1600 F F

In(A)	Ordering Code	M.R.P.(₹)
1600	1SDA062040R1	1,05,160
1600	1SDA062041R1	1,29,430

T7D M - Fixed (F), I_{cn} (1s) = 20 kA

T7D 1000 M F F

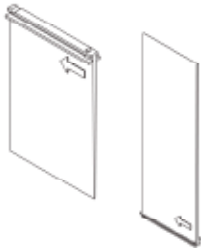
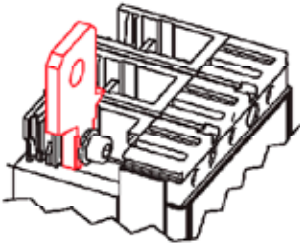
Poles	In(A)	Ordering Code	M.R.P.(₹)
3	1000	1SDA062034R1	91,480
4	1000	1SDA062035R1	1,15,760

T7D 1250 M F F

In(A)	Ordering Code	M.R.P.(₹)
1250	1SDA062038R1	1,05,160
1250	1SDA062039R1	1,29,430

T7D 1600 M F F

In(A)	Ordering Code	M.R.P.(₹)
1600	1SDA062042R1	1,15,760
1600	1SDA062043R1	1,44,270



Accessories for T-Max MCCBs

Extended Spreaded terminals - ES

Frame	Description	Ordering code	M.R.P.(₹)
T1	Kit EST1 6pcs	1SYN450201R0001 ■	800
	Kit EST1 8pcs	1SYN450207R0001 ■	900
T2	Kit EST2 6pcs	1SYN450202R0001 ■	1,200
	Kit EST2 8pcs	1SYN450208R0001 ■	1,420
T3	Kit EST3 6pcs	1SYN450203R0001 ■	1,350
	Kit EST3 8pcs	1SYN450209R0001 ■	1,700
T4	Kit EST4 6pcs	1SYN450204R0001 ■	1,630
	Kit EST4 8pcs	1SYN450210R0001	1,950
T5	Kit EST5 6pcs (for 400A)	1SYN450205R0001 ■	2,250
	Kit EST5 8pcs (for 400A)	1SYN450211R0001	2,820
	Kit EST5 6pcs (for 630A)	1SYN450206R0001 ■	2,250
	Kit EST5 8pcs (for 630A)	1SYN450212R0001	2,820

Note: Phase barrier supplied as standard with above spreaders

Seperators - PB

Frame	Description	Ordering code	M.R.P.(₹)
T1	PB100 4 pcs - Low T1	1SYN850205R0001 ■	580
	PB100 6 pcs - Low T1	1SYN850208R0001	680
T2-T3	PB100 4 pcs - Low T2-T3	1SYN850206R0001 ■	680
	PB100 6 pcs - Low T2-T3	1SYN850209R0001	950
T4-T5	PB100 4 pcs - Low T4, T5	1SYN850207R0001 ■	800
	PB100 6 pcs - Low T4, T5 - 400A	1SYN850210R0001	1,150

Note: For T5 630A please contact the nearest sales office

Rotary handle operating mechanism

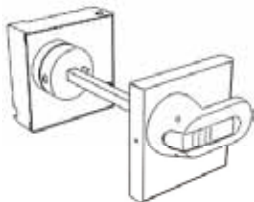
Direct - RHD

Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	RHD Normal T1-T2-T3	1SDA051381R1 ■	1,610
	RHD_EM Emergency T1-T2-T3	1SDA051382R1	1,930
T4-T5	RHD Normal for Fixed/Plug-in T4-T5	1SDA054926R1 ■	3,160
	RHD_EM Emergency for Fixed/Plug-in T4-T5	1SDA054927R1	3,500
	RHD Normal for Withdrawable T4-T5	1SDA054928R1	3,620
	RHD_EM Emergency for Withdrawable T4-T5	1SDA055234R1	4,070
T6	RHD Normal for Fixed T6	1SDA060405R1	4,330
	RHD Normal for Withdrawable T6	1SDA060407R1	5,620
	RHD_EM Emergency for Fixed T6	1SDA060406R1	5,620
	RHD_EM Emergency for Withdrawable T6	1SDA060408R1	6,210
T7	RHD Normal for Fixed/Plug-in T7	1SDA062120R1	5,620
	RHD_EM Emergency for Fixed/Withdrawable T7	1SDA062121R1	6,320



Transmitted - RHE

Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	RHE_S T1-T2-T3 250MM	1SDA070207R1 ■	1,690
	RHE_EM Emergency T1-T2-T3	1SDA051384R1	3,380
T4-T5	RHE Normal for Fixed/Plug-in T4-T5 250mm	1SDA070447R1 ■	2,950
	RHE_EM Emergency for Fixed/Plug-in T4-T5	1SDA054930R1	5,860
	RHE Normal for Withdrawable T4-T5	1SDA054933R1	5,300
	RHE_EM Emergency for Withdrawable T4-T5	1SDA054934R1	5,780
T6	RHE Normal for Fixed T6	1SDA060409R1 ■	5,640
	RHE Normal for Withdrawable T6	1SDA060411R1	6,750
	RHE_EM Emergency for Fixed T6	1SDA060410R1	7,280
	RHE_EM Emergency for Withdrawable T6	1SDA060412R1	6,750
T7	RHE Normal for Fixed/Plug-in T7	1SDA062122R1	6,830
	RHE_EM Emergency for Fixed/Withdrawable T7	1SDA062123R1	8,430



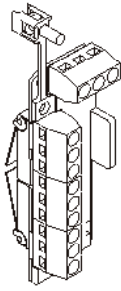
Cabled Contact in Electronic Version

Frame	Description	Ordering code	M.R.P.(₹)
T4-T5	AUX-E-C 1Q 1SY T4-T5	1SDA054916R1	4,820
T6	AUX-E-C 1Q 1SY T6	1SDA064161R1	5,620

■ Stock items



Tmax accessories



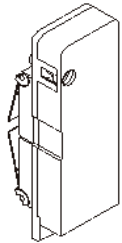
Electrical Signals

Auxiliary Contact - AUX

Frame	Description	Ordering code	M.R.P.(₹)
T1...T6(1)	AUX 1Q 1SY 250V AC/DC T1...T6 (1)	1SDA051368R1 ■	1,450
	AUX 3Q 1SY 250V AC/DC T1...T6 (1)	1SDA051369R1 ■	2,360
	AUX 3Q 1SY 24V DC T1...T6 (1)	1SDA054914R1	2,270
T4-T5	AUX-SA 1 S51 T4-T5	1SDA055050R1	1,450
T7M-X1	AUX 2Q 24V DC T7M-X1	1SDA062101R1	1,450
	AUX 2Q 400V AC T7M-X1	1SDA062102R1	1,450
T7M-X1	AUX SA T7M-X1 S51 24VDC	1SDA066100R1	Upon request
	AUX SA T7M-X1 S51 250VAC	1SDA063553R1	Upon request
T7	AUX 1Q + 1SY 24V DC T7	1SDA062103R1	2,270
	AUX 1Q + 1SY 400V AC T7	1SDA062104R1	2,270

Note (1): Cannot be used with T2 MCCB fitted with PR221DS trip unit

Note: For T7 TM in Withdrawable Version Sliding Contact Blocks for Fixed and moving Part are Necessary



Auxiliary Contact Cabled-Version - AUX - C

Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3 (1)	AUX-C 1Q 1SY 250 V AC/DC T1-T2-T3 (1)	1SDA051370R1	2,000
	AUX-C 3Q 1SY 250 V AC/DC T1-T2-T3 (1)	1SDA051371R1	3,750
	AUX-C 3Q 1SY T1-T2-T3 (1)	1SDA055361R1	3,160
T2	AUX-C 1Q 1SY 1S51 - PR221 T2	1SDA053704R1 ■	2,370
	AUX-C 2Q 1SY - PR221 T2	1SDA055504R1	2,730
T4-T5-T6	AUX-C 1Q 1SY 250V AC/DC C T4-T5-T6	1SDA054910R1	2,000
	AUX-C 1Q 1SY 400V AC C T4-T5-T6	1SDA054912R1	2,950
	AUX-C 2Q 400V AC C T4-T5-T6	1SDA054913R1	3,380
	AUX-C 3Q 1SY 24VDC C T4-T5-T6	1SDA054915R1	3,160
	AUX-C 3Q 1SY 250V AC/DC C T4-T5-T6	1SDA054911R1	3,750

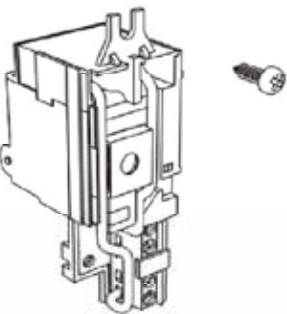
Opening Release

Shunt Opening Release - SOR

Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	SOR 12V DC T1-T2-T3	1SDA053000R1	1,980
	SOR 24...30V AC/DC T1-T2-T3	1SDA051333R1	1,910
	SOR 48...60V AC/DC T1-T2-T3	1SDA051334R1	1,910
	SOR 110...127V AC-110...125V DC T1-T2-T3	1SDA051335R1	1,910
	SOR 220...240V AC-220...250V DC T1-T2-T3	1SDA051336R1 ■	1,910
	SOR 380...440V AC T1-T2-T3	1SDA051337R1	1,910
	SOR 480...525V AC T1-T2-T3	1SDA051338R1	1,980
T4-T5-T6	SOR 12V DC T4-T5-T6	1SDA054862R1	3,050
	SOR 24V AC/DC T4-T5-T6	1SDA054863R1	2,940
	SOR 48...60V AC/DC T4-T5-T6	1SDA054864R1	2,940
	SOR 110...120V AC-110...125V DC T4-T5-T6	1SDA054865R1	2,940
	SOR 220...240V AC-220...250V DC T4-T5-T6	1SDA054866R1 ■	2,940
	SOR 380...440V AC T4-T5-T6	1SDA054867R1	2,940
	SOR 480...500V AC T4-T5-T6	1SDA054868R1	3,050
T7-T7M-X1	SOR 24V AC/DC T7-T7M-X1	1SDA062065R1	5,750
	SOR 30V AC/DC T7-T7M-X1	1SDA062066R1	5,750
	SOR 48V AC/DC T7-T7M-X1	1SDA062067R1	5,750
	SOR 60V AC/DC T7-T7M-X1	1SDA062068R1	5,750
	SOR 110...120V AC/DC T7-T7M-X1	1SDA062069R1	5,750
	SOR 120...127V AC/DC T7-T7M-X1	1SDA063547R1	5,750
	SOR 220...240V AC/DC T7-T7M-X1	1SDA063548R1 ■	5,750
	SOR 240...250V AC/DC T7-T7M-X1	1SDA062070R1	5,750
	SOR 380...400V AC T7-T7M-X1	1SDA062071R1	5,750
	SOR 415...440V AC T7-T7M-X1	1SDA062072R1	5,750

Note (1): Cannot be used with T2 MCCB fitted with PR221DS trip unit

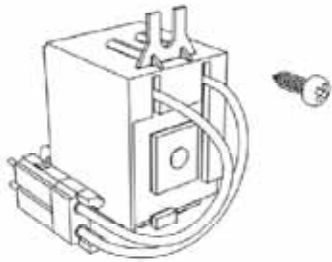
Note: For T7 TM in Withdrawable Version Sliding Contact Blocks for Fixed and Moving Part are Necessary



■ Stock items

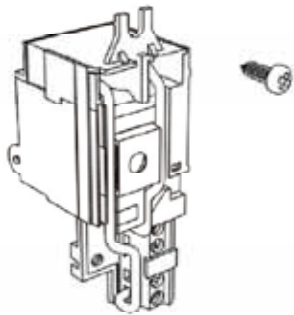
Tmax accessories

1



Shunt Opening Release - SOR - C			
Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	SOR-C 12V DC T1-T2-T3	1SDA053001R1	3,050
	SOR-C 24 ...30V AC/DC T1-T2-T3	1SDA051339R1	2,850
	SOR-C 48...60V AC/DC T1-T2-T3	1SDA051340R1	2,850
	SOR-C 110...127V AC-110...125V DC T1-T2-T3	1SDA051341R1	2,850
	SOR-C 220...240V AC-220...250V DC T1-T2-T3	1SDA051342R1	2,850
	SOR-C 380...440V AC T1-T2-T3	1SDA051343R1	2,850
T4-T5-T6	SOR-C 480...525V AC T1-T2-T3	1SDA051344R1	3,050
	SOR-C 12V DC T4-T5-T6	1SDA054869R1	5,190
	SOR-C 24V AC/DC T4-T5-T6	1SDA054870R1	5,190
	SOR-C 48...60V AC/DC T4-T5-T6	1SDA054871R1	5,190
	SOR-C 110...120V AC-110...125V DC T4-T5-T6	1SDA054872R1	4,850
	SOR-C 220...240V AC-220...250V DC T4-T5-T6	1SDA054873R1	4,850
	SOR 380...440V AC T4-T5-T6	1SDA054875R1	4,850
	SOR 480...500V AC T4-T5-T6	1SDA054868R1	5,190

Test unit- SOR



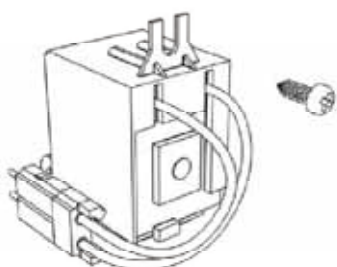
Frame	Description	Ordering code	M.R.P.(₹)
T7-T7M-X1-E1/6	SOR test unit T7-T7M-X1-E1/6	1SDA050228R1	27,000

Under Voltage Release - UVR

Frames	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	UVR 24...30V AC/DC T1-T2-T3	1SDA051345R1	3,960
	UVR 48V AC/DC T1-T2-T3	1SDA051346R1	3,960
	UVR 60V AC/DC T1-T2-T3	1SDA052333R1	3,960
	UVR 110...127V AC-110...125V DC T1-T2-T3	1SDA051347R1	3,820
	UVR 220...240V AC-220...250V DC T1-T2-T3	1SDA051348R1 ■	3,820
	UVR 380...440V AC T1-T2-T3	1SDA051349R1 ■	3,820
	UVR 480...500V AC T1-T2-T3	1SDA051350R1	3,960
T4-T5-T6	UVR 24V AC/DC T4-T5-T6	1SDA054880R1	6,180
	UVR 48V AC/DC T4-T5-T6	1SDA054881R1	6,000
	UVR 60V AC/DC T4-T5-T6	1SDA054882R1	6,420
	UVR 110...120V AC-110...125V DC T4-T5-T6	1SDA054883R1	6,180
	UVR 220...240V AC-220...250V DC T4-T5-T6	1SDA054884R1 ■	6,180
	UVR 380...440V AC T4-T5-T6	1SDA054885R1 ■	6,180
T7-T7M-X1	UVR 480...500V AC T4-T5-T6	1SDA054886R1	6,180
	UVR 24V AC/DC T7-T7M-X1	1SDA062087R1	7,660
	UVR 30V AC/DC T7-T7M-X1	1SDA062088R1	7,660
	UVR 48V AC/DC T7-T7M-X1	1SDA062089R1	7,660
	UVR 60V AC/DC T7-T7M-X1	1SDA062090R1	7,660
	UVR 110...120V AC/DC T7-T7M-X1	1SDA062091R1	7,660
	UVR 120...127V AC/DC T7-T7M-X1	1SDA063551R1	7,660
	UVR 220...240V AC/DC T7-T7M-X1	1SDA063552R1 ■	7,660
	UVR 240...250V AC/DC T7-T7M-X1	1SDA062092R1	7,660
UVR 380...400V AC T7-T7M-X1	1SDA062093R1	7,660	
	UVR 415...440V AC T7-T7M-X1	1SDA062094R1	7,660

Note: For T7 TM in Withdrawable version sliding contact blocks for Fixed and Moving part are necessary

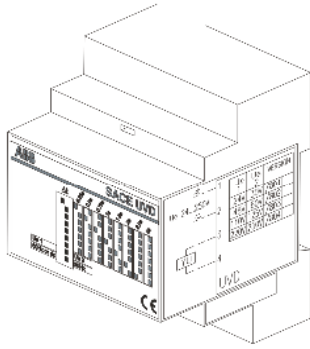
Under Voltage Release C - UVR - C



Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	UVR-C 24...30 V AC/DC T1-T2-T3	1SDA051351R1	7,660
	UVR-C 48V AC/DC T1-T2-T3	1SDA051352R1	7,660
	UVR-C 110...127V AC-110...125VDC T1-T2-T3	1SDA051353R1	7,150
	UVR-C 220...240V AC-220...250VDC T1-T2-T3	1SDA051354R1	7,150
	UVR-C 380...440V AC T1-T2-T3	1SDA051355R1	7,660
	UVR-C 480...500V AC T1-T2-T3	1SDA051356R1	7,660
T4-T5-T6	UVR-C 60V AC/DC T1-T2-T3	1SDA052335R1	7,660
	UVR-C 24V AC/DC T4-T5-T6	1SDA054887R1	8,350
	UVR-C 48V AC/DC T4-T5-T6	1SDA054888R1	8,350

■ Stock items

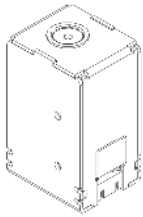
Tmax accessories



Time Delay Device for Under Voltage Release- UVD

Frame	Description	Ordering code	M.R.P.(₹)
T1...T6	UVD 24...30V AC/DC T1...T6	1SDA051357R1	32,640
	UVD 48...60V AC/DC T1...T6	1SDA051358R1	32,640
	UVD 110...125V AC/DC T1...T6	1SDA051360R1	32,640
	UVD 220...250V AC/DC T1...T6	1SDA051361R1	32,640
T7-T7M-X1	UVD 24/30V AC/DC E1/6 - T7-T7M-X1	1SDA038316R1	10,700
	UVD 48V AC/DC E1/6 - T7-T7M-X1	1SDA038317R1	10,700
	UVD 60V AC/DC E1/6 - T7-T7M-X1	1SDA038318R1	10,700
	UVD 110...125V AC/DC E1/6 - T7-T7M-X1	1SDA038319R1	10,700
	UVD 220...250V AC/DC E1/6 - T7-T7M-X1	1SDA038320R1	10,700

Note: Order along with relative UV release



Shunt Closing Release

Frame	Description	Ordering code	M.R.P.(₹)
T7M-X1	SCR 24V AC/DC T7M-X1	1SDA062076R1	7,280
	SCR 30V AC/DC T7M-X1	1SDA062077R1	7,280
	SCR 48V AC/DC T7M-X1	1SDA062078R1	7,280
	SCR 60V AC/DC T7M-X1	1SDA062079R1	7,280
	SCR 110...120V AC/DC T7M-X1	1SDA062080R1	7,280
	SCR 120...127V AC/DC T7M-X1	1SDA063549R1	7,280
	SCR 220...240V AC/DC T7M-X1	1SDA063550R1	7,280
	SCR 240...250V AC/DC T7M-X1	1SDA062081R1	7,280
	SCR 380...400V AC T7M-X1	1SDA062082R1	7,280
	SCR 415...440V AC T7M-X1	1SDA062083R1	7,280

Note: For T7 M in withdrawable version sliding blocks for fixed and moving part are necessary

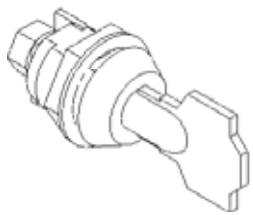
Key lock

Key Lock - KLC			
Frame	Description	Ordering code	M.R.P.(₹)
KLC for Manual Breaker			
T1	KLC Ronis Same Key T1	1SDA051395R1	1,800
	KLC Same Key T1	1SDA053528R1	1,800
T2	KLC Ronis Same Key T2	1SDA052015R1	1,800
	KLC Same Key T2	1SDA053529R1	1,800
T3	KLC Ronis Same Key T3	1SDA052016R1	1,800
	KLC Same Key T3	1SDA053530R1	1,800
T7	KLC-D Key Lock - Different Key in Open Position T7	1SDA062134R1	2,730
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20005) T7	1SDA062135R1	2,730
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20006) T7	1SDA062136R1	2,730
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20007) T7	1SDA062137R1	2,730
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20008) T7	1SDA062138R1	2,730
	KLC Arrangement for Ronis Key Lock T7	1SDA062139R1	2,730
	KLC Arrangement for Profalux Key Lock T7	1SDA062140R1	3,160
	KLC-D Different Key in open Position T7M	1SDA062141R1	3,160
T7 M	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20005) T7M	1SDA062142R1	2,950
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20006) T7M	1SDA062143R1	2,950
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20007) T7M	1SDA062144R1	2,950
	KLC-S Same Key for Different Groups of Circuit Breakers (N. 20008) T7M	1SDA062145R1	2,950
	KLC Same Key Ronis-Profalux T7M	1SDA062146R1	2,950



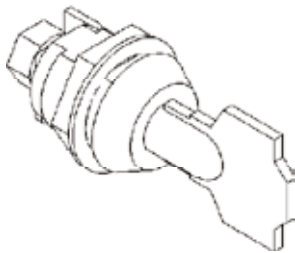
Tmax accessories

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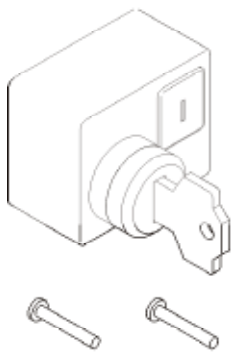
Key Lock for Rotary Handle - RHL

Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	RHL Different keys in open position for rotary handleT1-T2-T3	1SDA051389R1	910
	RHL Same Keys in open position for rotary handleT1-T2-T3	1SDA051390R1	910
	RHL Different keys in open /closed position for rotary handle T1-T2-T3	1SDA052021R1	910
	RHL Same Keys in open position for rotary handleT1-T2-T3	1SDA060147R1	910
	RHL Same Keys in open position for rotary handleT1-T2-T3	1SDA060148R1	910
	RHL Same Keys in open position for rotary handleT1-T2-T3	1SDA060149R1	910



Key Lock for Front / Rotary / Fixed Part- KLF

Frame	Description	Ordering code	M.R.P.(₹)
T4-T5	KLF-D Lock for Front / Rotary Handle - Different Key in open PositionT4-T5	1SDA054939R1	2,650
	KLF-S Block for Front / Rotary Handle - Same Key (N. 20005) T4-T5	1SDA054940R1 ■	2,650
	KLF-S Block for Front / Rotary Handle - Same Key (N. 20006) T4-T5	1SDA054941R1	2,650
	KLF-S Block for Front / Rotary Handle - Same Key (N. 20007) T4-T5	1SDA054942R1	2,650
	KLF-S Block for Front / Rotary Handle - Same Key (N. 20008) T4-T5	1SDA054943R1	2,650
T4-T5-T6	KLF-D FP Different Key for Each Circuit Breaker T4-T5-T6	1SDA055230R1	2,650
	KLF-D FP Same Key for Different Groups of Circuit Breaker T4-T5-T6	1SDA055231R1	2,840
	KLF-D Ronis Fixed Part- Lock Type Ronis T4-T5-T6	1SDA055233R1	2,840
T6	KLF-D Different Key in open Position T6	1SDA060658R1	2,650
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20005) T6	1SDA060659R1 ■	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20006) T6	1SDA060660R1	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20007) T6	1SDA060661R1	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20008) T6	1SDA060662R1	2,840
T7	KLF-D Different Key in open Position T7	1SDA063555R1	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20005) T7	1SDA063556R1	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20006) T7	1SDA063557R1	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20007) T7	1SDA063558R1	2,840
	KLF-S Same Key for Different Groups of Circuit Breakers (N. 20008) T7	1SDA063559R1	2,840
	KLF Arrangment for ronis key lock T7	1SDA063560R1	2,840
	KLF Arrangment for profalux key lock T7	1SDA063561R1	2,840



Key lock for motor operated- MOL

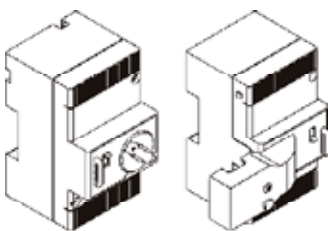
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5	MOL-D - Same Key T4-T5	1SDA054904R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20005) T4-T5	1SDA054905R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20006) T4-T5	1SDA054906R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20007) T4-T5	1SDA054907R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20008) T4-T5	1SDA054908R1	2,950
T4-T5-T6	MOL-M - Lock only on manual operation - Same Key T4-T5-T6	1SDA054909R1	2,950
T6	MOL-D - Different key T6	1SDA060611R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20005) T6	1SDA060612R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20006) T6	1SDA060613R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20007) T6	1SDA060614R1	2,950
	MOL-S - Same Key for Different Groups of Circuit Breakers (N. 20008) T6	1SDA060615R1	2,950

Motor operated

Solenoid Operator - MOS

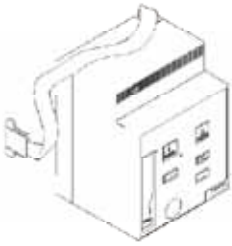
Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	MOS Superinposed 48...60V DC T1-T2-T3	1SDA059596R1	17,820
	MOS Superinposed 110...250V AC-110...250V DC T1-T2-T3	1SDA059597R1 ■	17,820
T1-T2	MOS Side-by-side 48...60V DC T1-T2	1SDA059598R1	21,630
	MOS Side-by-side 110...250V AC-110...250V DC T1-T2	1SDA059599R1	21,630

Note: It is always Fitted with Socket - Plug Connector



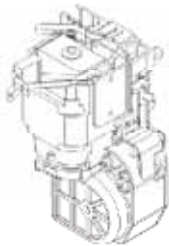
■ Stock items

Tmax accessories

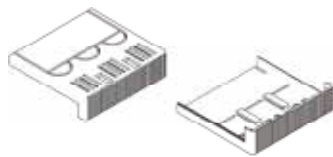


Stored Energy Motor Operator - MOE			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5	MOE 24 V DC T4-T5	1SDA054894R1	31,420
	MOE 48...60 V DC T4-T5	1SDA054895R1	29,360
	MOE 110...125 V AC / DC T4-T5	1SDA054896R1	29,360
	MOE 220...250 V AC / DC T4-T5	1SDA054897R1 ■	29,360
	MOE 380 V AC T4-T5	1SDA054898R1	29,360
T6	MOE 24 V DC T6	1SDA060395R1	36,570
	MOE 48...60 V DC T6	1SDA060396R1	36,570
	MOE 110...125 V AC/DC T6	1SDA060397R1	36,570
	MOE 220...250 V AC/DC T6	1SDA060398R1	36,570
	MOE 380 V AC T6	1SDA060399R1	36,570

Stored Energy Motor Operator with Electronics - MOE-E			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5	MOE-E 24 V DC T4-T5	1SDA054899R1	43,340
	MOE-E 48...60 V DC T4-T5	1SDA054900R1	43,340
	MOE-E 110...125 V AC / DC T4-T5	1SDA054901R1	38,500
	MOE-E 220...250 V AC / DC T4-T5	1SDA054902R1	38,500
	MOE-E 380 V AC T4-T5	1SDA054903R1	38,500
T6	MOE-E 24 V DC T6	1SDA060400R1	52,970
	MOE-E 48...60 V DC T6	1SDA060401R1	52,970
	MOE-E 110...125 V AC/DC T6	1SDA060402R1	47,500
	MOE-E 220...250 V AC/DC T6	1SDA060403R1	47,500
	MOE-E 380 V AC T6	1SDA060404R1	47,500



Spring Charging Motor- M			
Frame	Description	Ordering code	M.R.P.(₹)
T7M	M 24...30V AC/DC T7M	1SDA062113R1	38,500
	M 48...60V AC/DC T7M	1SDA062114R1	38,500
	M 100...130V AC/DC T7M	1SDA062115R1	36,780
	M 220...250V AC/DC T7M	1SDA062116R1	36,780
	M 380...415V AC T7M	1SDA062117R1	36,780



Low insulating terminal covers - LTC			
Frame	Description	Ordering code	M.R.P.(₹)
T1	LTC 3p T1	1SDA051421R1	1,720
	LTC 4p T1	1SDA051422R1	2,040
T2	LTC 3p T2	1SDA051423R1	1,720
	LTC 4p T2	1SDA051424R1	2,040
T3	LTC 3p T3	1SDA051425R1	1,820
	LTC 4p T3	1SDA051426R1	2,250
T4	LTC 3p T4	1SDA054966R1	1,820
	LTC 4p T4	1SDA054967R1	2,570
T5	LTC 3p T5	1SDA054968R1	2,360
	LTC 4p T5	1SDA054969R1	3,110
T6	LTC 3p T6	1SDA014038R1	2,570
	LTC 4p T6	1SDA014039R1	3,430
T7-T7M	LTC 3p T7-T7M	1SDA063093R1	3,960
	LTC 4p T7-T7M	1SDA063094R1	5,140

Dialogue Unit - PR 222/DS-PD			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5-T6	PR222DS/PD LSI T4-T5-T6	1SDA055066R1	22,500
	PR222DS/PD LSIG T4-T5-T6	1SDA055067R1	26,500

Note : Order X3 connector along with dialogue unit

■ Stock items

X3 Connector			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5-T6	X3 Connector for fixed circuit-breaker PR222DS or PR223DS	1SDA055059R1	4,500
	X3 Connector for plug-in/withdrawable circuit-breaker	1SDA055061R1	4,500

HMI030			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5-T6-T7/ E1-E6	HMI030 interface on the front of switchgear	1SDA063143R1	32,000

Measurement Module - VM210			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5-T6	VM210 T4-T5-T6	1SDA059602R1	25,000

Note : Order X4 connector along with measurement module
Mounted only with PR223/DS

X4 Connector			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5-T6	X4 Connector for fixed circuit-breaker	1SDA055060R1	4,500
	X4 Connector for plug-in/withdrawable circuit-breaker	1SDA055062R1	4,500

Interface Module - EP010			
Frame	Description	Ordering code	M.R.P.(₹)
T4-T5-T6	EP010 - Interface Module for PR222/PD	1SDA059469R1	26,000

Note : Converter for Modbus to ASI, DeviceNet & Profibus for MCCB & ACB. Used along with dialogue module

Residual current releases

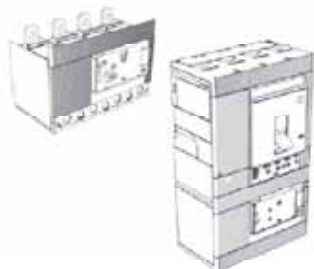
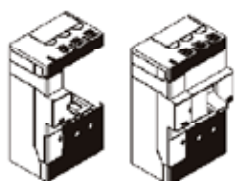
SACE RC22x			
Frame	Description	Ordering code	M.R.P.(₹)
T1	RC221/1 3p Fixed T1	1SDA051398R1	19,260
	RC221/1 4p Fixed T1	1SDA051401R1	22,470
	RC222/1 3p Fixed T1	1SDA051400R1	19,260
	RC222/1 4p Fixed T1	1SDA051402R1	22,470
	RC222/1 Mod200mm 4p Fixed T1	1SDA053869R1	27,820
T2	RC221/2 4p Fixed T2	1SDA051405R1	24,080
	RC222/2 3p Fixed T2	1SDA051404R1	19,800
	RC222/2 4p Fixed T2	1SDA051406R1	24,080
T3	RC221/3 3p Fixed T3	1SDA051407R1	24,610
	RC221/3 4p Fixed T3	1SDA051409R1	32,640
	RC222/3 3p Fixed T3	1SDA051408R1	24,610
T4	RC222/3 4p Fixed T3	1SDA051410R1	38,520
	RC222/4 4p Fixed T4	1SDA054954R1	40,660
T5	RC223/4 4p Fixed T4 250	1SDA054956R1	48,150
	RC222/5 4p Fixed T5	1SDA054955R1	45,480

Note: The Residual Current Releases for the T2 and T3 Circuit Breakers always Supplied Complete with FC Cu Terminal Kit

Automatic Transfer Switch - ATS

Automatic Transfer Switch			
Frame	Description	Ordering code	M.R.P.(₹)
T3-T7/E1-E6	ATS021	1SDA065523R1 ■	85,000
	ATS022	1SDA065524R1	95,000

Note : ATS will be used along with either two motorized ACB or MCCBs with required interlocking and changeover base plate as per the requirement.



Tmax accessories



Mechanical Interlock Between Circuit Breakers - MIF

Frame	Description	Ordering code	M.R.P.(₹)
T1-T2-T3	MIF Mechanical Interlock Between 2 Breakers T1-T2-T3	1SDA051396R1	4,330
	MIF Mechanical Interlock Between 3 Breakers T1-T2-T3	1SDA052165R1	7,830

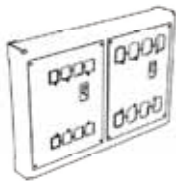
Note: Incompatible with the front accessories (solenoid operator, rotary handle operating mechanism) and with the residual current releases.



Mechanical Interlock Between Circuit Breakers - MIR - to be used with copper spreaders only

Frame	Description	Ordering code	M.R.P.(₹)
T3	MIR-H Horizontal Mechanical Interlock T3	1SDA063324R1	7,210
	MIR-V Vertical Mechanical Interlock T3	1SDA063325R1	7,210
T4-T5	MIR-HB Horizontal Interlock Frame Unit T4-T5	1SDA054946R1	8,550
	MIR-VB Vertical Interlock Frame Unit T4-T5	1SDA054947R1	8,550
	MIR-P Plate for Interlock Type A T4 (F-P-W) + T4 (F-P-W)	1SDA054948R1	4,700
	MIR-P Plate for Interlock Type B T4 (F-P-W) + T5 400 (F-P-W) or T5 630 (F)	1SDA054949R1	4,700
	MIR-P Plate for Interlock Type C T4 (F-P-W) + T5 630 (P-W)	1SDA054950R1	4,700
	MIR-P Plate for Interlock Type D T5 400 (F-P-W) or T5 630 (F)+T5 400 (F-P-W) or T5 630 (F)	1SDA054951R1	4,700
T4-T5	MIR-P Plate for Interlock Type E T5 400 (F-P-W) or T5 630 (F) + T5 630 (P-W)	1SDA054952R1	4,700
	MIR-P Plate for Interlock Type F T5 630 (P-W) + T5 630 (P-W)	1SDA054953R1	4,700
	MIR-H Horizontal Mechanical Interlock T6	1SDA060685R1	14,900
	MIR-V Vertical Mechanical Interlock T6	1SDA060686R1	14,900

Note: For interlocking in T4-T5, Please order both Frame and Plate unit



Mechanical Interlock with Cables Between 2 Circuit Breakers

Frame	Description	Ordering code	M.R.P.(₹)
T7-T7M	Cable Kit for Interlock T7-T7M	1SDA062127R1	6,200
	Cable Kit for Interlock T7-T7M with E1-6	1SDA064568R1	6,750
	Plate for Interlock T7-T7M Fixed	1SDA062129R1	24,700
	Plate for Interlock T7-T7M withdrawable	1SDA062131R1	26,430

Note: It is Necessary to Order 2 Plate and one Kit of Cables

Tmax Conversion Kit

Plug-in and drawout conversion

Frame	Pole	Type	Description	Ordering code	M.R.P.(₹)	
T2	3P	Plugin Kit	KIT MP T2 P 3p KIT CONVERSION	1SDA051411R1	4,620	
			T2 P FP 3p F	1SDA051329R1	8,470	
T3			KIT MP T3 P 3p KIT CONVERSION	1SDA051413R1	5,830	
			T3 P FP 3p F	1SDA051331R1	8,690	
T4			KIT MP T4 P 3p	1SDA054839R1	6,710	
			T4 P FP 3p EF	1SDA054737R1	9,350	
T5			KIT MP T5 400 P 3p	1SDA054843R1	8,800	
			T5 400 P FP 3p EF	1SDA054749R1	18,920	
T5			KIT MP T5 630 P 3p	1SDA054847R1	10,670	
			T5 630 P FP 3p EF	1SDA054762R1	22,550	
T4			Drawout Kit	KIT MP T4 W 3p	1SDA054841R1	9,900
				T4 W FP 3p EF	1SDA054743R1	18,370
T5				KIT MP T5 400 W 3p	1SDA054845R1	13,860
				T5 400 W FP 3p EF	1SDA054755R1	31,350
T5	KIT MP T5 630 W 3p	1SDA054849R1		17,710		
	T5 630 W FP 3p EF	1SDA054768R1		37,400		
T6	KIT MP T6 630/800 W 3p	1SDA060390R1		18,480		
	T6 W FP 3p EF	1SDA060384R1		39,050		
T7	KIT MP T7-T7M-X1 W 3p	1SDA062162R1		30,140		
	T7-X1 W FP 3p EF-EF	1SDA062045R1		57,750		
T2	4P	Plugin Kit		KIT MP T2 P 4p KIT CONVERSION	1SDA051412R1	6,050
				T2 P FP 4p F	1SDA051330R1	11,440
T3				KIT MP T3 P 4p KIT CONVERSION	1SDA051414R1	6,820
				T3 P FP 4p F	1SDA051332R1	11,990
T4			KIT MP T4 P 4p	1SDA054840R1	8,910	
			T4 P FP 4p EF	1SDA054740R1	12,430	
T5			KIT MP T5 400 P 4p	1SDA054844R1	11,550	
			T5 400 P FP 4p EF	1SDA054752R1	25,080	
T5			KIT MP T5 630 P 4p	1SDA054848R1	14,190	
			T5 630 P FP 4p EF	1SDA054765R1	29,920	
T4			Drawout Kit	KIT MP T4 W 4p	1SDA054842R1	13,090
				T4 W FP 4p EF	1SDA054746R1	24,530
T5				KIT MP T5 400 W 4p	1SDA054846R1	18,370
				T5 400 W FP 4p EF	1SDA054758R1	41,800
T5	KIT MP T5 630 W 4p	1SDA054850R1		21,010		
	T5 630 W FP 4p EF	1SDA054771R1		49,940		
T6	KIT MP T6 630/800 W 4p	1SDA060391R1		22,660		
	T6 W FP 4p EF	1SDA060387R1		50,600		
T7	KIT MP T7-T7M-X1 W 4p	1SDA062163R1		35,090		
	T7-X1 W FP 4p EF-EF	1SDA062049R1		77,220		

Tmax Conversion Kit

Accessories:

Frame / Type	Description	Ordering code	M.R.P.(₹)
Connector	ADP 5pin SOR-C /UVR-C T4-T5-T6 P/W	1SDA055173R1	1,980
	ADP 6pin AUX -C T4-T5-T6 P/W	1SDA054922R1	1,540
	ADP 10pin MOE AUE -C T4-T5-T6 P/W	1SDA054924R1	1,980
	ADP 12pin AUX -C T4-T5-T6 P/W	1SDA054923R1	2,530
MOT T7M	LEFT SLIDING CONTAC.MP C.BR.T7-T7M-X1	1SDA062164R1	4,620
	LEFT SLIDING CONTAC.FP C.BR.T7M-X1	1SDA062167R1	6,820
SOR/SCR/UVR/AUX - T7-T7M	RIGHT SLIDING CONTAC.MP C.BR.T7-T7M-X1	1SDA062166R1	4,620
	RIGHT SLIDING CONTAC.FP C.BR.T7M-X1	1SDA062169R1	6,820
Central Block for T7-T7M	Central block - MP T7 - T7M	1SDA062165R1	4,620
	Central block - FP T7 - T7M	1SDA062168R1	6,820

Note: The plug-in version must be composed as follows

- 1) Fixed circuit-breaker
- 2) Conversion kit from fixed into moving part of plug-in
- 3) Fixed part of plug-in

2) Conversion kit from fixed into moving part of withdrawable

- 3) Fixed part of withdrawable
- 4) Front for lever operating mechanism or rotary handle or motor operator
- 5) Sliding contacts blocks if the circuit-breaker is automatic or fitted with electrical accessories (only for T7)

Note: The withdrawable version must be composed as follows

- 1) Fixed circuit-breaker

Tmax PV: photovoltaic range moulded case switch disconnecter



Tmax PV is the latest T Generation product upto 1600 A / 1100 V DC / 1500V DC.

- IEC 60947-3 certification
- 6 different sizes: from the compact T1 (which can be mounted on DIN rail) to the high-performance T7, available in the two versions, with lever operating mechanism and motor operator
- Rated insulation voltage up to 1150 V DC /1500V DC
- Advantages like
 - excellent performance-dimensions
 - vast and complete range of accessories for all requirements
 - complete remote control

Rated current In (A)	Rated Voltage	Description	Ordering Code	Version / Poles	M.R.P. (₹)
160	1100 V DC	T1D/PV 160 4p F FC Cu 1100V DC	1SDA069816R1	Fixed / 4p	Upon Request
200		T3D/PV 200 4p F FC Cu 1100V DC	1SDA069822R1	Fixed / 4p	
250		T4D/PV 250 4p F F 1100V DC	1SDA069823R1	Fixed / 4p	
500		T5D/PV 500 4p F F 1100V DC	1SDA069824R1	Fixed / 4p	
800		T6D/PV 800 4p F F 1100V DC	1SDA069825R1	Fixed / 4p	
1250		T7D/PV 1250 4p F F 1100V DC	1SDA069826R1	Fixed / 4p	
1250M		T7D/PV 1250 4p F F M 1100V DC	1SDA069827R1	Fixed / 4p	
1600		T7D/PV 1600 4p F F 1100V DC	1SDA069828R1	Fixed / 4p	
1600M	T7D/PV 1600 4p F F M 1100V DC	1SDA069829R1	Fixed / 4p		

*For information please contact our nearest sales office

Rated current In (A)	Rated Voltage	Description	Ordering Code	Version / Poles	M.R.P. (₹)
250	1500V DC	T4D/PV-E 250 4p F F 1500V DC	1SDA073559R1	Fixed / 4p	Upon Request
500		T5D/PV-E 500 4p F F 1500V DC	1SDA076898R1	Fixed / 4p	
1250		T7D/PV-E 1250 4p F F M 1500V DC	1SDA073560R1	Fixed / 4p	
1600		T7D/PV-E 1600 4p F F M 1500V DC	1SDA073561R1	Fixed / 4p	
250	1500V DC	KIT 2JUMPER U 2+2PS T4D/PV 250	1SDA070454R1	Kit jumpers	Upon Request
500		KIT 2JUMPER U 2+2PS T5D/PV-E 500	1SDA076899R1	Kit jumpers	
1250		KIT JUMPER U 2+2PS T7D/PV 1250	1SDA070429R1	Kit jumpers	
1600		KIT JUMPER U 2+2PS T7D/PV 1600	1SDA070431R1	Kit jumpers	

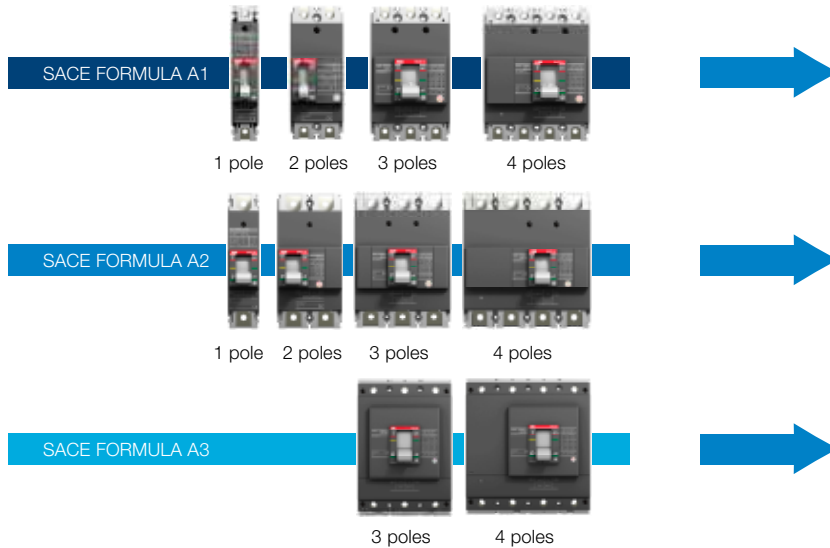
*Jumper kit is compulsory to order with 1500V DC version

FORMULA moulded case circuit breaker

New low voltage moulded case circuit breakers up to 630A

General characteristics

- Conforms to IEC 60947-2
- Fixed thermal magnetic release throughout the range
- Compact dimensions
- Common range of accessories
- Available in 1P, 2P, 3P & 4 pole versions
- Line-load reversibility
- Suitable for DC application till 250Vdc
- Operation voltage till 550VAC, insulation voltage of 690VAC and impulse voltage of 6KV



FORMULA A1

- Rated current, In 15...125A
- 1, 2, 3, 4 pole versions
- Icu = 10, 18, 25, 36KA

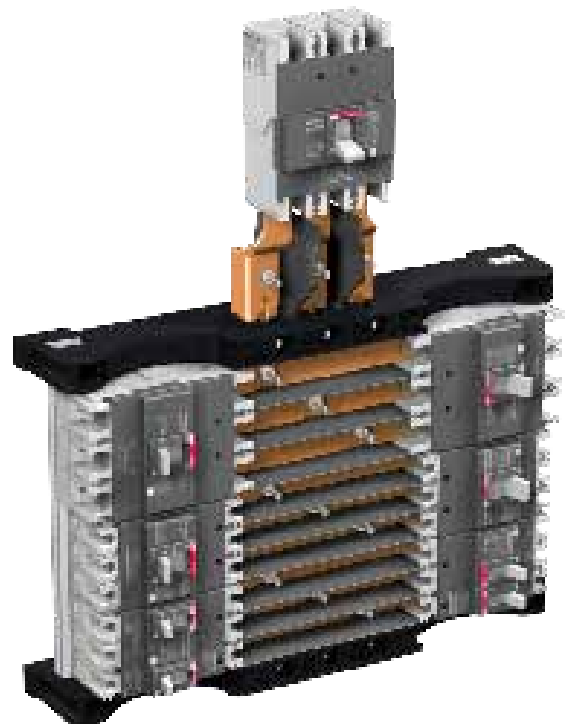
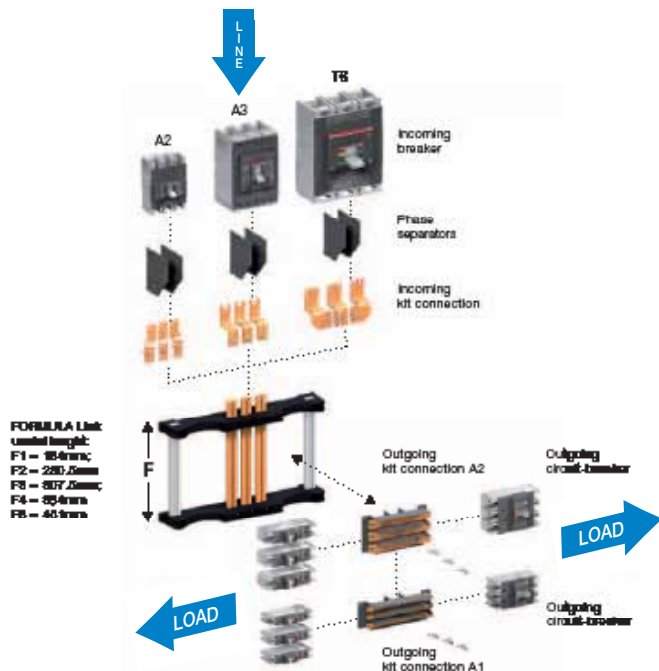
FORMULA A2

- Rated current, In 125...250A
- 1, 2, 3, 4 pole versions
- Icu = 18, 25, 36KA

FORMULA A3

- Rated current, In 320...630A
- 3, 4 pole versions
- Icu = 36, 50KA

FORMULA link system



FORMULA moulded case circuit breakers

- FORMULA link in accordance with IEC 60439 Standard
- FORMULA link is a component of a power distribution system which divides the main power supply over different users
- The FORMULA link is characterised on the supply side by a main circuit-breaker which protects the whole distribution system, and on the load side by smaller sized circuit-breakers, dedicated to the individual users
- FORMULA link assembly for total discrimination between upstream and downstream devices

FORMULA link - Electrical characteristics

FORMULA link frame	[A]	250	400	630/800
Incoming breaker		A2	A3	T6
Outgoing breaker		A1	A1-A2	A1-A2
Rated operational voltage 50/60 Hz	[V]	550AC	550AC	550AC
Rated insulation voltage	[V]	690AC	690AC	690AC
Rated short time withstand current (1s)	[KA]	30	40	40



Fixed thermal and fixed magnetic MCCB

A1 125

TMF

In(A)	Poles	A1A 125 Icu = 10KA, Ics = 50%(Icu)		A1B 125 Icu = 18KA, Ics = 50%(Icu)		A1C 125 Icu = 25KA, Ics = 50%(Icu)		A1N 125 Icu = 36KA, Ics = 50%(Icu)	
		Ordering Code	M.R.P.(₹)	Ordering Code	M.R.P.(₹)	Ordering Code	M.R.P.(₹)	Ordering Code	M.R.P.(₹)
16	3	1SDA068746R1	2,060	1SDA068747R1	2,760	1SDA068748R1	3,350	1SDA068749R1	3,950
25		1SDA066512R1	2,060	1SDA066699R1	2,760	1SDA066711R1	3,350	1SDA066723R1	3,950
32		1SDA068757R1 ■	2,060	1SDA068758R1 ■	2,760	1SDA068759R1 ■	3,350	1SDA068760R1 ■	3,950
40		1SDA066514R1	2,060	1SDA066701R1	2,760	1SDA066713R1	3,350	1SDA066725R1	3,950
50		1SDA066515R1 ■	2,060	1SDA066702R1	2,760	1SDA066714R1	3,350	1SDA066726R1	3,950
63		1SDA068768R1 ■	2,060	1SDA068769R1 ■	2,760	1SDA068770R1 ■	3,350	1SDA068771R1 ■	3,950
80		1SDA066518R1 ■	2,060	1SDA066705R1 ■	2,760	1SDA066717R1	3,350	1SDA066729R1	3,950
100		1SDA066520R1 ■	2,060	1SDA066707R1 ■	2,760	1SDA066719R1 ■	3,350	1SDA066731R1 ■	3,950
125		1SDA066521R1 ■	2,430	1SDA066708R1 ■	3,510	1SDA066720R1 ■	3,570	1SDA066732R1 ■	4,160
16	4	1SDA068750R1	2,760	1SDA068751R1	3,510	1SDA068752R1	4,320	1SDA068753R1	5,030
25		1SDA066526R1	2,760	1SDA066735R1	3,510	1SDA066747R1	4,320	1SDA066759R1	5,030
32		1SDA068761R1 ■	2,760	1SDA068762R1	3,510	1SDA068763R1	4,320	1SDA068764R1	5,030
40		1SDA066528R1	2,760	1SDA066737R1	3,510	1SDA066749R1	4,320	1SDA066761R1	5,030
50		1SDA066529R1	2,760	1SDA066738R1	3,510	1SDA066750R1	4,320	1SDA066762R1	5,030
63		1SDA068772R1 ■	2,760	1SDA068773R1 ■	3,510	1SDA068774R1 ■	4,320	1SDA068775R1 ■	5,030
80		1SDA066532R1	2,760	1SDA066741R1	3,510	1SDA066753R1	4,320	1SDA066765R1	5,030
100		1SDA066534R1 ■	2,760	1SDA066743R1 ■	3,510	1SDA066755R1 ■	4,320	1SDA066767R1 ■	5,030
125		1SDA066535R1	2,970	1SDA066744R1	3,730	1SDA066756R1	4,540	1SDA066768R1	5,400

■ Stock items

FORMULA moulded case circuit breakers

A2 250

TMF

In(A)	Poles
160	3
200	
250	
160	4
200	
250	

A2B 250

Icu = 18KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066549R1 ■	6,540
1SDA066551R1 ■	6,540
1SDA066553R1 ■	7,020
1SDA066555R1	8,320
1SDA066557R1 ■	8,320
1SDA066559R1 ■	9,080

A2C 250

Icu = 25KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066776R1 ■	7,020
1SDA066778R1 ■	7,020
1SDA066780R1 ■	7,510
1SDA066788R1	8,970
1SDA066790R1 ■	8,970
1SDA066792R1 ■	10,320

A2N 250

Icu = 36KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066782R1 ■	8,000
1SDA066784R1 ■	8,000
1SDA066786R1 ■	8,970
1SDA066794R1	10,320
1SDA066796R1 ■	10,320
1SDA066798R1 ■	11,400

A3 400

TMF

In(A)	Poles
320	3
400	
320	4
400	

A3N 400

Icu = 36KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066560R1	19,440
1SDA066561R1	19,440
1SDA066568R1	25,170
1SDA066569R1	25,170

A3S 400

Icu = 50KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066562R1	21,170
1SDA066563R1	21,170
1SDA066570R1	27,540
1SDA066571R1	27,540

A3 630

TMF

In(A)	Poles
500	3
630	
500	4
630	

A3N 630

Icu = 36KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066564R1	21,060
1SDA066566R1	25,170
1SDA066572R1	27,220
1SDA066574R1	32,080

A3S 630

Icu = 50KA, Ics = 50%(Icu)

Ordering Code	M.R.P. (₹)
1SDA066565R1	22,900
1SDA066567R1	28,100
1SDA066573R1	29,160
1SDA066575R1	36,720

Accessories

Terminals	3P		4P	
Front extended spread terminal - ES	Ordering Code	M.R.P. (₹) 6 pieces	Ordering Code	M.R.P. (₹) 8 pieces
A1	1SYN450221R0001	550	1SYN450222R0001	650
A2		Upon request		Upon request

Rotary handle	A1-A2		
Description	Ordering code	M.R.P. (₹)	
RHD - Operating mechanism direct handle	1SDA066154R1	980	
RHE - Operating mechanism transmitted handle	1SDA066158R1	1,840	

Shunt opening release – SOR-C Cabled version	A1-A2		
Description	Ordering code	M.R.P. (₹)	
SOR-C 220...240 VAC - 220...250 VDC	1SDA066137R1	1,520	
SOR-C 380...440 VAC	1SDA066138R1	1,400	

Auxiliary contacts – AUX-C Cabled version	A1-A2		
Description	Ordering code	M.R.P. (₹)	
AUX-C 1Q + 1SY 250 VAC/DC	1SDA66149R1	1,300	

Undervoltage release – UVR-C Cabled version	A1-A2		
Description	Ordering code	M.R.P. (₹)	
UVR-C 220...240 VAC - 220...250 VDC	1SDA066146R1	2,900	
UVR-C 380...440 VAC	1SDA066147R1	2,900	

■ Stock items

Switches

ABB has a wide portfolio of low voltage switches. They are suitable for diverse applications, in motor control centers, in switch boards and as main switches in various equipments and machines. From single to 8 poles and combination switches for change-over, automatic transfer, bypass, reversing etc.

Switch-disconnectors 16 – 4000 A

The switch disconnector is largely used as the main switch in low voltage switchgears for distribution of power, starting and stopping motors and isolating loads during maintenance.

The range from 16 to 125 Amps are either base plate or door mounted by snap-on or screw fitting front operated 3, 4, 6 and 8-pole are available as standard.

From 160 to 4000 Amps the switch disconnectors, also called load break switches, are designed as pole modules and they are available as 1, 2, 3 and 4-pole versions, front or side operated.

Switch Disconnector fuses 16 – 1250A

The switch disconnector fuse is used as the main switch in low voltage switchgears in industry for distributing power and protecting motors, cables and other devices against short circuits and over loads.

The switch disconnector fuses are available for all types of fuse links, DIN, BS, NFC, UL, CSA.

The range includes single pole to four pole versions, front- or side-operated. The pole module design enables location of the operating mechanism in any position together with the direction of the terminals giving flexibility to installation in different types of cubicle designs.

Change-over and transfer switches 16 – 3200 A

ABB's change-over and transfer switches are designed to transfer loads from one power source to another in a wide

variety of applications.

The range includes switches from 16 to 3200 Amperes, which can be operated manually, remotely by using a motor or automatically.

ABB's change-over and transfer switches are tested according to IEC 60947-6-1 and IEC 60947-3 standards. The switches have ratings in AC31 and AC33 utilization categories, up to 415 V. In motorized switches, the motor operators have a wide voltage operation range.

Enclosed switches.16 – 1600 A

The ABB enclosed switches are suitable for power distribution in factories and buildings, as local motor isolators and as main switches. Each incoming supply shall be provided with a hand operated main switch-disconnector according to the Machine Directive EN 60204 and isolate reliably the electrical equipment from the supply. ABB enclosed switches are designed and tested to meet these requirements and complies with IEC 60947-3.

The enclosed switches are easy to install and safe to use in industrial, public and residential environments. The indication of the handle is always reliable and lockable in the OFF-position with a standard padlock. ABB's long experience in switch disconnects guarantees a long and safe use

Cam switches 10 – 315 A

ABB's new OC, OM, ON and OL rotary cam switches offer a complete range of cam switches for control, instrumentation and motor starting applications, maximizing the benefits and optimizing your use of assets. The standard cam switches provide you with a variety of functionalities for the most common mounting types and applications with minimum footprint area.



DC switch disconnectors for PV application

1



OTDC 10...32A

- Modular Design.
- Simple and fast installation
- DIN rail or screw mounted
- Tunnel terminals for easy termination
- Shortcircuit bars are pre-installed as standard.
- Maximum energy efficiency.
- Available in plastic enclosure.



OTDC 100A...800A

- ABB offers a compact DC switch range for single and multi circuit disconnecting
- Carefully designed arc plates and dual magnetic breaking, breaking power is optimized across the entire current range.
- As a result of symmetric pole design, the connections are independent of polarity. The user can make the connections in both ways.
- OTDC is the only DC switch in the market that has visible contacts.
- The mechanism can be located between the poles or on the side of the switch.
- Special four pole versions can be made for double circuit applications
- The operation of the switch is not vulnerable to voltage peaks and it is independent of the user (quick make quick brake).
- The switches are available in direct mounting handle version as well as external door mounted handle version
- The power losses are very low, results in high efficiency.



Rated current In (A)	Rated Voltage	Description	Ordering Code	M.R.P. (₹)
10	1000 V DC	OTDC16F2	1SCA121454R1001	Upon Request
16		OTDC16F3	1SCA121457R1001	
25		OTDC25F3	1SCA121458R1001	
32		OTDC32F3	1SCA121459R1001	
100		OTDC100E11K	1SCA127730R1001	
160		OTDC160E11K	1SCA127736R1001	
200		OTDC200E11K	1SCA127739R1001	
250		OTDC250E11K	1SCA127742R1001	
315		OTDC315E11K	1SCA131682R1001	
400		OTDC400E11K	1SCA131683R1001	
500		OTDC500E11K	1SCA132134R1001	
630		OTDC630EPP22K	1SCA137209R1001	
800		OTDC800EPP22K	1SCA137212R1001	

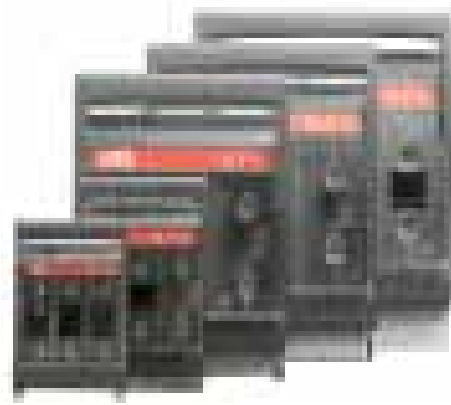
*For information please contact our nearest sales office

Easyline - XLP

Fuse Switch Disconnecter 1, 2, 3 & 4P for both AC and DC application 160...630A

All units are applicable for AC Voltage, and the 1-pole and 2-pole range are also rated for DC voltage. In addition to be used as single apparatus, the 3-pole range from size 00 to size 3 (160A - 630A) are also designed to be used in distribution systems by use of a busbar adapter for easy installation. The Busbar adapters are available for 40mm, and 60mm distance in-between centre of the phases for

each busbarsystems. The whole EasyLine range got a sturdy, uniform design that is operator friendly and safe with IP 30 from front in closed position and IP 20 in open position. EasyLine Fuse Switch Disconnectors are developed and type tested according to IEC60947-3 and based on a long history, going back to 1958 when we successfully introduced the manually dependent operated LHB.



Features

- All the XLP cable terminals can be delivered with integrated bolts for cable lugs or with integrated bridge clamps (BC) for easy direct cable connection.
- Typetested according to EN60947-3
- Easy to recycle / EN14001 standards
- Quick-make operation device
- Integrated IP20 cable termination
- IP30 degree of protection from the front
- Replacement compatible to similar types in the market
- Voltage measuring from the front
- V-0 plastic materials

Advantages

- Easy to install
- Easy to operate
- Sturdy design
- High personal safety
- Wide range of cable terminals and snap-on accessories
- Compact, add-on Electronic Fuse Monitoring (EFM)
- Busbar adapters

Applications

- UPS: Uninterruptible Power Supply, used for the power supply for computer/servers, storage devices, communication network systems, industry control systems, etc.
- Telecom Power Supplies.
- General protection in smaller distribution panels using 1-pole or 2-pole configurations AC or DC.

*For information please contact our nearest sales office

Description	Ordering Code	M.R.P. (₹)
XLP00-1P-2BC	1SEP600113R0002	Upon request
XLP1-1P-2BC	1SEP600116R0002	
XLP2-1P-2BC	1SEP600122R0002	
XLP3-1P-2BC	1SEP600126R0002	

Description	Ordering Code	M.R.P. (₹)
XLP00-2P-4BC	1SEP600114R0002	Upon request
XLP1-2P-4BC	1SEP600117R0002	
XLP2-2P-4BC	1SEP600123R0002	
XLP3-2P-4BC	1SEP600127R0002	

Description	Ordering Code	M.R.P. (₹)
XLP00-6BC	1SEP101890R0002	Upon request
XLP1-6BC	1SEP101891R0002	
XLP2-6BC	1SEP101892R0002	
XLP3-6BC	1SEP101975R0002	

Description	Ordering Code	M.R.P. (₹)
XLP00-4P-8BC	1SEP600115R0002	Upon request
XLP1-4P-8BC	1SEP600119R0002	
XLP2-4P-8BC	1SEP600124R0002	
XLP3-4P-8BC	1SEP600128R0002	

Fusegear

InLine II - ZLBM/ZHBM Designed for the future

1

ABB is proud to introduce the latest technology of Fuse Switch Disconnectors to ensure the best stability and highest safety in the power distribution network.

The new generation InLine II also offers the highest level of personal safety during operation and service.



Features

- Available as 160A, 250A, 400A and 630A types in combination with NH/DIN HRC Fuse Links acc. to EN/IEC 60269
- Type tested in accordance to EN/IEC 60947-3
- 1 - pole and 3 - pole variants
- For vertical and horizontal installations
- Designed for 185mm busbar distance
- IP30 degree of protection from the front
 - Padlocking in open and closed position at the 3 - pole version
 - Padlocking in closed position at the 1 - pole version
- Park position with possible padlocking at the 1 - pole type
- Sealing solutions
- Wide range of accessories and cable terminal connections
- Compatible dimensions to equivalent products in the market

Advantages

- High level of personal safety by:
 - Safe and reliable operation ON/OFF
 - Safe and simple replacement of the NH fuse links

- Universal terminal bolts offering standing bolt or fixed nut for high flexibility of cable connections
- Variants with integrated V-clamps
- Available in two alternative depths (ZLBM/ZHBM), L-version (ZLBM) will save space in Cable Distribution Cabinets by offering reduced depth
- Easy installation of current transformers in the H-version (ZHBM)
- Variants with non corrosive steel materials (stainless steel)
- Designed for intelligent communication to support a high level of stability in the power distribution network

Applications

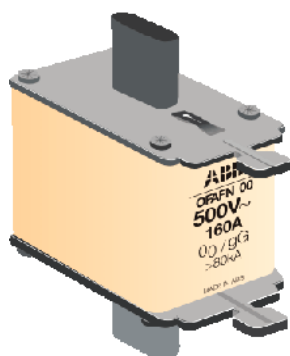
- Cable distribution cabinets (CDC)
- Low voltage distribution in compact secondary substations (CSS)
- Distribution boards for industry, housing and office buildings
- Installations

*For information please contact our nearest sales office

OFAF HRC fuse links and base, DIN-type

DIN -type fuse links, gG, 500 V, 80 kA

The ordering code includes one fuse link, the delivery batch is according to the column.



Fuse size	Rated current In (A)	Description	Ordering Code	M.R.P. (₹)	Delivery batch [pcs]	
000	2	OFAFN000GG2	1SCA107747R1001	180	6	
	6	OFAFN000GG6	1SCA107748R1001	180	6	
	10	OFAFN000GG10	1SCA107749R1001	180	6	
	16	OFAFN000GG16	1SCA107750R1001	180	6	
	20	OFAFN000GG20	1SCA107751R1001	180	6	
	25	OFAFN000GG25	1SCA107751R1002	180	6	
	32	OFAFN000GG32	1SCA107752R1001 ■	180	6	
	63	OFAFN000GG63	1SCA107753R1001 ■	180	6	
	00	6	OFAFN00GG6	1SCA107754R1001	420	6
		10	OFAFN00GG10	1SCA107755R1001	420	6
16		OFAFN00GG16	1SCA107756R1001	420	6	
20		OFAFN00GG20	1SCA107757R1001	420	6	
25		OFAFN00GG25	1SCA107758R1001	420	6	
32		OFAFN00GG32	1SCA107759R1001	420	6	
50		OFAFN00GG50	1SCA107760R1001	420	6	
63		OFAFN00GG63	1SCA107761R1001	420	6	
80		OFAFN00GG80	1SCA107762R1001	420	6	
100		OFAFN00GG100	1SCA107763R1001	420	6	
0	125	OFAFN00GG125	1SCA107764R1001 ■	420	6	
	160	OFAFN00GG160	1SCA107765R1001 ■	420	6	
	160	OFAF0H160 ¹	1SCA022627R3170	820	3	
	200	OFAF0H200 ¹	1SCA022629R5140 ■	820	3	
1	32	OFAFN1GG32	1SCA107766R1001	620	6	
	50	OFAFN1GG50	1SCA107767R1001	620	6	
	63	OFAFN1GG63	1SCA107768R1001	620	6	
	80	OFAFN1GG80	1SCA107769R1001	620	6	
	100	OFAFN1GG100	1SCA107770R1001	620	6	
	125	OFAFN1GG125	1SCA107771R1001	620	6	
	160	OFAFN1GG160	1SCA107772R1001	620	6	
2	200	OFAFN1GG200	1SCA107773R1001	620	3	
	250	OFAFN1GG250	1SCA107774R1001 ■	620	3	
	100	OFAFN2GG100	1SCA107775R1001	900	3	
	125	OFAFN2GG125	1SCA107776R1001	900	3	
	250	OFAFN2GG250	1SCA107778R1001	900	3	
3	315	OFAFN2GG315	1SCA107779R1001	900	3	
	400	OFAFN2GG400	1SCA107780R1001 ■	900	3	
	315	OFAFN3GG315	1SCA107781R1001	1,400	3	
	500	OFAFN3GG500	1SCA107783R1001	1,400	3	
	630	OFAFN3GG630	1SCA107784R1001	1,400	3	
	800	OFAFN3GG800	1SCA107785R1001	1,400	3	

Note: Pl contact our nearest sales office

*For requirement of DIN type 500V 120kA and 690V 80kA.

*For size 4 / 4A (400-1250A) and size 5(1250, 1600A)

¹120kA, 500V

Din type fuse bases



Fuse size	Rated current In (A)	Description	Ordering Code	M.R.P. (₹)
00	160	Fuse Base - Din type	1SCA833001R2001 ■	350
1	250		1SCA833001R2002 ■	700
2	400		1SCA833001R2003 ■	1,200
3	630		1SCA833001R2004 ■	1,600

■ Stock items

OFF HRC fuse links and base, BS-type

BS -type fuse links, gG, 415 V, 80 kA

The type code includes one fuse link, but the delivery batch is according to the column.



Fuse size	Rated current In [A]	Description	Ordering Code	M.R.P. (₹)	Delivery batch [pcs]
Offset blade tag fuse link					
F1	2	OFFNF1GG2	1SCA107786R1001	50	10
	4	OFFNF1GG4	1SCA107787R1001	50	10
	6	OFFNF1GG6	1SCA107788R1001	50	10
	10	OFFNF1GG10	1SCA107789R1001	50	10
	16	OFFNF1GG16	1SCA107790R1001	50	10
	20	OFFNF1GG20	1SCA107791R1001 ■	50	10
	25	OFFNF1GG25	1SCA107792R1001	58	10
	32	OFFNF1GG32	1SCA107793R1001 ■	58	10
Offset bolted tag fuse link					
A2	6	OFFNA2GG6	1SCA107795R1001	75	10
	10	OFFNA2GG10	1SCA107796R1001	75	10
	16	OFFNA2GG16	1SCA107798R1001	75	10
	20	OFFNA2GG20	1SCA107827R1001	75	10
	25	OFFNA2GG25	1SCA107800R1001	75	10
	32	OFFNA2GG32	1SCA107801R1001 ■	75	10
A3	40	OFFNA3GG40	1SCA107803R1001	110	10
	50	OFFNA3GG50	1SCA107804R1001	110	10
	63	OFFNA3GG63	1SCA107805R1001 ■	110	10
A4	50	OFFNA4GG50	1SCA107806R1001	225	10
	63	OFFNA4GG63	1SCA107807R1001	225	10
	80	OFFNA4GG80	1SCA107808R1001	225	10
	100	OFFNA4GG100	1SCA107809R1001	225	10
	125	OFFNA4GG125	1SCA107810R1001 ■	225	10
Central bolted tag fuse link					
B1	50	OFFNB1GG50	1SCA107811R1001	270	10
	63	OFFNB1GG63	1SCA107812R1001	270	10
	80	OFFNB1GG80	1SCA107813R1001	270	10
	100	OFFNB1GG100	1SCA107814R1001	270	10
B2	125	OFFNB2GG125	1SCA107816R1001	410	10
	160	OFFNB2GG160	1SCA107817R1001	410	5
	200	OFFNB2GG200	1SCA107818R1001 ■	420	5
B3	250	OFFNB3GG250	1SCA107819R1001 ■	600	1
	315	OFFNB3GG315	1SCA107820R1001	630	1
B4	400	OFFNB4GG400	1SCA107822R1001	1,050	1
C1	400	OFFNC1GG400	1SCA107823R1001	1,600	1
C2	500	OFFNC2GG500	1SCA107824R1001	1,800	1
C2	630	OFFNC2GG630	1SCA107825R1001	1,800	1
C3	800	OFFNC3GG800	1SCA107826R1001	2,300	1



BS type fuse bases

Fuse size	Rated current In [A]	Description	Ordering Code	M.R.P. (₹)	Delivery batch [pcs]
F1	20	Control Fuse Base	1SYN833001R2005 ■	120	100
	32		1SYN833001R2009 ■	140	100

■ Stock items

OESA/OS switch disconnecter fuse, DIN-types

DIN type

32 - 800A SDF supplied with shaft and IP65 handle

Mechanism at the end of the switch fuse



Rated current In [A]	Poles	Recommend Fuse size	Description	Ordering code	M.R.P. (₹)	
32	3	000 / 00	OESA00-32	1SCA022058R7710	2,000	
63			OESA 00-63	1SCA022057R6850	2,750	
100		00	OESA00 100	1SCA022025R7830	5,300	
125			OESA 00125	OESA00125 ■	7,100	
160		0	OESA00-160	1SCA022077R8130 ■	7,600	
200			OS200D03P	1SYN022709R9500 ■	9,800	
250		0-1	OS250D03P	1SYN022719R0090	12,200	
315		0-2	OS315D03P	1SYN953046P3001	16,200	
400			OS400D03P	1SYN022719R0250	18,200	
630		3	OS630D03P	1SYN022825R2830 ■	31,000	
800			OS800D03P	1SYN022825R4880	33,000	
32	TPN	000 / 00	OESA0032N	OESA0032N ■	2,100	
63			OESA0063N	OESA0063N ■	2,850	
100		00	OESA00100N	OESA00100N	5,600	
125			OESA00125N	OESA00125N ■	7,500	
160		0	OESA00160N	OESA00160N	8,400	
200			OS200D03N3P	1SYN022749R8710 ■	10,600	
250		0-1	OS250D03N3P	1SYN022749R9430	12,800	
315		0-2	OS315D03N3P	1SYN953047P3001	17,200	
400			OS400D03N3P	1SYN022753R9320 ■	19,000	
630		3	OS630D03N3P	1SYN100858R1001 ■	31,500	
800			OS800D03N3P	1SYN100859R1001	34,000	
32		4	000 / 00	OESA 00-32A4	1SCA022067R7610	2,300
63				OESA 00-63A4	1SCA022057R7740	3,000
100			00	OESA00100A4	1SCA022043R6760	5,800
125				OESA00125A4	OESA00125A4	8,000
160			0	OESA 00-160A4	1SCA022080R7840	9,000
200				OS200D04N2P	1SYN022709R9680	11,600
250			0-1	OS250D04N2P	1SYN022719R2380	13,600
315	0-2		OS315D04N2P	1SYN953048P3001	19,500	
400			OS400D04N2P	1SYN022719R2460	21,000	
630	3		OS630D04N2P	1SYN022825R4290	33,600	
800			OS800D04N2P	1SYN022825R5180	38,500	

Notes:

4th pole of all SFU's are 100% rated and are in the switched neutral (SN) version.

Contact our nearest sales office

- For 1250A Switch disconnecter fuse requirement
- For mechanism inbetween poles configuration
- For Motorized Switch disconnecter fuse requirement
- For 2 pole Switch disconnecter fuse
- For 4th pole has fuse protection
- For Switch disconnecter fuse with direct mounting handle

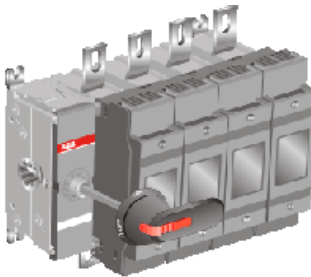
OESA/OS switch disconnecter fuse, BS-types

BS

32 - 800A SDF supplied with shaft and IP65 handle

Mechanism at the end of the switch fuse

1



Rated current In [A]	Poles	Recommend Fuse size	Description	Ordering code	M.R.P. (₹)	
32	3	A2	OESA32G1	1SCA022057R1540	1,950	
63		A3	OESA63G1	1SCA022057R0310 ■	2,650	
100		A4	OESA100G1	1SCA022042R0920 ■	5,200	
125			OESA125G1	OESA125G1	6,600	
160		B2	OESA160B3	1SCA022076R9570	7,200	
200		B1-B2	OS200B03P	1SYN022709R9330	8,700	
250		B1-B3	OS250B03P	1SYN022750R6660	11,100	
315		B1-B4	OS315B03P	1SYN022719R0680	16,100	
400			OS400B03P	1SYN022719R0840	16,400	
630		C1-C2	OS630B03P	1SYN022825R5850	28,500	
800		C1-C3	OS800B03P	1SYN022825R7550	34,000	
32		TPN	A2	OESA32G1N	OESA32G1N ■	2,050
63			A3	OESA63G1N	OESA63G1N ■	2,750
100	A4		OESA100G1N	OESA100G1N ■	5,500	
125			OESA125G1N	OESA125G1N ■	6,800	
160	B2		OESA160B3N	OESA160B3N	7,400	
200	B1-B2		OS200B03N3P	1SYN022750R0620 ■	9,300	
250	B1-B3		OS250B03N3P	1SYN022750R8010 ■	12,000	
315	B1-B4		OS315B03N3P	1SYN022753R8940	16,500	
400			OS400B03N3P	1SYN022753R9160	17,300	
630	C1-C2		OS630B03N3P	1SYN100860R1001	29,000	
800	C1-C3		OS800B03N3P	1SYN100861R1001	34,200	
32	4		A2	OESA32G4	1SCA022059R9040	2,350
63			A3	OESA63G4	1SCA022057R1110	3,000
100		A4	OESA100G4	1SCA022043R7570	6,500	
125			OESA125G4	OESA125G4	8,000	
160		B2	OESA160B4	1SCA022080R3690	9,000	
200		B1-B2	OS200B04N2P	1SYN022709R9410	11,700	
250		B1-B3	OS250B04N2P	1SYN022750R7800	13,800	
315		B1-B4	OS315B04N2P	1SYN022719R2710	19,800	
400			OS400B04N2P	1SYN022719R2890	20,000	
630		C1-C2	OS630B04N2P	1SYN022825R6230	34,500	
800		C1-C3	OS800B04N2P	1SYN022825R8010	39,500	

Note:

4th pole of all SFU's are 100% rated and are in the switched neutral (SN) version.

Contact our nearest sales office

- For 1250A Switch disconnecter fuse requirement
- For mechanism inbetween poles configuration
- For Motorized Switch disconnecter fuse requirement
- For 2 pole Switch disconnecter fuse
- For 4th pole has fuse protection

■ Stock items

Accessories for OESA/OS switch disconnecter fuse, 32..800 A

1



Phase barriers

Frame	Pole	Height (mm)	Description	Ordering code	M.R.P. (₹)
OS200...400	3	100	PB100 low	1SDA054970R1	650
	4	100	PB100 low	1SDA054971R1	950



Mechanical interlock mechanism

(Prevents one switch from closing to ON-position, if the other is not in OFF-position)

Frame	Remarks	Shaft distance (mm)	Description	Ordering code	M.R.P. (₹)
OS200-250	Two 3- or 4-pole switches needed	190	OTZW10	1SCA022431R5280	2,540
OS315-800		250	OETLZW14	1SCA022077R3410	6,500
OS315-800		300	OETLZW3	1SCA022049R0380	6,800
OS315-800		500	OETLZW15	1SCA022081R9340	7,550

Auxiliary contacts



Frame	Contact function	Description	Ordering Code	M.R.P. (₹)	
OESA 32...160	1NO+1NC	OESAZX 15	OESAZX 15 ■	420	
	2NO+2NC	OESAZX 16	OESAZX 16 ■	820	
OS200...800	1NO	OA1G10	1SCA022353R4970 ■	550	
	1NC	OA3G01	1SCA022456R7410 ■	730	
Screw mounting to the left side of the switch			OEA28	1SCA022714R8810 ■	1,900

Note: OEA 28 has to be order along with 200 & 250A TPN switch only

Fuse monitor



Frame	Rated voltage [Vac]	Description	Ordering code	M.R.P. (₹)
OS200...800	100...260	OFS260	1SCA022716R0180	6,150
	380...690	OFS690	1SCA022715R9920	6,300

Wrapped neutral link



Frame	Description	Ordering Code	M.R.P. (₹)
OESA32...63	OESAZX87	OESAZX 87	370
OESA100	OESAZX 86/1	OESAZX 86 / 1	690
OESA125...160	OESAZX86	OESAZX 86	750
OSA200...250	OXN250	1SCA022752R9950	3,500
OSA315...400	OXN400	1SCA022770R3060	9,160
OSA630...800	OXN800S	1SCA022831R4880	10,500

Handles



Frame	Description	Ordering code	M.R.P. (₹)
OESA32...63	YASDB51	YASDB 51 ■	630
OESA100...160	YASDB10	YASDB 10 ■	950
OS200...250	OHB80J6	1SCA022381R0240 ■	1,300
OS315...400	OHB145J12	1SCA022381R2110 ■	1,600
OS630...800	OHB175J12	1SCA022381R2450 ■	1,900

Shaft



Frame	Description	Ordering code	M.R.P. (₹)
OESA/OS32...250	EXP6X210	1SCA022295R6080 ■	320
OS315...400	EXP12X250	1SCA022325R6980 ■	650
OS630...800	EXP12X280	1SCA022137R5140 ■	850

Fuse covers for OESA switch disconnecter fuse

Frame	Type	Description	Ordering code	M.R.P. (₹)
32...63	DIN	Fuse cover	1SYN833035R2012 ■	50
32...63	BS		1SYN833036R2012 ■	50
100...160	DIN		1SYN833037R2012 ■	60

Note: Ordering code mentioned above for fuse cover is per piece

■ Stock items

OT switch-disconnectors

1



- Contact our nearest sales office
- For Door mounted switch disconnector
 - For different configuration of Shaft and Handle(selector type)
 - For 6 & 8pole switch disconnectorrequirement

Front operated switch-disconnectors

OT 16-3150A switch disconnector supplied with extended shaft and IP 65 pistol type handle

Rated current In [A]	Poles	Description	Ordering code	M.R.P. (₹)
16	3	OT16F3	1SYN104811R1001	2,450
25		OT25F3	1SYN104857R1001	2,500
40		OT40F3	1SYN104902R1001	2,550
63		OT63F3	1SYN105332R1001	2,600
80		OT80F3	1SYN105798R1001	4,200
100		OT100F3	1SYN105004R1001	5,600
125		OT125F3	1SYN105033R1001	5,700
16	4	OT16F4N2	1SYN104829R1001	2,650
25		OT25F4N2	1SYN104886R1001	2,750
40		OT40F4N2	1SYN104932R1001	2,800
63		OT63F4N2	1SYN105365R1001	3,200
80		OT80F4N2	1SYN105413R1001	5,500
100		OT100F4N2	1SYN105018R1001	5,800
125		OT125F4N2	1SYN105051R1001	6,000

160	2	OT160E02P	1SCA120508R1001	6,840	
200		OT200E02P	1SCA022751R1400	7,650	
250		OT250E02P	1SCA022735R2500	9,450	
315		OT315E02P	1SCA022866R5590	10,350	
400		OT400E02P	1SCA022741R7210	13,950	
630		OT630E02P	1SCA022866R5670	17,500	
800		OT800E02P	1SCA022835R4830	21,600	
1000		OT1000E02P	1SCA105795R1001	45,000	
1250		OT1250E02P	1SCA106136R1001	54,000	
1600		OT1600E02P	1SCA106142R1001	72,000	
2000		OT2000E02P	1SCA120025R1001	90,000#	
2500		OT2500E02P	1SCA113956R1001	112,500#	
3200		OT3200E02P	1SCA128581R1001	162,000#	
4000		OT4000E02P	1SCA128595R1001	189,000#	
160		3	OT160E03P	1SCA120514R1001	7,600
200			OT200E03P	1SCA022712R0800	8,500
250			OT250E03P	1SCA022710R0100	10,500
315	OT315E03P		1SCA022718R8510	11,500	
400	OT400E03P		1SCA022718R8780	15,500	
630	OT630E03P		1SCA022718R8940	19,200	
800	OT800E03P		1SCA022718R9410	24,000	
1000	OT1000E03P		1SCA022860R5930	47,000	
1250	OT1250E03P		1SCA022860R6230	60,000	
1600	OT1600E03P		1SCA022860R6580	80,000	
2000	OT2000E03P		1SCA108036R1001	98,000#	
2500	OT2500E03P		1SCA104972R1001	125,000#	
3200	OT3200E03P		1SCA128481R1001	180,000#	
4000	OT4000E03P		1SCA12484R1001	210,000#	
160	4		OT160E04P	1SCA120521R1001	10,500
200			OT200E04P	1SCA022713R4930	10,700
250			OT250E04P	1SCA022710R0520	12,000
315		OT315E04P	1SCA022719R1730	13,000	
400		OT400E04P	1SCA022719R1810	16,700	
630		OT630E04P	1SCA022719R2030	22,800	
800		OT800E04P	1SCA022719R2110	27,500	
1000		OT1000E04P	1SCA022860R6150	62,000	
1250		OT1250E04P	1SCA022860R6310	78,000	
1600		OT1600E04P	1SCA022860R6740	100,000	
2000		OT2000E04P	1SCA108038R1001	118,000#	
2500		OT2500E04P	1SCA105140R1001	145,000#	
3200		OT3200E04P	1SCA128482R1001	195,000#	
4000		OT4000E04P	1SCA124856R1001	220,000#	

Note:
Marked products carry list prices

- Contact our nearest sales office
- For requirement of Motorized isolators
 - For mechanism in between poles configuration
 - For switch disconnector with direct mounted handle

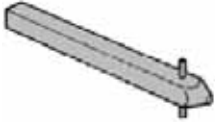
Accessories for OT switch-disconnectors

Handles



Frame	Description	Ordering code	M.R.P. (₹)
OT16...125	OHB45J6	1SCA022380R8770 ■	950
OT160...250	OHB65J6	1SCA022380R9660	1,300
OT315...400	OHB95J12	1SCA022381R0830	1,500
OT630...800	OHB125J12	1SCA022381R1560	1,600
OT1000...4000	OHB274J12	1SCA115920R1001	4,600

Shaft



Frame	Description	Ordering code	M.R.P. (₹)
OT16...125	EXP6X170	1SCA108224R1001 ■	300
OT160...250	EXP6X210	1SCA022295R6080	320
OT315...800	EXP12X185	1SCA022325R6710	650
OT1000...4000	EXP12X280	1SCA022137R5140	850

Auxiliary contact



Frame	Contact function	Description	Ordering code	M.R.P. (₹)
OT16...4000	1NO	OA1G10	1SCA022353R4970 ■	550
OT16...125	1NC	OA1G01	1SCA022353R4890 ■	550
OT160EV...4000	1NC	OA3G01	1SCA022456R7410 ■	730

Phase barrier



Frame	Poles	Description	Ordering code	M.R.P. (₹)
OT160...OT800	3	PB100 low	1SDA054970R1	650
OT160...OT800	4	PB100 low	1SDA054971R1	950
OT1000...2500	3 & 4	OTB1600/6	1SCA100768R1001	4,150
OT3200...4000	3 & 4	OTB4000/6	1SCA129040R1001	4,200

Mechanical interlock mechanism

(Prevents one switch from closing to ON-position, if the other is not in OFF-position)



Frame	Shaft distance [mm]	Description	Ordering code	M.R.P. (₹)
OT16...125	100	OTZW24	1SCA022639R5610	2,100
OT160...250	190	OTZW10	1SCA022431R5280	2,540
OT315...400	250	OETLZW14	1SCA022077R3410	6,500
OT315...800	300	OETLZW3	1SCA022049R0380	6,800
OT315...4000	500	OETLZW15	1SCA022081R9340	7,550

Terminal shrouds snap-on mounting, transparent

For 3-pole switches



Frame	Description	Ordering code	M.R.P. (₹)
OT 16...40F3	OTS40T3	1SCA105317R1001	350
OT63...80F3	OTS63T3	1SCA022353R6750	250
OT 100...125F3	OTS125T3	1SCA022379R9680	520

Note:

for requirement of Terminal shrouds for higher current rating contact our nearest sales office

OT manual changeover switches

Manual changeover switches, I-O-II -operation

Supplied with extended shaft and IP 65 pistol type handle

Rated current In [A]	Poles	Description	Ordering code	M.R.P. (₹)
16	3	OT16F3C	1SYN104816R1001	3,800
25		OT25F3C	1SYN104863R1001	4,800
40		OT40F3C	1SYN104913R1001	5,200
63		OT63F3C	1SYN105338R1001	6,800
80		OT80F3C	1SYN105402R1001	7,500
100		OT100F3C	1SYN105008R1001	10,000
125	4	OT125F3C	1SYN105037R1001	10,500
16		OT16F4C	1SYN104831R1001	4,800
25		OT25F4C	1SYN104877R1001	5,000
40		OT40F4C	1SYN104934R1001	5,500
63		OT63F4C	1SYN105369R1001 ■	7,700
80		OT80F4C	1SYN105418R1001	8,100
100	OT100F4C	1SYN105019R1001 ■	11,900	
125	OT125F4C	1SYN105054R1001	12,200	

Supplied with bridging bars, extended shaft and IP 65 pistol type handle

160	3	OT160E03CP	1SYN022772R6510	14,500
200		OT200E03CP	1SYN022771R7520	15,000
250		OT250E03CP	1SYN022771R3450	18,000
315		OT315E03CP	1SYN022772R6780	22,000
400		OT400E03CP	1SYN022771R8500	26,000
630		OT630E03CP	1SYN022785R6050	39,000
800		OT800E03CP	1SYN022785R6300	50,000
1000		OT1000E03CP	1SYN022872R1680	135,000#
1250		OT1250E03CP	1SYN022872R0790	150,000#
1600		OT1600E03CP	1SYN022872R1840	185,000#
2000		OT2000E03CP	1SYN103908R1001	280,000#
2500		OT2500E03CP	1SYN105615R1001	305,000#
3200		OT3200E03CP	1SYN129156R1001	440,000#
160		4	OT160E04CP	1SYN022775R9440
200	OT200E04CP		1SYN022771R7280 ■	17,500
250	OT250E04CP		1SYN022775R4640 ■	19,500
315	OT315E04CP		1SYN022775R7150	23,800
400	OT400E04CP		1SYN022771R8680 ■	28,000
630	OT630E04CP		1SYN022785R6130	48,000
800	OT800E04CP		1SYN022785R6210	58,000
1000	OT1000E04CP		1SYN022872R1500	155,000#
1250	OT1250E04CP		1SYN022872R1250	162,000#
1600	OT1600E04CP		1SYN022872R2310	200,000#
2000	OT2000E04CP		1SYN103912R1001	360,000#
2500	OT2500E04CP	1SYN103906R1001	400,000#	
3200	OT3200E04CP	1SYN129158R1001	525,000#	

Marked products carry list prices

Note:

1. For 6 pole change over
2. For manual bypass switch
3. For manual closed transition
4. For wide phase manual change over

OT motorized changeover switches

Changeover switches, motor operation, I-O-II -operation

Supplied with bridging bars and handle



Rated current in [A]	Poles	Description	Ordering code	M.R.P.(₹)
40	3	OTM40F3CMA230V	1SYN120096R1001	26,000
63		OTM63F3CMA230V	1SYN120095R1001	27,500
80		OTM80F3CMA230V	1SYN120093R1001	30,000
100		OTM100F3CMA230V	1SYN120071R1001	31,500
125		OTM125F3CMA230V	1SYN120070R1001	32,500
160		OTM160E3CM230C	1SYN022845R8610	38,000
200		OTM200E3CM230C	1SYN022845R8960	38,500
250		OTM250E3CM230C	1SYN022845R9260	47,500
315		OTM315E3CM230C	1SYN022847R1210	48,000
400		OTM400E3CM230C	1SYN022847R1630	57,750
630		OTM630E3CM230C	1SYN103567R1001	65,000
800		OTM800E3CM230C	1SYN103570R1001	96,600#
1000		OTM1000E3CM230C	1SYN112677R1001	144,000#
1250		OTM1250E3CM230C	1SYN112676R1001	158,000#
1600		OTM1600E3CM230C	1SYN112678R1001	190,000#
2000		OTM2000E3CM230C	1SYN112709R1001	320,250#
2500		OTM2500E3CM230C	1SYN112710R1001	351,750#
40	4	OTM40F4CMA230V	1SYN120102R1001	28,000
63		OTM63F4CMA230V	1SYN120101R1001	29,500
80		OTM80F4CMA230V	1SYN120100R1001	31,000
100		OTM100F4CMA230V	1SYN120098R1001	32,000
125		OTM125F4CMA230V	1SYN120097R1001	34,000
160		OTM160E4CM230C	1SYN022848R1510	39,000
200		OTM200E4CM230C	1SYN022846R1590	39,200
250		OTM250E4CM230C	1SYN022846R1910	48,000
315		OTM315E4CM230C	1SYN022847R2870	49,000
400		OTM400E4CM230C	1SYN022847R3250	61,500
630		OTM630E4CM230C	1SYN022873R1990	66,500
800		OTM800E4CM230C	1SYN022872R8340	100,000#
1000		OTM1000E4CM230C	1SYN112703R1001	145,000#
1250		OTM1250E4CM230C	1SYN112702R1001	159,000#
1600		OTM1600E4CM230C	1SYN112704R1001	195,000#
2000		OTM2000E4CM230C	1SYN112712R1001	346,500#
2500		OTM2500E4CM230C	1SYN112713R1001	378,000#

Marked products carry list prices

Note:

Motor voltage U_e 110-240 V AC/DC (OTM40...125A)

Motor voltage U_e 220-240 V AC (OTM160...2500A)

OMD control units can be purchased separately for their motorized changeover switches in order to build an ATS by themselves. Contact nearest sales office for making selection

Contact our nearest sales office

- For motor voltage U_e 110...125 V AC/DC (160A-2500A)
- For motor voltage $U_e = 48V$ DC (160A-2500A)

OT automatic transfer switches

Automatic transfer switches, I - O - II operation

Supplied with bridging bars and handle

1



Automatic operation, equipped with OMD300 controller unit

Rated current In [A]	Poles	Description	Ordering code	M.R.P.(₹)
160	4	OTM160E4C3D230C	1SYN106305R1001	89,000
200		OTM200E4C3D230C	1SYN106309R1001	92,000
250		OTM250E4C3D230C	1SYN106313R1001	95,000
315		OTM315E4C3D230C	1SYN106317R1001	99,500
400		OTM400E4C3D230C	1SYN106318R1001	105,000
630		OTM630E4C3D230C	1SYN108726R1001	140,000#
800		OTM800E4C3D230C	1SYN108728R1001	185,000#
1000		OTM1000E4C3D230C	1SYN112852R1001	200,000#
1250		OTM1250E4C3D230C	1SYN112851R1001	230,000#
1600		OTM1600E4C3D230C	1SYN112848R1001	300,000#



Automatic operation, equipped with OMD800 controller unit with display

160	4	OTM160E4C8D230C	1SYN101020R1001	120,000
200		OTM200E4C8D230C	1SYN101021R1001	125,000
250		OTM250E4C8D230C	1SYN101022R1001	130,000
315		OTM315E4C8D230C	1SYN101063R1001	135,000
400		OTM400E4C8D230C	1SYN101064R1001	150,000
630		OTM630E4C8D230C	1SYN108453R1001	165,000#
800		OTM800E4C8D230C	1SYN108455R1001	200,000#
1000		OTM1000E4C8D230C	1SYN112861R1001	255,000#
1250		OTM1250E4C8D230C	1SYN112864R1001	280,000#
1600		OTM1600E4C8D230C	1SYN112867R1001	350,000#

Note:

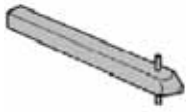
- Motor voltage Ue 220-240 V AC

- For 3 pole requirement please contact the nearest sales office

Marked products carry list prices

Accessories for changeovers (manual, motorized, ATS)

Shaft



Frame	Description	Ordering code	M.R.P. (₹)
OT16...125F_C	OXF6x170	1SCA108224R1001 ■	300
OT160...250_C	OXF6x161	1SCA022067R1760	280
OT315...400_C	OXF12x166	1SCA022325R7100	460
OT630...3200_C	OXF12x185	1SCA022325R6710	650

Handle



Frame	Description	Ordering code	M.R.P. (₹)
OT16...125F_C	OHB45J6E311	1SCA022817R2130 ■	1,900
OT160...250_C	OHB65J6E011	1SCA022383R2480	2,100
OT315...400_C	OHB95J12E011	1SCA022621R0760	2,400
OT630...800_C	OHB125J12E011	1SCA022589R3340	2,650
OT1000...3200_C	OHB200J12PE011	1SCA022873R4230	5,800

Auxiliary contacts



Frame	Contact functions	Installation side	Description	Ordering code	M.R.P. (₹)
OT16...125F_C OTM40...125	1NO	Right	OA1G10	1SCA022353R4970	550
	1NC	Right	OA8G01	1SCA022744R2240	840
	1NO	Left	OA7G10	1SCA022673R1140	750
	1NC	Left	OA1G01	1SCA022353R4890	550
OT160...3200 OTM160...2500	1NO	Right	OA1G10	1SCA022353R4970 ■	550
	1NC	Right	OA3G01	1SCA022456R7410 ■	730

Phase barriers

3-pole change-overs need 8 barriers and 4-pole change-overs need 12 barriers for full protection.



Frame	Poles	Description	Ordering code	M.R.P. (₹)
OT160...800 OTM160...800	3	PB100 low	1SDA054970R1	650
	4	PB100 low	1SDA054971R1	950

Basic ATS controller for motorised change over



Frame	Description	Ordering code	M.R.P. (₹)
40...2500A	ODPS230	1SCA122946R1001	16,000

Note: Contact our nearest sales office for more information

Kabeldon low voltage switchgear system

Kabeldon low voltage distribution system by ABB is used to build modern systems for various applications, from substations and cable distribution cabinets to distribution boards in industry.

1



Features of the Kabeldon IP-system are its simplicity and reliability. These are the most important factors when you want to achieve low operating costs and high delivery reliability in a distribution system.

- Busbars of continuously-extruded aluminium sections, insulated with a layer of polyamid.
- The busbar has a touch-proof contact slot. This ensures safety regardless of where on the busbar the switching device will be placed.
- Blade fuses in all of the fuse-switch disconnectors.
- The switching devices can be arranged in any order, regardless of rated current
- All parts, busbars and devices, fulfil IP2X protection in accordance with IEC 60529*).
- Switching devices 100-1600 A.
- It is easy to add new switching devices to existing distribution boards.
- Switching devices are mounted on and connected to the busbar system in the same operation.
- Switching devices can be connected when the system is live.
- Always voltage-free ("dead") when changing fuses.
- Busbars are available with rated currents from 400 to 1600 A.
- Switching devices, connectors and busbars combine to form a modular system. Each module is 12.5 mm. The modular system makes planning easier.
- The compact design of the switching devices makes them suitable for use in many different types of distribution boards.
- All switching devices have a utilisation category so that they can be used in cable distribution cabinets, substations and other distribution boards.

Note : For more details pl contact the nearest sales office.

Low Voltage Products

Control Products

Control Products

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ABB's comprehensive range of LV control products

The range of ABB control products ranks amongst the most extensive on the market with a full range of innovative solutions for Control & Protection, Motor Starting, Intelligent motor management, measurement and monitoring and connection applications.

2

The business unit is comprised of 3 main product families :

- Control & Protection
- Electronic Relays
- Connection Devices

Our products

Our products are already among the most extensive in the market and we are constantly adding new products in order to meet ever changing customer needs.

Quality and reliability are built into every device to ensure total performance satisfaction, even in the most demanding applications.

We offer a very modern and competitive range of contactors, softstarters, starters, manual motorstarters, a wide range of electronic relays and overload relays, together with an extended program of pilot devices.

Our offering

- Contactors
- Manual motor starters
- Thermal overload relays
- Electronic overload relays
- Soft starters
- Intelligent Motor Management Systems
 - Universal Motor Controllers
 - Communication Fieldbus Plugs
- Electronic Products and Relays
 - Timers
 - Measuring and monitoring relays
 - Power Supplies
 - Analog Signal converters
 - Interface Relays & Optocouplers
- Jokab Safety Systems
- Pilot devices
- Arc Guard Systems
- Current & Voltage Sensors
- Terminal blocks



Auxiliary contactors



Standard control contactors

No. of Contacts	Contact Configuration		Type Code Reference	AC operated		M.R.P.(₹)	DC operated		M.R.P.(₹)
	NO	NC		Order Code	Type Code Reference		Order Code		
4	2	2	N22E **	1SBH141001R□□22 ■	1,015	NL22E **	1SBH143001R□□22 ■	1,560	
4	3	1	N31E **	1SBH141001R□□31 ■		NL31E **	1SBH143001R□□31 ■		
4	4	0	N40E **	1SBH141001R□□40 ■		NL40E **	1SBH143001R□□40 ■		

Refer coil voltage & codes mentioned below.

AC/DC operated

No. of Contacts	Contact Configuration		Type Code Reference	AC/DC operated		M.R.P.(₹)	AC/DC operated low consumption [#]		M.R.P.(₹)
	NO	NC		Order Code	Type Code Reference		Order Code		
4	2	2	NF22E **	1SBH137001R□□22 ■	1,900	NFZ22E **	1SBH136001R□□22	1,975	
4	3	1	NF31E **	1SBH137001R□□31 ■		NFZ31E **	1SBH136001R□□31		
4	4	0	NF40E **	1SBH137001R□□40 ■		NFZ40E **	1SBH136001R□□40		

Refer coil voltage & codes mentioned below.

[#]Allows direct control by PLC output ≥ 24 V DC 500 mA

Coil voltages and codes

N range (AC operated)

Voltage V - 50Hz	Voltage V - 60Hz	Code □□
24	24	8 1 ■
110	110 ... 120	8 4
220 ... 230	230 ... 240	8 0 ■
230 ... 240	240 ... 260	8 8
400 ... 415	415 ... 440	8 6 ■

NL (DC operated)

Voltage V DC	Code □□
24	8 1
48	8 3
110	8 6
220	8 8
240	8 9

NF range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
24...60	20...60	1 1
48...130	48...130	1 2
100...250	100...250	1 3
250...500	250...500	1 4

NFZ range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
-	12...20	2 0
24...60	20...60	2 1
48...130	48...130	2 2
100...250	100...250	2 3

Note: For Non standard coil voltage, other than this please contact us for pricing

■ Stock items

3 pole contactors : AC operated



2

Contactors: 3-pole – AC Operated

AC1 duty Amps	AC3 rating at 415V			Auxiliary Contacts		Type Code	Order Code	M.R.P.(₹)
	Amps	hP	kW					
25	9	5.5	4	1NO	-	A09-30-10**	1SBL141001R□□10 ■	980
25	9	5.5	4	-	1NC	A09-30-01**	1SBL141001R□□01 ■	980
27	12	7.5	5.5	1NO	-	A12-30-10**	1SBL161001R□□10 ■	1,110
27	12	7.5	5.5	-	1NC	A12-30-01**	1SBL161001R□□01 ■	1,110
30	17	12.5	7.5	1NO	-	A16-30-10**	1SBL181001R□□10 ■	1,265
30	17	12.5	7.5	-	1NC	A16-30-01**	1SBL181001R□□01 ■	1,265
45	26	15	11	1NO	-	A26-30-10**	1SBL241001R□□10 ■	1,825
45	26	15	11	-	1NC	A26-30-01**	1SBL241001R□□01 ■	1,825
55	32	20	15	1NO	-	A30-30-10**	1SBL281001R□□10 ■	3,525
55	32	20	15	-	1NC	A30-30-01**	1SBL281001R□□01 ■	3,525
60	37	30	18.5	1NO	-	A40-30-10**	1SBL321001R□□10 ■	5,650
60	37	30	18.5	-	1NC	A40-30-01**	1SBL321001R□□01 ■	5,650
100	50	40	25	-	-	A50-30-00**	1SBL351001R□□00 ■	6,525
115	65	50	37	-	-	A63-30-00**	1SBL371001R□□00 ■	9,250
125	75	60	40	-	-	A75-30-00**	1SBL411001R□□00 ■	11,550
145	96	70	55	1NO	1NC	A95-30-11**	1SFL431001R□□11 ■	14,425
160	110	75	59	1NO	1NC	A110-30-11**	1SFL451001R□□11 ■	17,450
250	145	100	75	1NO	1NC	A145-30-11**	1SFL471001R□□11 ■	23,100
275	185	115	90	1NO	1NC	A185-30-11**	1SFL491001R□□11 ■	28,550
350	210	150	110	1NO	1NC	A210-30-11**	1SFL511001R□□11	34,320
400	260	170	140	1NO	1NC	A260-30-11**	1SFL531001R□□11	41,030
500	300	210	160	1NO	1NC	A300-30-11**	1SFL551001R□□11	47,605
600	400	300	220	1NO	1NC	AF400-30-11**	1SFL577001R□□11	59,500
700	460	340	250	1NO	1NC	AF460-30-11**	1SFL597001R□□11	75,000
800	580	470	355	1NO	1NC	AF580-30-11**	1SFL617001R□□11	1,03,000
1050	750	570	425	1NO	1NC	AF750-30-11**	1SFL637001R□□11	1,60,000
1260	-	-	-	1NO	1NC	AF1250-30-11**	1SFL647001R□□11	Upon request
1350	-	-	-	1NO	1NC	AF1350-30-11**	1SFL657001R□□11	
1650	-	-	-	1NO	1NC	AF1650-30-11**	1SFL677001R□□11	
2050	-	-	-	1NO	1NC	AF2050-30-11**	1SFL707001R□□11	
2650	-	-	-	1NO	1NC	AF2650-30-11**	1SFL667001R□□11	

Complete the contactor type code by replacing ** with desired coil voltage AF contactors have advanced electronic coil interface with wideband AC/DC coil
For AG contactors (AC contactors with wide band coil 200...240 V AC) R38 coil code to be considered and additional cost of Rs. 125 applicable on the MRP of A contactors.

Coil voltages and codes: A 09 ... A 300, range

Voltage V - 50Hz	Voltage V - 60Hz	Code □□
24	24	8 1
110	110 ... 120	8 4 ■
220 ... 230	230 ... 240	8 0 ■
230 ... 240	240 ... 260	8 8
400 ... 415	415 ... 440	8 6 ■

AF400 and above range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
-	24...60	6 8
48...130	48...130	6 9
100...250	100...250	7 0
250...500	250...500	7 1

Note: For Non standard coil voltage, other than this please contact us for pricing

4 Pole contactors : AC operated



Contactors: 4-pole (AC operated)

Rating at 415V AC1 Amps	Main Contact Arrangement	Auxiliary Contacts		Type Code Reference	Order Code	M.R.P.(₹)
25	4NO	-	-	A09-40-00 **	1SBL141201R□□□00	1,400
25	2NO	2NC	-	A09-22-00 **	1SBL141501R□□□00	1,725
30	4NO	-	-	A16-40-00 **	1SBL181201R□□□00	1,500
30	2NO	2NC	-	A16-22-00 **	1SBL181501R□□□00	1,975
45	4NO	-	-	A26-40-00 **	1SBL241201R□□□00	2,475
45	2NO	2NC	-	A26-22-00 **	1SBL241501R□□□00	3,100
70	4NO	-	-	A45-40-00**	1SBL331201R□□□00	6,850
70	2NO	2NC	-	A45-22-00**	1SBL331501R□□□00	9,450
100	4NO	-	-	A50-40-00**	1SBL351201R□□□00	9,550
125	4NO	-	-	A75-40-00**	1SBL411201R□□□00	12,900
125	2NO	2NC	-	A75-22-00**	1SBL411501R□□□00	14,500
160	4NO	-	-	AF116-40-00 NEW	1SFL427102R□□□00	20,500
200	4NO	-	-	AF140-40-00 NEW	1SFL447102R□□□00	25,000
275	4NO	-	-	AF190-40-00 NEW	1SFL487102R□□□00	35,000
350	4NO	-	-	AF205-40-00 NEW	1SFL527102R□□□00	41,000
400	4NO	-	-	AF265-40-00 NEW	1SFL547102R□□□00	49,000
500	4NO	-	-	AF305-40-00 NEW	1SFL587102R□□□00	60,000
525	4NO	-	-	AF370-40-00 NEW	1SFL607102R□□□00	72,000
800	4NO	-	1NO 1NC	EK550-40-11 **	SK827041 - □□	1,15,000
1000	4NO	-	1NO 1NC	EK1000-40-11 **	SK827044 - □□	1,60,000

NEW AF contactors are with wide band coil can be operated on both AC and DC Voltages, with built-in Surge suppressors

Complete the contactor type code by replacing ** with desired coil voltage

Coil voltages and codes: A 09 ... A 75 , range

Voltage V - 50Hz	Voltage V - 60Hz	Code □□
24	24	8 1
110	110 ... 120	8 4
220 ... 230	230 ... 240	8 0
230 ... 240	240 ... 260	8 8
400 ... 415	415 ... 440	8 6

Coil voltages and codes: EK 550 ... EK 1000

Voltage V - 50Hz	Voltage V - 60Hz	Code □□
-	110	A E
110	120	A F
220 ... 230	*	A L
230 ... 240	-	A M
400 ... 415	-	A R

Note: For Non standard coil voltage, other than this please contact us for pricing

Coil voltages and codes: New AF range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
24...60	20...60	1 1
48...130	48...130	1 2
100...250	100...250	1 3
250...500	250...500	1 4

(1) The connection polarities indicated close to the coil terminals must be respected: A1 for the positive pole and A2 for the negative pole.

3 Pole contactors AL and TAL range: DC operated

AL.., TAL.. contactors are mainly used for controlling 3-phase motors and more generally for controlling power circuits both ac & dc. These contactors have a low power consumption

for direct control from PLC outputs. Consequently they are perfectly adapted for all applications associated with PLC control.

AL Contactors



AC 1 duty Amps	AC3 rating at 415V			Auxiliary contacts		Type code reference	Order Code	M.R.P.(₹)
	Amps	hP	kW					
25	21	5	4	1NO	-	AL 9-30-10	1SBL143001R□□10 ■	1,650
25	21	5	4	-	1NC	AL 9-30-01	1SBL143001R□□01 ■	1,650
27	25	7.5	5.5	1NO	-	AL 12-30-10	1SBL163001R□□10 ■	1,800
27	25	7.5	5.5	-	1NC	AL 12-30-01	1SBL163001R□□01 ■	1,800
30	30	10	7.5	1NO	-	AL 16-30-10	1SBL183001R□□10 ■	2,300
30	30	10	7.5	-	1NC	AL 16-30-01	1SBL183001R□□01 ■	2,300
45	40	20	11	1NO	-	AL 26-30-10	1SBL243001R□□10 ■	2,900
45	40	20	11	-	1NC	AL 26-30-01	1SBL243001R□□01 ■	2,900
55	50	25	15	1NO	-	AL 30-30-10	1SBL283001R□□10 ■	6,250
55	50	25	15	-	1NC	AL 30-30-01	1SBL283001R□□01 ■	6,250
60	60	30	18.5	1NO	-	AL 40-30-10	1SBL323001R□□10 ■	7,650
60	60	30	18.5	-	1NC	AL 40-30-01	1SBL323001R□□01 ■	7,650

TAL Contactors



AC 1 duty Amps	AC3 rating at 415V			Auxiliary contacts		Type code reference	Order Code	M.R.P.(₹)
	Amps	hP	kW					
25	21	5	4	1NO	-	TAL 9-30-10	1SBL143061R□□10	2,080
25	21	5	4	-	1NC	TAL 9-30-01	1SBL143061R□□01	2,080
27	25	7.5	5.5	1NO	-	TAL 12-30-10	1SBL163061R□□10	2,165
27	25	7.5	5.5	-	1NC	TAL 12-30-01	1SBL163061R□□01	2,165
30	30	10	7.5	1NO	-	TAL 16-30-10	1SBL183061R□□10	2,575
30	30	10	7.5	-	1NC	TAL 16-30-01	1SBL183061R□□01	2,575
45	40	20	11	1NO	-	TAL 26-30-10	1SBL243061R□□10	3,600
45	40	20	11	-	1NC	TAL 26-30-01	1SBL243061R□□01	3,600
55	50	25	15	1NO	-	TAL 30-30-10	1SBL283061R□□10	7,700
55	50	25	15	-	1NC	TAL 30-30-01	1SBL283061R□□01	7,700
60	60	30	18.5	1NO	-	TAL 40-30-10	1SBL323061R□□10	8,620
60	60	30	18.5	-	1NC	TAL 40-30-01	1SBL323061R□□01	8,620

Coil voltages and codes: AL

Voltage □□ V DC	Code □□
24	8 1
110	8 6 ■
220	8 8 ■
240	8 9

Other voltages: please consult us.

Coil voltages and codes: TAL

Voltage □□ V DC	Code □□
25...45	5 2
77...143	6 2
90...150	6 6
152...264	6 8

■ Stock items

Contactors for special application - capacitors switching

Contactors for capacitor switching: 3 pole – AC operated:

kVAR Rating at 415V	Peak inrush current	Auxiliary Contacts		Type Code reference	Order Code	M.R.P.(₹)
		NO	NC			
Type UA..RA with in-built damping resistors:						
12.5	Unlimited	1NO	--	UA16-30-10RA **	1SBL181024R□□10 ■	2,450
22	Unlimited	1NO	--	UA26-30-10RA **	1SBL241024R□□10 ■	4,150
30	Unlimited	1NO	--	UA30-30-10RA**	1SBL281024R□□10 ■	4,800
40	Unlimited	--	--	UA50-30-00RA	1SBL351024R□□00	13,450
50	Unlimited	--	--	UA63-30-00RA**	1SBL371024R□□00	14,500
60	Unlimited	--	--	UA75-30-00RA**	1SBL411024R□□00	15,450
70	Unlimited	--	--	UA95-30-00RA**	1SFL431024R□□00	18,220
80	Unlimited	--	--	UA110-30-00RA**	1SFL451024R□□00	19,550

Type UA..RA with in-built damping resistors

Complete the contactor type code by replacing ** with desired coil voltage

Price for UAF 50-30 - 00RA..... UAF110-30-00RA (with wide band electronic coil 100...250V AC/DC) on request

Coil voltages and codes

UA...RA

Voltage V - 50Hz	Voltage V - 60Hz	Code □□
24	24	8 1
110	110 ... 120	8 4 ■
220 ... 230	230 ... 240	8 0 ■
230 ... 240	240 ... 260	8 8
400 ... 415	415 ... 440	8 6 ■



Note: For Non standard coil voltage, other than this please contact us for pricing

Contactors for DC Circuit Switching: AC/DC operated

Coil	Current Ratings at 440V DC			Type Code reference	Order Code	M.R.P.(₹)
	DC-1	DC-3	DC-5			
AC	100A	85A	50A	GA75-10-11 **	1SBL411025R□□11	Upon request
DC	100A	85A	50A	GAE75-10-11 **	1SBL419025R□□11	Upon request

Complete the contactor type code by replacing ** with desired coil voltage

Coil	Current Ratings at 1000V DC		Type Code reference	Order Code	M.R.P.(₹)
	DC-1 L/R 1 ms				
AC/DC	275A		GAF185-10-11	1SFL497025R□□11	Upon request
	450A		GAF300-10-11	1SFL557025R□□11	
	700A		GAF460-10-11	1SFL597025R□□11	
	1050A		GAF750-10-11	1SFL637025R□□11	
	1250A		GAF1250-10-11	1SFL647025R□□11	
	1650A		GAF1650-10-11	1SFL677025R□□11	
	2050A		GAF2050-10-11	1SFL707025R□□11	

DC3, DC5 ratings please refer technical catalog

Coil voltages and codes:

GA 75

Voltage V - 50Hz	Voltage V - 60Hz	Code □□
24	24	8 1
110	110 ... 120	8 4
220 ... 230	230 ... 240	8 0
230 ... 240	240 ... 260	8 8
400 ... 415	415 ... 440	8 6

Coil voltages and codes:

GAE 75

Voltage V d.c.	Code □□
12	8 0
24	8 2
42	8 1
110	8 6
220	8 8
240	8 9

Coil voltages and codes: GAF range

(AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
-	24...60	6 8
48...130	48...130	6 9
100...250	100...250	7 0
250...500	250...500	7 1

■ Stock items

Accessories for contactors

2



Auxiliary contact block

Description	Mounting on Contactors	Contact Configuration		Type Code Reference	Order Code	M.R.P.(₹)
		NO	NC			
Front mounted single pole add-on blocks	A9...A110 AL9...AL40, TAL9...TAL40 AE45...AE110, TAE45...TAE110 AF45...AF110 N,NL &UA	1NO	-	CA5-10	1SBN010010R1010 ■	175
		-	1NC	CA5-01	1SBN010010R1001 ■	175
		4NO	-	CA 5-40 E	1SBN 010 040 R1040	820
		3NO	1NC	CA 5-31 E	1SBN 010 040 R1031	
		2NO	2NC	CA 5-22 E	1SBN 010 040 R1022	
			4NC	CA 5-04 E	1SBN 010 040 R1004	
Side mounted 2 pole add-on blocks	A9...A75 AL9...AL40, TAL9...TAL40 AE45...AE75, TAE45...TAE75 AF45...AF75 N,NL & UA 16..75 A95...A300,AE95... AE110 TAE95...TAE110, AF95...AF110 UA95...UA110, AF145... AF2050 A145...A300 AF145...AF2050	1NO	1NC	CAL5-11	1SBN010020R1011 ■	580
		1NO	1NC	CAL18-11	1SBN010720R1011 ■	625
		1NO	1NC	CAL18-11B	1SBN010720R3311 ■	625

* Please refer technical catalogue for proper selection.

Auxiliary contact blocks for EK Range of contactors:

Description	Mounting on Contactors	Contact Configuration		Type Code Reference	Order Code	M.R.P.(₹)
		NO	NC			
Side mounting Two Pole Auxiliary contact blocks	EK110EK1000	1NO	1NC	CAL16-11A	SK829002-A	650
		1NO	1NC	CAL16-11B	SK829002-B	650
		1NO	1NC	CAL16-11C	SK829002-C	650
		1NO	1NC	CAL16-11D	SK829002-D	650

■ Stock items

Accessories for contactors



Surge suppressors

For contactor types	Voltage Range	Type Code reference	Order Code	M.R.P.(₹)
AL9...AL40, AE45...AE110, TAL9...TAL40 TAE45...TAE110 NL/TNL,	12...32 DC	RT 5/32	1SBN050020R1000	660
	25...65 DC	RT 5/65	1SBN050020R1001	
	50...90 DC	RT 5/90	1SBN050020R1002	
	77...150 DC	RT 5/150	1SBN050020R1003	
	150...264 DC	RT5/264	1SBN050020R1004	
A9...A110, AL9...AL40, AE45...AE10,TAL9... TAL40, TAE45... TAE110, N/NL/TNL	24...50V AC/DC	RV 5/50	1SBN050010R1000	660
	50...133V AC/DC	RV 5/133	1SBN050010R1001	
	110...250V AC/DC	RV 5/250	1SBN050010R1002 ■	
	250...440V AC/DC	RV 5/440	1SBN050010R1003	
A9...A40 , N	24...50V AC	RC 5-1/50	1SBN050100R1000	650
	50...133V AC	RC 5-1/133	1SBN050100R1001	
	110...250V AC	RC 5-1/250	1SBN050100R1002 ■	
	250...440V AC	RC 5-1/440	1SBN050100R1003	
A45...A110	24...50V AC	RC 5-2/50	1SBN050200R1000	700
	50...133V AC	RC 5-2/133	1SBN050200R1001	975
	110...250V AC	RC 5-2/250	1SBN050200R1002 ■	
	250...440V AC	RC 5-2/440	1SBN050200R1003	
A145...A300	250...440	RC 5-3/440	1SFN050300R1003	2,000
EK550.....EK1000	48...110V/AC	RC-EH 800/110	SK 829 007-C	3,750
	220...600V/AC	RC-EH 800/600	SK 829 007-D	

Mechanical interlocks

For contactor types	Description	Type Code reference	Order Code	M.R.P.(₹)
A9...A40, AL9...AL40	Horizontal Mechanical Interlock	VM 5-1	1SBN030100R1000 ■	450
A9...A40, AL9...AL40	Horizontal Mechanical & Electrical Interlock with 2NC contacts	VE 5-1	1SBN030110R1000 ■	700
A9...A40, AL9...AL40	Horizontal Mechanical & Electrical Interlock with 2NC contacts	VE 5-2	1SBN030210R1000 ■	1,375
A95...A185, A210...A300	Horizontal with 2NC contacts	VM 300H	1SFN034700R1000	2,900
EK110...EK150	Horizontal Mechanical Interlock	VH145	SK829071-A	3,950
EK175...EK210	Horizontal Mechanical Interlock	VH300	SK829071-B	4,500
EK370...EK1000	Horizontal Mechanical Interlock	VH800	SK829070-F	Upon request

Note: Please refer technical catalogue for proper selection.



VM5-1



VM300

■ Stock items

3 pole contactors : AX09...AX370 : AC operated

NEW

AX Contactor

AX contactors are mainly used for controlling 3-phase motors and power circuits up to 690 V AC.

These contactors are of the block type design with

- 3 main poles and built-in auxiliary contact
- control circuit: AC operated
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.

2 Contactors: 3-pole – AC Operated

AC1duty Amps	AC3 rating at 415V		Auxiliary Contacts		Type Code	Order Code	M.R.P.(₹)
	Amps	kW					
22	9	4	1NO	-	AX09-30-10	1SBL901074R□□10	850
22	9	4	-	1NC	AX09-30-01	1SBL901074R□□01	850
25	12	5.5	1NO	-	AX12-30-10	1SBL911074R□□10	960
25	12	5.5	-	1NC	AX12-30-01	1SBL911074R□□01	960
27	18	9	1NO	-	AX18-30-10	1SBL921074R□□10	1,050
27	18	9	-	1NC	AX18-30-01	1SBL921074R□□01	1,050
32	25	11	1NO	-	AX25-30-10	1SBL931074R□□10	1,515
32	25	11	-	1NC	AX25-30-01	1SBL931074R□□01	1,515
55	32	15	1NO	-	AX32-30-10	1SBL281074R□□10	3,085
55	32	15	-	1NC	AX32-30-01	1SBL281074R□□01	3,085
60	40	18.5	1NO	-	AX40-30-10	1SBL321074R□□10	4,800
60	40	18.5	-	1NC	AX40-30-01	1SBL321074R□□01	4,800
100	50	25	1NO	1NC	AX50-30-11	1SBL351074R□□11	6,050
115	65	30	1NO	1NC	AX65-30-11	1SBL371074R□□11	8,225
125	80	37	1NO	1NC	AX80-30-11	1SBL411074R□□11	10,200
145	96	45	1NO	1NC	AX95-30-11	1SFL431074R□□11	11,925
160	115	55	1NO	1NC	AX115-30-11	1SFL981074R□□11	14,600
190	150	75	1NO	1NC	AX150-30-11	1SFL991074R□□11	19,350
250	185	90	1NO	1NC	AX185-30-11	1SFL491074R□□11	23,500
275	205	110	1NO	1NC	AX205-30-11	1SFL501074R□□11	27,700
400	265	132	1NO	1NC	AX260-30-11	1SFL547074R□□11	33,000
500	305	160	1NO	1NC	AX300-30-11	1SFL587074R□□11	39,250
600	370	200	1NO	1NC	AX370-30-11	1SFL607074R□□11	49,000

Complete the contactor code by replacing □□ with desired coil voltages as per below table

Auxiliary contactors: NX

NX Contactor

NX contactors are mainly used for switching auxiliary circuits and control circuits.

These contactors are of the block type design with

- 4 poles. Contactor relays have mechanically linked auxiliary contact elements.
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.



No. of Contacts	Contact Configuration		Type Code Reference	AC operated		M.R.P.(₹)
	NO	NC		Order Code		
4	2	2	NX22E	1SBH901074R□□22	905	
4	3	1	NX31E	1SBH901074R□□31		
4	4	0	NX40E	1SBH901074R□□40		

Coil voltages and codes AX range

Voltage	Voltage	Code
□□ V - 50Hz	□□ V - 60Hz	□□
24	24	8 1
110	110	8 4
220 ... 230	220 ... 230	8 0
400 ... 415	400 ... 415	8 6

■ Stock items

Complete the contactor code by replacing □□ with desired coil voltages as per below table



Auxiliary contact block

Description	Mounting on Contactors	Contact Configuration		Type Code Reference	Order Code	M.R.P.(₹)
		NO	NC			
Front mounted single pole add-on blocks	AX09...AX150, NX 4-pole	1NO	-	CA5X-10	1SBN019010R1010	165
		-	1NC	CA5X-01	1SBN019010R1001	165
Front mounted Four pole add-on blocks	AX09...AX150, NX 4-pole	2NO	2NC	CA5X-22E	1SBN019040R1022	600
		3NO	1NC	CA5X-31E	1SBN019040R1031	
		4NO	-	CA5X-40E	1SBN019040R1040	
		-	4NC	CA5X-04E	1SBN019040R1004	
Side mounted 2 pole add-on blocks	AX09...AX80, NX 4-pole	1NO	1NC	CAL5X-11	1SBN019020R1011	560
	AX95...AX205	1NO	1NC	CAL18X-11	1SFN019820R1011	560
		1NO	1NC	CAL18X-11B	1SFN019820R3311	560
	AX260...AX370	1NO	1NC	CAL19-11	1SFN010820R1011 ■	625
		1NO	1NC	CAL19-11B	1SFN010820R3311 ■	625

Surge suppressors



For contactor types	Voltage Range	Type Code reference	Order Code	M.R.P.(₹)
AX09...AX150	24...50V AC/DC	RV 5/50	1SBN050010R1000	660
	50...133V AC/DC	RV 5/133	1SBN050010R1001	
	110...250V AC/DC	RV 5/250	1SBN050010R1002 ■	
	250...440V AC/DC	RV 5/440	1SBN050010R1003	
AX09...AX40	24...50V AC	RC 5-1/50	1SBN050100R1000	650
	50...133V AC	RC 5-1/133	1SBN050100R1001	
	110...250V AC	RC 5-1/250	1SBN050100R1002 ■	
	250...440V AC	RC 5-1/440	1SBN050100R1003	
AX50...AX150	24...50V AC	RC 5-2/50	1SBN050200R1000	700
	50...133V AC	RC 5-2/133	1SBN050200R1001	
	110...250V AC	RC 5-2/250	1SBN050200R1002 ■	
	250...440V AC	RC 5-2/440	1SBN050200R1003	
AX185...AX205	250...440	RC 5-3/440	1SFN050300R1003	2,000

Mechanical interlocks



VM5-1

For contactor types	Description	Type Code reference	Order Code	M.R.P.(₹)
AX09...AX40	Horizontal Mechanical Interlock	VM 5-1	1SBN030100R1000 ■	450
AX09...AX40	Horizontal Mechanical & Electrical Interlock with 2NC contacts	VE 5-1	1SBN030110R1000 ■	700
AX50...AX115	Horizontal Mechanical & Electrical Interlock with 2NC contacts	VE 5-2	1SBN030210R1000 ■	1,375
AX185...AX205	Horizontal with 2NC contacts	VM 300H	1SFN034700R1000	2,900
AX260...AX370	Horizontal Mechanical Interlock	VM19	1SFN030300R1000	3,000

Note: Please refer technical catalogue for proper selection.



VM30C

■ Stock items

NF / AF contactors

Wide band AC / DC Operated - with Screw Terminals

Description

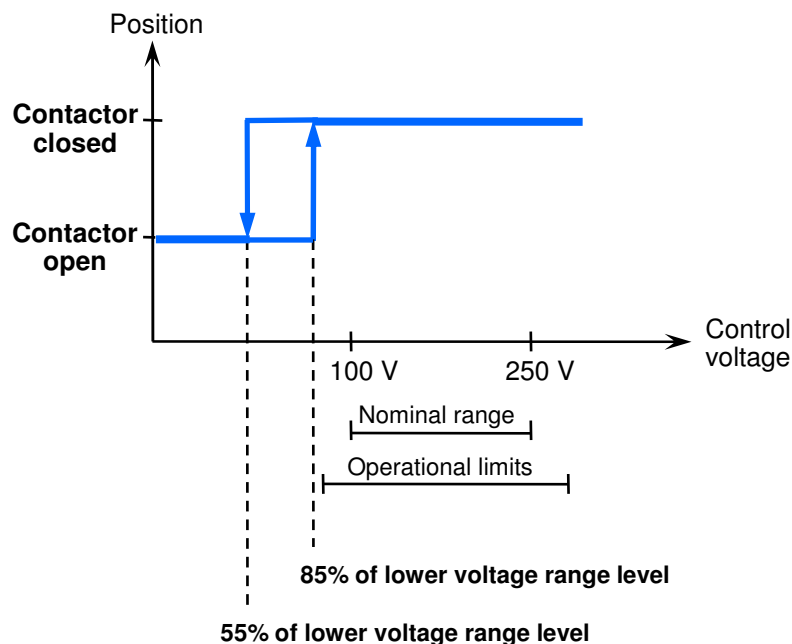
- **NF / AF contactor** include an electronic coil interface accepting a wide control voltage $U_c \text{ min. } \dots U_c \text{ max.}$ only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC
- **NF / AF contactor** can manage large control voltage variations. One coil (e.g. 100...250 V 50/60 Hz - DC) can be used for different control voltages used worldwide without any coil change.
- **NF...Z / AF...Z contactor** equipped with a Z coil type allow direct control by 24 V DC 500 mA PLC-output and obtain a reduced holding coil consumption.
- **NF / AF contactor** have built-in surge protection and do not require additional surge suppressors.

Control contactors : Wide band AC/DC operated with low power consumption & inbuilt surge suppressor for order code refer page no. 54



Innovative solution from ABB

- Electronically controlled coil
- Distinct drop out- and pick up value
- 20ms sags and dip immunity
- Fulfills SEMI - F47- 0200 surge suppressors.
 - Specification for processing equipment regarding voltage drop immunity.



3 pole contactors AF range : Wide band AC / DC operated

AF contactors are built in with

- Universal coil operable on wide band AC / DC voltages ranging from 70% Uc min - 110% Uc max
- Surge Suppressors
- Low power consumption coil

NEW



AC1duty Amps	AC3 rating at 415V			Auxiliary Contacts		Type Code	Order code	M.R.P.(₹)
	Amps	hP	kW					
25	9	5.5	4	1NO	-	AF09-30-10-□□	1SBL137001R□□10	1,850
				-	1NC	AF09-30-01-□□	1SBL137001R□□01	1,850
28	12	7.5	5.5	1NO	-	AF12-30-10-□□	1SBL157001R□□10	2,050
				-	1NC	AF12-30-01-□□	1SBL157001R□□01	2,050
30	18	12.5	7.5	1NO	-	AF16-30-10-□□	1SBL177001R□□10	2,650
				-	1NC	AF16-30-01-□□	1SBL177001R□□01	2,650
45	26	15	11	-	-	AF26-30-00-□□	1SBL237001R□□00	3,325
50	32	20	18	-	-	AF30-30-00-□□	1SBL277001R□□00	7,125
50	38	25	18.5	-	-	AF38-30-00-□□	1SBL297001R□□00	8,225
70	40	30	18.5	-	-	AF40-30-00-□□	1SBL347001R□□00	8,600
100	53	40	22	-	-	AF52-30-00-□□	1SBL367001R□□00	11,250
105	65	50	30	-	-	AF65-30-00-□□	1SBL387001R□□00	13,300
125	80	60	37	-	-	AF80-30-00-□□	1SBL397001R□□00	16,000
130	96	70	45	-	-	AF96-30-00-□□	1SBL407001R□□00	19,800
160	116	75	55	1NO	1NC	AF116-30-11-□□	1SFL427001R□□11	20,300
200	140	100	75	1NO	1NC	AF140-30-11-□□	1SFL447001R□□11	25,750
225	146	100	75	1NO	1NC	AF146-30-11-□□	1SFL467001R□□11	27,000
275	490	120	90	1NO	1NC	AF190-30-11-□□	1SFL487002R□□11	31,400
350	205	150	110	1NO	1NC	AF205-30-11-□□	1SFL527002R□□11	31,750
400	265	175	140	1NO	1NC	AF265-30-11-□□	1SFL547002R□□11	37,500
500	305	215	160	1NO	1NC	AF305-30-11-□□	1SFL587002R□□11	43,500
600	370	270	200	1NO	1NC	AF370-30-11-□□	1SFL607002R□□11	55,450
For AF400...AF750 refer Table B for coil codes								
600	400	300	220	1NO	1NC	AF400-30-11**	1SFL577001R□□11	59,500
700	460	340	250	1NO	1NC	AF460-30-11**	1SFL597001R□□11	75,000
800	580	470	355	1NO	1NC	AF580-30-11**	1SFL617001R□□11	1,03,000
1050	750	570	425	1NO	1NC	AF750-30-11**	1SFL637001R□□11	1,60,000

Coil voltages and codes: New AF09...AF370 range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
24...60	20...60	1 1
48...130	48...130	1 2
100...250	100...250	1 3
250...500	250...500	1 4

AF400 and above range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
-	24...60	6 8
48...130	48...130	6 9
100...250	100...250	7 0
250...500	250...500	7 1

Old AF range contactor

AC1duty Amps	AC3 rating at 415V			Auxiliary Contacts		Type Code	Order code	M.R.P.(₹)
	Amps	hP	kW					
100	50	34	25	-	-	AF50-30-00 **	1SBL357001R□□00	Upon request
115	65	50	37	-	-	AF63-30-00 **	1SBL377001R□□00	
125	75	54	40	-	-	AF75-30-00 **	1SBL417001R□□00	
145	96	60	55	1NO	1NC	AF95-30-11**	1SFL437001R□□11	
160	110	75	59	1NO	1NC	AF110-30-11**	1SFL457001R□□11	
250	145	80	75	1NO	1NC	AF145-30-11**	1SFL477001R□□11	
275	185	100	90	1NO	1NC	AF185-30-11**	1SFL497001R□□11	

Coil voltages and codes: Old AF range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
-	24...60	6 8
48...130	48...130	6 9
100...250	100...250	7 0

4 pole contactors : Wide band AC / DC operated

New AF Contactors: 4 pole – AC / DC Operated NEW

Rating at 415V AC1 Amps	Main Contact Arrangement		Auxiliary Contacts		Type Code Reference	Order code	M.R.P.(₹)
25	4NO	-	-	-	AF09-40-00-□□	1SBL137201R□□00	Upon request
	2NO	2NC	-	-	AF09-22-00-□□	1SBL137501R□□00	
30	4NO	-	-	-	AF16-40-00-□□	1SBL177201R□□00	
	2NO	2NC	-	-	AF16-22-00-□□	1SBL177501R□□00	
45	4NO	-	-	-	AF26-40-00-□□	1SBL237201R□□00	
	2NO	2NC	-	-	AF26-22-00-□□	1SBL237501R□□00	
55	4NO	-	-	-	AF38-40-00-□□	1SBL297201R□□00	
	2NO	2NC	-	-	AF38-22-00-□□	1SBL297501R□□00	
70	4NO	-	-	-	AF40-40-00-□□	1SBL347201R□□00	
	2NO	2NC	-	-	AF40-22-00-□□	1SBL347501R□□00	
100	4NO	-	-	-	AF52-40-00-□□	1SBL367201R□□00	
125	4NO	-	-	-	AF80-40-00-□□	1SBL397201R□□00	
	2NO	2NC	-	-	AF80-22-00-□□	1SBL397501R□□00	
160	4NO	-	-	-	AF116-40-00-□□	1SFL427102R□□00	
200	4NO	-	-	-	AF140-40-00-□□	1SFL447102R□□00	25,000
275	4NO	-	-	-	AF190-40-00-□□	1SFL487102R□□00	35,000
350	4NO	-	-	-	AF205-40-00-□□	1SFL527102R□□00	41,000
400	4NO	-	-	-	AF265-40-00-□□	1SFL547102R□□00	49,000
500	4NO	-	-	-	AF305-40-00-□□	1SFL587102R□□00	60,000
600	4NO	-	-	-	AF370-40-00-□□	1SFL607102R□□00	72,000

Coil voltages and codes: New AF range (AC/DC operated)

Voltage V 50/60 Hz	Voltage V DC	Code □□
24...60	20...60	1 1
48...130	48...130	1 2
100...250	100...250	1 3
250...500	250...500	1 4

Old AF Contactors: 4 pole – AC / DC Operated

Rating at 415V AC1 Amps	Main Contact Arrangement		Auxiliary Contacts		Type Code Reference	Order code	M.R.P.(₹)
70	4NO	-	-	-	AF45-40-00	1SBL337201R□□00	Upon request
	2NO	2NC	-	-	AF45-22-00	1SBL337501R□□00	
125	4NO	-	-	-	AF75-40-00	1SBL417201R□□00	
	2NO	2NC	-	-	AF75-22-00	1SBL427501R□□00	

Coil voltages and codes: AF45... AF75

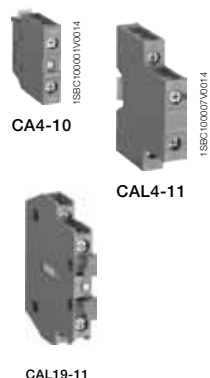
Voltage V - 50/60Hz	Voltage V d.c.	Code □□
-	20 ... 60	72 ⁽¹⁾
48 ... 130	48 ... 130	69
100 ... 250	100 ... 250	70

(1) The connection polarities indicated close to the coil terminals must be respected: A1 for the positive pole and A2 for the negative pole.

Note: For Non standard coil voltage, other than this please contact us for pricing



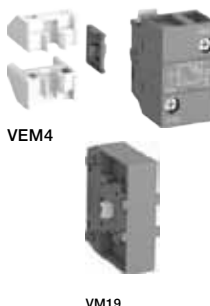
Auxiliary contact block



Description	Mounting on Contactors	Contact Configuration		Type Code Reference	Order Code	M.R.P.(₹)
		NO	NC			
Front mounted 1 pole add-on blocks	AF09...AF38 / NF	1NO	-	CA4-10	1SBN010110R1010	200
		-	1NC	CA4-01	1SBN010110R1001	200
4NO		-	CA4-40E	1SBN010140R1040	830	
3NO		1NC	CA4-31E	1SBN 010140R1031	830	
2NO		2NC	CA4-22E	1SBN 010140R1022	830	
-		4NC	CA4-04E	1SBN 010140R1004	830	
Side mounted 2 pole add-on blocks	AF96...AF370	1NO	1NC	CAL19-11	1SFN010820R1011	625
	AF09...AF38 / NF	1NO	1NC	CAL19-11B	1SFN010820R3311	625
		1NO	1NC	CAL4-11	1SBN010120R1011	575

* Please refer technical catalogue for proper selection.

Mechanical interlocks



For contactor types	Description	Type Code reference	Order Code	M.R.P.(₹)
AF09...AF38	Horizontal Mechanical Interlock	VM 4	1SBN030105T1000	560
AF09...AF38	Horizontal Mechanical & Electrical Interlock	VEM 4	1SBN030111R1000	980
AF40...AF96	Horizontal Mechanical Interlock	VM96-4	1SBN033405T1000	3,500
AF116...AF146 and AF190. AF205	Horizontal Mechanical Interlock	VM140/190	1SFN034403R1000	2,700
AF190, AF205 and AF265 ... AF370		VM205/265	1SFN035203R1000	2,900
AF116...AF370	Horizontal Mechanical Interlock	VM19	1SFN030300R1000	3,000

Note: Please refer technical catalogue for proper selection.

Electronic timers

For contactor types	Time delay range selected by switch	Delay type	Auxiliary contacts	Type	Order Code	M.R.P.(₹)
AF09 ... AF96	0.1...1 s 1...10 s 10...100 s	ON-delay	1NO + 1NC	TEF4-ON	1SBN020112R1000	Upon request
		OFF-delay	1NO + 1NC	TEF4-OFF	1SBN020114R1000	

Note: Rated control circuit voltage Uc 24...240 V 50/60 Hz or DC.

Connecting links with manual motor starters

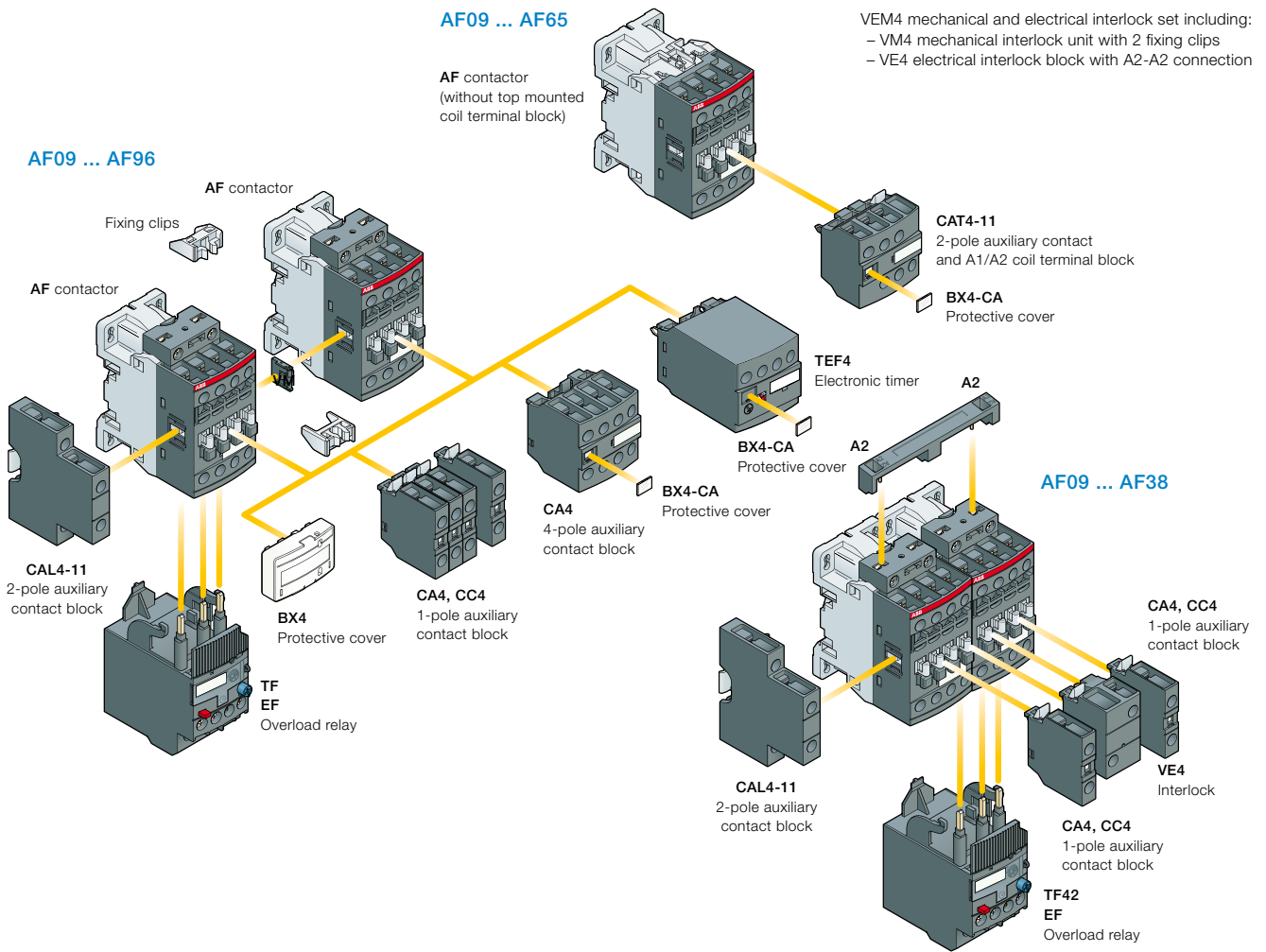
For contactor types	Used with	Type	Order Code	M.R.P.(₹)
AF09 ... AF16	MS116-0.16 ... MS116-25, MS132-0.16 ... MS132-25	BEA16-4	1SBN081306T1000	375
AF26 ... AF30	MS116-0.16 ... MS116-16, MS132-0.16 ... MS132-10	BEA26-4	1SBN082306T1000	530
	MS116-20 ... MS116-32, MS132-12 ... MS132-32	BEA38-4	1SBN082306T2000	450

Connection sets for reversing contactors

For contactor types	Type	Order Code	M.R.P.(₹)
AF09 ... AF16	BER16-4	1SBN081311R1000	950
AF26 ... AF30	BER38-4	1SBN082311R1000	1,280
AF40 ... AF65	BER65-4	1SBN083411R1000	1,550
AF80 ... AF96	BER96-4	1SBN083911R1000	2,700

Connection sets for star-delta starting

For contactor types	Type	Order Code	M.R.P.(₹)
AF09 ... AF16	BEY16-4	1SBN81313R2000	1,280
AF26 ... AF30	BEY38-4	1SBN82713R2000	2,000
AF40 ... AF65	BEY65-4	1SBN83413R2000	2,575
AF80 ... AF96	BEY96-4	1SBN83913R2000	3,300



AF the premium range



The AF contactor is compact

The AF contactor is compact in size and has had its width reduced by up to 30% thanks to an 80% reduction of the coil's energy consumption.

The AF contactor is flexible

AF09...AF370 is perfect for motor starting applications and for solutions where space is limited. Interlocked reversing pairs require no spacing between contactors meaning you can fit more functionality into cabinets or other small enclosures.

Installation contactors



EN/ESB20	EN/ESB24	EN/ESB40	EN/ESB63
Switching heaters and resistors, AC-1 / AC-7a			
Rated operational current I _g (NO)			
20 A	24 A	40 A	63 A
Rated operational current I _g (NC)			
20 A	24 A	30 A	30 A
Rated operational power, 1-phase at 230 V			
4 kW	5.3 kW	8.8 kW	13.8 kW
Rated operational power, 3-phase at 400 V			
	16 kW	26 kW	41 kW
Switching motors, AC-3 / AC-7b			
Rated operational current I _g (NO)			
9 A	9 A	22 A	30 A
Rated operational current I _g (NC)			
9 A	6 A		
Rated operational power, 1-phase at 230 V			
1.3 kW	2.2 kW	5.5 kW	8 kW
Rated operational power, 3-phase at 400 V			
	4 kW	11 kW	15 kW
Module width			
18 mm	36 mm	54 mm	54 mm

EN-Types - with benefits for service

EN-Types have an integrated 3-position switch for manual and automatic operation.

Contacts	Type	Order No.	M.R.P.(₹)
20 A 2-pole (No aux.-contact block possible)			
2NO	EN 20-20 24 V 50 Hz	GHE3221101R0001	Upon request
2NO	EN 20-20 230 V 50 Hz	GHE3221101R0006	Upon request
24 A 3-pole (1 aux.-contact block possible)			
3NO	EN 24-30 230-240 V AC/DC	GHE3261501R0006	Upon request
24 A 4-pole (1 aux.-contact block possible)			
4NO	EN 24-40 24 V AC/DC	GHE3261101R0001	Upon request
4NO	EN 24-40 230-240 V AC/DC	GHE3261101R0006	Upon request
40 A 3-pole (1 aux.-contact block possible)			
3NO	EN 40-30 230 V AC/DC	GHE3421501R0006	Upon request
40 A 4-pole (1 aux.-contact block possible)			
4NO	EN 40-40 24 V AC/DC	GHE3421101R0001	Upon request
4NO	EN 40-40 230 V AC/DC	GHE3421101R0006	Upon request
Accessories			
2NO	EH 04-20, Aux.-contact block	GHE3401321R0001	Upon request
1NO, 1NC	EH 04-11, Aux.-contact block	GHE3401321R0002	
distance pcs	ESB-DIS Spacer	GHE3201902R0001	
Seal	ESBPLK24	GHE3201903 0001	

Contacts	Type	Order No.	M.R.P.(₹)	
20 A 2-pole (No aux.-contact block possible)				
2NO	ESB 20-20 24 V 50/60 Hz	GHE3211102R0001	Upon request	
2NO	ESB 20-20 230 V 50/60 Hz	GHE3211102R0006		
2NC	ESB 20-02 24 V 50/60 Hz	GHE3211202R0001		
2NC	ESB 20-02 230 V 50/60 Hz	GHE3211202R0006		
1NO, 1NC	ESB 20-11 24 V 50/60 Hz	GHE3211302R0001		
1NO, 1NC	ESB 20-11 230 V 50/60 Hz	GHE3211302R0006		
24 A 2-pole (1 aux.-contact block possible)				
2NO	ESB 24-20 24 V AC/DC	GHE3291402R0006	Upon request	
2NO	ESB 24-20 24 V AC/DC	GHE3291402R0001		
24 A 4-pole (1 aux.-contact block possible)				
4NO	ESB 24-40 24 V AC/DC	GHE3291102R0001	Upon request	
4NO	ESB 24-40 230-240 V AC/DC	GHE3291102R0006		
2NO, 2NC	ESB 24-22 24 V AC/DC	GHE3291302R0001		
2NO, 2NC	ESB 24-22 230-240 V AC/DC	GHE3291302R0006		
40 A 2-/3-/4-pole (1 aux.-contact block possible)				
2NO	ESB 40-20 24 V AC/DC	GHE3491402R0001		Upon request
2NO	ESB 40-20 230 V AC/DC	GHE3491402R0006		
3NO	ESB 40-30 24 V AC/DC	GHE3491502R0001		
3NO	ESB 40-30 230 V AC/DC	GHE3491502R0006		
4NO	ESB 40-40 24 V AC/DC	GHE3491102R0001		
4NO	ESB 40-40 230 V AC/DC	GHE3491102R0006		
2NO, 2NC	ESB 40-22 24 V AC/DC	GHE3491302R0001		
2NO, 2NC	ESB 40-22 230 V AC/DC	GHE3491302R0006		
63 A 2-/3-/4-pole (1 aux.-contact block possible)				
2NO	ESB 63-20 24 V AC/DC	GHE3691402R0001	Upon request	
2NO	ESB 63-20 230 V AC/DC	GHE3691402R0006		
3NO	ESB 63-30 230 V AC/DC	GHE3691502R0006		
4NO	ESB 63-40 24 V AC/DC	GHE3691102R0001		
4NO	ESB 63-40 230 V AC/DC	GHE3691102R0006		

Functions:

- Switch in position “AUTO” : standard control
- Switch in position “O” : Supply to coil interrupted
- Switch in position “I” : Manually switched on (a trigger signal at the coil terminal initiates the switch moving into “AUTO” position)

Mini contactors

Mini contactors with screw connection: 3 pole - AC operated

AC1 duty Amps	AC3 rating at 415V			Auxiliary Contacts	Type Code Reference	Order Code	M.R.P.(₹)	
	Amps	hP	kW					
16A	9	5.5	4	1NO	-	B06-30-10 **	GJL1211001R□10□	915
16A	9	5.5	4	-	1NC	B06-30-01 **	GJL1211001R□01□	
20A	12	7.5	5.5	1NO	-	B07-30-10 **	GJL1311001R□10□	990
20A	12	7.5	5.5	-	1NC	B07-30-01 **	GJL1311001R□01□	

Complete the contactor type code by replacing ** with desired coil voltage

Mini contactors with screw connection: 3 pole - DC operated

AC1 duty Amps	AC3 rating at 415V			Auxiliary Contacts	Type Code Reference	Order Code	M.R.P.(₹)	
	Amps	hP	kW					
16A	9	5.5	4	1NO	-	BC6-30-10 **	GJL1213001R□10□	1,350
16A	9	5.5	4	-	1NC	BC6-30-01 **	GJL1213001R□01□	
20A	12	7.5	5.5	1NO	-	BC7-30-10 **	GJL1313001R□10□	1,450
20A	12	7.5	5.5	-	1NC	BC7-30-01 **	GJL1313001R□01□	

Mini reversing contactors with screw connection: 3 pole - AC operated

AC1 duty Amps	AC3 rating at 415V			Auxiliary Contacts	Type Code Reference	Order Code	M.R.P.(₹)	
	Amps	hP	kW					
16A	9	5.5	4	1NO	-	VB06-30-10 **	GJL1211901R□10□	2,800
16A	9	5.5	4	-	1NC	VB06-30-01 **	GJL1211901R□01□	2,800
20A	12	7.5	5.5	1NO	-	VB07-30-10 **	GJL1311901R□10□	2,950
20A	12	7.5	5.5	-	1NC	VB07-30-01 **	GJL1311901R□01□	2,950

Complete the contactor type code by replacing ** with desired coil voltage

Mini reversing contactors with screw connection: 3 pole - DC operated

AC1 duty Amps	AC3 rating at 415V			Auxiliary Contacts	Type Code Reference	Order Code	M.R.P.(₹)	
	Amps	hP	kW					
16A	9	5.5	4	1NO	-	VBC6-30-10 **	GJL1213901R□10□	2,950
16A	9	5.5	4	-	1NC	VBC6-30-01 **	GJL1213901R□01□	2,950
20A	12	7.5	5.5	1NO	-	VBC7-30-10 **	GJL1313901R□10□	3,200
20A	12	7.5	5.5	-	1NC	VBC7-30-01 **	GJL1313901R□01□	3,200

Complete the contactor type code by replacing ** with desired coil voltage

Mini contactors are also available in 4 pole (4NO / 2NO + 2NC)

Mini auxiliary contactor 4 pole with screw connection

Control Circuit	Contact Configuration		Type Code Reference	Order Code	M.R.P.(₹)
	NO	NC			
AC	2NO	2NC	K6-22Z**	GJH 121 1001 R□22□	1,075
	3NO	1NC	K6-31Z **	GJH 121 1001 R□31□	
	4NO	-	K6-40E **	GJH 121 1001 R□40□	
DC	2NO	2NC	KC6-22Z**	GJH 121 3001 R□22□	1,350
	3NO	1NC	KC6-31Z **	GJH 121 3001 R□31□	
	4NO	-	KC6-40E **	GJH 121 3001 R□40□	

Coil voltage for mini contactors

AC		DC	
50-60Hz	Code	DC V	Code
24	0 ... 1	24	0 ... 1
48	0 ... 3	110 ... 125	0 ... 4
110 ... 127	8 ... 4	220 ... 240	0 ... 5
220 ... 240	8 ... 0		
380 ... 415	8 ... 5		

Complete the contactor type code by replacing ** with desired coil voltage

Auxiliary contact blocks for mini contactors, 4 A, 240 V AC-15 / 2.5 A, 24V DC-13

Ordering details

For contactor types	Auxiliary contacts	Type	Order Code	M.R.P.(₹)
Front mounted instantaneous auxiliary contact blocks 1)				
B6-, B7-30-10, BC6-, BC7-30-10	1NO + 1NC	CAF6-11M	GJL1201330R0003	600
VB6, VB7, VBC6, VBC7, VB6A, VB7A	2NO	CAF6-20M	GJL1201330R0007	
VBC6A, VBC7A	2NC	CAF6-02M	GJL1201330R0011	
Side mounted instantaneous auxiliary contact block 1)				
B6-, B7-30-10, BC6-, BC7-30-10	1NO + 1NC	CA6-11M	GJL1201317R0003	600



Spares for contactors

Spare coils for A range

For contactor types	Type Code Reference	Order Code	M.R.P.(₹)
N, A9...A16, UA16..RA	ZA16 **	1SBN151410R□□06 ■	550
A26...A40;UA26..UA30 RA	ZA40 **	1SBN152410R□□06 ■	640
A45...A75;UA50..UA75 RA	ZA75 **	1SBN153510R□□06 ■	2,000
A95...A110; UA95..UA110 RA	ZA110 **	1SFN154310R□□06 ■	2,550
A145...A185	ZA185 **	1SFN154710R□□06 ■	4,050
A210...A300	ZA300 **	1SFN155110R□□06 ■	4,500

Spare coils for AF range

For contactor types	Type Code Reference	Order Code	M.R.P.(₹)
AF45...AF75	ZAF75	1SBN153570R□□06 ■	5,400
AF95...AF110	ZAF110	1SFN153370R□□06 ■	9,400
AF145...AF185	ZAF185	1SFN154770R□□06 ■	11,000
AF210,AF260 &AF300	ZAF300	1SFN155170R□□06	14,500
AF400...AF460	ZAF460**	1SFN155770R□□06	18,000
AF580...AF750**	ZAF750**	1SFN156170R□□06	22,500

Coil voltages & codes

N range, A09.....A300, UA....RA		
Voltage V-50 Hz	Voltage V-60 Hz	Code
24	24	81
110	110....120	84
220....230	230....240	80
230....240	240....260	88
400....415	415....440	86

AF45...AF750		
Voltage V-50/60 Hz	Voltage V.dc	Code
	24....60	68
48....130	48....130	69
100....250	100....250	70
250....500	250....500	71

Spare contact sets for 3 pole

Description	For contactor types	Type Code Reference	Order Code	M.R.P.(₹)
Contact set for 3 -pole contactors consisting of 6 fixed contacts, 3 moving contacts, springs and the required screws	A/AF/AE/TAE50	ZL 50	1SBN163503R1000 ■	2,950
	A/AF/AE/TAE63	ZL 63	1SBN163703R1000 ■	3,750
	A/AF/AE/TAE75	ZL 75	1SBN164103R1000 ■	4,750
	A/AF/AE/TAE95	ZL 95	1SFN164303R1000 ■	6,900
	A/AF/AE/TAE110	ZL 110	1SFN164503R1000 ■	7,350
	A/AF145	ZL 145	1SFN164703R1000 ■	9,200
	A/AF185	ZL 185	1SFN164903R1000 ■	12,200
	A/AF210	ZL 210	1SFN165103R1000 ■	14,500
	A/AF260	ZL 260	1SFN165303R1000 ■	19,700
	A/AF300	ZL 300	1SFN165503R1000 ■	21,000
	AF400	ZL 400	1SFN165703R1000	25,000
	AF460	ZL 460	1SFN165903R1000	31,000
	AF 580	ZL 580	1SFN166103R1000	52,100
	AF 750	ZL 750	1SFN166303R1000	62,000
	UA 50	ZLU 50	1SBN163502R1000 ■	3,000
	UA 63	ZLU 63	1SBN163702R1000 ■	4,200
	UA 75	ZLU 75	1SBN164102R1000 ■	5,300

■ Stock items

DOL and Star Delta starters


Direct on line starter:

Rating at 415V 50Hz		Back - up Fuse rating (A)	Type Code Reference	Order Code	M.R.P.(₹)
HP	kW				
0.25	0.18	4A	MA-0.25 **	1SYN140318R8625	3,075
0.50	0.37	4A	MA-0.50 **	1SYN140318R8605	3,075
0.75	0.52	6A	MA-0.75 **	1SYN140318R8675	3,075
1.00	0.75	6A	MA-1.00 **	1SYN140318R8610	3,075
1.50	1.10	10A	MA-1.50 **	1SYN140318R8615	3,075
2.00	1.50	10A	MA-2.00 **	1SYN140318R8620	3,075
3.00	2.20	16A	MA-3.00 **	1SYN140318R8630	3,075
5.00	3.70	25A	MA-5.00 **	1SYN140318R8650	3,075
7.50	5.50	32A	MA-7.50 **	1SYN16018R86750	3,075
10.00	7.50	32A	MA-10.00 **	1SYN180318R8610	3,325

Fully automatic Star Delta starter:

HP rating at 415V	Type Code Reference	Order Code	M.R.P.(₹)
12.5	SDA-12.5 **	1SYN184322R8600	11,500
15	SDA-15 **	1SYN242322R8600	12,500
20	SDA- 20 **	1SYN244322R8600	14,500
25	SDA-25 **	1SYN246322R8600	15,100
30	SDA-30 **	1SYN282322R8600	18,250
35	SDA-35 **	1SYN284322R8600	20,250
40	SDA-40 **	1SYN322322R8600	24,575
50	SDA-50 **	1SYN352342R8600	29,500
60	SDA-60 **	1SYN372342R8600	37,950
75	SDA-75 **	1SYN412342R8600	44,500

Complete the starter type code by replacing the ** with the desired coil voltage.

Voltage	Code
 220 ... 230 V coil	<input type="checkbox"/> 3 8
400 ... 415 V coil	8 6

■ Stock items

Manual motor starter

0.10 to 32 A – with thermal and electromagnetic protection

Description

MS116 Manual motor starters with short Circuit, overload and phase loss protection



Direct on line starter:

Rated Power 415V KW	Ie current setting Range Amp	S/C Ics Breaking Capacity kA	Type	Order code	M.R.P.(₹)
0.03	0.10 ... 0.16	50	MS116-0.16	1SAM250000R1001	2,755
0.06	0.16 ... 0.25	50	MS116-0.25	1SAM250000R1002	2,755
0.09	0.25 ... 0.40	50	MS116-0.4	1SAM250000R1003	2,755
0.12	0.40 ... 0.63	50	MS116-0.63	1SAM250000R1004	3,150
0.25	0.63 ... 1.00	50	MS116-1.0	1SAM250000R1005	3,150
0.55	1.00 ... 1.60	50	MS116-1.6	1SAM250000R1006	3,165
0.75	1.60 ... 2.50	50	MS116-2.5	1SAM250000R1007	3,165
1.5	2.50 ... 4.00	50	MS116-4.0	1SAM250000R1008	3,200
2.2	4.00 ... 6.30	50	MS116-6.3	1SAM250000R1009	3,200
4.0	6.30 ... 10.0	50	MS116-10	1SAM250000R1010	3,300
5.5	8.00 ... 12.0	25	MS116-12	1SAM250000R1012	3,750
7.5	10.0 ... 16.0	16	MS116-16	1SAM250000R1011	4,165
9.0	16.0 ... 20.0	10	MS116-20	1SAM250000R1013	4,475
12.5	20.0 ... 25.0	10	MS116-25	1SAM250000R1014	4,675
15.5	25.0 ... 32.0	10	MS116-32	1SAM250000R1015	8,150

MS132 Manual motor starters with Short Circuit, overload and phase loss protection



0.03	0.10 ... 0.16	100	MS132-0.16	1SAM350000R1001	3,610
0.06	0.16 ... 0.25	100	MS132-0.25	1SAM350000R1002	3,610
0.09	0.25 ... 0.40	100	MS132-0.4	1SAM350000R1003	3,610
0.12	0.40 ... 0.63	100	MS132-0.63	1SAM350000R1004	3,910
0.25	0.63 ... 1.00	100	MS132-1.0	1SAM350000R1005	3,950
0.55	1.00 ... 1.60	100	MS132-1.6	1SAM350000R1006	4,120
0.75	1.60 ... 2.50	100	MS132-2.5	1SAM350000R1007	4,120
1.5	2.50 ... 4.00	100	MS132-4.0	1SAM350000R1008	4,150
2.2	4.00 ... 6.30	100	MS132-6.3	1SAM350000R1009	4,200
4.0	6.30 ... 10.0	100	MS132-10	1SAM350000R1010	4,500
5.5	8.00 ... 12.0	100	MS132-12	1SAM350000R1012	4,950
7.5	10.0 ... 16.0	100	MS132-16	1SAM350000R1011	5,500
9.0	16.0 ... 20.0	100	MS132-20	1SAM350000R1013	5,900
12.5	20.0 ... 25.0	50	MS132-25	1SAM350000R1014	6,025
15.5	25.0 ... 32.0	25	MS132-32	1SAM350000R1015	9,600

MO132 Manual motor starters with short circuit protection only



0.03	0.16	100	MO132-0.16	1SAM360000R1001	3,450
0.06	0.25	100	MO132-0.25	1SAM360000R1002	3,450
0.09	0.40	100	MO132-0.4	1SAM360000R1003	3,450
0.12	0.63	100	MO132-0.63	1SAM360000R1004	3,750
0.25	1.0	100	MO132-1.0	1SAM360000R1005	3,800
0.55	1.6	100	MO132-1.6	1SAM360000R1006	3,800
0.75	2.5	100	MO132-2.5	1SAM360000R1007	3,800
1.5	4.0	50	MO132-4.0	1SAM360000R1008	3,850
2.2	6.3	50	MO132-6.3	1SAM360000R1009	3,850
4.0	10	50	MO132-10	1SAM360000R1010	3,975
5.5	12	50	MO132-12	1SAM360000R1012	3,975
7.5	16	50	MO132-16	1SAM360000R1011	3,975
9.0	20	50	MO132-20	1SAM360000R1013	4,350
12.5	25	50	MO132-25	1SAM360000R1014	4,500
15.5	32	25	MO132-32	1SAM360000R1015	9,300

Manual motor starter

MS132-T circuit breakers for transformer protection



2

Description

MS132-T Circuit breakers for transformer protection are electro mechanical protection devices specially designed to protect control transformers on the primary side. The short-circuit current setting is fixed to 20 times the operating current to handle the high inrush current generated by transformers.

le current setting Range Amp	S/C Ics Breaking Capacity kA	Type	Order code	M.R.P.(₹)
0.10 ... 0.16	100	MS132-0.16T	1SAM340000R1001	3,970
0.16 ... 0.25	100	MS132-0.25T	1SAM340000R1002	3,970
0.25 ... 0.40	100	MS132-0.4T	1SAM340000R1003	3,970
0.40 ... 0.63	100	MS132-0.63T	1SAM340000R1004	4,300
0.63 ... 1.00	100	MS132-1.0T	1SAM340000R1005	4,350
1.00 ... 1.60	100	MS132-1.6T	1SAM340000R1006	4,550
1.60 ... 2.50	100	MS132-2.5T	1SAM340000R1007	4,550
2.50 ... 4.00	100	MS132-4.0T	1SAM340000R1008	4,565
4.00 ... 6.30	100	MS132-6.3T	1SAM340000R1009	4,620
6.30 ... 10.0	100	MS132-10T	1SAM340000R1010	4,950
8.00 ... 12.0	100	MS132-12T	1SAM340000R1012	5,450
10.0 ... 16.0	100	MS132-16T	1SAM340000R1011	5,450
16.0 ... 20.0	100	MS132-20T	1SAM340000R1013	6,600
20.0 ... 25.0	50	MS132-25T	1SAM340000R1014	6,625

MS116, MS132, MO132, MS4xx, MO4xx

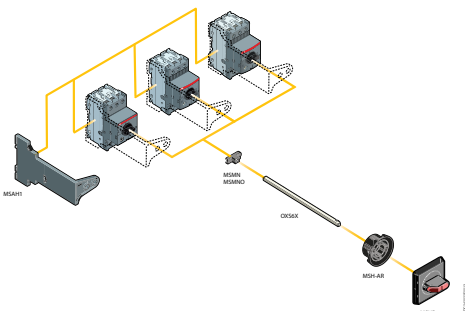
General accessories

Description

With this solution of door coupling rotary mechanism it is possible to operate a Manual Motor Starter in the back of a switch cabinet from outside. The door coupling mechanism prevents opening of the door of a switch cabinet with the Manual Motor Starter in ON position. The complete mechanism includes handle, shaft, driver, shaft alignment ring and shaft supporter. All accessories fit for 6 mm shafts with a maximum length of 180 mm. The degree of protection for handles MSHD is IP64.

Ordering details

Rated Power 415V KW	le current setting Range Amp	Type	Order code	M.R.P.(₹)			
MS116 MS132 MO132 MS4xx, MO4xx	SHAFT - Shaft diameter 6 mm. Shaft extension for door coupling driver	OX6X130	1SCA101655R1001	375			
			MSHD - Handle	MSHD-LB	1SAM201920R1001	1,020	
				MSHD-LY	1SAM201920R1002	1,020	
				MSHD-LTB	1SAM201920R1011	1,020	
				MSHD-LTY	1SAM201920R1012	1,020	
			MSMN- Driver	MSMN	1SAM101923R0002	150	
				MSMNO	1SAM101923R0012	150	
			MSH-AR Shaft alignment ring	MSH-AR	1SAM201920R1000	150	
			MS116, MS132	MSAH1-Shaft	MSAH1	1SAM201909R1021	675



■ Stock items

Manual motor starter

Accessories for MS116, MS132, MO132, MS132-T



AA1-24

Shunt trip					Undervoltage release			
Suitable for	Rated voltage	Type	Order code	M.R.P.(₹)	Rated voltage	Type	Order code	M.R.P.(₹)
MS116, MS132, MO132, MS132-T	20 ... 24	AA1-24	1SAM201910R1001	2,625	24	UA1-24	1SAM201904R1001	2,150
	110	AA1-110	1SAM201910R1002	2,625	110	UA1-110	1SAM201904R1004	2,150
	200-240	AA1-230	1SAM201910R1003	2,625	230	UA1-230	1SAM201904R1005	2,150
	350-415	AA1-400	1SAM201910R1004	2,625	415	UA1-415	1SAM201904R1007	2,150



HKF1-11

		Auxiliary contacts – mountable on the front			Auxiliary contacts – mountable on the right		
Suitable for	Aux contacts	Type	Order code	M.R.P.(₹)	Type	Order code	M.R.P.(₹)
MS116, MS132, MO132, MS132-T	1NO+1NC	HKF1-11	1SAM201901R1001	745	HK1-11	1SAM201902R1001	810
	2 NO	HKF1-20	1SAM201901R1002	745	HK1-20	1SAM201902R1002	810
	2 NC	-	-	-	HK1-02	1SAM201902R1003	810



SK1-11

Signaling contacts – mountable on the right

Auxiliary contacts – mountable on the front

Suitable for	Aux contacts	Type	Order code	M.R.P.(₹)
MS116, MS132, MO132, MS132-T	1NO+1NC	SK1-11**	1SAM201903R1001	1,020
	2 NO	SK1-20**	1SAM201903R1002	1,020
	2 NC	SK1-02**	1SAM201903R1003	1,020
MS132,	1NO+1NC	CK1-11#	1SAM301901R1001	1,450
MS132-T	2 NO	CK1-20#	1SAM301901R1002	1,450
	2 NC	CK1-02#	1SAM301901R1003	1,450

**for tripped alarm, max 2 piece

#for short-circuit alarm, max. 2 pieces



CK1-11

Manual motor starter

MS450, MS495, MS495 Manual motor starters



2

Description

MS450 Manual motor starters with short Circuit, overload and phase loss protection

Rated Power 415V KW	Ie current setting Range Amp	S/C Ics Breaking Capacity kA	Type	Order code	M.R.P.(₹)
18.5	28.0 ... 40.0	25	MS450-40	1SAM450000R1005	11,500
22	36.0 ... 45.0	25	MS450-45	1SAM450000R1006	12,500
22	40.0 ... 50.0	25	MS450-50	1SAM450000R1007	14,700
30	45.0 ... 63.0	25	MS495-63	1SAM550000R1007	15,000
MS495 Manual motor starters with short Circuit, overload and phase loss protection					
37	57.0 ... 75.0	25	MS495-75	1SAM550000R1008	16,400
45	70.0 ... 90.0	25	MS495-90	1SAM550000R1009	16,850
55	80.0 100.0	25	MS495-100	1SAM550000R1010	17,000
MS497 Manual motor starters with short Circuit, overload and phase loss protection					
15	22.0 ... 32.0	50	MS497-32	1SAM580000R1004	Upon request
18.5	28.0 ... 40.0	50	MS497-40	1SAM580000R1005	
22	36.0 ... 50.0	50	MS497-50	1SAM580000R1006	
30	45.0 ... 63.0	50	MS497-63	1SAM580000R1007	
37	57.0 ... 75.0	50	MS497-75	1SAM580000R1008	
45	70.0 ... 90.0	50	MS497-90	1SAM580000R1009	
55	80.0 ... 100.	50	MS497-100	1SAM580000R1010	

MO450, MO495, MO495 Manual motor starters



Description

MO450 Manual motor starters with short Circuit protection only

Rated Power 415V KW	Ie current setting Range Amp	S/C Ics Breaking Capacity kA	Type	Order code	M.R.P.(₹)
18.5	40	25	MO450-40	1SAM460000R1005	Upon request
22	45	25	MO450-45	1SAM460000R1006	
22	50	25	MO450-50	1SAM460000R1007	
MO495 Manual motor starters with short Circuit, overload and phase loss protection					
30	32	25	MO495-63	1SAM560000R1007	Upon request
37	40	25	MO495-75	1SAM560000R1008	
45	50	25	MO495-90	1SAM560000R1009	
55	63	25	MO495-100	1SAM560000R1010	
MO497 Manual motor starters with short Circuit, overload and phase loss protection					
15	32	50	MO497-32	1SAM590000R1004	Upon request
18.5	40	50	MO497-40	1SAM590000R1005	
22	50	50	MO497-50	1SAM590000R1006	
30	63	50	MO497-63	1SAM590000R1007	
37	75	50	MO497-75	1SAM590000R1008	
45	90	50	MO497-90	1SAM590000R1009	
55	100	50	MO497-100	1SAM590000R1010	

Manual motor starter Accessories for MS4xx



HK4-11

Auxiliary contacts – mountable on the front					Auxiliary contacts – mountable on the right			
Suitable for	Aux contacts	Type	Order code	M.R.P.(₹)	Rated voltage	Type	Order code	M.R.P.(₹)
MS45x, MS49x, MO45x, MO49x	1NO+1NC	HK4-11	1SAM401901R1001	820	1NO+1NC	HK4-11	1SAM401902R1001	820
					2 NO	HK4-20	1SAM401902R1002	820
					2 NC	HK4-02	1SAM401902R1003	820



SK4-11

Signaling contacts – mountable on the right*				
Suitable for	Aux contacts	Type	Order code	M.R.P.(₹)
MS45x, MS49x, MO45x, MO49x	1NO+1NC	SK4-11	1SAM401904R1001	1,500

*for tripped alarm, max 2 piece



AA4-24

Shunt trip units – mountable on the right					Undervoltage release mountable on the right			
Suitable for	Rated voltage	Type	Order code	M.R.P.(₹)	Rated voltage	Type	Order code	M.R.P.(₹)
MS45x, MS49x, MO45x, MO49x	20 ... 24	AA4-24	1SAM401907R1001	3,050	24	UA4-24	1SAM401905R1004	3,050
	110	AA4-110	1SAM401907R1002	3,050	110	UA4-110	1SAM401905R1001	3,050
	200-240	AA4-230	1SAM401907R1003	3,050	230	UA4-230	1SAM401905R1002	3,050
	350-415	AA4-400	1SAM401907R1004	3,050	415	UA4-415	1SAM401905R1002	3,050

Thermal overload relays



2

TA25, TA42 and TA75 relays

Relay range in Amps	"Direct mounting on contactors"	"Type Code reference"	Order Code	M.R.P.(₹)
0.1 ... 0.16	"A9...A40 AX9...AX32 AL9...AL40 TAL9...TAL40"	TA25DU 0.16M	1SAZ211201R2005	1,405
0.1 ... 0.16		TA25DU 0.25M	1SAZ211201R2009	1,405
0.25 ... 0.4		TA25DU 0.4M	1SAZ211201R2013	1,405
0.4 ... 0.63		TA25DU 0.63M	1SAZ211201R2017	1,405
0.63 ... 1.0		TA25DU 1.0M	1SAZ211201R2021	1,405
1.0 ... 1.4		TA25DU 1.4M	1SAZ211201R2023 ■	1,405
1.3 ... 1.8		TA25DU 1.8M	1SAZ211201R2025 ■	1,405
1.7 ... 2.4		TA25DU 2.4M	1SAZ211201R2028 ■	1,405
2.2 ... 3.1		TA25DU 3.1M	1SAZ211201R2031 ■	1,405
2.8 ... 4.0		TA25DU 4.0M	1SAZ211201R2033 ■	1,405
3.5 ... 5.0		TA25DU 5.0M	1SAZ211201R2035 ■	1,405
4.5 ... 6.5		TA25DU 6.5M	1SAZ211201R2038 ■	1,405
6.0 ... 8.5		TA25DU 8.5M	1SAZ211201R2040 ■	1,405
7.5 ... 11.0		TA25DU 11M	1SAZ211201R2043 ■	1,405
10.0 ... 14.0		TA25DU 14M	1SAZ211201R2045 ■	1,405
13.0 ... 19.0		TA25DU 19M	1SAZ211201R2047 ■	1,725
18.0 ... 25.0		TA25DU 25M	1SAZ211201R2051 ■	1,725
24.0 ... 32.0		TA25DU 32M	1SAZ211201R2053 ■	2,400

TA42DU

18.0 ... 25.0	"A30,A40, AX32...AX40 AL30,AL40, TAL30,TAL 40"	TA42DU 25	1SAZ311201R2001	2,850
22.0 ... 32.0		TA42DU 32	1SAZ311201R2002	2,850
29.0 ... 42.0		TA42DU 42	1SAZ311201R2003	2,850

TA75DU

22 ... 32	A50...A75 AX50...AX80 AE50...AE75 TAE50...TAE75 AF50...AF75	TA75DU 32	1SAZ321201R2002	3,605
29 ... 42		TA75DU 42	1SAZ321201R2003 ■	4,225
36 ... 52		TA75DU 52	1SAZ321201R2004 ■	4,225
45 ... 63		TA75DU 63	1SAZ321201R2005 ■	4,225
60 ... 80		TA75DU 80	1SAZ321201R2006	4,535

TA25/TA42/TA75/TA80/TA110/TA200 are direct operated relays with trip class 10A

TA110DU

66 ... 90	A95...A110, AX95...AX150	TA110DU-90	1SAZ411201R1001	Upon request
80 ... 110	AF95...AF110	TA110DU-110	1SAZ411201R1002	

TA200DU

66 ... 90	A145...A185 AX185...AX205 AF145...AF185	TA200DU-90	1SAZ421201R1001	Upon request
80 ... 110		TA200DU-110	1SAZ421201R1002	
100 ... 135		TA200DU-135	1SAZ421201R1003	
110 ... 150		TA200DU-150	1SAZ421201R1004	
130 ... 175		TA200DU-175	1SAZ421201R1005	
150 ... 200		TA200DU-200	1SAZ421201R1006	

Accessories

Independent Mounting Kit	TA25DU0.16..25A	DB25/25	1SAZ201108R0001 ■	360
	TA25DU32	DB25/32	1SAZ 201108R0002	650
	TA42DU, TA75DU	DB80	1SAZ301110R0001	Upon request
	TA110DU, TA200DU	DB200	1SAZ401110R0001	

■ Stock items

Thermal overload relays



TF42

T16 Relays

Relay range in Amps	Direct mounting on contactors	Type Code reference	Order Code	M.R.P.(₹)
0.10 ... 0.13	B6/BC6 B7/BC7 VB6/VBC6 VB7/VBC7 AS/ASL	T16-0.13	1SAZ711201R1005	Upon Request
0.13 ... 0.17		T16-0.17	1SAZ711201R1008	
0.17 ... 0.23		T16-0.23	1SAZ711201R1009	
0.23 ... 0.31		T16-0.31	1SAZ711201R1013	
0.31 ... 0.41		T16-0.41	1SAZ711201R1014	
0.41 ... 0.55		T16-0.55	1SAZ711201R1017	
0.55 ... 0.74		T16-0.74	1SAZ711201R1021	
0.74 ... 1.00		T16-1.0	1SAZ711201R1023	
1.00 ... 1.30		T16-1.3	1SAZ711201R1025	
1.30 ... 1.70		T16-1.7	1SAZ711201R1028	
1.70 ... 2.30		T16-2.3	1SAZ711201R1031	
2.30 ... 3.10		T16-3.1	1SAZ711201R1033	
3.10 ... 4.20		T16-4.2	1SAZ711201R1035	
4.20 ... 5.70		T16-5.7	1SAZ711201R1038	
5.70 ... 7.60		T16-7.6	1SAZ711201R1040	
7.60 ... 10.0		T16-10	1SAZ711201R1043	
10.0 ... 13.0	T16-13	1SAZ711201R1045		
13.0 ... 16.0	T16-16	1SAZ711201R1047		

TF42 Relays

Relay range in Amps	Direct mounting on contactors	Type Code reference	Order Code	M.R.P.(₹)
0.10 ... 0.13	AF09...AF38	TF42-0.13	1SAZ721201R1005	Upon Request
0.13 ... 0.17		TF42-0.17	1SAZ721201R1008	
0.17 ... 0.23		TF42-0.23	1SAZ721201R1009	
0.23 ... 0.31		TF42-0.31	1SAZ721201R1013	
0.31 ... 0.41		TF42-0.41	1SAZ721201R1014	
0.41 ... 0.55		TF42-0.55	1SAZ721201R1017	
0.55 ... 0.74		TF42-0.74	1SAZ721201R1021	
0.74 ... 1.00		TF42-1.0	1SAZ721201R1023	
1.00 ... 1.30		TF42-1.3	1SAZ721201R1025	
1.30 ... 1.70		TF42-1.7	1SAZ721201R1028	
1.70 ... 2.30		TF42-2.3	1SAZ721201R1031	
2.30 ... 3.10		TF42-3.1	1SAZ721201R1033	
3.10 ... 4.20		TF42-4.2	1SAZ721201R1035	
4.20 ... 5.70		TF42-5.7	1SAZ721201R1038	
5.70 ... 7.60		TF42-7.6	1SAZ721201R1040	
7.60 ... 10.0		TF42-10	1SAZ721201R1043	
10.0 ... 13.0		TF42-13	1SAZ721201R1045	
13.0 ... 16.0		TF42-16	1SAZ721201R1047	
16.0 ... 20.0		TF42-20	1SAZ721201R1049	
20.0 ... 24.0		TF42-24	1SAZ721201R1051	
24.0 ... 29.0	TF42-29	1SAZ721201R1052		
29.0 ... 35.0	TF42-35	1SAZ721201R1053		
35.0 ... 38.0/40.0	TF42-38	1SAZ721201R1055		

Thermal overload relays

2



TF42

TF42 Relays

Relay range in Amps	Direct mounting on contactors	Type Code reference	Order Code	M.R.P.(₹)
22.0...28.0	AF40, AF52, AF65	TF65-28	1SAZ811201R1001	Upon Request
25.0...33.0		TF65-33	1SAZ811201R1002	
30.0...40.0		TF65-40	1SAZ811201R1003	
36.0...47.0		TF65-47	1SAZ811201R1004	
44.0...53.0		TF65-53	1SAZ811201R1005	
50.0...60.0		TF65-60	1SAZ811201R1006	
57.0...67.0		TF65-67	1SAZ811201R1007	
40.0...51.0	AF80, AF96	TF96-51	1SAZ911201R1001	
48.0...60.0		TF96-60	1SAZ911201R1002	
57.0...68.0		TF96-68	1SAZ911201R1003	
65.0...78.0		TF96-78	1SAZ911201R1004	
75.0...87.0		TF96-87	1SAZ911201R1005	
84.0...96.0	TF96-96	1SAZ911201R1006		
66...90	AF116, AF140	TF140DU-90	1SAZ431201R1001	
80...110		TF140DU-110	1SAZ431201R1002	
100...135		TF140DU-135	1SAZ431201R1003	
110...142		TF140DU-142	1SAZ431201R1004	

For AF190 and AF205 use TA200DU OLR

Description	Type	Order Code	M.R.P.(₹)
Separate mounting kit	DB16E	1SAX101110R0001	Upon Request
Separate mounting kit	DB42	1SAZ701902R0001	

Electronic overload relays and suitable contactors

Suitable for Contactor	A9 ... A40	A30 ... A40	A50 ... A75	A95, A110	A145, A185	A210 ... A300	
	AL9 ... AL40	AL30 ... AL40	AE50 ... AE75	AE95, AE110	AF145, AF185	AF210 ... AF300	
			AF50 ... AF75	AF95, AF110			
EOLR	E16DU	E45DU	E80DU	E140DU	EF205	EF370	
Suitable for Contactor	AF400,	AF580,	AF1350,		B6/BC6		
	AF460	AF750	AF1650		B7/BC7		
EOLR	EF460	EF750	E1250DU		E16DU, T16		
Suitable for Contactor	AF09 ... AF16	AF26, AF38	AF40, AF52, AF65	AF80, AF96	AF116, AF140, AF146	AF190, AF205	AF265, AF305, AF370
EOLR	EF19	EF45	EF65	EF96	EF146	EF205	EF370

Electronic overload relays class 10, 20, 30



Electronic overload relays

Trip Class 10, 20, 30 selectable

Setting Range	Trip Class	Type	Order Code	M.R.P.(₹)
0.1 - 0.32A	Selectable 10E, 20E and 30E	E16DU 0.32	1SAX111001R1101	Upon Request
0.3 - 1.0A		E16DU 1.0	1SAX111001R1102	
0.8 - 2.7A		E16DU 2.7	1SAX111001R1103	
1.9 - 6.3A		E16DU 6.3	1SAX111001R1104	
5.7 - 18.9A		E16DU 18.9	1SAX111001R1105	
9 - 30A		E45DU 30	1SAX211001R1101	
15 - 45A		E45DU 45	1SAX211001R1102	
27 - 80A		E80DU 80	1SAX311001R1101	
50 - 140A		E140DU 140	1SAX321001R1101	
63 - 210A		EF205-210	1SAX511001R1101	
115 - 380A		EF370-380	1SAX521001R1101	
150 - 500A		E500DU 500	1SAX711001R1101	
250 - 800A		E800DU 800	1SAX811001R1101	
375 - 1250A		E1250DU 375 - 1250 A	1SFA739001R1000	
0.10...0.32	Selectable 10E, 20E and 30E	EF19-0.32	1SAX121001R1101	Upon Request
0.30...1.00		EF19-1.0	1SAX121001R1102	
0.80...2.70		EF19-2.7	1SAX121001R1103	
1.90...6.30		EF19-6.3	1SAX121001R1104	
5.70...18.9		EF19-18.9	1SAX121001R1105	
9.00...30.0		EF45-30	1SAX221001R1101	
15.0...45.0		EF45-45	1SAX221001R1102	
25...70		EF65-70	1SAX331001R1101	
36...100		EF96-100	1SAX341001R1101	
54...150		EF146-150	1SAX351001R1101	
63 - 210A		EF205-210	1SAX511001R1101	
115 - 380A		EF370-380	1SAX521001R1101	

Accessories

Description	Type	Order Code	M.R.P.(₹)
Separate mounting kit	DB16E	1SAX101110R0001	Upon Request
Separate mounting kit - EF19	DB19EF	1SAX101910R1001	
Separate mounting kit	DB45E	1SAX201110R1001	
Separate mounting kit	DB80E	1SAX301110R1001	
Separate mounting kit	DB140E	1SAX301110R1002	

For suitable contactors please refer page no. 74

Softstarters

ABB softstarters - The complete range

ABB offers four different ranges of softstarters to cover every customer need for solutions for motor sizes up to 1800 A. This page describes the main characteristics of the different softstarter ranges

PSR - The compact range

The PSR softstarter is the most compact of all the softstarter ranges, thereby making it possible to design compact starting equipments. The system concept with Manual Motor Starters and the PSR provides a far more compact starting solution than for instance a star delta starter.

Built-in by-pass reduces the energy loss and makes the connection easier and with only three potentiometers, the set-up couldn't be any easier. Still, the optimized ramping characteristics will ensure a very smooth start and stop for all applications.

PSE - The efficient range

The PSE softstarter is the world's first compact softstarter with both built-in electronic overload for motor protection and torque control for an excellent control of pumps. The compact design with the most important functionality integrated provides a very efficient starting solution.

The illuminated language neutral display and the four button keypad make it easy to take advantage of all the advanced functionality in the softstarter. The display will also provide all the necessary information both during

PST(B) - The advanced range

The PST(B) softstarter is the most advanced softstarter in the range with almost all imaginable functionality included. All the advanced protections for the motor, the softstarter and the load ensure a trouble free operation. Pre-warnings even allow problems to be detected before the motor needs to be stopped

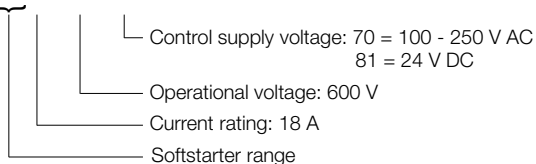
The torque control function has been developed and tested together with well known pump manufacturers to ensure the absolutely best possible stop of pumps without water hammering and pressure surges. and there by avoiding unnecessary downtime.

With the full text LCD display in your own language, pre-programmed

application settings and event logging, it couldn't be easier to set-up and operate.

By using the ABB FieldBusPlug, you can decide at any time which bus protocol to use. The fieldbus system will allow you to set-up, control and monitor the softstarter.

PSR18 - 600 -70



NEW

The PSTX combines many years of research and product development with extensive knowledge of application specific requirements and needs.

It is our latest advancement in motor control and protection and adds new functionality and increased reliability.

- Three-phase controlled
- Operational voltage: 208 – 690 VAC
- Wide rated control supply voltage: 100 – 250 V, 50/60 Hz
- PSTX rated operational current: 30 to 370 A (inside-delta: 640 A)
- Both in-line and inside-delta connection
- Coated circuit boards protecting from dust, moist and corrosive atmosphere
- Detachable keypad rated IP66 (Type 1, 4X,12)
- Graphical display with 14 languages for easy setup and operation
- Built-in bypass for energy saving and easy installation
- Built-in Modbus RTU for monitoring and control
- Support for all major communication protocols
- Analog output for measurement of current, voltage, power factor etc.

PSR	PSS	PSE	PST(B)	● Standard O Optional - Not available
●	-	●	● 1)	Built-in by-pass
-	●	-	●	Inside delta connection
-	-	●	O	Coated PCBs
-	-	●	●	Display and keypad
-	-	●	●	Torque control
-	O	●	●	Settable current limit function
-	-	●	●	Electronic motor overload protection
-	-	-	●	PTC input for motor protection
-	-	-	●	Phase imbalance protection
-	-	-	●	Phase reversal protection
-	-	●	●	Locked rotor protection
-	●	●	●	Thyristor overtemperature protection
-	-	●	●	Underload protection
-	-	-	●	Programmable warning functions
-	-	●	●	Analog output
O	-	O	●	FieldBus communication
-	-	O	●	Event log
-	-	O	O	External keypad

Quick guide for selection



Normal start Class 10

Heavy duty start class 30

Typical applications

- | | | | |
|----------------|-------------------------|-------------------|------------------------|
| • Bow thruster | • Centrifugal pump | • Centrifugal fan | • Conveyor belt (long) |
| • Compressor | • Conveyor belt (short) | • Crusher | • Mill |
| • Elevator | • Escalator | • Mixer | • Stirrer |

! If more than 10 starts/h
Select one size larger than the standard selection

PSR - The compact and cost effective solution integrated bypass PSR3 ... PSR105

Rated operational voltage U_e , 208-600 V AC
Rated control supply voltage, U_s , 100 - 240 V AC



415V Pe kW"	IEC Max rated operational Ie A	Type	Order Code	M.R.P
1.5	3.9	PSR3-600-70	1SFA896103R7000	8,860
3	6.8	PSR6-600-70	1SFA896104R7000	9,700
4	9	PSR9-600-70	1SFA896105R7000	11,850
5.5	12	PSR12-600-70	1SFA896106R7000	14,200
7.5	16	PSR16-600-70	1SFA896107R7000	16,000
11	25	PSR25-600-70	1SFA896108R7000	18,350
15	30	PSR30-600-70	1SFA896109R7000	25,250
18.5	37	PSR37-600-70	1SFA896110R7000	30,400
22	45	PSR45-600-70	1SFA896111R7000	32,900
30	60	PSR60-600-70	1SFA896112R7000	45,900
37	72	PSR72-600-70	1SFA896113R7000	56,950
45	85	PSR85-600-70	1SFA896114R7000	63,900
55	105	PSR105-600-70	1SFA896115R7000	70,050

For Rated control supply voltage, U_s , 24 V Dc replace R7000 by R8100

PSE - The efficient range with integrated bypass Normal Starts , Class 10, In-Line



415V Pe kW	IEC Max rated operational Ie A	Type	Order Code	M.R.P
7.5	18	PSE18-600-70	1SFA897101R7000	37,600
11	25	PSE25-600-70	1SFA897102R7000	37,800
15	30	PSE30-600-70	1SFA897103R7000	40,100
18.5	37	PSE37-600-70	1SFA897104R7000	46,000
22	45	PSE45-600-70	1SFA897106R7000	52,550
30	60	PSE60-600-70	1SFA897106R7000	61,300
37	72	PSE72-600-70	1SFA897107R7000	70,050
45	85	PSE85-600-70	1SFA897108R7000	78,800
55	106	PSE105-600-70	1SFA897109R7000	80,600
75	143	PSE142-600-70	1SFA897110R7000	1,13,300
90	171	PSE170-600-70	1SFA897111R7000	1,23,600
110	210	PSE210-600-70	1SFA897112R7000	1,33,900
132	250	PSE250-600-70	1SFA897113R7000	1,49,350
160	300	PSE300-600-70	1SFA897114R7000	1,62,750
200	370	PSE370-600-70	1SFA897115R7000	1,75,100

For accessories please consult

Normal starts, class 10, In-Line

PST30 ... PSTB1050

Rated operational voltage U_e , 208 - 600 V

Rated control supply voltage, U_s , 100 - 250 V AC, 50/60 Hz



415V Pe kW	IEC Max rated operational Ie A	Type*)	Order code**)	M.R.P
15	30	PST30-600-70■	1SFA894002R70▼0	Upon Request
18.5	37	PST37-600-70■	1SFA894003R70▼0	
22	44	PST44-600-70■	1SFA894004R70▼0	
25	50	PST50-600-70■	1SFA894005R70▼0	
30	60	PST60-600-70■	1SFA894006R70▼0	
37	72	PST72-600-70■	1SFA894007R70▼0	
45	85	PST85-600-70■	1SFA894008R70▼0	
55	105	PST105-600-70■	1SFA894009R70▼0	
75	142	PST142-600-70■	1SFA894010R70▼0	
90	175	PST175-600-70■	1SFA894011R70▼0	
110	210	PST210-600-70■	1SFA894012R70▼0	
132	250	PST250-600-70■	1SFA894013R70▼0	
160	300	PST300-600-70■	1SFA894014R70▼0	
200	370	PSTB370-600-70■	1SFA894015R70▼0	
250	470	PSTB470-600-70■	1SFA894016R70▼0	
315	570	PSTB570-600-70■	1SFA894017R70▼0	
400	720	PSTB720-600-70■	1SFA894018R70▼0	
450	840	PSTB840-600-70■	1SFA894019R70▼0	
560	1050	PSTB1050-600-70■	1SFA894020R70▼0	

*) Add code number in Type acc. to: ■ No code letter = Normal | T = Coated PCBs

*) Add code number in Type acc. to: ▼ 0 = Normal | 2 = Coated PCBs

PST(B) – The advanced range -Heavy Duty, class 30, In-Line, ordering details

PST30 ... PSTB1050 / Rated operational voltage U_e , 400 - 690 V e

Rated control supply voltage, U_s , 100 - 250 V AC, 50/60 Hz



415V Pe kW	IEC Max rated operational Ie A	Type*)	Order code**)	M.R.P
11	22	PST30-690-70■	1SFA895002R70▼0	Upon Request
15	3	PST37-690-70■	1SFA895003R70▼0	
18.5	37	PST44-690-70■	1SFA895004R70▼0	
22	44	PST50-690-70■	1SFA895005R70▼0	
25	50	PST60-690-70■	1SFA895006R70▼0	
30	60	PST72-690-70■	1SFA895007R70▼0	
37	72	PST85-690-70■	1SFA895008R70▼0	
45	85	PST105-690-70■	1SFA895009R70▼0	
55	105	PST142-690-70■	1SFA895010R70▼0	
75	142	PST175-690-70■	1SFA895011R70▼0	
90	175	PST210-690-70■	1SFA895012R70▼0	
110	210	PST250-690-70■	1SFA895013R70▼0	
132	250	PST300-690-70■	1SFA895014R70▼0	
160	300	PSTB370-690-70■	1SFA895015R70▼0	
200	370	PSTB470-690-70■	1SFA895016R70▼0	
250	470	PSTB570-690-70■	1SFA895017R70▼0	
315	570	PSTB720-690-70■	1SFA895018R70▼0	
400	720	PSTB840-690-70■	1SFA895019R70▼0	
450	840	PSTB1050-690-70■	1SFA895020R70▼0	

*) Add code number in Type acc. to: ■ No code letter = Normal | T = Coated PCBs

*) Add code number in Type acc. to: ▼ 0 = Normal | 2 = Coated PCBs

For accessories please consult

PSTX30 ... PSTX370 – The advanced range
Normal starts, class 10, in-line, ordering details

NEW

Three-phase controlled

- Operational voltage: 208 – 690 VAC
- Wide rated control supply voltage: 100 – 250 V, 50/60 Hz
- PSTX rated operational current: 30 to 370 A (inside-delta: 640 A)
- Both in-line and inside-delta connection
- Coated circuit boards protecting from dust, moist and corrosive atmosphere
- Detachable keypad rated IP66 (Type 1, 4X, 12)
- Graphical display for easy setup and operation
- Built-in bypass for energy saving
- Built-in Modbus RTU for monitoring and control
- Support for all major communication protocols
- Analog output for measurement of current, voltage, power factor etc.

Rated operational voltage U_e , 208-600 V
Rated control supply voltage U_s , 100-250 V AC, 50/60 Hz



415V P_e kW	IEC Max rated operational I_e A	Type*)	Order code**)	M.R.P
15	30	PSTX30-600-70	1SFA898103R7000	Upon request
18.5	37	PSTX37-600-70	1SFA898104R7000	
22	45	PSTX45-600-70	1SFA898105R7000	
30	60	PSTX60-600-70	1SFA898106R7000	
37	72	PSTX72-600-70	1SFA898107R7000	
45	85	PSTX85-600-70	1SFA898108R7000	
55	106	PSTX105-600-70	1SFA898109R7000	
75	143	PSTX142-600-70	1SFA898110R7000	
90	171	PSTX170-600-70	1SFA898111R7000	
110	210	PSTX210-600-70	1SFA898112R7000	
132	250	PSTX250-600-70	1SFA898113R7000	
160	300	PSTX300-600-70	1SFA898114R7000	
200	370	PSTX370-600-70	1SFA898115R7000	



PSTX30 ... PSTX105

1SFC132038V0001



PSTX142 ... PSTX170

1SFC132033V0001



PSTX210 ... PSTX370

1SFC132039V0001

Rated operational voltage U_e , 208-690 V
Rated control supply voltage U_s , 100-250 V AC, 50/60 Hz



415V P_e kW	IEC Max rated operational I_e A	Type*)	Order code**)	M.R.P
15	30	PSTX30-690-70	1SFA898203R7000	Upon request
18.5	37	PSTX37-690-70	1SFA898204R7000	
22	44	PSTX45-690-70	1SFA898205R7000	
30	60	PSTX60-690-70	1SFA898206R7000	
37	72	PSTX72-690-70	1SFA898207R7000	
45	85	PSTX85-690-70	1SFA898208R7000	
55	106	PSTX105-690-70	1SFA898209R7000	
75	143	PSTX142-690-70	1SFA898210R7000	
90	171	PSTX170-690-70	1SFA898211R7000	
110	210	PSTX210-690-70	1SFA898212R7000	
132	250	PSTX250-690-70	1SFA898213R7000	
160	300	PSTX300-690-70	1SFA898214R7000	
200	370	PSTX370-690-70	1SFA898215R7000	

Intelligent Motor Management

General Information

Large industrial plants often have several thousand motors to provide the required motion. This in turn requires intelligent devices on site, as well as a continuous connection from the process control and automation level through to the field. For this reason it is particularly important that motors can be easily integrated into system control and monitoring. With the FieldBusPlug system and the new UMC100-FBP motor management system, the best prerequisites are created for this. Intelligent motor management ensures high reliability in the process. The UMC100-FBP motor management system is easy to handle, from planning and implementation through to on-site service.

2

With the Universal Motor Controller UMC100-FBP, ABB provides the optimum solution for integrating motor control into system control. The UMC100-FBP is a flexible, modularly expandable motor management system for low voltage motors with constant rotational speed. Its most important task is avoiding system downtimes through early detection of possible drive problems and reducing the associated downtimes through quick detection of the error cause if a motor stop has occurred.



A modular system to suit all requirements

Continued further development

The UMC100-FBP Universal Motor Controller ideally supplements the already proven UMC22-FBP with several additional functions and extensions. It is based on ABB's long-standing experience in the area of motor protection and drive technology.

Motor management and more

With its predefined control features and the option to optimally adapt the device to different system conditions due to its flexible logic, the UMC100-FBP is very well suited to varied applications. For complex applications with more I/Os or special signals, extension modules are available.

High system availability

The UMC100-FBP continuously provides extensive operating, service and diagnostic data of the motor. This enables the operator to detect faults in time or to even prevent these with suitable measures, or to limit their effect. Quick error location and elimination increases system availability.

Electronic full motor protection

The comprehensive electronic full motor protection is self-sufficient and guarantees full motor protection even if superordinated automation or process control systems or the bus system fail and is fully capable of operating as a stand alone system. The high accuracy of the electronic measuring system better utilizes the performance of the motors. The digital technology guarantees high long-term stability of the tripping characteristic and consistent tripping behavior even after many years of use.

Less planning, development and material effort

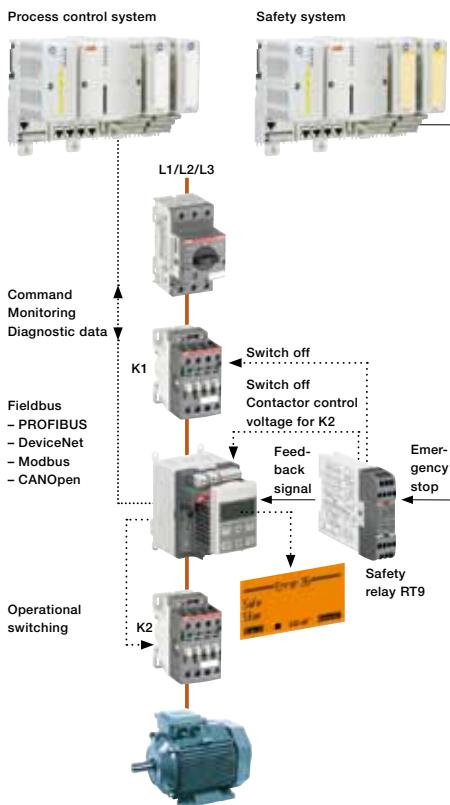
The UMC100-FBP is well convincing during the planning and development phase due to its universal and modular structure. All required protection, monitoring and control features are integrated in one single device, which thus reduces the wiring effort. One single version for all current ranges and field buses simplifies planning and service from systems through to the spares inventory.

Simple integration in a confined space

Due to its compact design with integrated measuring system, the UMC100-FBP reduces the required floor space. This is important for application in low voltage drawer systems in conditions with limited space, or for conversion of existing systems to a modern motor management system.

Flexible integration into process control, Any bus communication

With the FieldBusPlug, the UMC100-FBP can communicate with control systems via the widespread standard fieldbus systems PROFIBUS DP, Profinet IO, CANopen, DeviceNet, Modbus RTU or Modbus TCP. With the FDT interface it is easy to configure the motor management in the process control and adapt it to the process.



Process Automation

Intelligent Motor Management

Motor management system UMC 100.3-FBP NEW



New features in comparison to preceding versions

New Protection Functions

- The new analog input module AI111 adds three analog inputs to the UMC100. Up to two AI111 can be connected to the UMC100 at the same time.
- RTD based Temperature Supervision and Analog Inputs for temperature measurement
- Single phase / three phase operation modes

New Motor Management Functions

- Control functions for load feeder and softstarter mode
- Standstill and operating hours supervision

Fieldbus Communication

- The new communication adapters use no M12 connectors and cables anymore. Standard fieldbus cables and fieldbus connectors can be used.

Power supply

- Supply Voltage There is an additional UMC100.3 version for 110V AC/DC to 240V AC/DC supply voltage. A 24 V DC supply output is available to supply the expansion modules.

Other new Functions

- The LCD panel offers a USB interface for configuration via Laptop
- Availability to display all three phase currents

Backward Compatibility

- The new UMC100 version is fully backwards compatible with the previous version and replaces it.

2

Motor management system UMC100-FBP & accessories, ordering data



UMC100-FBP

Universal Motor Controller UMC100-FBP

Intelligent motor management system for three-phase with $I = 0,24 - 63 \text{ A}$ in one single device. Compact housing 8 with integrated bushing-type current transformer for cable cross section up to 25 mm^2 (max. \varnothing with Insulation 11 mm). Higher currents with additional external current transformer.

Thermal overload protection according to EN/IEC 60947-4-1, selectable trip classes 5E, 10E, 20E, 30E, 40E. (Some functions require the additional use of a voltage expansion module V1150 or V1155)

Motor protection functions	:	Over-/Underload, Over-/Undercurrent, Over-/Undervoltage, rotor blocking Phase failure / imbalance / sequence Earth fault detection intergrated or with external sensor CEM11 Thermistor motor protection
Motor control functions	:	Easily configurable motor control functions: direct, reverse, star-delta starter, polechanging, overload relay, actuator mode. Additionally free programmable application specific logic with function blocks
Service and diagnostic data	:	Operating hours, number of motor starts and overload trips Motorstatus, faults and warnings, fault history (16 events) Motor current, phase voltages, thermal load, power factor (ccs 0), active power, apparent power, energy, total harmonic distortion (THD).
Integrated I/Os	:	6 digital inputs, 1 PTC input, 4 digital outputs. Maximum number of I/Os with expansion module 14 digital inputs, 1 PTC input, 8 digital outputs, 1 analogue output,
Communication	:	Compatible with FieldBusPlug interfaces for communication via fieldbus systems (4 Fieldbusses and 2 networks) amd also operable as stand alone

Intelligent Motor Management

Motor management system UMC100-FBP & accessories, ordering data

2



DX111-FBP /
DX122-FBP

Designation	Nominal motor current	Type	Order code	M.R.P.
Universal Motor Controller	0.24 - 63 A	UMC100-FBP.0	1SAJ520000R0101	Upon request
Universal Motor Controller, ATEX	0.24 - 63 A	UMC100-FBP.2	1SAJ520000R0200	

Expansion modules and accessories for Universal Motor Controller UMC100-FBP

One I/O-expansion-module Dx111 or Dx122 and one voltage-expansion-module V1150 or V1155 can be connected to a UMC100. All expansion modules require 24 V DC power supply

- DX111-FBP.0 : I/O-expansion module with 8 digital inputs 24 V DC, 4 relay outputs, 1 analog output 0/4...20 mA or 0...10 V
- DX122-FBP.0 : I/O-expansion module with 8 digital inputs 110 / 230 V AC, 4 relay outputs, 1 analog output 0/4 - 0 mA or 0 - 10 V
- V1150-FBP.0 : Voltage expansion module for use in grounded networks, 150 - 690 V AC
- V1155-FBP.0 : Voltage expansion module for use in all networks, 150 - 690 V AC
Voltage modules for the determination of phase voltages, power factor (cos 0), apparent power, energy, total harmonic distortion (THD)



V1150-FBP /
V1155-FBP

Designation	For use with	Type	Order code	M.R.P.
1/I/O module for UMC100, 24 V DC digital input and supply voltage	UMC100-FBP	DX111-FBP.0	1SAJ611000R0101	Upon request
1/I/O module for UMC100, 110-230 V AC digital input, 24 V DC supply voltage	UMC100-FBP	DX122-FBP.0	1SAJ622000R0101	
3 phase Voltage module for grounded networks	UMC100-FBP	V1150-FBP.0	1SAJ650000R0100	
3 phase Voltage module for all networks	UMC100-FBP	V1155-FBP.0	1SAJ655000R0100	
Connection cable UMC100 - I/O module, length 0.30 m	UMC100-FBP	UMCIO-CAB.030	1SAJ691000R0001	
Connection cable IO-module - IO module, length 0.30 m	UMC100-FBP	IOIO-CAB.030	1SAJ692000R0001	



UMC100-PAN

Operating panel UMC100-PAN and accessories for Universal Motor Controller UMC100-FBP

Operating, diagnostics and parameter setting panel for Universal Motor Controller UMC100-FBP. Setting of motor and bus parameters. Backlit graphical multilingual display. Assembly directly on UMC100-FBP or on the control cabinet door via extension cable and door mounting set IP65 (front side)

Designation	For use with	Type	Order code	M.R.P.
Operating panel	UMC100-FBP	UMC100-PAN	1SAJ590000R0102	Upon request
3 m ext. cable with door mounting set	UMC100-FBP	UMCPAN-CAB.300	1SAJ510002R0001	
0.7 m ext. cable with door mounting set	UMC100-FBP	UMCPAN-CAB.070	1SAJ510003R0001	
1.5 m ext. cable with door mounting set	UMC100-FBP	UMCPAN-CAB.150	1SAJ510004R0001	

FBP FieldBusPlug

System description, general information

Modbus® TCP

The FieldBusPlug system allows simple, universal and intelligent integration of numerous switching devices and components into any automation system. Simple and flexible planning and integration also has an effect on the design and operation of machines and systems.



Typical devices

These are intelligent motor controllers, softstarters, circuit breakers, switch disconnecter fuses and decentralized automation systems.

Modbus® RTU

Communication interface

The listed devices are fieldbus-neutral. With the FieldBusPlug (FBP) they can be connected to the most common fieldbus system. And with the new MTQ22 interface to Ethernet networks.



Reduces multiplicity of devices

One single device version can be connected to different fieldbus systems via suitable FieldBusPlugs. This simplifies planning, development, service and storage.



Operational safety

The M12 connection technology with ready-made components ensures easy assembly and high availability.

Open Communication

Large product portfolio

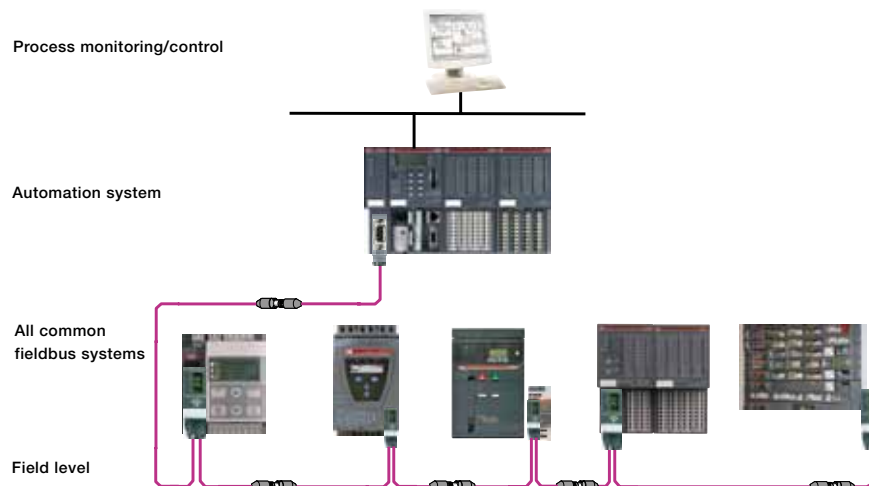
A comprehensive range of accessories, like cables, adapters, plugs and software tools rounds off the product range.



Simple integration

New tools based on the generally valid FDT / DTM (Device Type Manager) standard support planners and operators in configuring and implementing the systems.

PBDTM



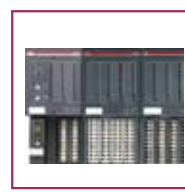
FieldBusPlug



Universal Motor Controller UMC100-FBP



Softstarter PST



Decentralized automation S500



MTQ22



Circuit breaker Emax

DeviceNet FieldBusPlug

Ready-made DeviceNet fieldbus interface with various cable lengths.

- Applicable on all FBP motor starters and other devices
- Degree of protection IP65, diagnostic LED



Designation	Cable length	Type	Order code	M.R.P
DeviceNet-FBP	0.25 m	DNP21-FBP.025	1SAJ230000R1003	Upon request
DeviceNet-FBP	0.50 m	DNP21-FBP.050	1SAJ230000R1005	
DeviceNet-FBP	1.00 m	DNP21-FBP.100	1SAJ230000R1010	
DeviceNet-FBP	5.00 m	DNP21-FBP.500	1SAJ230000R1050	



DNP21-FBP
MRP21-FBP
COP21-FBP

MODBUS-RTU FieldBusPlug

Ready-made MODBUS-RTU fieldbus interface with various cable lengths.

- Applicable on all FBP motor starters and other devices
- Degree of protection IP65, diagnostic LED

Designation	Cable length	Type	Order code	M.R.P
MODBUS-RTU-FBP	0.25 m	MRP21-FBP.025	1SAJ250000R0003	Upon request
MODBUS-RTU-FBP	0.50 m	MRP21-FBP.050	1SAJ250000R0005	
MODBUS-RTU-FBP	1.00 m	MRP21-FBP.100	1SAJ250000R0010	
MODBUS-RTU-FBP	5.00 m	MRP21-FBP.500	1SAJ250000R0050	

CANopen FieldBusPlug

Ready-made CANopen fieldbus interface with various cable lengths.

- Applicable on all FBP motor starters and other devices
- Degree of protection IP65, diagnostic LED

Designation	Cable length	Type	Order code	M.R.P
CANopen-FBP	0.25 m	COP21-FBP.025	1SAJ230100R1003	Upon request
CANopen-FBP	0.50 m	COP21-FBP.050	1SAJ230100R1005	
CANopen-FBP	1.00 m	COP21-FBP.100	1SAJ230100R1010	



DNF11-FBP.050

Accessories for the DeviceNet, MODBUS-RTU and CANopen bus connector

DeviceNet, MODBUS-RTU and CANopen round cable for bus junctions

Ready-made bus cable with an M12 connector and an open cable end.

Designation	Cable length	Type	Order code	M.R.P
Round cable with female connector	0.50 m	DNF11-FBP.050	1SAJ923002R0005	Upon request
Round cable with male connector	0.50 m	DNM11-FBP.050	1SAJ923003R0005	



DNM11-FBP.050

DeviceNet, MODBUS-RTU and CANopen round cable for bus extension

Ready-made bus cable with M12 male and female connectors

Designation	Cable length	Type	Order code	M.R.P
Extension cable	1.00 m	DNX11-FBP.100	1SAJ923001R0010	Upon request
Extension cable	3.00 m	DNX11-FBP.300	1SAJ923001R0030	
Extension cable	5.00 m	DNX11-FBP.500	1SAJ923001R0050	
Round cable	100.00 m	DNC11-FBP.999	1SAJ923004R0001	



DNX11-FBP



DNR11-FBP.120

DeviceNet, MODBUS-RTU and CANopen termination resistor

Designation	Type	Order code	M.R.P
Termination Resistor, 120 Ohm	DNR11-FBP.120	1SAJ923007R0001	Upon request

FBP FieldBusPlug

Profibus DP, ordering details



PDP22-FBP

Profibus DP FieldBusPlug

Ready-made Profibus DP fieldbus interface with various cable lengths.

- Supports PROFIBUS DP V0 and V1
- Applicable on all FBP motor starters and other devices
- Degree of protection IP65, diagnostic LED



Designation	Cable length	Type	Order code	M.R.P
Profibus DP FBP	0.25 m	PDP22-FBP.025	1SAJ240100R1003	Upon request
Profibus DP FBP	0.50 m	PDP22-FBP.050	1SAJ240100R1005	
Profibus DP FBP	1.00 m	PDP22-FBP.100	1SAJ240100R1010	
Profibus DP FBP	2.00 m	PDP22-FBP.200	1SAJ240100R1020	
Profibus DP FBP	5.00 m	PDP22-FBP.500	1SAJ240100R1050	



PDQ22-FBP

Profibus DP FieldBusPlug for four devices

PDQ22 is a member of the ABB's FieldBusPlug family of bus connectors. It allows the connection of up to four devices to Profibus DP by just using one Profibus node access. This allows a cost efficient device integration for devices that are located physically nearby. PDQ22 supports DP-V0 and DP-V1. The degree of protection is IP66. There are separate diagnosis LEDs for bus and device status.

Note that the accessory PDQ22-FBP only works with the PSR and PSE and not with the PST(B) softstarter.

Designation	Type	Order code	M.R.P
Quadruple bus connector	PDQ22-FBP	1SAJ240200R0050	Upon request
DINrail adapter for PDQ22-FBP	CDA11-FBP.0	1SAJ929300R0001	
Fixing bracket for passive plug of connection cable	CDP11-FBP.0	1SAJ929100R0001	

Configuration software

This cable and software can be used for setup and commissioning of the softstarter as well as to keep back-up of the parameter settings.



2CDC341 101S0010

Designation	Type	Order code	M.R.P
USB to FBP interface cable	UTF21-FBP	1SAJ929400R0002	Upon request
PDP22/PDQ22 Device Type Manager (DTM) incl. FDT/DTM frame application	PBDTM-FBP	1SAJ924012R0005	

Accessories for the Profibus DP Bus Connector

Profibus DP Round cable for Bus Junctions

Ready-made bus cable with an M12 connector and an open cable end.

- Application on bus junctions such as e.g. Profibus DB couplers or devices with an integrated Profibus DB interface



PDF11-FBP.50

2CDC341 048 F0003



PDM11-FBP.50

2CDC341 048 F0008

Designation	Cable length	Type	Order code	M.R.P
Round cable with female connector	0.50 m	PDF11-FBP.050	1SAJ924002R0005	Upon request
Round cable with male connector	0.50 m	PDM11-FBP.050	1SAJ924003R0005	



PDX11-FBP

2CDC 341 047 F0003

Profibus DP round cable for bus extension

Ready-made bus cable with M12 male and female connectors Round cable on coil

Designation	Cable length	Type	Order code	M.R.P
Extension cable	0.50 m	PDX11-FBP.050	1SAJ924001R0005	Upon request
Extension cable	1.00 m	PDX11-FBP.100	1SAJ924001R0010	
Extension cable	3.00 m	PDX11-FBP.300	1SAJ924001R0030	
Extension cable	5.00 m	PDX11-FBP.500	1SAJ924001R0050	
Round cable	100.00 m	PDC11-FBP.999	1SAJ924004R1000	



PDM11-FBP

2CDC 341 051 F0003



PDF11-FBP

2CDC 341 050 F0003

Profibus DP accessories for bus extension

Designation	Type	Order code	M.R.P
Male Connector for round cable	PDM11-FBP.0	1SAJ924005R0001	Upon request
Female Connector for round cable	PDF11-FBP.0	1SAJ924006R0001	Upon request



PDR11-FBP.150

2CDC 341 054 F0003



PDV11-FBP,
PDV12-FBP

2CDC 341 053 F0003

Profibus DP termination resistor, miscellaneous accessories

Designation	Type	Order code	M.R.P
Termination resistor, 150 Ohm	PDR11-FBP.150	1SAJ924007R0001	Upon request
Feeding connector 24V DC, Code B-A	PDV11-FBP.0	1SAJ924008R0001	
Feeding connector 24V DC, Code A-A	PDV12-FBP.0	1SAJ924011R0001	
Adaptor M12-Dsub9-M12 Cable length 0.50m	PDA11-FBP.050	1SAJ924009R0001	
Adaptor M12-Dsub9-M12 Cable length 2 x 0.50m	PDA12-FBP.050	1SAJ924010R0001	



PDA11-FBP.050

2CDC 341 006 F0004



PDA12-FBP.050

2CDC 341 007 F0004

Extension cable

Designation	Cable length	Type	Order code	M.R.P
Extension cable (female/male), shielded	0.3 m	CDP15-FBP.030	1SAJ929140R0003	Upon request
Extension cable (female/male), shielded	0.6 m	CDP15-FBP.060	1SAJ929140R0006	
Extension cable (female/male), shielded	1.5 m	CDP15-FBP.150	1SAJ929140R0015	
Extension cable (male/open), shielded	1.5 m	CDP16-FBP.150	1SAJ929150R0015	



MTQ22

Ethernet Modbus TCP Interface MTQ22-FBP

Designation	Cable length	Type	Order code	M.R.P
Ethernet Modbus TCP Interface	-	MTQ22-FBP.0	1SAJ260000R0100	Upon request
Terminal bloc for MTQ22 X1...X4	-	ETHTB-FBP.4	1SAJ929200R0001	
Terminal bloc for MTQ22 X1...X4	-	ETHTB-FBP.50	1SAJ929200R0002	
Cable MTQ22 – UMC100	1.5 m	CDP17-FBP.150	1SAJ929170R0015	
Cable MTQ22 – drawer outside	1.5 m	CDP18-FBP.150	1SAJ929180R0015	
Cable UMC100 – drawer inside	1.0 m	CDP19-FBP.100	1SAJ929190R0010	



PNQ22

PROFINET IO Interface PNQ22 NEW

Designation	Cable length	Type	Order code	M.R.P
PROFINET IO Interface for 4 FBP-Devices	-	PNQ22.0	1SAJ261000R0100	Upon request

Electronic products and relays

The product range



1 Time relays, CT range

Three ranges of electronic timers provide timing functions for all applications: the CT-D range with a width of just 17.5 mm; the CT-E range, the ideal solution for serial applications; and the CT-S range that has two different types of connection terminals and is ideally suited for universal use. The CT range has a wide variety of timing functions (from ON or OFF delay to star-delta changeover). The time relays are available with output relays, solid-state outputs and precise direct time adjustment.

2 Measuring and monitoring relays, CM range

State of the Art monitors for single and three-phase systems. Monitoring of: voltage, current, frequency, power factor (motor load), thermistors, temperature, liquid level, insulation resistance, and grid feeding. ABB has one of the world's widest product ranges of measuring and monitoring relays. The CM range is a key product line of the EPR range.

3 Power supplies, CP range

Modern power supply units are a vital component in most areas of energy management and automation technology. As your global partner in this area, ABB pays close attention to corresponding requirements. Innovation is the key to the substantial enlargement of our power supply product range. ABB offers four different product lines for single and three-phase supplies, output voltages 5/12/24, and 48 VDC in plastic and metal enclosure, as well as various accessories.

4 Signal converters, CC range and ILPH

The ABB serial data converters allow communication to be established between units with different communication standards. In order to assure process continuity, existing systems must be updated consistently or connected to new devices. Serial data enables communication to be established if the communication standard of the existing system and the connected device vary. As well as converting signals, analog signal converters and serial data converters can amplify, filter or separate signals.

5 Interface relays and optocouplers, CR range and R500 / 600

Interface relays and optocouplers are widely used in various industrial applications. As an interface, they link the controller, e.g. PLC (programmable logic controller), PC or field bus systems to the sensor/actuator level. Here, they have various functions: switching AC or DC loads with different resistive, inductive and capacitive parts, switching voltages from a few mV up to 250 V, switching currents from a few mA up to 16 A, amplification of weak control signals, electrical isolation of control and load circuits, and signal multiplying.

6 Logic relays, CL range

CL range logic relays are suitable for small and medium-sized control tasks and can substitute logic wiring quickly and easily. Three different ranges are available: stand alone, expandable and the display systems.

Electronic products & relays

Electronic timer

2



ON-delay timers

CT-ERE : 1 c/o contact, 2 LEDs

Type	"Rated control supply voltage"	Time Range	Order code	M.R.P
CT-ERE	"24 V AC/DC, 220-240 V AC"	0.1-10 s	1SVR550107R1100 ■	1,010
		0.3-30 s	1SVR550107R4100 ■	
		3-300 s	1SVR550107R2100 ■	
		0.3-30 min	1SVR550107R5100	
	110-130 V AC	0.1-10 s	1SVR550100R1100	
		0.3-30 s	1SVR550100R4100	
		3-300 s	1SVR550100R2100	
		0.3-30 min	1SVR550100R5100	

OFF-delay timers

CT-AHE : 1 c/o contact, 2 LEDs

Type	"Rated control supply voltage"	Time Range	Order code	M.R.P
CT-AHE	"24 V AC/DC, 220-240 V AC"	0.1-10 s	1SVR550118R1100 ■	1,190
		0.3-30 s	1SVR550118R4100 ■	
		3-300 s	1SVR550118R2100 ■	
	110-130 V AC	0.1-10 s	1SVR550110R1100	
		0.3-30 s	1SVR550110R4100	
		3-300 s	1SVR550110R2100	
	200-240 V AC	0.1-10 s	1SVR550110R2100 ■	
		0.3-30 s	1SVR550111R4100 ■	
		3-300 s	1SVR550111R2100 ■	

CT-ARE : without auxiliary voltage, 1 c/o contact, 1 LED

Type	"Rated control supply voltage"	Time Range	Order code	M.R.P
CT-ARE	"24 V AC/DC, 220-240 V AC"	0.1-10 s	1SVR550127R1100 ■	1,660
		0.3-30 s	1SVR550127R4100 ■	
	110-130 V AC	0.1-10 s	1SVR550120R1100	
		0.3-30 s	1SVR550120R4100	

Multifunction timer

CT-MFE : 6 functions, 8 time ranges (0.05 s - 100 h), 1 c/o contact, 2 LEDs

Type	"Rated control supply voltage"	Time Range	Order code	M.R.P
CT-MFE	24-240 V AC/DC	0.05 s - 100 h	1SVR550 029R8100 ■	1,625

Star Delta timers

CT-YDE : ON-delayed, OFF-delayed without auxiliary voltage, 1 c/o contact, 2 LEDs

Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-YDE	24 V AC/DC, 220 -240V AC	0.1-10 s	1SVR550207R1100	Upon request
		0.3-30 s	1SVR550207R4100	
		3-300 s	1SVR550207R2100	
	110-130V AC	0.1-10 s	1SVR550200R1100	
		0.3-30 s	1SVR550200R4100	
		3-300 s	1SVR550200R2100	

■ Stock items

Electronic products & relays

Electronic timer



CT-SDE: ON-delayed with fixed transition time, 1 n/c contact, 1 n/o contact, internally wired, 2 LEDs

Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-SDE	24 V AC/DC, 220 - 240V AC	0.3-30 s	1SVR550217R4100 ■	1,190
	110-130V AC		1SVR550210R4100	
	380-415V AC		1SVR550212R4100	

CT-VWE: Impulse-ON, 1 c/o contact

Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-VWE	24 V AC/DC, 220-240 V AC	0.1-10 s	1SVR550137R1100 ■	1,090
		0.3-30 s	1SVR550137R4100 ■	
		3-300 s	1SVR550137R2100 ■	
	110-130 V AC	0.1-10 s	1SVR550130R1100 ■	
		0.3-30 s	1SVR550130R4100	
		3-300 s	1SVR550130R2100	

CT-AWE: Impulse-OFF, 1 c/o contact

Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-AWE w/o Aux.	24 V AC/DC	0.05-1 s	1SVR550158R3100 ■	1,825
	110-130 V AC		1SVR550150R3100	
	220-240 V AC		1SVR550151R3100 ■	
CT-AWE with Aux.	24 V AC/DC	0.1-10 s	1SVR550148R1100 ■	
		0.3-30 s	1SVR550148R4100 ■	
		3-300 s	1SVR550148R2100 ■	
	110-130 V AC	0.1-10 s	1SVR550140R1100	
		0.3-30 s	1SVR550140R4100	
		3-300 s	1SVR550140R2100	
220-240 V AC	0.1-10 s	1SVR550141R1100 ■		
	0.3-30 s	1SVR550141R4100 ■		
	3-300 s	1SVR550141R2100 ■		

CT-EBE: Flasher starting with OFF, 1 c/o contact

Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-EBE	24 V AC/DC, 220-240 V AC	0.1-10 s	1SVR550167R1100 ■	1,265
	110-130 V AC		1SVR550160R1100	

CT-MFS.21: ON-delay (accumulative), OFF-delay without aux., Symmetrical ON-delay and OFF-delay and Impulse-ON, ON/OFF function, pulse former, star-delta changeover with impulse, Flasher starting with OFF, Flasher starting with ON, impulse -OFF, 2 c/o



Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-MFS.21	24-240 V AC/DC	10 (0.05 s- 300 h)	1SVR630010R0200 ■	3,320

CT-ERS.22: ON-delay (accumulative), 2 c/o

Type	Rated control supply voltage	Time Range	Order code	M.R.P
CT-ERS.22	24-48 V DC, 24-240 V AC	10 (0.05 s- 300 h)	1SVR630100R3300 ■	2,215

■ Stock items

Electronic products & relays

Measuring and monitoring relays



2

Single and three phase monitoring relays for phase failure detection

Type	Rated control supply voltage = measuring voltage	Order Code	M.R.P
With neutral monitoring			
CM-PBE	3x380-440 V AC, 220-240 V AC	1SVR550881R9400	Upon request
Without neutral monitoring			
CM-PBE	3x380-440 V AC	1SVR550882R9500	Upon request

Single and three phase monitoring relays for over / undervoltage and phase failure detection

Type	Rated control supply voltage = measuring voltage	Order Code	M.R.P
With neutral monitoring			
CM-PVE	3x320-460 V AC, 185-265 V AC	1SVR550870R9400	Upon request
Without neutral monitoring			
CM-PVE	3x320-460 V AC	1SVR550871R9500	Upon request

Three phase monitoring relays for phase sequence monitoring and phase failure detection

Type	Rated control supply voltage = measuring voltage	Order Code	M.R.P
CM-PFS	3x200-500 V AC	1SVR430824R9300 ■	1,550

Three phase monitoring relays for over and undervoltage with adjustable threshold values



Type	Rated control supply voltage = measuring voltage	Order Code	M.R.P
CM-PVS.31P	3x160-300 V AC	1SVR740794R1300	Upon request
CM-PVS.31S		1SVR730794R1300	
CM-PVS.41P	3x300-500 V AC	1SVR740794R3300	
CM-PVS.41S		1SVR730794R3300	

Three phase monitoring relays for phase unbalance

Type	Rated control supply voltage = measuring voltage	Order Code	M.R.P
CM-PAS.31P	3x160-300 V AC	1SVR740774R1300	Upon request
CM-PAS.31S		1SVR730774R1300	
CM-PAS.41P	3x300-500 V AC	1SVR740774R3300	
CM-PAS.41S		1SVR730774R3300	

Multifunctional three phase monitoring relays (phase failure detection, Phase sequence monitoring, overvoltage, undervoltage, Phase unbalance)

Type	Rated control supply voltage = measuring voltage	Order Code	M.R.P
With interrupted neutral monitoring			
CM-MPS.11P	3x90-170 V AC	1SVR740885R1300	Upon request
CM-MPS.11S		1SVR730885R1300	
CM-MPS.21P	3x180-280 V AC	1SVR740885R3300	
CM-MPS.21S		1SVR730885R3300	
Without interrupted neutral monitoring			
CM-MPS.31P	3x160-300 V AC	1SVR740884R1300	Upon request
CM-MPS.31S		1SVR730884R1300	
CM-MPS.41	3x300-500 V AC	1SVR630884R3300 ■	

■ Stock items

Electronic products & relays

Measuring and monitoring relays

Three phase monitoring relays



Multifunctional three phase monitoring relays, automatic phase sequence correction and separate monitoring of over and undervoltage (window monitoring) configurable

Type	"Rated control supply voltage = measuring voltage"	Order Code	M.R.P
With interrupted neutral monitoring			
CM-MPS.23P	3x180-280 V AC	1SVR740885R4300	Upon request
CM-MPS.23S		1SVR730885R4300	
Without interrupted neutral monitoring			
CM-MPS.43P	3x300-500 V AC	1SVR740884R4300	Upon request
CM-MPS.43S		1SVR730884R4300	

Multifunctional three phase monitoring relays, automatic phase sequence correction and separate monitoring of over and undervoltage (window monitoring) configurable

Type	"Rated control supply voltage = measuring voltage"	Order Code	M.R.P
CM-MPN.52P	3x350-580 V AC	1SVR760487R8300	Upon request
CM-MPN.52S		1SVR750487R8300	
CM-MPN.62P	3x450-720 V AC	1SVR760488R8300	
CM-MPN.62S		1SVR750488R8300	
CM-MPN.72P	3x530-820 V AC	1SVR760489R8300	
CM-MPN.72S		1SVR750489R8300	

Insulation monitors for unearthed supply systems



Type	Nominal voltage Un of the distribution system to be monitored	Rated control supply voltage	Order Code	M.R.P
CM-IWS.1P	0-250 V AC / 0-300 V DC	24-240 V AC/DC	1SVR740660R0100	Upon request
CM-IWS.1S			1SVR730660R0100	
CM-IWS.2P	0-400 V AC	24-240 V AC/DC	1SVR740670R0200	
CM-IWS.2S			1SVR730670R0200	
CM-IWN.1P	0-400 V AC / 0-600 V DC	24-240 V AC/DC	1SVR760660R0200	Upon request
CM-IWN.1S			1SVR750660R0200	
CM-IVN	0-690 V AC / 0-1000 V DC	"Passive device, no control supply voltage needed"	1SVR650669R9400	

Insulation monitors for unearthed supply systems



CM-MSE

Type	Rated control supply voltage	Order code	M.R.P
CM-MSE	24 V AC	1SVR550805R9300	Upon request
	110-130 V AC	1SVR550800R9300	
	220-240 V AC	1SVR550801R9300	

CM-MSS (1), 1 c/o contact

Type	Rated control supply voltage	Order code	M.R.P
CM-MSS (1)	24 V AC/DC	1SVR430800R9100	Upon request
	220-240 V AC	1SVR430801R1100	

CM-MSS (2), 2 c/o contact

Type	Rated control supply voltage	Order code	M.R.P
CM-MSS (2)	24 V AC/DC	1SVR430810R9300	Upon request
	24 V AC	1SVR430811R9300	
	110-130 V AC	1SVR430811R0300	
	220-240 V AC	1SVR430811R1300	

■ Stock items

Electronic products & relays

Power supplies

Overview

Modern power supply units are a vital component in most areas of energy management and automation technology. ABB as your global partner in these areas pays the utmost attention to the resulting requirements. Innovation is the key to a substantial enlargement of our power supply product program:

CP-D

The CP-D range of power supply units in MDRC design (modular DIN rail components) fits into all domestic installation and distribution panels.

CP-E

The CP-E range offers enhanced functionality while the number of different types has been considerably reduced. Now all power supply units can be operated at an ambient temperature of up to +70 °C.

CP-T

The CP-T range of three-phase power supply units is ABB's youngest member of the power supply family.

CP-S

The CP-S range is ABB's standard range, a high-end power supply unit optimised for serial applications.

CP-C

The CP-C range's pluggable function modules adapt these power supply units exactly to your application's needs. Of course, all ABB power supply units feature primary switch mode technology – environmentally sound and cost-efficiency. This represents the highest level of innovative industrial electronics.

CP-E range



Rated I/P voltage	Rated O/P Voltage/Current	Type	Order Code	M.R.P
100-240 V AC	5 V DC / 3 A	CP-E 5/3.0	1SVR427033R3000	4,200
100-240 V AC	12 V DC / 2.5 A	CP-E 12/2.5	1SVR 427032R1000	4,200
115 / 230 V AC auto select	12 V DC / 10 A	CP-E 12/10.0	1SVR427035R1000	7,670
100-240 V AC	24 V DC / 0.75 A	CP-E 24/0.75	1SVR427030R0000	3,200
100-240 V AC	24 V DC / 1.25 A	CP-E 24/1.25	1SVR427031R0000 ■	3,450
100-240 V AC	24 V DC / 2.5 A	CP-E 24/2.5	1SVR427032R0000 ■	3,600
115 / 230 V AC auto select	24 V DC / 5 A	CP-E 24/5.0	1SVR427034R0000 ■	6,350
115 / 230 V AC auto select	24 V DC / 10 A	CP-E 24/10.0	1SVR427035R0000 ■	9,400
115 / 230 V AC	24 V DC / 20 A	CP-E 24/20.0	1SVR427036R0000 ■	16,325
100-240 V AC	48 V DC / 0.625 A	CP-E 48/0.62	1SVR427030R2000	4,500
100-240 V AC	48 V DC / 1.25 A	CP-E 48/1.25	1SVR427031R2000	5,720
115 / 230 V AC auto select	48 V DC / 5 A	CP-E 48/5.0	1SVR427034R2000	11,590
115 / 230 V AC	48 V DC / 10 A	CP-E 48/10.0	1SVR427035R2000	15,800

Note: Please refer technical Data sheet for DC Voltage input range

CP-T range



"Rated I/P voltage"	"Rated O/P Voltage/Current"	Type	Order Code	M.R.P
340-575 V AC/ 480-820 V DC	24 V DC / 5 A	CP-T 24/5.0	1SVR427054R0000	Upon request
340-575 V AC/ 480-820 V DC	24 V DC / 10 A	CP-T 24/10.0	1SVR427055R0000	
340-575 V AC/ 480-820 V DC	24 V DC / 20 A	CP-T 24/20.0	1SVR427056R0000	
340-575 V AC/ 480-820 V DC	24 V DC / 40 A	CP-T 24/40.0	1SVR427057R0000	
340-575 V AC/ 480-820 V DC	48 V DC / 5 A	CP-T 48/5.0	1SVR427054R2000	
340-575 V AC/ 480-820 V DC	48 V DC / 10 A	CP-T 48/10.0	1SVR427055R2000	
340-575 V AC/ 480-820 V DC	48 V DC / 20 A	CP-T 48/20.0	1SVR427056R2000	

Productivity and safety go hand in hand

Jokab Safety was acquired by ABB in march 2010. This gives us extra strength and a sales network in 120 countries. Our goal is to become even better at supporting you as a customer through cooperation within ABB Jokab Safety globally and locally.

The fact that the leading power and automation technology company, ABB, and a leader in machine safety, Jokab Safety, are joining forces means a lot more than just a new organisational chart. ABB has a huge footprint in the industry - from power supply to the control of each individual motor - and has been delivering reliable solutions for decades that boost productivity in the industry. The acquisition of Jokab Safety now means the last building block is in place. We can now offer our customers tailored, turnkey solutions where machine safety is an integral and value-enhancing component.

Since its inception in 1988, Jokab Safety has been adhering to the business concept of developing innovative products and solutions for machine safety. The company has supplied everything from individual safety components to fully installed protection systems for entire production lines and works on a daily basis with the practical application of safety requirements in combination with production requirements. Jokab Safety is also represented on a variety of international standards committees concerned with the safety of machinery which means that we have now added this very valuable experience and knowledge to our offering. Similarly, ABB has always been a pioneer and a representative for its business areas and a powerful voice in professional organisations and committees. All in all, this creates an enormous bank of knowledge and experience that we look forward to sharing with our customers. Productivity and safety are not



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contradictory terms. On the contrary, safety solutions that are properly executed and adapted from the beginning will increase productivity. A partner that can deliver integrated and well thought out turnkey solutions enables a production-friendly safety environment. By building up and upgrading safety solutions in existing environments in a smart way, the mode of production will not need to be adapted to meet the requirements that safety sets. Instead, this allows a system that is manufacturing-friendly and that takes into account the business and its productivity objectives.



Pluto Safety PLC

Pluto, Gateway, Profibus, DeviceNet, CANopen, Ethernet, Safe Encoder, IDFIX, program examples

Pluto AS-I

Pluto AS-I, Urax

Pluto Manager

Software for programming of Pluto

Vital and Tina safety systems

Vital, Tina and Connection examples

Light Curtains, Light grids, Light beams and Scanner

Focus, Spot, Look, Bjom, Focus Wet, Blanking programmer, Connection examples

Stop time measurement and machine diagnosis

Smart, Smart manager

Sensors/Switches

Eden, MKey series, Magne, Dalton, Knox

Control devices

3-position device JSHD4, Two-handed control unit Safeball

Emergency stop devices

Inca, Smile, Smile Tina, Line emergency stop

Contacts rails/Bumpers/Safety mats

Fencing systems

Quick-Guard, Quick-Guard E, SafeCad, Roller doors

EC Declaration of Conformity

Jokab Safetys developments in 80's



Jokab Safetys first safety relay



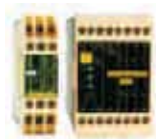
Jokab Safetys first steel fencing system

2

Jokab Safetys developments in 90's



Timer reset and first light beam



Smallest safety relays JSBT5 and JSBR4



Stop time measurement



Quick-Guard aluminium fencing system



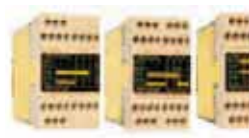
Three-position switch for robots



3-position devices



Safeball - ergonomic control device



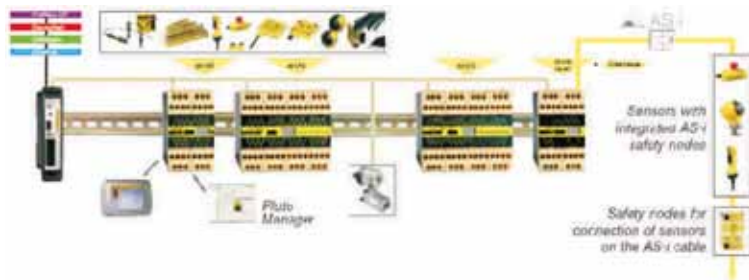
RT series universal relays



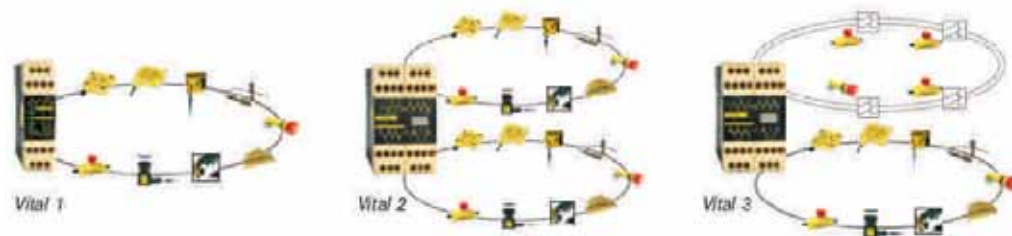
SafeCad for Quick-Guard

Jokab Safetys developments in 2000

Pluto All-Master safety PLC



Vital with dynamic safety circuits



Non-contact sensor Eden, guard locks, Focus light beam, E-stops Inca and smile, Smart for machine diagnosis and three-position device with hand detection



Pilot Devices

Pilot Devices Offering

ABB Pilot Devices offers both a Modular and Compact Range of Pushbuttons. Both feature the same front-of-panel design and appear consistent when combined.

Modular Range, features a wide range of operators that can be combined with high flexibility. The unique snap-on design promotes simple and fast assembly.

Compact Range features an all-in-one construction and rugged design for added simplicity and ease of installation.



Technical data compact range

Standard and approvals	
IEC / EN 60947-1	Low-voltage switchgear and controlgear - Part 1: General rules
IEC / EN 60947-5-1	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electro-mechanical control circuit devices
IEC / EN 60947-5-5	Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function
IEC / EN 60073	Basic and safety principles for man-machine
IEC / EN 60529	Degrees of protection provided by enclosures (IP Code)
EN 50013	Low-voltage switchgear and controlgear for industrial use - Terminal marking and distinctive number for particular control switches
DIN 40050-9	Road vehicles; degrees of protection (IP-code); protection against foreign objects; water and contact; electrical equipment
UL 508	Industrial Control Equipment
CSA C22.2 No 14	Industrial Control Equipment

Environmental data		
Degrees of protection		
Pilot device:	IEC/EN DIN	UL/CSA
Pushbutton	IP66, IP67 and IP69K	Type 1, 3R, 4, 4X, 12, 13
Selector switch	IP66, IP67 and IP69K	Type 1, 3R, 4, 4X, 12, 13
Pilot light	IP66, IP67 and IP69K	Type 1, 3R, 4, 4X, 12, 13
Emergency stops	IP66, IP67 and IP69K	Type 1, 3R, 4, 4X, 12, 13
Terminals	IP20	

Temperature	
Ambient temperature during operation	-25 to +70 °C
Storage temperature	-40 to +85 °C

Technical data	
Cable connections	
Operator	Cable terminal
Pushbutton Selector switch Emergency stop	Plus-minus Pozidriv No. 2 Connectable area: min. 1 x 0.5 mm ² /1 x AWG22 max. 2 x 1.5 mm ² /2 x AWG14

Tightening torque	
Operators, M22	Min. 2 Nm / Max. 2.3 Nm
Pushbutton and selector switch	Cable terminals M3, 0.8 Nm
Pilot light	Cable terminals M3.5, 0.9 Nm
Emergency stop	Cable terminals M3, 0.8 Nm

Modular Range	
Electrical data	
Electrical ratings	
Contacts	
Ratings as per IEC 60947-5-1	
Rated insulation voltage, U _i	300 V
Rated thermal current, I _{th}	5 A
Rated operational current, I _o utilisation category AC-15	at 240 V 1 A
Rated operational current, I _o utilization category DC-13,	at 24 V 0.3 A at 125 V 0.2 A
Ratings as per UL, CSA, NEMA	C300 AC R300 DC
Rated insulation voltage	250 V 250 V
Rated thermal current	2.5 A 1 A
Rated operational current	at 120 V 1.5 A at 125 V 0.75 A at 240 V 0.75 A at 250 V 0.11 A
Short circuit protection	
Max. fuse at 1 kA	gG 10A
Make-and-break contacts	
Pushbutton	Emergency stop pushbutton

LED's (for both compact and modular)	
Service life for LED's means number of service hours until the brightness has been reduced down 50 %. Service life 50 000 h	
White LED's	x=0.31 Y=3.2 means the position of color in the ICI Chromaticity Diagram
Over voltage on LED's	10 % overvoltage is acceptable without affecting the service life
Voltage peaks on LED's	Voltage peaks up to 1000 V Current peaks up to 500 mA during a few msec
Gloaming light	All integrated LEDs have a function built in to cut leakage currents

Mechanical data	
Mechanical life	
Pushbuttons, selector switches	500 000 operations
Emergency stop pushbutton	50 000 operations

Pilot Devices

Compact range

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Order example:

Ex 1: Type CP1-10■-10, to order color red replace ■ with R: CP1-10 R-10

Ex 2: Order code 1SFA619100R101□ To order color red replace □ with 1: 1SFA619100R1011

Color codes

	Red ●	Green ●	Yellow ●	Blue ●	White ○	Black ●	Grey ●
Type ■	R	G	Y	L	W	B	U
Order Code □	1	2	3	4	5	6	7



Non-illuminated Flush Pushbutton with Black Plastic Bezel

Non-illuminated Flush pushbutton

	Type	Order Code	M.R.P.(₹)	Pack Size
Momentary				
1 NO	CP1-10■-10	1SFA619100R101□	94	1 X 10
2 NO	CP1-10■-20	1SFA619100R102□	143	1 X 10
1 NC	CP1-10■-01	1SFA619100R104□	94	1 X 10
2 NC	CP1-10■-02	1SFA619100R105□	143	1 X 10
1 NO+1 NC	CP1-10■-11	1SFA619100R107□	143	1 X 10
Maintained				
1 NO	CP2-10■-10	1SFA619101R101□	130	1 X 10
2 NO	CP2-10■-20	1SFA619101R102□	175	1 X 10
1 NC	CP2-10■-01	1SFA619101R104□	130	1 X 10
2 NC	CP2-10■-02	1SFA619101R105□	175	1 X 10
1 NO+1 NC	CP2-10■-11	1SFA619101R107□	175	1 X 10



Non-illuminated Extended Pushbutton with Black Plastic Bezel

Non-illuminated Extended pushbutton

	Type	Order Code	M.R.P.(₹)	Pack Size
Momentary				
1 NO	CP3-10■-10	1SFA619102R101□	128	1 X 10
2 NO	CP3-10■-20	1SFA619102R102□	174	1 X 10
1 NC	CP3-10■-01	1SFA619102R104□	128	1 X 10
2 NC	CP3-10■-02	1SFA619102R105□	174	1 X 10
1 NO+1 NC	CP3-10■-11	1SFA619102R107□	174	1 X 10
Maintained				
1 NO	CP4-10■-10	1SFA619103R101□	130	1 X 10
2 NO	CP4-10■-20	1SFA619103R102□	175	1 X 10
1 NC	CP4-10■-01	1SFA619103R104□	130	1 X 10
2 NC	CP4-10■-02	1SFA619103R105□	175	1 X 10
1 NO+1 NC	CP4-10■-11	1SFA619103R107□	175	1 X 10

Pilot Devices

Compact range

Color codes

	Red ●	Green ●	Yellow ●	Blue ●	White ○	Amber ●
Type ■	R	G	Y	L	W	A
Order Code □	1	2	3	4	5	9

Pilot light with integrated LED

Type	Order Code	M.R.P.(₹)	Pack Size
24 V, AC/DC			
CL-502R	1SFA619402R5021	150	1 X 10
CL-502G	1SFA619402R5022	150	1 X 10
CL-502Y	1SFA619402R5023	150	1 X 10
CL-502L	1SFA619402R5024	270	1 X 10
CL-502W	1SFA619402R5025	150	1 X 10
CL-502A	1SFA619402R5029	150	1 X 10
110-130 V, AC			
CL-513R	1SFA619402R5131	150	1 X 10
CL-513G	1SFA619402R5132	150	1 X 10
CL-513Y	1SFA619402R5133	150	1 X 10
CL-513L	1SFA619402R5134	270	1 X 10
CL-513W	1SFA619402R5135	150	1 X 10
CL-513A	1SFA619402R5139	150	1 X 10
110-130 V, DC			
CL-515R	1SFA619402R5151	150	1 X 10
CL-515G	1SFA619402R5152	150	1 X 10
CL-515Y	1SFA619402R5153	150	1 X 10
CL-515L	1SFA619402R5154	270	1 X 10
CL-515W	1SFA619402R5155	150	1 X 10
CL-515A	1SFA619402R5159	150	1 X 10
220 V, DC			
CL-520R	1SFA619402R5201	150	1 X 10
CL-520G	1SFA619402R5202	150	1 X 10
CL-520Y	1SFA619402R5203	150	1 X 10
CL-520L	1SFA619402R5204	270	1 X 10
CL-520W	1SFA619402R5205	150	1 X 10
CL-520A	1SFA619402R5209	150	1 X 10
230 V, AC			
CL-523R	1SFA619402R5231	150	1 X 10
CL-523G	1SFA619402R5232	150	1 X 10
CL-523Y	1SFA619402R5233	150	1 X 10
CL-523L	1SFA619402R5234	275	1 X 10
CL-523W	1SFA619402R5235	150	1 X 10
CL-523A	1SFA619402R5239	150	1 X 10



Pilot Light with intergrated LED, with leakage current protection



Pilot Light with intergrated LED, with leakage current protection



Pilot Light with intergrated LED, with leakage current protection

Note:

48 V AC/DC, 60 V AC/DC, 380 V AC and 415 V AC Pilot devices are available with ABB range of Pilot lamps prices will be available upon request

Pilot Devices

Compact range

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Non-illuminated Black Selector Switch with Plastic Bezel

Selector switch				
	Type	Order Code	M.R.P.(₹)	Pack Size
Maintained / Two-positions				
1 NO	C2SS1-10B-10	1SFA619200R1016	230	1 X 10
2 NO	C2SS1-10B-20	1SFA619200R1026	250	1 X 10
1 NC	C2SS1-10B-01	1SFA619200R1046	230	1 X 10
2 NC	C2SS1-10B-02	1SFA619200R1056	250	1 X 10
1 NO+1 NC	C2SS1-10B-11	1SFA619200R1076	250	1 X 10
Maintained / Two-positions				
1 NO	C2SS2-10B-10	1SFA619201R1016	230	1 X 10
2 NO	C2SS2-10B-20	1SFA619201R1026	250	1 X 10
1 NC	C2SS2-10B-01	1SFA619201R1046	230	1 X 10
2 NC	C2SS2-10B-02	1SFA619201R1056	250	1 X 10
1 NO+1 NC	C2SS2-10B-11	1SFA619201R1076	250	1 X 10
Momentary / Two-positions				
1 NO	C2SS3-10B-10	1SFA619202R1016	230	1 X 10
2 NO	C2SS3-10B-20	1SFA619202R1026	250	1 X 10
1 NC	C2SS3-10B-01	1SFA619202R1046	230	1 X 10
2 NC	C2SS3-10B-02	1SFA619202R1056	250	1 X 10
1 NO+1 NC	C2SS3-10B-11	1SFA619202R1076	250	1 X 10
Maintained / Three-positions				
2 NO	C3SS1-10B-20	1SFA619210R1026	250	1 X 10
2 NC	C3SS1-10B-02	1SFA619210R1056	250	1 X 10
1 NO+1 NC	C3SS1-10B-11	1SFA619210R1076	250	1 X 10
Momentary / Three-positions				
2 NO	C3SS2-10B-20	1SFA619211R1026	250	1 X 10
2 NC	C3SS2-10B-02	1SFA619211R1056	250	1 X 10
1 NO+1 NC	C3SS2-10B-11	1SFA619211R1076	250	1 X 10
Momentary / Three-positions				
2 NO	C3SS3-10B-20	1SFA619212R1026	250	1 X 10
2 NC	C3SS3-10B-02	1SFA619212R1056	250	1 X 10
1 NO+1 NC	C3SS3-10B-11	1SFA619212R1076	250	1 X 10

Pilot Devices

Compact range



Non-illuminated Emergency Stop Pushbutton, 30 mm



Non-illuminated Emergency Stop Pushbutton, 40 mm

Emergency Stop Pushbutton

Description	Type	Order Code	M.R.P.(₹)	Pack Size
●				
Twist release				
1 NC	Ø 30 mm	CE3T-10R-01	1SFA619500R1041	170
2 NC	Ø 30 mm	CE3T-10R-02	1SFA619500R1051	230
1NO+1NC	Ø 30 mm	CE3T-10R-11	1SFA619500R1071	230
Pull release				
2 NC	Ø 30 mm	CE3P-10R-02	1SFA619501R1051	230
1NO+1NC	Ø 30 mm	CE3P-10R-11	1SFA619501R1071	230
Key release: Ronis 455, key code 71				
2 NC	Ø 30 mm	CE3K1-10R-02	1SFA619502R1051	655
1NO+1NC	Ø 30 mm	CE3K1-10R-11	1SFA619502R1071	655
Twist release				
1 NC	Ø 40 mm	CE4T-10R-01	1SFA619550R1041	170
2 NC	Ø 40 mm	CE4T-10R-02	1SFA619550R1051	230
1NO+1NC	Ø 40 mm	CE4T-10R-11	1SFA619550R1071	230
Pull release				
2 NC	Ø 40 mm	CE4P-10R-02	1SFA619551R1051	230
1NO+1NC	Ø 40 mm	CE4P-10R-11	1SFA619551R1071	230
Key release: Ronis 455, key code 71				
2 NC	Ø 40 mm	CE4K1-10R-02	1SFA619552R1051	670
1NO+1NC	Ø 40 mm	CE4K1-10R-11	1SFA619552R1071	670

2



Non-illuminated Machine Stop Pushbutton, Pull Release, 30 mm



Non-illuminated Machine Stop Pushbutton, Push Release, 30 mm

Machine stop

Description	Type	Order Code	M.R.P.(₹)	Pack Size
●				
Twist release				
1NO+1NC	Ø 30 mm	CE3T-10B-11	1SFA619500R1076	230
Pull release				
1NO+1NC	Ø 30 mm	CE3P-10B-11	1SFA619501R1076	230
Key release: Ronis 455, Key code 71				
1NO+1NC	Ø 30 mm	CE3K1-10B-11	1SFA619502R1076	655
Twist release				
1NO+1NC	Ø 40 mm	CE4T-10B-11	1SFA619550R1076	230
Pull release				
1NO+1NC	Ø 40 mm	CE4P-10B-11	1SFA619551R1076	230
Key release: Ronis 455, Key code 71				
1NO+1NC	Ø 40 mm	CE4K1-10B-11	1SFA619552R1076	670

Pilot Devices

Compact range

2



Buzzer						
Description	sound output	Rated current mA	Type	Order Code	M.R.P.(₹)	Pack Size
Rated voltage 24 V, AC/DC						
● Black	Continuous	40	CB1-620B	1SFA619600R6206	1,120	1
● Black	Pulsation	48	CB1-630B	1SFA619600R6306	1,120	1
Rated voltage 230 V, AC						
● Black	Continuous	40	CB1-623B	1SFA619600R6236	1,120	1
● Black	Pulsation	40	CB1-633B	1SFA619600R6336	1,120	1
Rated voltage 110-130 V, DC						
● Black	Continuous	15	CB1-622B	1SFA619600R6226	1,120	1
● Black	Pulsation	15	CB1-632B	1SFA619600R6326	1,120	1
Rated voltage 110-130 V, AC						
● Black	Continuous	40	CB1-621B	1SFA619600R6216	1,120	1
● Black	Pulsation	45	CB1-631B	1SFA619600R6316	1,120	1



Assembled compact emergency stop enclosures					
Description	Type	Order Code	M.R.P.(₹)	Pack Size	
1-seat plastic enclosure (yellow)					
<input type="checkbox"/> Twist release. Red button 2 NC	CEPY1-1001	1SFA619821R1001	1,325	1	
<input type="checkbox"/> Pull release. Red button 2 NC	CEPY1-1002	1SFA619821R1002	1,325	1	
Emergency stop enclosure with shroud					
<input type="checkbox"/> Twist release. Red button 2 NC	CEPY1-2002	1SFA619821R2002	1,580	1	
<input type="checkbox"/> Pull release. Red button 2 NC	CEPY1-2001	1SFA619821R2001	1,580	1	



Assembled compact machine stop enclosures					
Description	Type	Order Code	M.R.P.(₹)	Pack Size	
1-seat plastic enclosure with black mushroom pushbutton (dark grey)					
<input type="checkbox"/> Twist release. Black button 1 NO + 1 NC	CEP1-1001	1SFA619811R1001	1,325	1	
<input type="checkbox"/> Pull release. Black button 1 NO + 1 NC	CEP1-1002	1SFA619811R1002	1,325	1	
Machine stop enclosure with shroud					
<input type="checkbox"/> Twist release. Black button 1 NO + 1 NC	CEP1-2001	1SFA619811R2001	1,580	1	
<input type="checkbox"/> Pull release. Black button 1 NO + 1 NC	CEP1-2002	1SFA619811R2002	1,580	1	

Pilot Devices

Technical data modular range

Standard and approvals	
IEC / EN 60947-1	Low-voltage switchgear and controlgear - Part 1: General rules
IEC / EN 60947-5-1	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices
IEC / EN 60947-5-5	Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function
IEC / EN 60073	Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators
IEC / EN 60529	Degrees of protection provided by enclosures (IP Code)
EN 50013	Low-voltage switchgear and controlgear for industrial use - Terminal marking and distinctive number for particular control switches
UL 508	Industrial Control Equipment
CSA C22.2 No 14	Industrial Control Equipment

Environmental data

Degrees of protection

Operators	IEC/EN	UL/CSA
Pushbutton	IP 66	Type 1, 3R, 4, 4X, 12, 13
Double pushbutton	IP 66	Type 1, 3R, 4, 4X, 12, 13
Mushroom	IP 66	Type 1, 3R, 4, 4X, 12, 13
Emergency stop	IP 66	Type 1, 3R, 4, 4X, 12, 13
Selector switch	IP 66	Type 1, 3R, 4, 4X, 12, 13
Key operated selector switch	IP 66	Type 1, 3R, 4, 4X, 12
Toggle switch	IP 66	Type 1, 3R, 4, 4X, 12, 13
Extreme duty pushbutton	-	Type 1, 3R, 4, 4X
Reset button	IP 66	Type 1, 3R, 4, 4X, 12, 13
Joystick	IP 66, 67, 69K	Type 1, 4X (indoor), 12, 13
Pilot lights	IP 66	Type 1, 3R, 4, 4X, 12, 13
Buzzer	IP 65	Type 4X
Potentiometer	IP 66	Type 1, 3R, 4, 4X, 12, 13
Contact block and transformer block	IP 20	-
Plastic enclosures	IP 66	Type 1, 3R, 4, 4X, 12, 13
Metallic enclosures	IP 66, 67, 69K	-

Temperature

Ambient temperature during operation	-25 to +70 °C
Storage temperature	-40 to +85 °C

Technical data

Terminals

Plus-minus Pozidriv No.2 screw with DIN-washer.	
Connectable area	min. 1 x 0.5 mm ² AWG 20 max. 2 x 2.5 mm ² /2 x AWG14

Tightening torque

Operators, M22	Min. 2 Nm / Max. 2.3 Nm
Cable terminals	0.9 Nm
Recommended maximum number of blocks: 6	

Electrical data

Standards contact blocks

Mechanical endurance	10 million operations
Self cleaning contacts of silver, NC contact with positive opening. At voltages and currents below 24 V and 5.6 mA we recommended our micro switch blocks or as an alternative, gold plated contacts.	

Ratings as per IEC 60947-5-1

Rated insulation voltage, U _i		690 V	
Rated thermal current, I _{th}		10 A	
Rated operational current, I _e utilisation category AC 15,	at: 120 V at: 230 V at: 400 V at: 690 V	8 A 6 A 4 A 2 A	
Rated operational current, I _e utilisation category DC 13,	at: 24 V at: 125 V at: 250 V	5 A 1.1 A 0.55 A	

Ratings as per UL, CSA, NEMA

	A600 AC	Q600 DC		
Rated insulation voltage	600 V	600 V		
Rated thermal current	10 A	2.5 A		
Rated operational current	at: 120 V at: 240 V at: 480 V at: 600 V	6 A 3 A 1.5 A 1.2 A	at: 125 V at: 250 V at: 480 V at: 600 V	0.55 A 0.27 A 0.10 A 0.10 A

Contact resistance

Contact resistance	< 25 mΩ
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Compulsory function test

Compulsory function test	at: 5V, 16 mA
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Micro switch block / Ratings as per IEC 60947-5-1

Rated insulation voltage, U _i		125 V
Rated thermal current, I _{th}		3 A
Rated operational current, I _e utilisation category AC 14,	at: 125 V	0.5 A
Rated operational current, I _e utilisation category DC 13,	at: 24 V	0.3 A
Rated operational current, I _e utilisation category DC 12,	at: 24 V	0.1 A
Minimum switching capacity	3 V DC	1 mA

Ratings as per UL 508

	125 V AC	3 A
	60 V DC	0.2 A
	48 V DC	0.1 A

Short circuit protection

Max. fuse at 1 kA	gG 16A
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Note: LEDs see technical data compact range

Mechanical data

Mechanical life

Pushbuttons, momentary mushroom	2 million operations
Selector switches. Present standard (no operation of center contact)	500 000 operations
With operation of center contact	250 000 operations
Maintained mushroom, pushbutton, key operated selector switch and double pushbutton	150 000 operations
Emergency stop	500 000 operations
Toggle switch	100 000 operations
	1 million operations

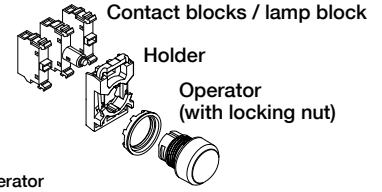


Modular product features

- Widest range of integrated LED:s on the market.
- Parts of Range IP 66, 67, 69K. All range & UL Type 1, 3R, 4, 4X, 12, 13.
- Snap-on feature reduces installation time.
- Quick release contact holder.
- Several bezel colors.
- Unique low energy solutions, including wiping action.

How to order standard operators:

- Non- illuminated operator
+ holder
+ contact block(s)
- Illuminated operator
+ holder
+ contact block(s)
+ lamp block



*Only for illuminated operator

How to order Bezel:

Bezel options	Type	Order code
Black plastic	MPX-10X	1SFA611 10X R1XXX

Color codes

	Red ●	Green ●	Yellow ●	Blue ●	White ○	Black ●	Grey ●
Type ■	R	G	Y	L	W	B	U
Order Code □	1	2	3	4	5	6	7

Ordering example:

Ex 1: Type MP1-10■, to order color red replace ■ with R: MP1-10R

Ex 2: Order code 1SFA611100R1001, to order color red replace □ with 1: 1SFA619100R1001



Operator : Flush button Non-illuminated

	Type	Order Code	M.R.P.(₹)	Pack Size
Momentary	MP1-10■	1SFA611100R100□	43	1 X 10
Maintained	MP2-10■	1SFA611101R100□	67	1 X 10

Operator : Extended button Non-illuminated

Momentary	MP3-10■	1SFA611102R100□	67	1 X 10
Maintained	MP4-10■	1SFA611103R100□	67	1 X 10

Color codes

	Red ●	Green ●	Yellow ●	Blue ●	White ○	Black ●	Grey ●	Amber ●
Type ■	R	G	Y	L	W	B	U	AN
Order Code □	1	2	3	4	5	6	7	9



Operator : Flush button illuminated

	Type	Order Code	M.R.P.(₹)	Pack Size
Momentary	MP1-11■	1SFA611100R110□	62	1 X 10
	MP1-11AN	1SIN611100R1109	62	1 X 10
Maintained	MP2-11■	1SFA611101R110□	82	1 X 10
	MP2-11AN	1SIN611101R1109	82	1 X 10

Operator : Extended button illuminated

Momentary	MP3-11■	1SFA611102R110□	82	1 X 10
	MP3-11AN	1SIN611102R1109	82	1 X 10
Maintained	MP4-11■	1SFA611103R110□	82	1 X 10
	MP4-11AN	1SIN611103R1109	82	1 X 10

Note:

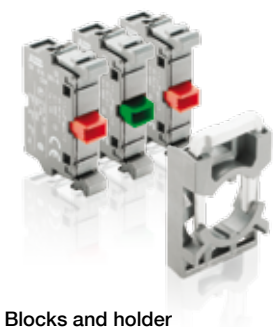
1. Integrated LED block to be considered from MLBL range of suitable voltage from page no. 10

Separate holder

Holders for three blocks	MCBH-00	1SFA611605R1100	13	1 X 10
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Contact blocks only (without holder)

1 NO	MCB-10	1SFA611610R1001	55	1 X 10
1 NC	MCB-01	1SFA611610R1010	55	1 X 10



Blocks and holder

Pilot Devices Modular range



LED lamp block with built in leakage curragge protection

Operator : Pilot lights				
	Type	Order Code	M.R.P.(₹)	Pack Size
● Red	ML1-100R	1SFA611400R1001	46	1 X 10
● Green	ML1-100G	1SFA611400R1002	46	1 X 10
● Yellow	ML1-100Y	1SFA611400R1003	46	1 X 10
● Blue	ML1-100L	1SFA611400R1004	46	1 X 10
○ White	ML1-100W	1SFA611400R1005	46	1 X 10
● Amber	ML1-100AN	1SIN611400R1009	46	1 X 10

Separate holder				
	Type	Order Code	M.R.P.(₹)	Pack Size
Holder for three blocks	MCBH-00	1SFA611605R1100	13	1 X 10

Lamp blocks with integrated LED				
Rated voltage 24 V, AC/DC				
	Type	Order Code	M.R.P.(₹)	Pack Size
● Red	MLBL-01R	1SFA611621R1011	123	1 X 10
● Green	MLBL-01G	1SFA611621R1012	123	1 X 10
● Yellow	MLBL-01YN	1SIN611621R1013	123	1 X 10
● Blue	MLBL-01L	1SFA611621R1014	270	1 X 10
○ White	MLBL-01W	1SFA611621R1015	123	1 X 10
● Amber	MLBL-01A	1SFA611621R1016	123	1 X 10

Rated voltage 110-130 V, AC				
	Type	Order Code	M.R.P.(₹)	Pack Size
● Red	MLBL-04R	1SFA611621R1041	123	1 X 10
● Green	MLBL-04G	1SFA611621R1042	123	1 X 10
● Yellow	MLBL-04YN	1SIN611621R1043	123	1 X 10
● Blue	MLBL-04L	1SFA611621R1044	270	1 X 10
○ White	MLBL-04W	1SFA611621R1045	123	1 X 10
● Amber	MLBL-04A	1SFA611621R1046	123	1 X 10

Rated voltage 110-130 V, DC				
	Type	Order Code	M.R.P.(₹)	Pack Size
● Red	MLBL-05R	1SFA611621R1051	123	1 X 10
● Green	MLBL-05G	1SFA611621R1052	123	1 X 10
● Yellow	MLBL-05YN	1SIN611621R1053	123	1 X 10
● Blue	MLBL-05L	1SFA611621R1054	270	1 X 10
○ White	MLBL-05W	1SFA611621R1055	123	1 X 10
● Amber	MLBL-05A	1SFA611621R1056	123	1 X 10

Rated voltage 220 V, DC				
	Type	Order Code	M.R.P.(₹)	Pack Size
● Red	MLBL-06R	1SFA611621R1061	123	1 X 10
● Green	MLBL-06G	1SFA611621R1062	123	1 X 10
● Yellow	MLBL-06YN	1SIN611621R1063	123	1 X 10
● Blue	MLBL-06L	1SFA611621R1064	270	1 X 10
○ White	MLBL-06W	1SFA611621R1065	123	1 X 10
● Amber	MLBL-06A	1SFA611621R1066	123	1 X 10

Rated voltage 230 V, AC				
	Type	Order Code	M.R.P.(₹)	Pack Size
● Red	MLBL-07R	1SFA611621R1071	123	1 X 10
● Green	MLBL-07G	1SFA611621R1072	123	1 X 10
● Yellow	MLBL-07YN	1SIN611621R1073	123	1 X 10
● Blue	MLBL-07L	1SFA611621R1074	270	1 X 10
○ White	MLBL-07W	1SFA611621R1075	123	1 X 10
● Amber	MLBL-07A	1SFA611621R1076	123	1 X 10

Note: 48 V AC/DC, 60 V AC/DC, 380 V AC and 415 V AC prices will be available upon request

Pilot Devices Modular range

2



Operator : Emergency stop pushbutton

	Type	Order Code	M.R.P.(₹)	Pack Size
●	Ø 30 mm / Non-illuminated			
Twist release	MPET3-10R	1SFA611520R1001	337	1
Pull release	MPEP3-10R	1SFA611521R1001	337	1
Key release code 71/Ronis 455	MPEK3-11R	1SFA611522R1101	670	1
Key release code 72/ Ronis 421	MPEK3-12R	1SFA611522R1201	670	1
Key release code 73/ Ronis 3433-E	MPEK3-13R	1SFA611522R1301	670	1
	Ø 40 mm / Non-illuminated			
Twist release	MPET4-10R	1SFA611523R1001	292	1
Pull release	MPEP4-10R	1SFA611524R1001	340	1
Key release code 71/Ronis 455	MPEK4-11R	1SFA611525R1101	670	1
Key release code 72/ Ronis 421	MPEK4-12R	1SFA611525R1201	670	1
Key release code 73/ Ronis 3433-E	MPEK4-13R	1SFA611525R1301	670	1
	Ø 60 mm / Non-illuminated			
Twist release	MPMT4-10R	1SFA611513R1001	576	1
Pull release	MPMP4-10R	1SFA611514R1001	465	1
	Ø 40 mm / Illuminated			
Twist release	MPMT3-11R	1SFA611510R1101	545	1
Pull release	MPMP3-11R	1SFA611511R1101	435	1
	Ø 60 mm / Illuminated			
Twist release	MPMT4-11R	1SFA611513R1101	750	1
Pull release	MPMP4-11R	1SFA611514R1101	610	1

Refer holder and contact block configuration for standard operator



Operator : Machine stop pushbutton

	Type	Order Code	M.R.P.(₹)	Pack Size
●	Ø 30 mm			
Twist release	MPET3-10B	1SFA611520R1006	337	1
Pull release	MPEP3-10B	1SFA611521R1006	337	1
Key release	MPEK3-10B	1SFA611522R1106	710	1
	Ø 40 mm			
Twist release	MPET4-10B	1SFA611523R1006	337	1
Pull release	MPEP4-10B	1SFA611524R1006	337	1
Key release	MPEK4-10B	1SFA611525 R1061	710	1

Refer holder and contact block configuration for standard operator



Operator : Double pushbutton

	Type	Order Code	M.R.P.(₹)	Pack Size
● Upper ● Lower	Extended lower button / Non-illuminated			
I / O	MPD13-11B	1SFA611142R1106	345	1
START / STOP	MPD15-11B	1SFA611144R1106	345	1
● Upper ● Lower	Extended lower button / Illuminated			
I / O	MPD13-11C	1SFA611142R1108	510	1
START / STOP	MPD15-11C	1SFA611144R1108	510	1
● Upper ● Lower	○ Upper Extended lower button / ● Lower Non-illuminated			
I / O	MPD17-11B	1SFA611146R1106	345	1

Refer holder and contact block configuration for standard operator



Operator: non-illuminated black two-position selector switch

Type	Order Code	M.R.P.(₹)	Pack Size
Maintained / Short handle			
M2SS1-10B	1SFA611200R1006	230	1
Maintained / Short handle			
M2SS2-10B	1SFA611201R1006	230	1
Momentary / Short handle, spring return from C to B			
M2SS3-10B	1SFA611202R1006	245	1
Maintained / Long handle			
M2SS4-10B	1SFA611203R1006	700	1
Maintained / Long handle			
M2SS5-10B	1SFA611204R1006	700	1
Momentary / Long handle, spring return from C to B			
M2SS6-10B	1SFA611205R1006	725	1

Refer holder and contact block configuration for standard operator

Operator: non-illuminated black three-position selector switch

Type	Order Code	M.R.P.(₹)	Pack Size
Maintained / Short handle			
M3SS1-10B	1SFA611210R1006	230	1
Momentary / Short handle, spring return from A to B and C to B			
M3SS2-10B	1SFA611211R1006	245	1
Momentary / Short handle, spring return from C to B			
M3SS3-10B	1SFA611212R1006	245	1
Momentary / Short handle, spring return from A to B			
M2SS7-10B	1SFA611216R1006	245	1
Maintained / Long handle			
M3SS4-10B	1SFA611213R1006	700	1
Momentary / Long handle, spring return from A to B and C to B			
M3SS5-10B	1SFA611214R1006	725	1
Momentary / Long handle, spring return from C to B			
M3SS6-10B	1SFA611215R1006	910	1
Momentary / Long handle, spring return from A to B			
M2SS8-10B	1SFA611217R1006	655	1

Refer holder and contact block configuration for standard operator

Operator: non-illuminated black three-position selector switch with operation of center position

Type	Order Code	M.R.P.(₹)	Pack Size
Short handle			
M3SSC1-10B	1SFA611250R1006	250	1
M3SSC2-10B	1SFA611251R1006	250	1
M3SSC3-10B	1SFA611252R1006	250	1
M3SSC7-10B	1SFA611256R1006	250	1
Long handle			
M3SSC4-10B	1SFA611253R1006	770	1
M3SSC5-10B	1SFA611254R1006	770	1
M3SSC6-10B	1SFA611255R1006	770	1
M3SSC8-10B	1SFA611258R1006	770	1

Refer holder and contact block configuration for standard operator

Pilot Devices Modular range

2



Operator : Key operated selector switch

	Type	Order Code	M.R.P.(₹)	Pack Size
●	Maintained / Two positions (The key can be removed in both position)			
71/Ronis 455	M2SSK1-101	1SFA611280R1001	545	1
72/Ronis 421	M2SSK1-102	1SFA611280R1002	545	1
73/Ronis 3433-E	M2SSK1-103	1SFA611280R1003	545	1
Random selection ^{*)}	M2SSK1-104	1SFA611280R1004	545	1
●	Maintained / Two positions (The key can be removed in position B only)			
71/Ronis 455	M2SSK2-101	1SFA611281R1001	545	1
72/Ronis 421	M2SSK2-102	1SFA611281R1002	545	1
73/Ronis 3433-E	M2SSK2-103	1SFA611281R1003	545	1
Random selection ^{*)}	M2SSK2-104	1SFA611281R1004	545	1
●	Momentary / Two positions, spring return from C to B (The key can be removed in position B only)			
71/Ronis 455	M2SSK3-101	1SFA611282R1001	600	1
72/Ronis 421	M2SSK3-102	1SFA611282R1002	600	1
73/Ronis 3433-E	M2SSK3-103	1SFA611282R1003	600	1
Random selection ^{*)}	M2SSK3-104	1SFA611282R1004	600	1

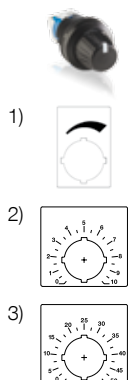
Refer holder and contact block configuration for standard operator

Operator : Key operated selector switch

	Type	Order Code	M.R.P.(₹)	Pack Size
●	Maintained / Three positions (The key can be removed in both position)			
71/Ronis 455	M3SSK1-101	1SFA611283R1001	545	1
72/Ronis 421	M3SSK1-102	1SFA611283R1002	545	1
73/Ronis 3433-E	M3SSK1-103	1SFA611283R1003	545	1
Random selection ^{*)}	M3SSK1-104	1SFA611283R1004	545	1
●	Maintained / Three positions (The key can be removed in position B only)			
71/Ronis 455	M3SSK2-101	1SFA611284R1001	545	1
72/Ronis 421	M3SSK2-102	1SFA611284R1002	545	1
73/Ronis 3433-E	M3SSK2-103	1SFA611284R1003	545	1
Random selection ^{*)}	M3SSK2-104	1SFA611284R1004	545	1
●	Momentary / Three positions, spring return from C to B (The key can be removed in position B only)			
71/Ronis 455	M3SSK3-101	1SFA611285R1001	600	1
72/Ronis 421	M3SSK3-102	1SFA611285R1002	600	1
73/Ronis 3433-E	M3SSK3-103	1SFA611285R1003	600	1
Random selection ^{*)}	M3SSK3-104	1SFA611285R1004	600	1

Refer holder and contact block configuration for standard operator

Potentiometer



	Type	Order Code	M.R.P.(₹)	Pack Size
●	with resistor 5 kohm			
Black plastic	MT-105B	1SFA611410R1056	3,140	1
Legend plates	1) SK615562-87		70	1
●	with resistor 10 kohm			
Black plastic	MT-110B	1SFA611410R1106	3,140	1
Legend plates	2) SK615562-88		70	1
●	with resistor 50 kohm			
Black plastic	MT-150B	1SFA611410R1506	5,280	1
Legend plates	3) 1SFA611930R1252		Upon request	1

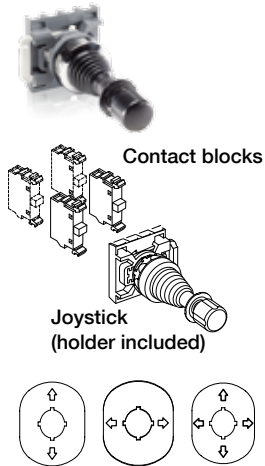
Toggle switch*



	Type	Order Code	M.R.P.(₹)	Pack Size
●	Maintained / Two-positions			
Black plastic	MTS1-10B	1SFA611300R1006	530	1
●	Momentary / Three-positions			
Black plastic	MTS2-10B	1SFA611301R1006	680	1
●	Maintained / Three-positions			
Black plastic	MTS3-10B	1SFA611302R1006	530	1

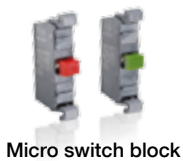
Pilot Devices Modular range

- Joystick (holder included)
- + contact blocks



Joystick				
	Type	Order Code	M.R.P.(₹)	Pack Size
Maintained				
2 - position	MJS1-60B	1SFA611701R6006	3,010	1
4 - position	MJS5-60B	1SFA611705R6006	3,315	1
Spring return				
2 - position	MJS2-60B	1SFA611702R6006	3,010	1
4 - position	MJS6-60B	1SFA611706R6006	3,315	1
Maintained / Latching function				
2 - position	MJS7-60B	1SFA611707R6006	3,315	1
4 - position	MJS11-60B	1SFA611711R6006	3,825	1
Spring return / Latching function				
2 - position	MJS8-60B	1SFA611708R6006	3,315	1
4 - position	MJS12-60B	1SFA611712R6006	3,825	1
Legend plates for joystick				
2 - position	MA6-1240	1SFA611930R1240	250	1
2 - position	MA6-1241	1SFA611930R1241	250	1
4 - position	MA6-1242	1SFA611930R1242	250	1

Refer holder and contact block configuration for standard operator



Micro switch blocks				
Description	Type	Order Code	M.R.P.(₹)	Pack Size
1 NO	MCBL-10	1SFA611612R1010	445	1
1 NC	MCBL-01	1SFA611612R1001	445	1

Extreme duty pushbutton				
	Type	Order Code	M.R.P.(₹)	Pack Size
● ● ●	For Ø 30 mm mounting hole			
	KP6-40■	1SFA616105R400□	1,275	1

Refer contact block configuration for standard operator



Reset pushbutton				
	Type	Order Code	M.R.P.(₹)	Pack Size
● ○	With shaft			
No text	KPR3-100■	1SFA616162R100□	395	1
● ○	Without shaft			
No text	KPR1-100■	1SFA616160R100□	300	1
● ○	Accessories: Shaft (black)			
No text	KA1-8046	1SFA616920R8046	125	1

Pilot Devices Accessories

2



Mounting tool



Protective cover



30 mm adaptor



Membrane of silicon rubber

Accessories

	Type	Order Code	M.R.P.(₹)	Pack Size
Mounting tool	MA1-8015	1SFA611920R8015	271	1
Membrane of silicone flush button	KA1-8052	1SFA611920R8052	170	1
Membrane of silicone extended button	KA1-8002	1SFA611920R8002	170	1
Locking nut	MA1-8019	1SFA611920R8019	210	1

*Spacer is needed when legendplates are not used in plastic enclosures

Enclosures



Empty enclosures



Shroud



DIN-rail adaptor

Empty plastic enclosures for modular and compact range

Description	Type	Order Code	M.R.P.(₹)	Pack Size
<input type="checkbox"/> 1-seat	MEPY1-0	1SFA611821R1000	1,560	1
<input type="checkbox"/> 1-seat	MEP1-0	1SFA611811R1000	1,540	1
<input type="checkbox"/> 2-seat	MEP2-0	1SFA611812R1000	1,570	1
<input type="checkbox"/> 3-seat	MEP3-0	1SFA611813R1000	2,015	1
<input type="checkbox"/> 4-seat	MEP4-0	1SFA611814R1000	2,730	1
<input type="checkbox"/> 6-seat	MEP6-0	1SFA611816R1000	4,160	1

Shroud for modular range push button operator

<input type="checkbox"/> Yellow	MA1-8053	1SFA611920R8053	1,385	1
<input type="checkbox"/> Grey	MA1-8128	1SFA611920R8128	1,385	1

Empty enclosures for compact range

<input type="checkbox"/> Yellow/Light grey	CEPY1-0	1SFA619821R1000	600	1
<input type="checkbox"/> Dark grey/Light grey	CEP1-0	1SFA619811R1000	600	1

Shroud for compact range push buttons

<input type="checkbox"/> Yellow	CA1-8053	1SFA619920R8053	250	1
<input type="checkbox"/> Grey	CA1-8054	1SFA619920R8054	250	1

DIN-rail adaptor

DIN-rail adaptor	MA1-8131	1SFA 611 920 R8131	745	1
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Arc Guard System TVOC-2

Most short circuit faults in LV and MV switchgears are accompanied by an electric arc. An arc fault always leads to considerable damage to equipment and personnel unless it is distinguished very fast. The fault should be disconnected as fast as possible and in less than 0.1 s to avoid serious damages and give involved person a fair chance to survive the accident without severe damages. This is a demand found in the electrical safety rules in all CE countries, ref. IEC364-4-42.

The Arc Guard System TVOC-2 is an aid to quickly detect an arc fault and trip the incoming circuit-breaker. The main advantage with the Arc Guard System is that it can trip instantaneously, i.e. override other tripping functions.

2



HBO100 to HBO600

158627 9128 3F0302

Current and Voltage Sensors

In the industrial and railway sectors, where the tendency for all players is towards higher performance, ABB current and voltage sensors provide competitive and adapted solutions. To meet your requirements, they draw on all their qualities to give you the advantage.

Resulting from a totally electronic technology, they integrate the latest innovations. More compact, they allow for the optimum reduction in equipment dimensions.

Made from high technology material, ABB sensors offer exceptional thermal performance, a stronger mechanical robustness and generally excellent resistance to harsh external conditions. These products conform to ecological, security and strict quality standards.

Terminal Blocks

ABB offers the most comprehensive product range of terminal blocks which include a variety of functions like feed-through, double deck, triple deck, ground, disconnect, fuse, sensor actuator, disconnect neutral adapted to all market connection technologies.

- Screw Clamp technology remains the most popular in connection devices.
- Spring Clamp technology is a fast growing standard in screwless connection.
- IDC (insulation displacement connection) technology is the fastest and most innovative of screwless connections.

In addition to general purpose terminal blocks, ABB offers dedicated products such as Power blocks, Distribution blocks, Railway terminal blocks, Pluggable blocks, a ATEX range and other specific technologies to satisfy our specialty needs.

Our offering

- Distribution Terminal Blocks
- PI-Spring Terminal Blocks
- Power Terminal Blocks
- Screw Clamp Terminal Blocks
- Spring Terminal Blocks
- IDCTerminal Blocks
- Pluggable Terminal Blocks
- Railway Terminal Blocks



Low Voltage Products

Enclosures & DIN Rail Products

Enclosures & DIN Rail Products

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The System pro M compact® – DIN Rail Products

System Pro M

System Pro M is a modular system developed by ABB which, is capable of meeting the requirements of the most modern and up-to-date installations for low voltage applications.

MCBs

Miniature circuit-breakers.

RCDs

- Residual current circuit-breakers (RCCBs);
- RCD-blocks;
- Residual current circuit-breakers with overcurrent protection (RCBOs);
- Residual current relays (modular and front panel) with external toroid.

Auxiliary elements

A whole range of accessories and auxiliary elements.

SPDs

Surge protective devices.

Protection devices

In addition to MCBs and RCDs, ABB supplies other modular devices for protection such as fuse holders, fuses, switch disconnectors, insulation monitoring devices etc.

Command devices

This category includes devices that are operated manually to command the electric system: contactors, latching relays, switch-isolators, switches, pushbuttons etc. Typically they are installed to control lights from several points of the same circuit or to pilot user devices with a high number of operations.

Load management devices

Overload relays, load management switches, anti black-out lamps, time switches and the other modular devices in this category react automatically to variations of parameters and other events in the system to allow for plant optimisation.

Measurement devices

The range of devices in this category is very wide, including a great number of auxiliary components and accessories that make installation in switchboards and consumer units practical and economic.

Other devices

The System pro M compact® range also includes bells, transformers, modular sockets etc.

Various accessories



Miniature circuit-breaker (MCB) SH200M Series

25 mm² cage terminals, a well proven and reliable technology.

IP20 - finger safety.

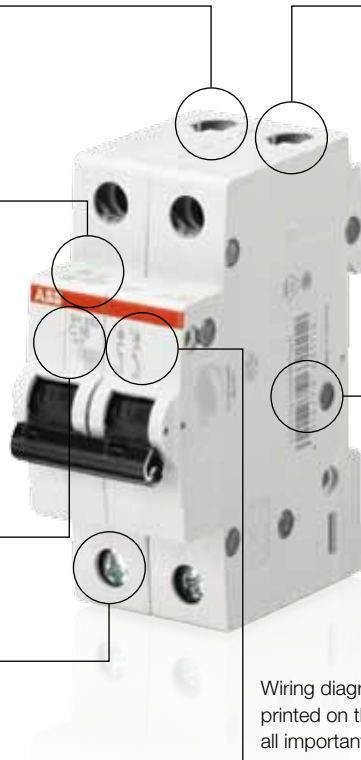
Scratch and solvent resistant marking due to laser printing. Easy identification of the products in case of maintenance or replacements.

Laser printed EAN code. Easy integration into merchandise management systems and quick identification of devices.

Easy product coding - easy identification - easy life. Basic technical information already integrated into the name.

Don't loose what's important for you - captive screws.

Wiring diagram and basic technical specification printed on the front of the MCB. Save your time - all important data available right away.



Technical Features

Electrical Data	SH200 M
Standards	IS/IEC 60898-1
Poles	1P, 2P, 3P, 4P, 1P +N, 3P +N
Tripping Characteristics	B, C, D
Rated Current	0.5A - 63 A
Rated Voltage	1P : 230/400/415 V AC 1P + N : 230 V AC 2...4P : 400/415 V AC 3P + N : 400/415 V AC
Insulation Voltage	250 V AC (Phase to Ground) 440 V AC (Phase to Phase)
Max Operating Voltage	1P: 253 V AC 2...4P : 440 V AC
Min Operating Voltage	12 V AC
Rated Frequency	50/60 Hz
Rated Short Circuit Capacity	10kA
Energy Limiting Class	3
Over Voltage Category (B,C upto 40A)	III
Pollution Degree	2
Rated Impulse withstand Voltage	4kV (Test Voltage 6.2kV at Sea Level, 5kV at 2,000 m)
Dielectric Test Voltage	2kV (50/60 Hz, 1 min)
Accessories mountable	No

SH200 M - MCBs, C Characteristics - 10 kA



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
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Single pole

SH201M-C 0.5	2CDS271011R0984	0.5	289	12
SH201M-C 1	2CDS271011R0014	1	289	12
SH201M-C 1.6	2CDS271011R0974	1.6	289	12
SH201M-C 2	2CDS271011R0024	2	289	12
SH201M-C 3	2CDS271011R0034	3	289	12
SH201M-C 4	2CDS271011R0044	4	289	12
SH201M-C 6	2CDS271011R0064 ■	6	198	12
SH201M-C 10	2CDS271011R0104 ■	10	198	12
SH201M-C 16	2CDS271011R0164 ■	16	198	12
SH201M-C 20	2CDS271011R0204 ■	20	198	12
SH201M-C 25	2CDS271011R0254 ■	25	198	12
SH201M-C 32	2CDS271011R0324 ■	32	198	12
SH201M-C 40	2CDS271011R0404 ■	40	370	12
SH201M-C 50	2CDS271011R0504 ■	50	377	12
SH201M-C 63	2CDS271011R0634 ■	63	377	12

Single Pole & Neutral

SH201M-C 0.5 NA	2CDS271113R0984	0.5	788	6
SH201M-C 1 NA	2CDS271113R0014	1	788	6
SH201M-C 1.6 NA	2CDS271113R0974	1.6	788	6
SH201M-C 2 NA	2CDS271113R0024	2	788	6
SH201M-C 3 NA	2CDS271113R0034	3	788	6
SH201M-C 4 NA	2CDS271113R0044	4	788	6
SH201M-C 6 NA	2CDS271113R0064	6	562	6
SH201M-C 10 NA	2CDS271113R0104	10	562	6
SH201M-C 16 NA	2CDS271113R0164	16	562	6
SH201M-C 20 NA	2CDS271113R0204	20	562	6
SH201M-C 25 NA	2CDS271113R0254	25	562	6
SH201M-C 32 NA	2CDS271113R0324	32	562	6
SH201M-C 40 NA	2CDS271113R0404	40	897	6
SH201M-C 50 NA	2CDS271113R0504	50	907	6
SH201M-C 63 NA	2CDS271113R0634	63	907	6

Double Pole

SH202M-C 0.5	2CDS272011R0984	0.5	794	6
SH202M-C 1	2CDS272011R0014	1	794	6
SH202M-C 1.6	2CDS272011R0974	1.6	794	6
SH202M-C 2	2CDS272011R0024	2	794	6
SH202M-C 3	2CDS272011R0034	3	794	6
SH202M-C 4	2CDS272011R0044	4	794	6
SH202M-C 6	2CDS272011R0064 ■	6	527	6
SH202M-C 10	2CDS272011R0104 ■	10	527	6
SH202M-C 16	2CDS272011R0164 ■	16	527	6
SH202M-C 20	2CDS272011R0204 ■	20	527	6
SH202M-C 25	2CDS272011R0254 ■	25	527	6
SH202M-C 32	2CDS272011R0324 ■	32	527	6
SH202M-C 40	2CDS272011R0404 ■	40	845	6
SH202M-C 50	2CDS272011R0504 ■	50	855	6
SH202M-C 63	2CDS272011R0634 ■	63	855	6

■ Stock items

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

SH200 M - MCBs, C Characteristics - 10 kA



3

Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
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Triple Pole

SH203M-C 0.5	2CDS273011R0984	0.5	1,190	4
SH203M-C 1	2CDS273011R0014	1	1,190	4
SH203M-C 1.6	2CDS273011R0974	1.6	1,190	4
SH203M-C 2	2CDS273011R0024	2	1,190	4
SH203M-C 3	2CDS273011R0034	3	1,190	4
SH203M-C 4	2CDS273011R0044	4	1,190	4
SH203M-C 6	2CDS273011R0064	6	912	4
SH203M-C 10	2CDS273011R0104	10	912	4
SH203M-C 16	2CDS273011R0164	16	912	4
SH203M-C 20	2CDS273011R0204	20	912	4
SH203M-C 25	2CDS273011R0254	25	912	4
SH203M-C 32	2CDS273011R0324	32	912	4
SH203M-C 40	2CDS273011R0404	40	1,390	4
SH203M-C 50	2CDS273011R0504	50	1,406	4
SH203M-C 63	2CDS273011R0634	63	1,406	4

Triple Pole & Neutral

SH203M-C 0.5 NA	2CDS273113R0984	0.5	1,525	3
SH203M-C 1 NA	2CDS273113R0014	1	1,525	3
SH203M-C 1.6 NA	2CDS273113R0974	1.6	1,525	3
SH203M-C 2 NA	2CDS273113R0024	2	1,525	3
SH203M-C 3 NA	2CDS273113R0034	3	1,525	3
SH203M-C 4 NA	2CDS273113R0044	4	1,525	3
SH203M-C 6 NA	2CDS273113R0064	6	1,218	3
SH203M-C 10 NA	2CDS273113R0104	10	1,218	3
SH203M-C 16 NA	2CDS273113R0164	16	1,218	3
SH203M-C 20 NA	2CDS273113R0204	20	1,218	3
SH203M-C 25 NA	2CDS273113R0254	25	1,218	3
SH203M-C 32 NA	2CDS273113R0324	32	1,218	3
SH203M-C 40 NA	2CDS273113R0404	40	1,790	3
SH203M-C 50 NA	2CDS273113R0504	50	1,810	3
SH203M-C 63 NA	2CDS273113R0634	63	1,810	3

Four Pole

SH204M-C 0.5	2CDS274011R0984	0.5	1,537	3
SH204M-C 1	2CDS274011R0014	1	1,537	3
SH204M-C 1.6	2CDS274011R0974	1.6	1,537	3
SH204M-C 2	2CDS274011R0024	2	1,537	3
SH204M-C 3	2CDS274011R0034	3	1,537	3
SH204M-C 4	2CDS274011R0044	4	1,537	3
SH204M-C 6	2CDS274011R0064	6	1,221	3
SH204M-C 10	2CDS274011R0104	10	1,221	3
SH204M-C 16	2CDS274011R0164	16	1,221	3
SH204M-C 20	2CDS274011R0204	20	1,221	3
SH204M-C 25	2CDS274011R0254	25	1,221	3
SH204M-C 32	2CDS274011R0324	32	1,221	3
SH204M-C 40	2CDS274011R0404	40	1,798	3
SH204M-C 50	2CDS274011R0504	50	1,818	3
SH204M-C 63	2CDS274011R0634	63	1,818	3

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

SH200 M - MCBs, D Characteristics - 10 kA



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
SH201M-D 0.5	2CDS271011R0981	0.5	325	12
SH201M-D 1	2CDS271011R0011	1	325	12
SH201M-D 1.6	2CDS271011R0971	1.6	325	12
SH201M-D 2	2CDS271011R0021	2	325	12
SH201M-D 3	2CDS271011R0031	3	325	12
SH201M-D 4	2CDS271011R0041	4	325	12
SH201M-D 6	2CDS271011R0061	6	243	12
SH201M-D 10	2CDS271011R0101	10	243	12
SH201M-D 16	2CDS271011R0161	16	243	12
SH201M-D 20	2CDS271011R0201	20	243	12
SH201M-D 25	2CDS271011R0251	25	243	12
SH201M-D 32	2CDS271011R0321	32	243	12
SH201M-D 40	2CDS271011R0401	40	445	12
SH201M-D 50	2CDS271011R0501	50	452	12
SH201M-D 63	2CDS271011R0631	63	452	12

Double pole				
SH202M-D 0.5	2CDS272011R0981	0.5	888	6
SH202M-D 1	2CDS272011R0011	1	888	6
SH202M-D 1.6	2CDS272011R0971	1.6	888	6
SH202M-D 2	2CDS272011R0021	2	888	6
SH202M-D 3	2CDS272011R0031	3	888	6
SH202M-D 4	2CDS272011R0041	4	888	6
SH202M-D 6	2CDS272011R0061	6	706	6
SH202M-D 10	2CDS272011R0101	10	706	6
SH202M-D 16	2CDS272011R0161	16	706	6
SH202M-D 20	2CDS272011R0201	20	706	6
SH202M-D 25	2CDS272011R0251	25	706	6
SH202M-D 32	2CDS272011R0321	32	706	6
SH202M-D 40	2CDS272011R0401	40	1,016	6
SH202M-D 50	2CDS272011R0501	50	1,028	6
SH202M-D 63	2CDS272011R0631	63	1,028	6

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

SH200 M - MCBs, D Characteristics - 10 kA



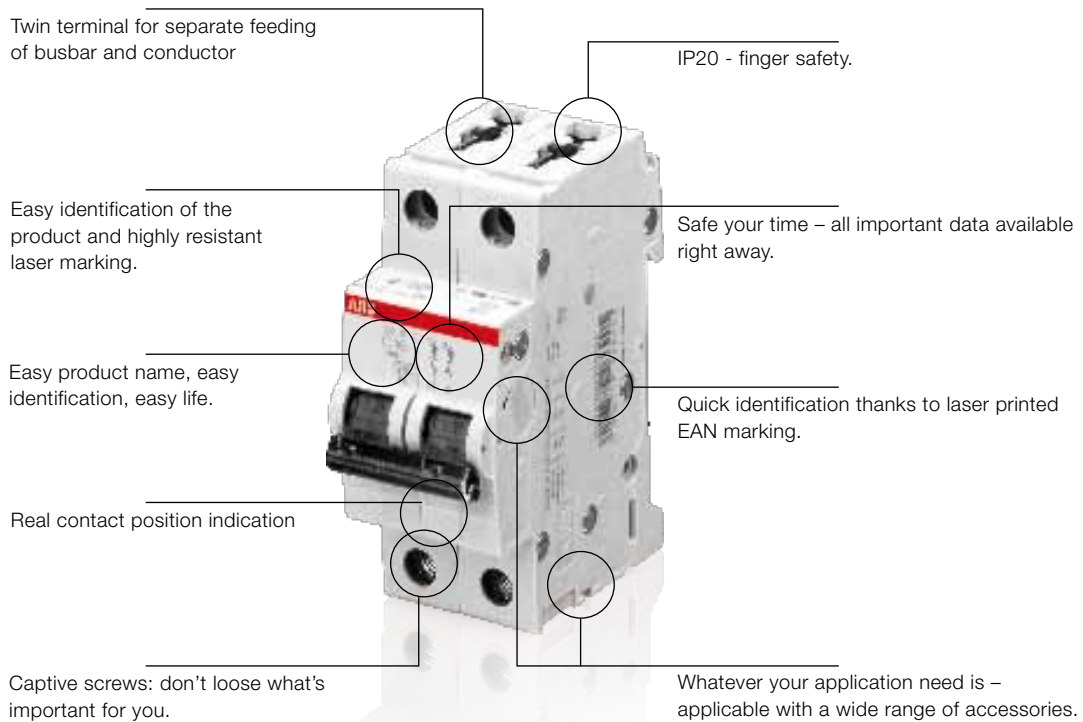
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Product Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Triple pole				
SH203M-D 0.5	2CDS273011R0981	0.5	1,333	4
SH203M-D 1	2CDS273011R0011	1	1,333	4
SH203M-D 1.6	2CDS273011R0971	1.6	1,333	4
SH203M-D 2	2CDS273011R0021	2	1,333	4
SH203M-D 3	2CDS273011R0031	3	1,333	4
SH203M-D 4	2CDS273011R0041	4	1,333	4
SH203M-D 6	2CDS273011R0061	6	1,140	4
SH203M-D 10	2CDS273011R0101	10	1,140	4
SH203M-D 16	2CDS273011R0161	16	1,140	4
SH203M-D 20	2CDS273011R0201	20	1,140	4
SH203M-D 25	2CDS273011R0251	25	1,140	4
SH203M-D 32	2CDS273011R0321	32	1,140	4
SH203M-D 40	2CDS273011R0401	40	1,558	4
SH203M-D 50	2CDS273011R0501	50	1,576	4
SH203M-D 63	2CDS273011R0631	63	1,576	4

Four pole				
SH204M-D 0.5	2CDS274011R0981	0.5	1,720	3
SH204M-D 1	2CDS274011R0011	1	1,720	3
SH204M-D 1.6	2CDS274011R0971	1.6	1,720	3
SH204M-D 2	2CDS274011R0021	2	1,720	3
SH204M-D 3	2CDS274011R0031	3	1,720	3
SH204M-D 4	2CDS274011R0041	4	1,720	3
SH204M-D 6	2CDS274011R0061	6	1,525	3
SH204M-D 10	2CDS274011R0101	10	1,525	3
SH204M-D 16	2CDS274011R0161	16	1,525	3
SH204M-D 20	2CDS274011R0201	20	1,525	3
SH204M-D 25	2CDS274011R0251	25	1,525	3
SH204M-D 32	2CDS274011R0321	32	1,525	3
SH204M-D 40	2CDS274011R0401	40	2,015	3
SH204M-D 50	2CDS274011R0501	50	2,040	3
SH204M-D 63	2CDS274011R0631	63	2,040	3

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

Miniature circuit-breaker (MCB) S200M Series



Technical Features

Electrical Data	S200 M
Standards	IEC 60947-2, IS/IEC-60898-1
Poles	1P, 2P, 3P, 4P, 1P +N, 3P +N
Tripping Characteristics	B, C, D
Rated Current	0.5A - 63 A
Rated Voltage	1P : 230 / 400 V AC 1P + N : 230 V AC 2...4P : 400 V AC 3P + N : 400 V AC 1P : 60 V DC 2P : 120 V DC
Insulation Voltage	250 V AC (Phase to Ground) 500 V AC (Phase to Phase)
Max Operating Voltage	1P: 253 V AC 2...4P : 440 V AC
Min Operating Voltage	12 V AC
Rated Frequency	50/60 Hz
Rated Short Circuit Capacity	10kA
Energy Limiting Class (B, C upto 40 A)	3
Over Voltage Category	III
Pollution Degree	2
Rated Impulse withstand Voltage	4kV (Test Voltage 6.2kV at Sea Level, 5kV at 2,000 m)
Dielectric Test Voltage	2kV (50/60 Hz, 1 min)
Accessories mountable	Yes
Cross-section of conductor (top / bottom)	35 mm ²
Terminal	Fail safe bi-directional cylinder - lift terminal
Contact position indication	Marking on toggle (1 ON / 0 OFF), Real CPI (red ON / green OFF)
Real Contact position indication	Red ON / green OFF

S200M - MCBs, C Characteristics - 10 kA



3

Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
S201M-C 0.5	2CDS271001R0984	0.5	370	12
S201M-C 1	2CDS271001R0014	1	370	12
S201M-C 1.6	2CDS271001R0974	1.6	370	12
S201M-C 2	2CDS271001R0024	2	370	12
S201M-C 3	2CDS271001R0034	3	370	12
S201M-C 4	2CDS271001R0044	4	370	12
S201M-C 6	2CDS271001R0064	6	247	12
S201M-C 10	2CDS271001R0104	10	247	12
S201M-C 16	2CDS271001R0164	16	247	12
S201M-C 20	2CDS271001R0204	20	247	12
S201M-C 25	2CDS271001R0254	25	247	12
S201M-C 32	2CDS271001R0324	32	247	12
S201M-C 40	2CDS271001R0404	40	514	12
S201M-C 50	2CDS271001R0504	50	525	12
S201M-C 63	2CDS271001R0634	63	525	12

Single pole & neutral

S201M-C 0.5 NA	2CDS271103R0984	0.5	990	6
S201M-C 1 NA	2CDS271103R0014	1	990	6
S201M-C 1.6 NA	2CDS271103R0974	1.6	990	6
S201M-C 2 NA	2CDS271103R0024	2	990	6
S201M-C 3 NA	2CDS271103R0034	3	990	6
S201M-C 4 NA	2CDS271103R0044	4	990	6
S201M-C 6 NA	2CDS271103R0064	6	707	6
S201M-C 10 NA	2CDS271103R0104	10	707	6
S201M-C 16 NA	2CDS271103R0164	16	707	6
S201M-C 20 NA	2CDS271103R0204	20	707	6
S201M-C 25 NA	2CDS271103R0254	25	707	6
S201M-C 32 NA	2CDS271103R0324	32	707	6
S201M-C 40 NA	2CDS271103R0404	40	1,150	6
S201M-C 50 NA	2CDS271103R0504	50	1,170	6
S201M-C 63 NA	2CDS271103R0634	63	1,170	6

Double pole

S202M-C 0.5	2CDS272001R0984	0.5	1,006	6
S202M-C 1	2CDS272001R0014	1	1,006	6
S202M-C 1.6	2CDS272001R0974	1.6	1,006	6
S202M-C 2	2CDS272001R0024	2	1,006	6
S202M-C 3	2CDS272001R0034	3	1,006	6
S202M-C 4	2CDS272001R0044	4	1,006	6
S202M-C 6	2CDS272001R0064	6	724	6
S202M-C 10	2CDS272001R0104	10	724	6
S202M-C 16	2CDS272001R0164	16	724	6
S202M-C 20	2CDS272001R0204	20	724	6
S202M-C 25	2CDS272001R0254	25	724	6
S202M-C 32	2CDS272001R0324	32	724	6
S202M-C 40	2CDS272001R0404	40	1,167	6
S202M-C 50	2CDS272001R0504	50	1,177	6
S202M-C 63	2CDS272001R0634	63	1,177	6

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

S200M - MCBs, C Characteristics - 10 kA



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Triple Pole				
S203M-C 0.5	2CDS273001R0984	0.5	1,531	4
S203M-C 1	2CDS273001R0014	1	1,531	4
S203M-C 1.6	2CDS273001R0974	1.6	1,531	4
S203M-C 2	2CDS273001R0024	2	1,531	4
S203M-C 3	2CDS273001R0034	3	1,531	4
S203M-C 4	2CDS273001R0044	4	1,531	4
S203M-C 6	2CDS273001R0064	6	1,161	4
S203M-C 10	2CDS273001R0104	10	1,161	4
S203M-C 16	2CDS273001R0164	16	1,161	4
S203M-C 20	2CDS273001R0204	20	1,161	4
S203M-C 25	2CDS273001R0254	25	1,161	4
S203M-C 32	2CDS273001R0324	32	1,161	4
S203M-C 40	2CDS273001R0404	40	1,766	4
S203M-C 50	2CDS273001R0504	50	1,793	4
S203M-C 63	2CDS273001R0634	63	1,793	4



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Triple Pole & Neutral				
S203M-C 0.5 NA	2CDS273103R0984	0.5	1,937	3
S203M-C 1 NA	2CDS273103R0014	1	1,937	3
S203M-C 1.6 NA	2CDS273103R0974	1.6	1,937	3
S203M-C 2 NA	2CDS273103R0024	2	1,937	3
S203M-C 3 NA	2CDS273103R0034	3	1,937	3
S203M-C 4 NA	2CDS273103R0044	4	1,937	3
S203M-C 6 NA	2CDS273103R0064	6	1,541	3
S203M-C 10 NA	2CDS273103R0104	10	1,541	3
S203M-C 16 NA	2CDS273103R0164	16	1,541	3
S203M-C 20 NA	2CDS273103R0204	20	1,541	3
S203M-C 25 NA	2CDS273103R0254	25	1,541	3
S203M-C 32 NA	2CDS273103R0324	32	1,541	3
S203M-C 40 NA	2CDS273103R0404	40	2,258	3
S203M-C 50 NA	2CDS273103R0504	50	2,274	3
S203M-C 63 NA	2CDS273103R0634	63	2,274	3



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Four Pole				
S204M-C 0.5	2CDS274001R0984	0.5	1,948	3
S204M-C 1	2CDS274001R0014	1	1,948	3
S204M-C 1.6	2CDS274001R0974	1.6	1,948	3
S204M-C 2	2CDS274001R0024	2	1,948	3
S204M-C 3	2CDS274001R0034	3	1,948	3
S204M-C 4	2CDS274001R0044	4	1,948	3
S204M-C 6	2CDS274001R0064	6	1,563	3
S204M-C 10	2CDS274001R0104	10	1,563	3
S204M-C 16	2CDS274001R0164	16	1,563	3
S204M-C 20	2CDS274001R0204	20	1,563	3
S204M-C 25	2CDS274001R0254	25	1,563	3
S204M-C 32	2CDS274001R0324	32	1,563	3
S204M-C 40	2CDS274001R0404	40	2,280	3
S204M-C 50	2CDS274001R0504	50	2,301	3
S204M-C 63	2CDS274001R0634	63	2,301	3

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

S200M - MCBs, D Characteristics - 10 kA



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Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
S201M-D 0.5	2CDS271001R0981	0.5	400	12
S201M-D 1	2CDS271001R0011	1	400	12
S201M-D 1.6	2CDS271001R0971	1.6	400	12
S201M-D 2	2CDS271001R0021	2	400	12
S201M-D 3	2CDS271001R0031	3	400	12
S201M-D 4	2CDS271001R0041	4	400	12
S201M-D 6	2CDS271001R0061	6	332	12
S201M-D 10	2CDS271001R0101	10	332	12
S201M-D 16	2CDS271001R0161	16	332	12
S201M-D 20	2CDS271001R0201	20	332	12
S201M-D 25	2CDS271001R0251	25	332	12
S201M-D 32	2CDS271001R0321	32	332	12
S201M-D 40	2CDS271001R0401	40	620	12
S201M-D 50	2CDS271001R0501	50	630	12
S201M-D 63	2CDS271001R0631	63	630	12

Double pole				
S202M-D 0.5	2CDS272001R0981	0.5	1,180	6
S202M-D 1	2CDS272001R0011	1	1,180	6
S202M-D 1.6	2CDS272001R0971	1.6	1,180	6
S202M-D 2	2CDS272001R0021	2	1,180	6
S202M-D 3	2CDS272001R0031	3	1,180	6
S202M-D 4	2CDS272001R0041	4	1,180	6
S202M-D 6	2CDS272001R0061	6	798	6
S202M-D 10	2CDS272001R0101	10	798	6
S202M-D 16	2CDS272001R0161	16	798	6
S202M-D 20	2CDS272001R0201	20	798	6
S202M-D 25	2CDS272001R0251	25	798	6
S202M-D 32	2CDS272001R0321	32	798	6
S202M-D 40	2CDS272001R0401	40	1,275	6
S202M-D 50	2CDS272001R0501	50	1,300	6
S202M-D 63	2CDS272001R0631	63	1,300	6

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

S200M - MCBs, D Characteristics - 10 kA



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Triple pole				
S203M-D 0.5	2CDS273001R0981	0.5	1,800	4
S203M-D 1	2CDS273001R0011	1	1,800	4
S203M-D 1.6	2CDS273001R0971	1.6	1,800	4
S203M-D 2	2CDS273001R0021	2	1,800	4
S203M-D 3	2CDS273001R0031	3	1,800	4
S203M-D 4	2CDS273001R0041	4	1,800	4
S203M-D 6	2CDS273001R0061	6	1,365	4
S203M-D 10	2CDS273001R0101	10	1,365	4
S203M-D 16	2CDS273001R0161	16	1,365	4
S203M-D 20	2CDS273001R0201	20	1,365	4
S203M-D 25	2CDS273001R0251	25	1,365	4
S203M-D 32	2CDS273001R0321	32	1,365	4
S203M-D 40	2CDS273001R0401	40	2,010	4
S203M-D 50	2CDS273001R0501	50	2,035	4
S203M-D 63	2CDS273001R0631	63	2,035	4



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Four pole				
S204M-D 0.5	2CDS274001R0981	0.5	2,120	3
S204M-D 1	2CDS274001R0011	1	2,120	3
S204M-D 1.6	2CDS274001R0971	1.6	2,120	3
S204M-D 2	2CDS274001R0021	2	2,120	3
S204M-D 3	2CDS274001R0031	3	2,120	3
S204M-D 4	2CDS274001R0041	4	2,120	3
S204M-D 6	2CDS274001R0061	6	1,700	3
S204M-D 10	2CDS274001R0101	10	1,700	3
S204M-D 16	2CDS274001R0161	16	1,700	3
S204M-D 20	2CDS274001R0201	20	1,700	3
S204M-D 25	2CDS274001R0251	25	1,700	3
S204M-D 32	2CDS274001R0321	32	1,700	3
S204M-D 40	2CDS274001R0401	40	2,460	3
S204M-D 50	2CDS274001R0501	50	2,480	3
S204M-D 63	2CDS274001R0631	63	2,480	3

Note: Standard packing quantity for MCBs: SP - 12 Nos, SPN/DP - 6 Nos, TP - 4 Nos, TPN/FP - 3 Nos.

Miniature circuit-breaker (MCB) S200M DC - MCB for DC applications

NEW

3



S200 M DC MCB in System pro M compact range impresses with its performance range, approvals and high inbuilt short circuit breaking capacity in DC applications. **S200 M DC MCBs can be used in 1-pole version at 220V DC and**

in 2-pole version up to 440V DC. During the installation process it is necessary to take into account, the polarity marked on the device.

Technical Features

Electrical Data	S200 M DC	
Standards	IEC / EN 60947-2	
Poles	1P, 2P	
Tripping Characteristics Curve	C	
Rated Current	1A - 63 A	
Rated Voltage	1P : 220 V DC	2P : 440V DC
Maximum Power frequency recovery Voltage, U _{max}	1P : 250V DC	2P : 500V DC
Min Operating Voltage	12 V DC	
Rated Ultimate short-circuit breaking Capacity, I _{cu}	10kA	
Rated Service short-circuit breaking Capacity, I _{cs}	10kA	
Cross-section of conductor (top / bottom)	35 mm ²	
Terminal	Fail safe bi-directional cylinder - lift terminal	
Contact position indication	Marking on toggle (1 ON / 0 OFF), Real CPI (red ON / green OFF)	
Real Contact position indication	Red ON / green OFF	
Accessories mountable	Yes (All System ProM Compact accessories)	
Housing	Insulation group I, RAL 7035	
Toggle	Insulation group II, black, sealable	
Ambient temperature	-25+55 C	
Storage temperature	-40+70 C	
Torque	2.8 Nm	
Screwdriver	No. 2 Pozidrive	
Mounting	On DIN rail 35 mm acc. to EN 60715 by fast clip	
Mounting position	any	
Mounting dimensions acc. To DIN 43880	1	
Pole dimensions (H X D X W)	85 X 69 X 17.5	
Pole weight	approx. 125g	

S200M - DC , C Characteristics - 10 kA



Description	Ordering Code	Current Rating (A)	Pack Unit (Pc)
Single pole			
S201M-C1DC	2CDS271064R0014	1	12
S201M-C1,6DC	2CDS271064R0974	1.6	12
S201M-C2DC	2CDS271064R0024	2	12
S201M-C3DC	2CDS271064R0034	3	12
S201M-C4DC	2CDS271064R0044	4	12
S201M-C6DC	2CDS271064R0064	6	12
S201M-C10DC	2CDS271064R0104	10	12
S201M-C16DC	2CDS271064R0164	16	12
S201M-C20DC	2CDS271064R0204	20	12
S201M-C25DC	2CDS271064R0254	25	12
S201M-C32DC	2CDS271064R0324	32	12
S201M-C40DC	2CDS271064R0404	40	12
S201M-C50DC	2CDS271064R0504	50	12
S201M-C63DC	2CDS271064R0634	63	12



Description	Ordering Code	Current Rating (A)	Pack Unit (Pc)
Double Pole			
S202M-C1DC	2CDS272064R0014	1	6
S202M-C1,6DC	2CDS272064R0974	1.6	6
S202M-C2DC	2CDS272064R0024	2	6
S202M-C3DC	2CDS272064R0034	3	6
S202M-C4DC	2CDS272064R0044	4	6
S202M-C6DC	2CDS272064R0064	6	6
S202M-C10DC	2CDS272064R0104	10	6
S202M-C16DC	2CDS272064R0164	16	6
S202M-C20DC	2CDS272064R0204	20	6
S202M-C25DC	2CDS272064R0254	25	6
S202M-C32DC	2CDS272064R0324	32	6
S202M-C40DC	2CDS272064R0404	40	6
S202M-C50DC	2CDS272064R0504	50	6
S202M-C63DC	2CDS272064R0634	63	6

■ Stock items

Miniature circuit-breaker (MCB) S280 Series



Features

- Breaking capacity - 6kA
- Tripping characteristics - C curve
- Suitable for -25° C to +55° C ambient temperatures
- Standards : Conforms to IEC60898, IEC60947-2

S280

Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
S281-C80	GHS2810001R0804	80	2,065	1
S281-C100	GHS2810001R0824	100	2,190	1
Double Pole				
S282-C80	GHS2820001R0804	80	4,035	1
S282-C100	GHS2820001R0824	100	4,125	1
Triple Pole				
S283-C80	GHS2830001R0804	80	5,955	1
S283-C100	GHS2830001R0824	100	6,065	1
Four Pole				
S284-C80	GHS2840001R0804	80	8,135	1
S284-C100	GHS2840001R0824	100	8,170	1

High Performance MCB

S800 Series



Features

- Complies to standards IEC 60947-2 & EN 60898-1
- Compact size : One size up to 125A
- Compact performance : Selective and back-up characteristics
- Does not let go: The interchangeable terminal adapter. Cage terminals or ring lugs
- On the safe side: Operating status display.
- Simple and flexible: Accessories fitted by the customer
- Identical accessories for a broad range of applications

The S800 range

- S800S (50kA) upto 125A
- S800N (36kA) upto 125A
- S800C (25kA) upto 125A
- S800B (16kA) upto 125A
- S800PV-S (upto 1200V DC & upto 125A)
- S800PV-M (upto 1200V DC & upto 125A)

S800B - 'C' Curve 16 kA as per IEC 60947-2

Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
S801B-C32	2CCS811001R0324	32	1,950	1
S801B-C40	2CCS811001R0404	40	1,950	1
S801B-C50	2CCS811001R0504	50	2,050	1
S801B-C63	2CCS811001R0634	63	2,050	1
S801B-C80	2CCS811001R0804	80	2,160	1
S801B-C100	2CCS811001R0824	100	2,225	1
S801B-C125	2CCS811001R0844	125	2,350	1
Double Pole				
S802B-C32	2CCS812001R0324	32	3,920	1
S802B-C40	2CCS812001R0404	40	3,920	1
S802B-C50	2CCS812001R0504	50	4,150	1
S802B-C63	2CCS812001R0634	63	4,150	1
S802B-C80	2CCS812001R0804	80	4,380	1
S802B-C100	2CCS812001R0824	100	4,550	1
S802B-C125	2CCS812001R0844	125	4,760	1
Triple Pole				
S803B-C32	2CCS813001R0324	32	5,850	1
S803B-C40	2CCS813001R0404	40	5,850	1
S803B-C50	2CCS813001R0504	50	6,770	1
S803B-C63	2CCS813001R0634	63	6,770	1
S803B-C80	2CCS813001R0804	80	6,620	1
S803B-C100	2CCS813001R0824	100	6,930	1
S803B-C125	2CCS813001R0844	125	7,135	1
Four Pole				
S804B-C32	2CCS814001R0324	32	8,020	1
S804B-C40	2CCS814001R0404	40	8,020	1
S804B-C50	2CCS814001R0504	50	8,600	1
S804B-C63	2CCS814001R0634	63	8,600	1
S804B-C80	2CCS814001R0804	80	9,320	1
S804B-C100	2CCS814001R0824	100	9,410	1
S804B-C125	2CCS814001R0844	125	9,520	1

Isolators

3



SHD Series

Isolator for panel installation onto DIN rail acc. to DIN EN 60715

Mounting depth : 70mm
 Mounting width : per pole = 17.5mm = 1 module
 Colour : grey, RAL 7035
 Colour of switch lever : red RAL 3000®

Captive screws with recessed/slotted head, Pozidrive size 2

Compatibility for Locking device (unauthorized ON/OFF)

Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
SHD201/16	2CDD271111R0016 ■	16	215	12
SHD201/25	2CDD271111R0025 ■	25	215	12
SHD201/32	2CDD271111R0032 ■	32	215	12
SHD201/40	2CDD271111R0040 ■	40	340	12
SHD201/63	2CDD271111R0063 ■	63	380	12
Double Pole				
SHD202/16	2CDD272111R0016 ■	16	360	6
SHD202/25	2CDD272111R0025 ■	25	375	6
SHD202/32	2CDD272111R0032 ■	32	375	6
SHD202/40	2CDD272111R0040 ■	40	405	6
SHD202/63	2CDD272111R0063 ■	63	535	6
Triple Pole				
SHD203/16	2CDD273111R0016 ■	16	625	4
SHD203/25	2CDD273111R0025 ■	25	635	4
SHD203/32	2CDD273111R0032 ■	32	635	4
SHD203/40	2CDD273111R0040 ■	40	695	4
SHD203/63	2CDD273111R0063 ■	63	810	4
Four Pole				
SHD204/16	2CDD274111R0016 ■	16	710	3
SHD204/25	2CDD274111R0025 ■	25	725	3
SHD204/32	2CDD274111R0032 ■	32	725	3
SHD204/40	2CDD274111R0040 ■	40	895	3
SHD204/63	2CDD274111R0063 ■	63	980	3

Note: Standard packing quantity for SHD Isolators: SP - 12 Nos, DP - 6 Nos, TP - 4 Nos, FP - 3 Nos.

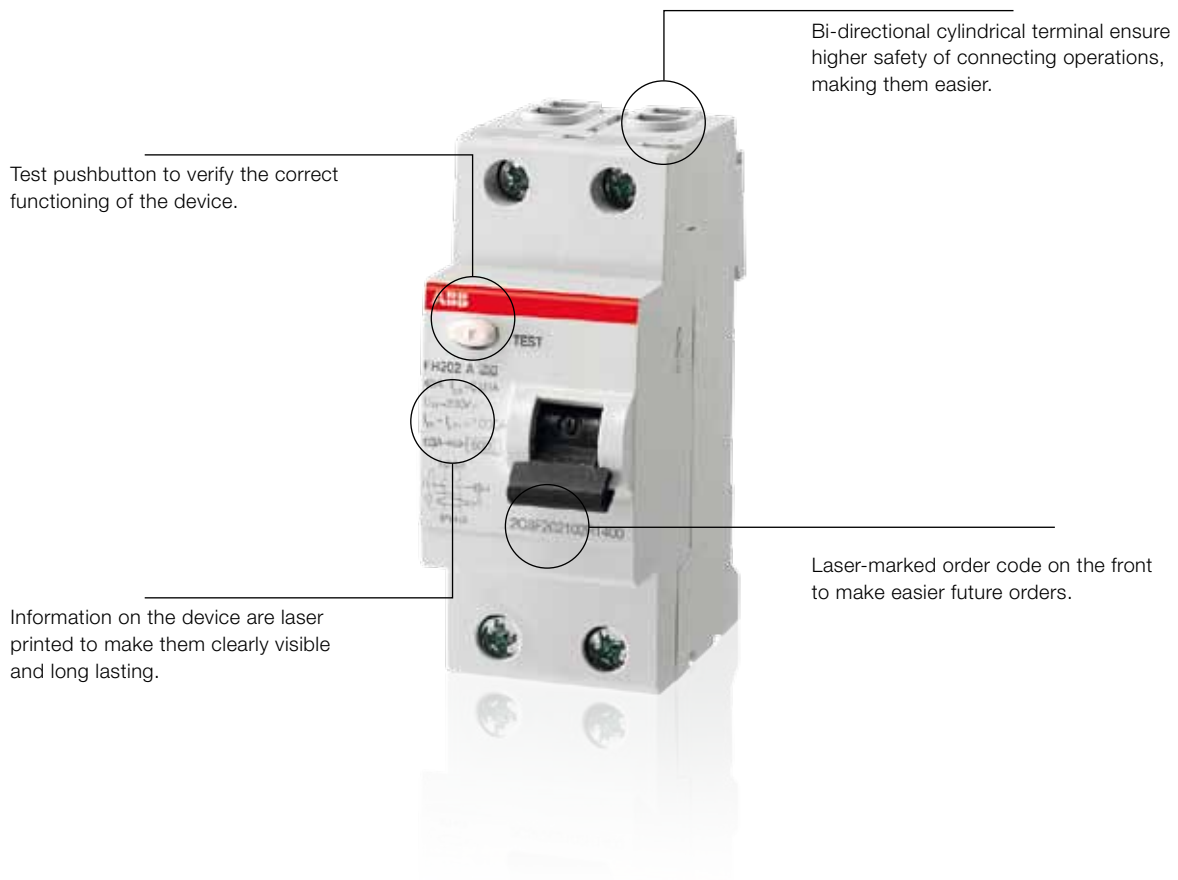
E200 Series



Description	Ordering Code	Current Rating (A)	M.R.P.(₹)	Pack Unit (Pc)
Single pole				
E201/80	2CDE281001R0080	80	435	1
E201/100	2CDE281001R0100	100	451	1
E201/125	2CDE281001R0125	125	467	1
Double Pole				
E202/80	2CDE282001R0080	80	705	1
E202/100	2CDE282001R0100	100	997	1
E202/125	2CDE282001R0125	125	1,045	1
Triple Pole				
E203/80	2CDE283001R0080	80	986	1
E203/100	2CDE283001R0100	100	1,002	1
E203/125	2CDE283001R0125	125	1,103	1
Four Pole				
E204/80	2CDE284001R0080	80	1,304	1
E204/100	2CDE284001R0100	100	1,341	1
E204/125	2CDE284001R0125	125	1,400	1

■ Stock items

Residual Current Circuit-breaker (RCCB) FH 200 Series



Technical Data	FH200
Standards	IEC/EN 61008
Type (wave form of the earth leakage sensed)	AC
Poles	2P, 4P
Rated current I_n	25, 40, 63 A
Rated sensitivity $I_{\Delta n}$	30, 100, 300 mA
Rated voltage U_n	230/400 - 240/415 V
Insulation voltage U_i	500 V
Max. operating voltage of circuit test	254 V
Min. operating voltage of circuit test	110 V
Rated frequency	50, 60 Hz
Dielectric test voltage at ind. freq. for 1 min.	2.5 kV
Mechanical features	
Toggle	BLACK sealable in ON-OFF position
Contact position indicator (CPI)	not available
Ambient temperature (with daily average $\leq +35$ °C)	-5...+40 °C
Storage temperature	-40...+70 °C
Installation	
Terminal type	Failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)
Terminal size top/bottom for cable	25/25 mm ²
Terminal size top/bottom for busbar	10/10 mm ²
Tightening torque	2.8 N*m
Connection	from top and bottom
Accessories mountability	No

Residual Current Circuit-breaker (RCCB)

FH 200 Series

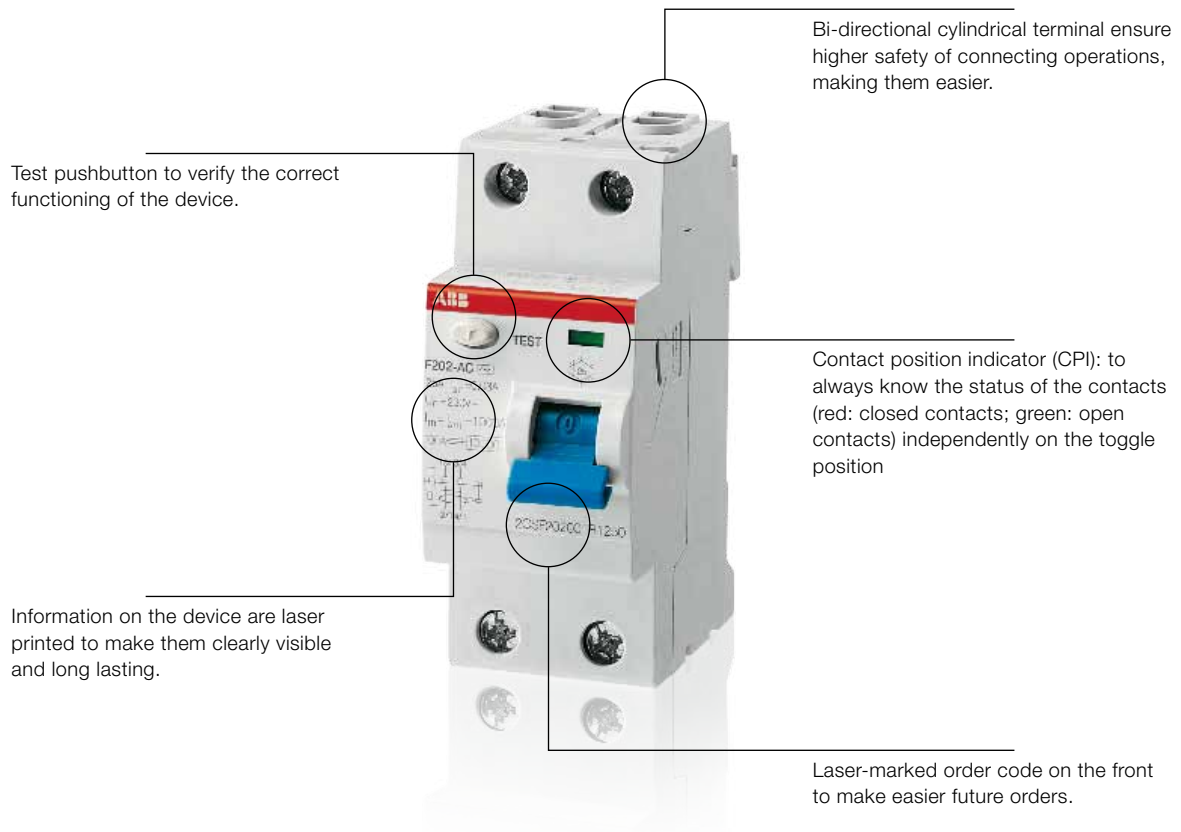


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Product Description	Product Code	Current Rating (A)	Residual rated current (mA)	M.R.P.(₹)	Pack Unit (Pc)
Two pole					
FH202 AC-25/0.03	1SYF202006R1250	25	30	2,350	1
FH202 AC-25/0.1	1SYF202006R2250	25	100	2,460	1
FH202 AC-25/0.3	1SYF202006R3250	25	300	2,460	1
FH202 AC-40/0.03	1SYF202006R1400	40	30	2,620	1
FH202 AC-40/0.1	1SYF202006R2400	40	100	2,790	1
FH202 AC-40/0.3	1SYF202006R3400	40	300	2,790	1
FH202 AC-63/0.03	1SYF202006R1630	63	30	3,150	1
FH202 AC-63/0.1	1SYF202006R2630	63	100	3,340	1
FH202 AC-63/0.3	1SYF202006R3630	63	300	3,340	1
Four pole					
FH204 AC-25/0.03	1SYF204006R1250	25	30	3,060	1
FH204 AC-25/0.1	1SYF204006R2250	25	100	3,200	1
FH204 AC-25/0.3	1SYF204006R3250	25	300	3,200	1
FH204 AC-40/0.03	1SYF204006R1400	40	30	3,100	1
FH204 AC-40/0.1	1SYF204006R2400	40	100	3,200	1
FH204 AC-40/0.3	1SYF204006R3400	40	300	3,340	1
FH204 AC-63/0.03	1SYF204006R1630	63	30	3,450	1
FH204 AC-63/0.1	1SYF204006R2630	63	100	3,650	1
FH204 AC-63/0.3	1SYF204006R3630	63	300	3,750	1

■ Stock items

Residual Current Circuit-breaker (RCCB) F 200 Series



Technical Data	F200	
Standards	IEC/EN 61008	
Type (wave form of the earth leakage sensed)	AC	A
Poles	2P, 4P	
Rated current I_n	25, 40, 63, 80, 100 & 125 A	
Rated sensitivity $I_{\Delta n}$	30, 100, 300 mA	
Rated voltage U_n	230/400 - 240/415 V	
Insulation voltage U_i	500 V	
Max. operating voltage of circuit test	254 V	
Min. operating voltage of circuit test	110 V	
Rated frequency	50..60 Hz	
Dielectric test voltage at ind. freq. for 1 min.	2.5 kV	
Mechanical features		
Toggle	BLUE sealable in ON-OFF position	
Contact position indicator (CPI)	yes	
Ambient temperature (with daily average $\leq +35$ °C)	-25...+55 °C	
Storage temperature	-40...+70 °C	
Installation		
Terminal type	Failsafe bi-directional cylinder-lift terminal at top and bottom (shock protected)	
Terminal size top/bottom for cable	25/25 mm ²	
Terminal size top/bottom for busbar	10/10 mm ²	
Tightening torque	2.8 N*m	
Connection	from top and bottom	
Accessories mountability	Yes	

Residual Current Circuit-breaker (RCCB) F 200 Series



3

Product Description	Product Code	Current Rating (A)	Residual rated current (mA)	M.R.P.(₹)	Pack Unit (Pc)
Two pole					
F202 AC-25/0,03	1SYF202005R1250	25	30	2,580	1
F202 AC-25/0,1	1SYF202005R2250	25	100	2,700	1
F202 AC-25/0,3	1SYF202005R3250	25	300	2,700	1
F202 AC-40/0,03	1SYF202005R1400	40	30	2,880	1
F202 AC-40/0,1	1SYF202005R2400	40	100	3,070	1
F202 AC-40/0,3	1SYF202005R3400	40	300	3,070	1
F202 AC-63/0,03	1SYF202005R1630	63	30	3,450	1
F202 AC-63/0,1	1SYF202005R2630	63	100	3,680	1
F202 AC-63/0,3	1SYF202005R3630	63	300	3,680	1
F202 AC-80/0,03	2CSF202005R1800	80	30	6,565	1
F202 AC-80/0,1	2CSF202005R2800	80	100	7,250	1
F202 AC-80/0,3	2CSF202005R3800	80	300	7,250	1
F202 AC-100/0,03	2CSF202005R1900	100	30	6,710	1
F202 AC-100/0,1	2CSF202005R2900	100	100	7,425	1
F202 AC-100/0,3	2CSF202005R3900	100	300	7,425	1
Four pole					
F204 AC-25/0,03	1SYF204005R1250	25	30	3,370	1
F204 AC-25/0,1	1SYF204005R2250	25	100	3,520	1
F204 AC-25/0,3	1SYF204005R3250	25	300	3,550	1
F204 AC-40/0,03	1SYF204005R1400	40	30	3,420	1
F204 AC-40/0,1	1SYF204005R2400	40	100	3,570	1
F204 AC-40/0,3	1SYF204005R3400	40	300	3,675	1
F204 AC-63/0,03	1SYF204005R1630	63	30	3,780	1
F204 AC-63/0,1	1SYF204005R2630	63	100	4,050	1
F204 AC-63/0,3	1SYF204005R3630	63	300	4,150	1
F204 AC-80/0,03	2CSF204005R1800	80	30	7,900	1
F204 AC-80/0,1	2CSF204005R2800	80	100	8,100	1
F204 AC-80/0,3	2CSF204005R3800	80	300	8,420	1
F204 AC-100/0,03	2CSF204005R1900	100	30	8,450	1
F204 AC-100/0,1	2CSF204005R2900	100	100	9,200	1
F204 AC-100/0,3	2CSF204005R3900	100	300	9,200	1
F204 AC-125/0,03	2CSF204001R1950	125	30	11,180	1
F204 AC-125/0,1	2CSF204001R2950	125	100	12,330	1
F204 AC-125/0,3	2CSF204001R3950	125	300	26,000	1

Residual Current Circuit-breaker with Over current Protection

RCBO - DS200M series



Features

- Complies to standard to IEC/EN 61009
- DS201 available in 4.5kA, 6kA & 10kA breaking capacity.
- Available in AC, A and APR types to meet all protection needs
- B and C characteristics with rated current up to 40 A available on all the versions
- Contact Position Indicator (CPI) to indicate the exact information of the circuit-breaker status
- Equipped with an RFID tag accor. to standard ISO/IEC FCD 15693-3 to authenticate the product.
- Bidirectional cylinder-lift terminals for easier the parallel feed
- Flag indicators - Differential trip indicator - blue
 - Contact position indicator - green / red

Description	Ordering Code	Current Rating (A)	Residual rated current (mA)	M.R.P.(₹)	Pack Unit (Pc)
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RCBO 10kA AC Type - DS200M

DS201 M C6 AC30	2CSR275040R1064	6	30	3,341	1
DS201 M C6 AC100	2CSR275040R2064	6	100	3,382	1
DS201 M C6 AC300	2CSR275040R3064	6	300	3,443	1
DS201 M C10 AC30	2CSR275040R1104	10	30	3,341	1
DS201 M C10 AC100	2CSR275040R2104	10	100	3,382	1
DS201 M C10 AC300	2CSR275040R3104	10	300	3,443	1
DS201 M C16 AC30	2CSR275040R1164	16	30	3,341	1
DS201 M C16 AC100	2CSR275040R2164	16	100	3,382	1
DS201 M C16 AC300	2CSR275040R3164	16	300	3,443	1
DS201 M C20 AC30	2CSR275040R1204	20	30	3,341	1
DS201 M C20 AC100	2CSR275040R2204	20	100	3,382	1
DS201 M C20 AC300	2CSR275040R3204	20	300	3,443	1
DS201 M C25 AC30	2CSR275040R1254	25	30	3,341	1
DS201 M C25 AC100	2CSR275040R2254	25	100	3,382	1
DS201 M C25 AC300	2CSR275040R3254	25	300	3,443	1
DS201 M C32 AC30	2CSR275040R1324	32	30	3,489	1
DS201 M C32 AC100	2CSR275040R2324	32	100	3,611	1
DS201 M C32 AC300	2CSR275040R3324	32	300	3,591	1
DS201 M C40 AC30	2CSR275040R1404	40	30	3,927	1
DS201 M C40 AC100	2CSR275040R2404	40	100	4,029	1
DS201 M C40 AC300	2CSR275040R3404	40	300	4,182	1

Residual Current Circuit-breaker with Over current Protection Blocks

RCD Blocks - DDA200 series

3



DDA - 200 AC type

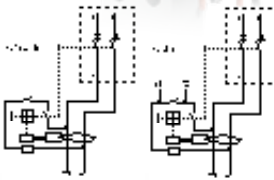
Function: RCD-block for assembly on site with MCBs S 200M series. Protection against the effects of sinusoidal alternating earth fault currents; protection against indirect contacts and additional protection against direct (with $I_{\Delta n}=30$ mA) contacts.

Standard: IEC/EN 61009 Ann. G



DDA 200 AC

Description	Ordering Code	Current Rating (A)	Residual rated current (mA)	M.R.P.(₹)	Pack Unit (Pc)
Two pole					
DDA202 AC-63/0.03	2CSB202001R1630	63	30	2,808	1
DDA202 AC-63/0.1	2CSB202001R2630	63	100	3,463	1
DDA202 AC-63/0.3	2CSB202001R3630	63	300	3,526	1

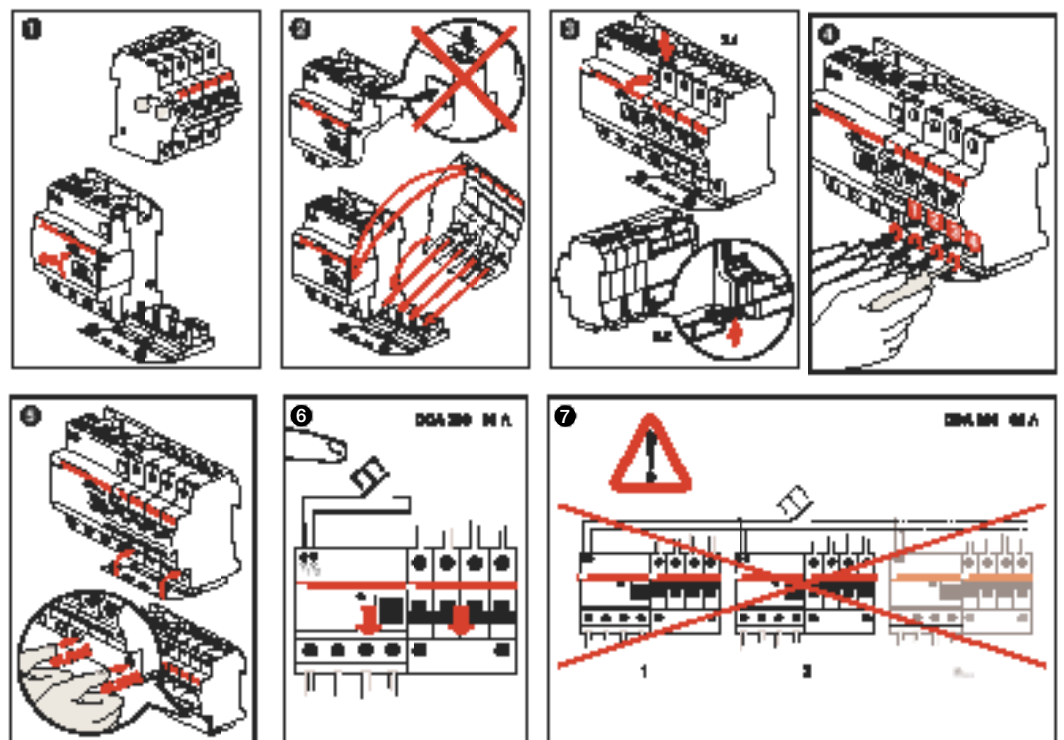
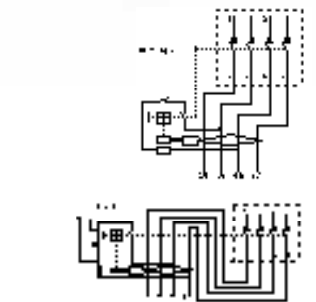


Two pole



Four pole

DDA204 AC-25/0.03	2CSB204001R1250	25	30	2,678	1
DDA204 AC-40/0.03	2CSB204001R1400	40	30	2,783	1
DDA204 AC-63/0.03	2CSB204001R1630	63	30	2,951	1
DDA204 AC-25/0.1	2CSB204001R2250	25	100	2,961	1
DDA204 AC-40/0.1	2CSB204001R2400	40	100	3,150	1
DDA204 AC-63/0.1	2CSB204001R2630	63	100	3,639	1
DDA204 AC-25/0.3	2CSB204001R3250	25	300	3,051	1
DDA204 AC-40/0.3	2CSB204001R3400	40	300	3,360	1
DDA204 AC-63/0.3	2CSB204001R3630	63	300	3,707	1



Solution for unwanted tripping - AP-R type (high immunity) RCCB / RCBO

The ABB range of AP-R anti-disturbance residual current circuit-breakers and blocks was designed to overcome the problem of unwanted tripping due to overvoltages of atmospheric or operational origin.

The electronic circuit in these devices can distinguish between temporary leakage caused by disturbances on the mains and permanent leakage due to actual faults, only breaking the circuit in the latter case.

AP-R residual current circuit-breakers and blocks have a slight delay into the tripping time, but this does not compromise the safety limits set by the Standards in force (release time at $2 I_{\Delta n} = 150$ ms).

Compared with standard type breakers, AP-R residual current breakers are therefore characterised, for any given sensibility, by:

- Higher residual trip current
- Tripping time delay
- Better resistance to overvoltages, harmonics and impulse disturbances.

Guaranteeing conventional residual current protection, their installation in the electrical circuit therefore allows any unwanted tripping to be avoided in domestic and industrial systems in which service continuity is essential.

This delay makes the AP-R residual current devices especially

suited for installations involving motor starters/variable speed drives, fluorescent lamps or IT/electronic equipment.

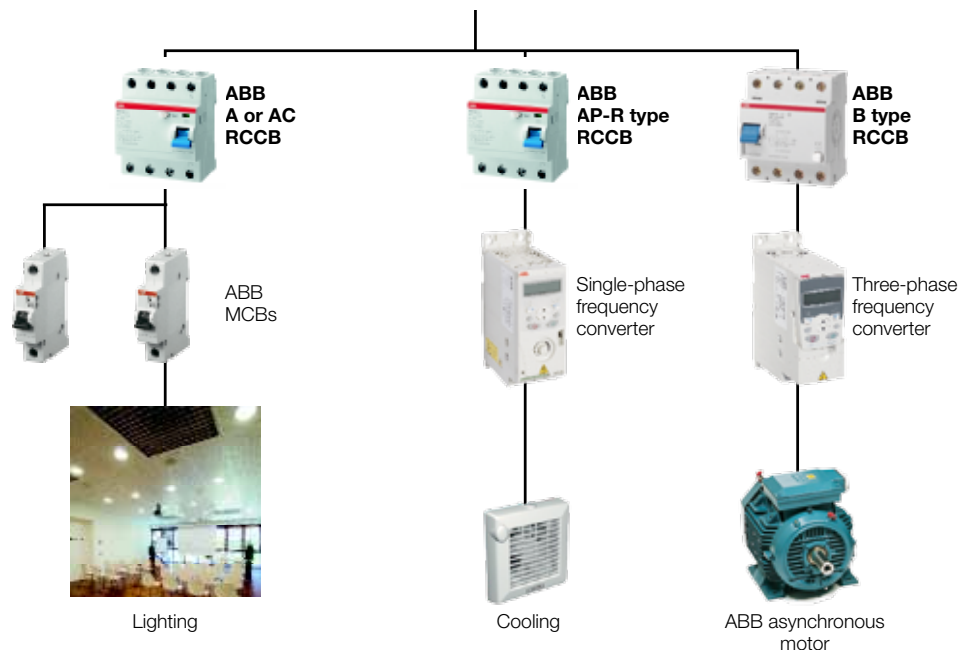
The use of multiple electronic reactors for the supply of fluorescent lamps instead generates permanent leakage currents and inrush currents that can cause nuisance tripping of a standard residual current circuit breaker.

IT system loads and other electronic equipment (e.g. dimmers, computers, inverters) with capacitive input filters connected between the phases and ground can also generate permanent earth leakage currents whose sum may provoke the nuisance tripping of a standard residual current circuit breaker. For these situations, the AP-R breakers allow a greater number of devices to be connected to the installation.

Frequency converters include a rectifier section and an inverter section.

In case of fault within a single-phase frequency converter AP-R type RCDs provide complete protection, because an earth fault occurring downstream the inverter, produces an earth fault current with multi-frequency shape with high amount of harmonics.

While, in case of fault within a three-phase frequency converter, B type RCDs ensure complete protection because in case of insulation fault between the rectifier and the inverter or downstream the inverter we can have a smooth DC earth fault current.



RCCB - F 200 series: AP-R (high immunity)

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing the best compromise between safety and continuity in the service thanks to the resistance to unwanted trippings; protection against indirect contacts and additional protection against direct ($I_{\Delta n}=30$ mA) contacts.

Application: residential, commercial, industrial. **Standard:** IEC/EN 61008

Surge current resistance (wave 8/20)=3000 A **Marking:** according to EN 61008

RCCB - F 200 series

Description	Ordering Code	Current Rating (A)	Residual rated current (mA)	M.R.P.(₹)	Packing
Two pole					
F202 A-25/0.03 AP-R	2CSF202401R1250	25	30	5,200	1
F202 A-40/0.03 AP-R	2CSF202401R1400	40	30	5,500	1
F202 A-63/0.03 AP-R	2CSF202401R1630	63	30	5,750	1
Four pole					
F204 A-25/0.03 AP-R	2CSF204401R1250	25	30	5,700	1
F204 A-40/0.03 AP-R	2CSF204401R1400	40	30	5,900	1
F204 A-63/0.03 AP-R	2CSF204401R1630	63	30	6,300	1

RCBO - DS200 series A APR type (high immunity)

Function: protection against the effects of sinusoidal alternating and direct pulsating earth fault currents, providing an optimal compromise between safety and continuity of service, thanks to the resistance to unwanted tripping; protection against indirect contact and additional protection against direct ($I_{\Delta n}=30$ mA) contact; protection and isolation of resistive and inductive loads.

Application: residential, commercial, industrial. **Standard:** IEC/EN 61009

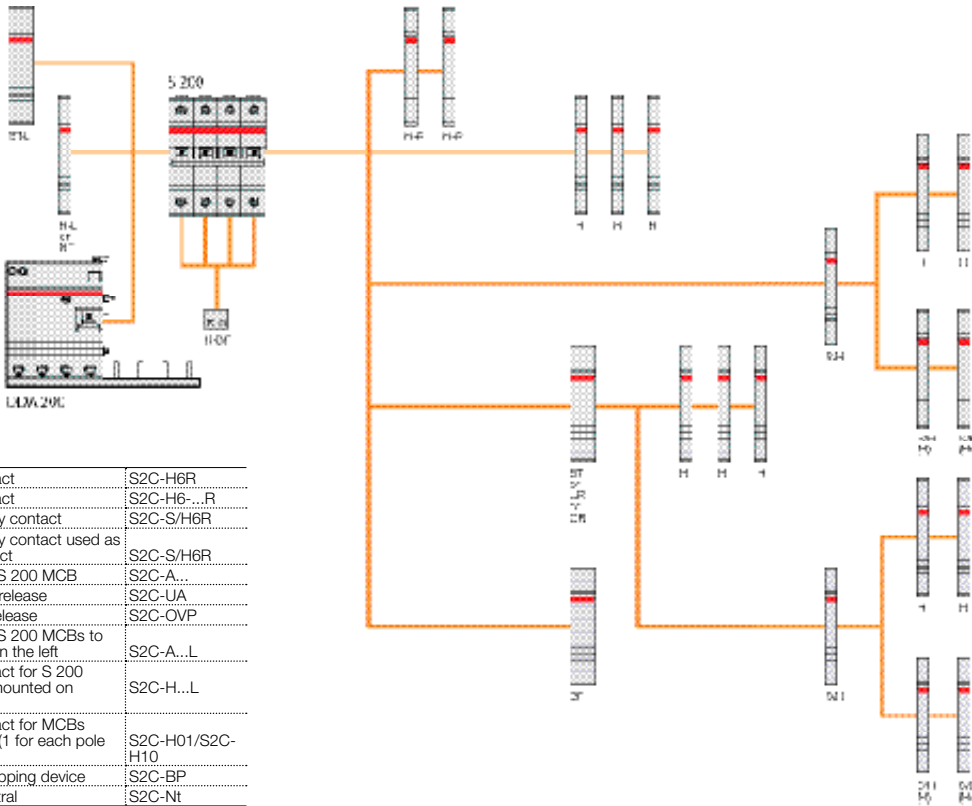
I_{cn}=10 kA

RCBO - DS200 series A APR type

Description	Ordering Code	Current Rating (A)	Residual rated current (mA)	M.R.P.(₹)	Packing
DS201 M C6 APR30	2CSR275440R1064	6	30	5,800	1
DS201 M C10 APR30	2CSR275440R1104	10	30	5,800	1
DS201 M C16 APR30	2CSR275440R1164	16	30	5,800	1
DS201 M C20 APR30	2CSR275440R1204	20	30	5,800	1
DS201 M C25 APR30	2CSR275440R1254	25	30	5,800	1
DS201 M C32 APR30	2CSR275440R1324	32	30	5,950	1
DS201 M C40 APR30	2CSR275440R1404	40	30	6,800	1
DS201 M C6 APR100	2CSR275440R2064	6	100	7,100	1
DS201 M C10 APR100	2CSR275440R2104	10	100	7,100	1
DS201 M C16 APR100	2CSR275440R2164	16	100	7,100	1
DS201 M C20 APR100	2CSR275440R2204	20	100	7,100	1
DS201 M C25 APR100	2CSR275440R2254	25	100	7,100	1
DS201 M C32 APR100	2CSR275440R2324	32	100	7,400	1
DS201 M C40 APR100	2CSR275440R2404	40	100	8,400	1
DS201 M C6 APR300	2CSR275440R3064	6	300	7,100	1
DS201 M C10 APR300	2CSR275440R3104	10	300	7,100	1
DS201 M C16 APR300	2CSR275440R3164	16	300	7,100	1
DS201 M C20 APR300	2CSR275440R3204	20	300	7,100	1
DS201 M C25 APR300	2CSR275440R3254	25	300	7,100	1
DS201 M C32 APR300	2CSR275440R3324	32	300	7,500	1
DS201 M C40 APR300	2CSR275440R3404	40	300	8,500	1

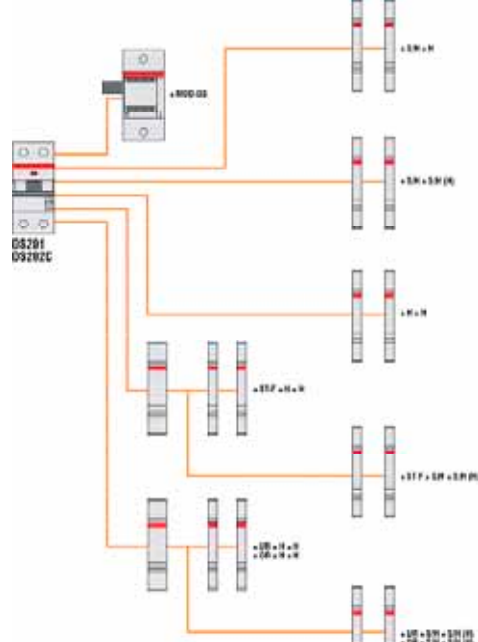
Auxiliary elements and accessories for MCBs S 200 and RCDs F 200 and DS 200 series

Combination of auxiliary elements with S 200, DDA 200 + S 200 or DS 200



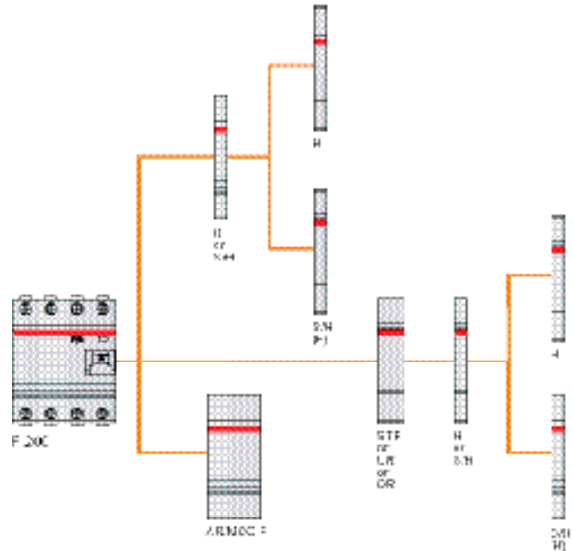
H	Auxiliary contact	S2C-H6R
H-R	Auxiliary contact	S2C-H6...R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST	Shunt trip for S 200 MCB	S2C-A...
UR	Undervoltage release	S2C-UA
OR	Overtoltage release	S2C-OVP
ST-L	Shunt trip for S 200 MCBs to be mounted on the left	S2C-A...L
H-L	Auxiliary contact for S 200 MCBs to be mounted on the left	S2C-H...L
H-BF	Auxiliary contact for MCBs bottom fitting (1 for each pole of MCB)	S2C-H01/S2C-H10
BP	Mechanical tripping device	S2C-BP
NT	Switched neutral	S2C-Nt

Combination of auxiliary elements with DS201, DS202C



H	Auxiliary contact	S2C-H6R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
ST-F	Shunt trip for F 200 RCCB	F2C-A
UR	Undervoltage release	S2C-UA
OR	Overtoltage release	S2C-OVP
M O D - Motor operating device		DS2C-CM
DS		

Combination of auxiliary elements with F 200



H	Auxiliary contact	S2C-H6R
S/H	Signal/Auxiliary contact	S2C-S/H6R
S/H (H)	Signal/Auxiliary contact used as auxiliary contact	S2C-S/H6R
UR	Undervoltage release	S2C-UA
OR	Overtoltage release	S2C-OVP
AR	Auto reclosing unit	F2C-ARI
MOD-F	Motor operating device	F2C-CM
ST-F	Shunt trip for F 200 RCCB	F2C-A

Auxiliary elements for MCBs S 200, RCDs F 200 and DS 200

Selection tables

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S2C-S/H6R

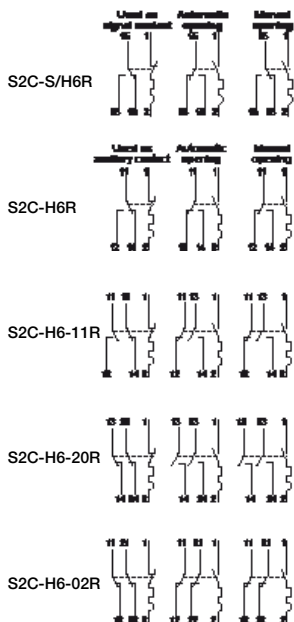
S2C-H6...

Signal/auxiliary contacts

Function S2C-S/H6R: choice through a selector between indication of the position of the device's contacts and signalling of the fault (overcurrent/short-circuit for MCBs and RCBOs; earth fault for RCCBs and RCBOs). Suitable for MCBs S 200 series, RCCBs F 200 series, RCBOs DS201, DS202C, DS 200 series.

Function S2C-H6R: indication of the position of the device's contacts. Suitable for MCBs S200 series. To be mounted on the left side of the MCBs thanks to the special pin. They are not suitable to be mounted together with RCD-block DDA200.

Function S2C-H6-xxR: indication of the position of the MCB contact. Mounted on the right side. They are not suitable to be mounted together with other right side mounted auxiliary contacts.



Description	Order details	Ordering Code	M.R.P.(₹)	Packing
Auxiliary Contact, 1CO (Right side)	S2C-H6R	2CDS200912R0001	653	1
Auxiliary Contact, 1NO / 1NC (Right side)	S2C-H6-11R	2CDS200946R0001	686	1
Auxiliary Contact, 2NO (Right side)	S2C-H6-20R	2CDS200946R0002	686	1
Auxiliary Contact, 2NC (Right side)	S2C-H6-02R	2CDS200946R0003	650	1
Signal contact / Auxiliary switch, 1CO (Right side)	S2C-S/H6R	2CDS200922R0001	1,201	1

Auxiliary contacts mounting on the left side

Description	Order details	Ordering Code	M.R.P.(₹)	Packing
Auxiliary Contact, 1NO / 1NC (Left side)	S2C-H11L	2CDS200936R0001	753	1
Auxiliary Contact, 2NO (Left side)	S2C-H20L	2CDS200936R0002	753	1
Auxiliary Contact, 2NC (Left side)	S2C-H02L	2CDS200936R0003	753	1

Bottom-fitting auxiliary contacts for S 200, S 200 M, S 200 P, S 200 S

Description	Order details	Ordering Code	M.R.P.(₹)	Packing
Bottom fitting Aux contact, 1NC	S2C-H01	2CDS200970R0001	1,029	1
Bottom fitting Aux contact, 1NO	S2C-H10	2CDS200970R0002	1,029	1



Shunt trips

Function: remote opening of the device when a voltage is applied. Suitable for MCBs S 200 series and RCBOs DS 200 series.

Description	Order details	Ordering Code	M.R.P.(₹)	Packing
Shunt Trip, 12...60V AC/DC	S2C-A1	2CDS200909R0001	3,091	1
Shunt Trip, 110...415V AC, 110...250 DC	S2C-A2	2CDS200909R0002	3,091	1

Function: remote opening of the device when a voltage is applied. Suitable for RCCBs F 200 series and RCBOs DS201 and DS202C.

It can be used with MCBs SN201 series by means of SN201-IH interface module.

Description	Order details	Ordering Code	M.R.P.(₹)	Packing
Shunt Trip, 12...60V AC/DC	F2C-A1	2CSS200933R0011	3,548	1
Shunt Trip, 110...415V AC/ 110...250V DC	F2C-A2	2CSS200933R0012	3,548	1

Auxiliary elements for MCBs S 200, RCDs F 200 and DS 200

Selection tables

Undervoltage releases

Function: protection of the load in the event of a voltage drop (between 70% and 35% of its rated value); positive safety (device's tripping when the voltage is disconnected) emergency stop by means of a button. Suitable for MCBs S 200 series, RCCBs F200 series and RCBOs DS201, DS202C, DS 200 series It can be used with MCBs SN201 series by means of SN201-IH interface module.



Description	Order details	Ordering Code	M.R.P.(₹)	Packing
Undervoltage Release, 12V DC	S2C-UA 12 DC	2CSS200911R0001	3,548	1
Undervoltage Release, 24V AC	S2C-UA 24 AC	2CSS200911R0002	3,548	1
Undervoltage Release, 24V DC	S2C-UA 24 DC	2CSS200911R0007	3,548	1
Undervoltage Release, 48V AC	S2C-UA 48 AC	2CSS200911R0003	3,548	1
Undervoltage Release, 48V DC	S2C-UA 48 DC	2CSS200911R0008	3,548	1
Undervoltage Release, 110V AC	S2C-UA 110 AC	2CSS200911R0004	3,548	1
Undervoltage Release, 110V DC	S2C-UA 110 DC	2CSS200911R0009	3,548	1
Undervoltage Release, 230V AC	S2C-UA 230 AC	2CSS200911R0005	3,548	1
Undervoltage Release, 230V DC	S2C-UA 230 DC	2CSS200911R0010	3,548	1
Undervoltage Release, 400V AC	S2C-UA 400 AC	2CSS200911R0006	3,548	1

Overvoltage releases

Function: monitoring voltage between the neutral and phase; when an overvoltage reaches the threshold value, the OVP device causes the tripping of the associated MCB or RCCB.

Suitable for MCBs of the S200 series up to 63 A, and RCCBs of the F200 series up to 100 A and RCBOs DS201 and DS202C series.



Description	Order details	Product Code	M.R.P.(₹)	Packing
Over Voltage Release (Max tripping : 275 V AC)	S2C-OVP1	2CSS200910R0005	4,435	1
Over Voltage Release (Max tripping : 290 V AC)	S2C-OVP2	2CSS200993R0005	4,435	1

Hand operated neutral

The hand operated neutral has to be mounted to the left side of the MCB and be snapped on the DIN rail. It is used for measuring duties where the neutral conductor must be in the open position. Due to the special design of the handle - when switching ON the MCB - the neutral will make before the MCB is closed.

The S2C - Nt is not to switch with a tool (screw driver).



Description	Order details	Product Code	M.R.P.(₹)	Packing
Hand operated Neutral (Right side)	S2C-NT	2CDS200918R0001	600	1

Auxiliary elements for MCBs S800 series

Auxiliary contact

Description	Order details	Product Code	M.R.P.(₹)	Packing
Auxiliary contact	S800-AUX	2CCS800900R0011	2,330	1



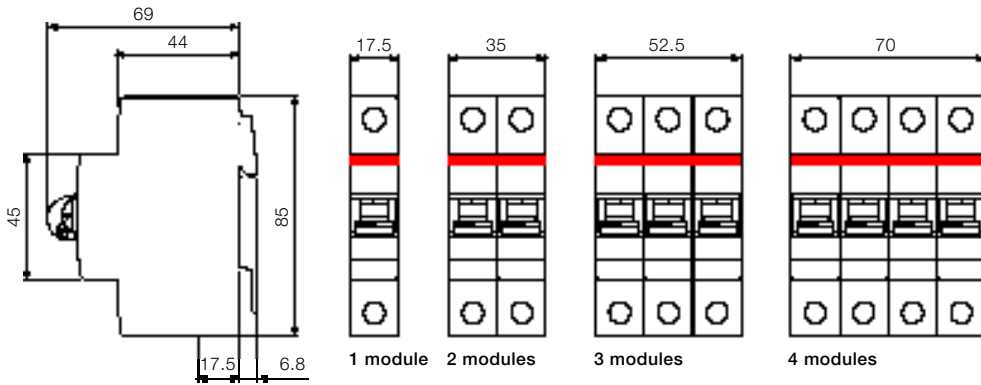
Combined auxiliary and signal contact

Description	Order details	Product Code	M.R.P.(₹)	Packing
Auxiliary/signal contact	S800-AUX/ALT	2CCS800900R0021	2,860	1



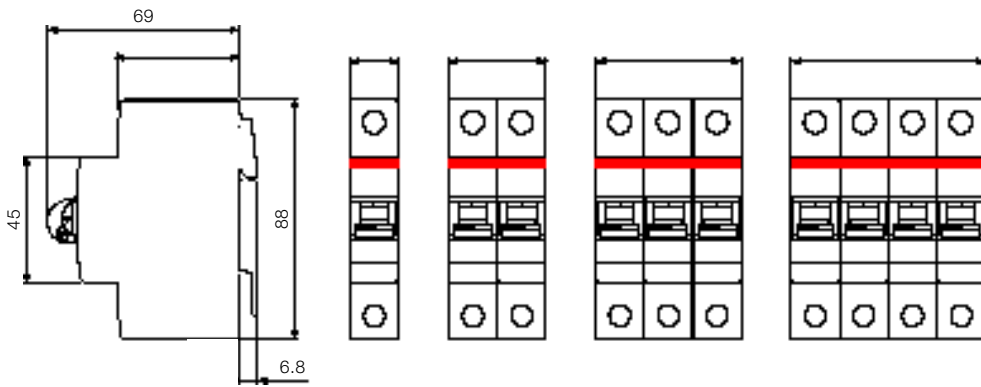
Overall dimensions

MCB - (SH200) and Isolator (SHD)

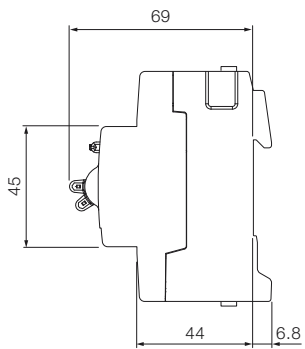


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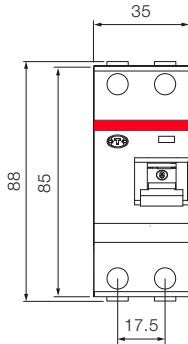
MCB - (S200)



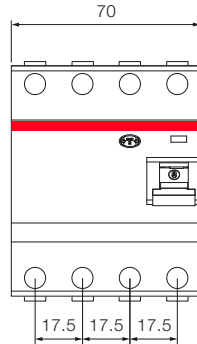
RCCB - (F200)



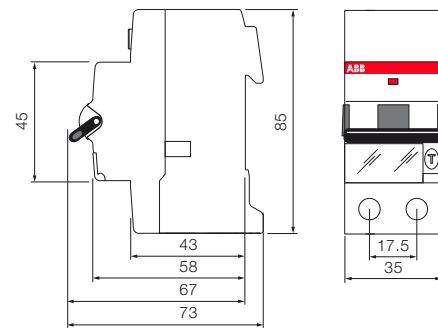
Two pole



Four pole



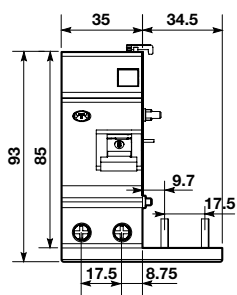
RCBO (DS200)



DDA 200

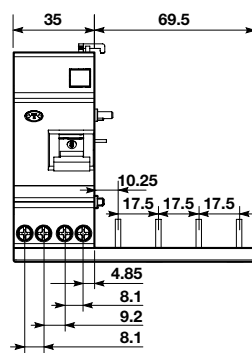
Two pole

In=25-63 A



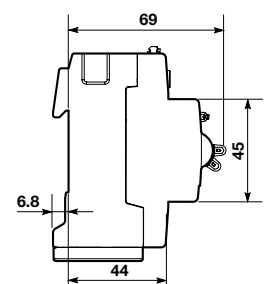
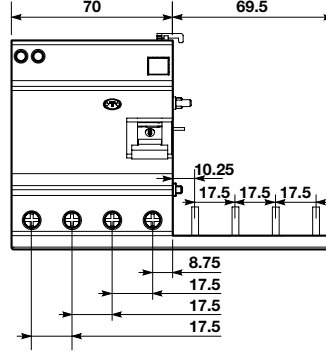
Four pole

In=25-40 A



Four pole

In=63 A



External Lightning Protection

OPR - Optimized Pulse Rod

The OPR efficiency (ΔT)

Lightning is one of the most spectacular meteorological phenomena. Generated by the interaction of clouds elements (water and ice), it can kill, injure and damage. The unique efficiency of the OPR Early streamer emission is based on the difference (ΔT), measured in a laboratory, in between the emission time of the OPR and the one from a simple rod. The OPR ESE air terminal is composed of a striking point connected to a down conductor to conduct the lightning to the ground.

Complete autonomy

During a storm the ambient electric field may rise from 600 V to 10-20 kV/m. When the electric field reach this level representing a minimum risk for a lightning, the OPR begins to get activated and generates high voltage pulses, helping to create and propagating an upward leader. After a strike on the OPR, the lightning current is driven to ground by the down conductor to the earth termination system.

Radius of protection

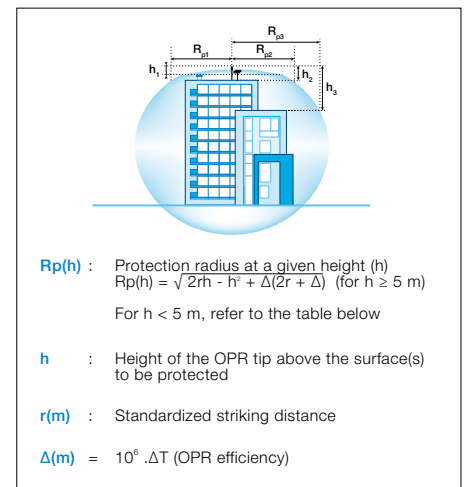
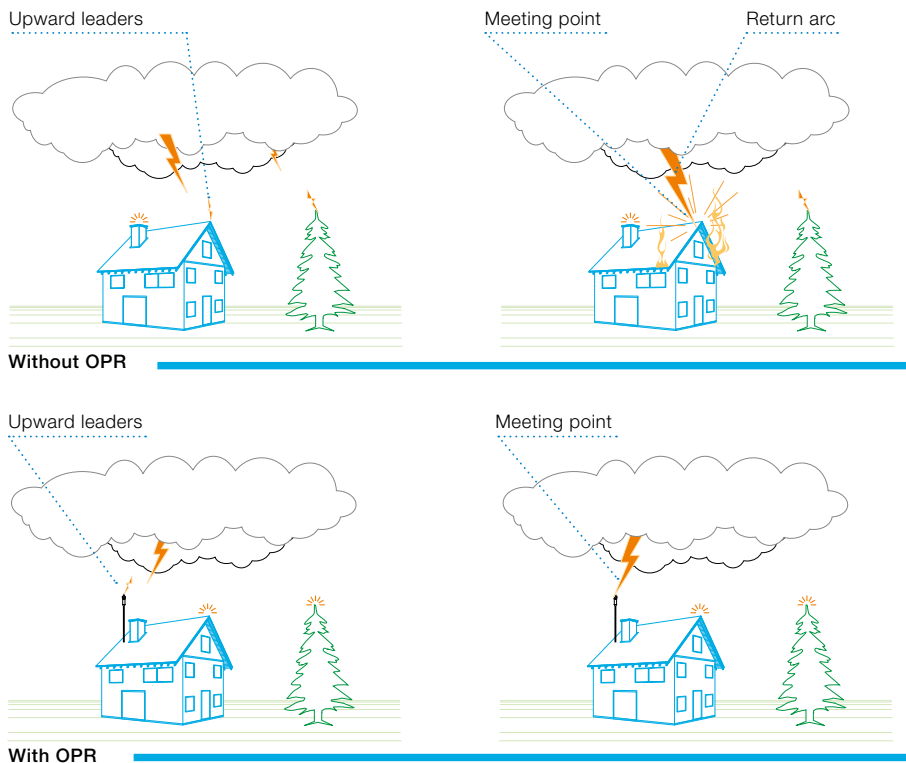
The radius of protection (R_p) of the OPR is calculated according to the NF C 17-102 (edition 2011). It depends on the OPR efficiency (ΔT) expressed in micro-seconds. The maximum value for ΔT is 60 μs .

The risk assessment shall be calculated according to the NF C 17-102 Annex A / IEC 62305-2 and will define the protection level (LPL I, II, III or IV) which will be used in the determination of the OPR radius of protection.

	LPL I	LPL II	LPL III	LPL IV
Rolling sphere radius $r(m)$	20	30	45	60

OPR radius of protection

Protection level	I ($r = 20 m$)			II ($r = 30 m$)			III ($r = 45 m$)			IV ($r = 60 m$)		
	OPR 30	OPR 45	OPR 60	OPR 30	OPR 45	OPR 60	OPR 30	OPR 45	OPR 60	OPR 30	OPR 45	OPR 60
h (m)	Radius of protection R_p (m)											
2	19	25	31	22	28	35	25	32	39	28	36	43
3	29	38	47	33	42	52	38	48	58	43	57	64
4	38	51	63	44	57	69	51	65	78	57	72	85
5	48	63	79	55	71	86	63	81	97	71	89	107
6	48	63	79	55	71	87	64	81	97	72	90	107
8	49	64	79	56	72	87	65	82	98	73	91	108
10	49	64	79	57	72	88	66	83	99	75	92	109
15	50	65	80	58	73	89	69	85	101	78	95	111
20	50	65	80	59	74	89	71	86	102	81	97	113
45	43	65	76	58	75	89	75	90	105	89	104	119
50	40	65	74	57	75	88	75	90	105	89	104	120
55	36	65	72	55	75	86	74	90	105	90	105	120
60	30	65	69	52	75	85	73	90	104	90	105	120



External Lightning Protection

OPR - Optimized Pulse Rod

OPR Range

Product Description	Product Code	Length (m)	Weight (kg)	Time gain (μs)	M.R.P.(₹)
OPR 30	2CTB899800R7000	0.215	2.40	30	90,000
OPR 45	2CTB899800R7500	0.215	2.40	45	1,00,000
OPR 60	2CTB899800R7100	0.215	2.40	60	1,10,000

Accessories

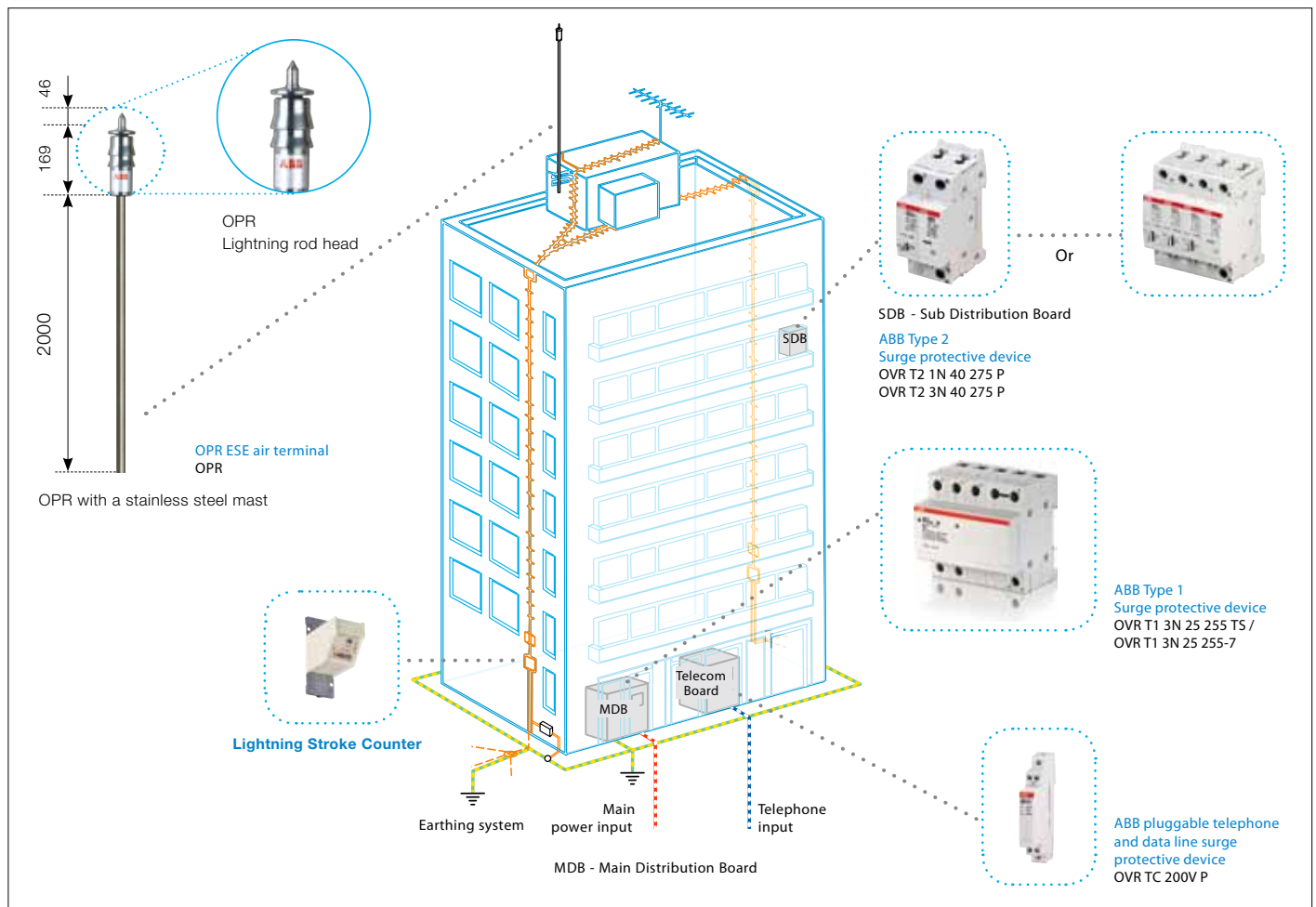
Product Description	Product Code	Length (m)	Weight (kg)	M.R.P.(₹)
Lightning stroke counter	2CTH0CCCF2004	0.121	0.56	32,000
Mounting Mast, 2m, 30mm dia	H00003002L	2	4.4	5,500
Mounting Mast, 3m with guywire and base plate	H00003003LGB	3	6.5	9,300
GRIC, Ground Resistance Improvement Compound	H00003002EC5	-	5	5,800
Copper bonded Earth Rod, 1.2m	H00003002ER12	1.2	1.4	1,200
Earth Rod clamp (Rod to Tape)	H00003002ERC1	-	0.12	450

3

Installing / testing

The installation and verification of lightning protection systems using one or more OPR units must be performed in

accordance with the manufacturer's recommendations and to the NF C 17-102 standard.



Surge Protection Devices (OVR)



Type 1 - Spark Gap Type

Type 1 surge protective devices are designed to discharge high current surges without any destruction of the installation. These surge protective devices are characterized by their capacity to withstand impulse current with 10/350 μ s wave form which simulate natural lightning current.

Type 1 SPDs can be installed at the entrance in the main switch board for a global protection of the electrical installation.

Description	Ordering Code	Max. Continuous Operating Voltage U_c (V)	I imp in kA (10/350 μ s wave)	I max in kA (8/20 μ s wave)	No of Modules	M.R.P.(₹)
OVR SO 100 400	2CTB815101R9600	255	25	-	4	11,970
OVR T1 3N 25 255-7	2CTB815101R8800	255	25	-	5	22,410
OVR T1+2 3N 7 275 s P	2CTB815502R1000	275	7	70	4	12,780



Type 2 - Metal Oxide Varistor

Type 2 surge protective devices are designed to protect electric installations and sensitive equipment against indirect surges with ensuring a low protection level (U_p). They are characterized by their capacity to safely discharge current with 8/20 μ s wave form.

Type 2 SPDs can be installed at the sub-distribution switch board for the protection of electrical installation and equipments.

Description	Ordering Code	Max. Continuous Operating Voltage U_c (V)	I max in kA (8/20 μ s wave)	No of Modules	M.R.P.(₹)
Single pole					
OVR T2 15 275	2CTB804200R0100	275	15	1	1,935
OVR T2 15 275 P	2CTB803851R2400	275	15	1	2,561
OVR T2 40 275	2CTB804201R0100	275	40	1	2,057
OVR T2 40 275 P	2CTB803851R2300	275	40	1	2,736
OVR T2 40 275 P TS	2CTB803851R1700	275	40	1	3,461
OVR T2 40 275 s P	2CTB803851R2000	275	40	1	3,834
OVR T2 40 275 s P TS	2CTB803851R1400	275	40	1	4,770
OVR T2 70 275 s P	2CTB803851R1900	275	70	1	4,109
OVR T2 70 275 s P TS	2CTB803851R1300	275	70	1	5,067

Single pole + Neutral

OVR T2 1N 15 275 P	2CTB803952R1200	275	15	2	5,369
OVR T2 1N 40 275 P	2CTB803952R1100	275	40	2	5,783
OVR T2 1N 40 275 P TS	2CTB803952R0500	275	40	2	5,783
OVR T2 1N 40 275 s P	2CTB803952R0800	275	40	2	6,746
OVR T2 1N 40 275 s P TS	2CTB803952R0200	275	40	2	6,746
OVR T2 1N 70 275 s P	2CTB803952R0700	275	70	2	7,164
OVR T2 1N 70 275 s P TS	2CTB803952R0100	275	70	2	8,361

Surge Protection Devices (OVR)

Three pole + Neutral



Description	Ordering Code	Max. Continuous Operating Voltage U_c (V)	I max in kA (8/20 μ s wave)	No of Modules	M.R.P.(₹)
OVR T2 3N 15 275 P	2CTB803953R1200	275	15	4	9,423
OVR T2 3N 40 275 P	2CTB803953R1100	275	40	4	10,530
OVR T2 3N 40 275 P TS	2CTB803953R0500	275	40	4	10,530
OVR T2 3N 40 275 s P	2CTB803953R0800	275	40	4	13,356
OVR T2 3N 40 275 s P TS	2CTB803953R0200	275	40	4	13,356
OVR T2 3N 70 275 s P	2CTB803953R0700	275	70	4	14,175
OVR T2 3N 70 275 s P TS	2CTB803953R0100	275	70	4	14,175

Surge arrester for Data line protection



Description	Ordering Code	Max. Continuous Operating Voltage U_c (V)	I max in kA (8/20 μ s wave)	No of Modules	M.R.P.(₹)
OVR TC 06V P	2CTB804820R0000	7	10	1	5,688
OVR TC 12V P	2CTB804820R0100	14	10	1	4,770
OVR TC 24V P	2CTB804820R0200	27	10	1	4,770
OVR TC 48V P	2CTB804820R0300	53	10	1	4,860
OVR TC 200V P	2CTB804820R0400	220	10	1	4,770
OVR TC 200 FR P	2CTB804820R0500	220	10	1	4,770

Surge arrester for Photovoltaic applications

Description	Ordering Code	Max. Continuous Operating Voltage U_c (V)	I max in kA (8/20 μ s wave)	No of Modules	M.R.P.(₹)
OVR PV 40 600 P	2CTB803953R5300	700	40	3	8,550
OVR PV 40 600 P TS	2CTB803953R5400	700	40	3	11,925
OVR PV 40 1000 P	2CTB803953R6400	1120	40	3	8,910
OVR PV 40 1000 P TS	2CTB803953R6500	1120	40	3	12,510

Modular DIN Rail components



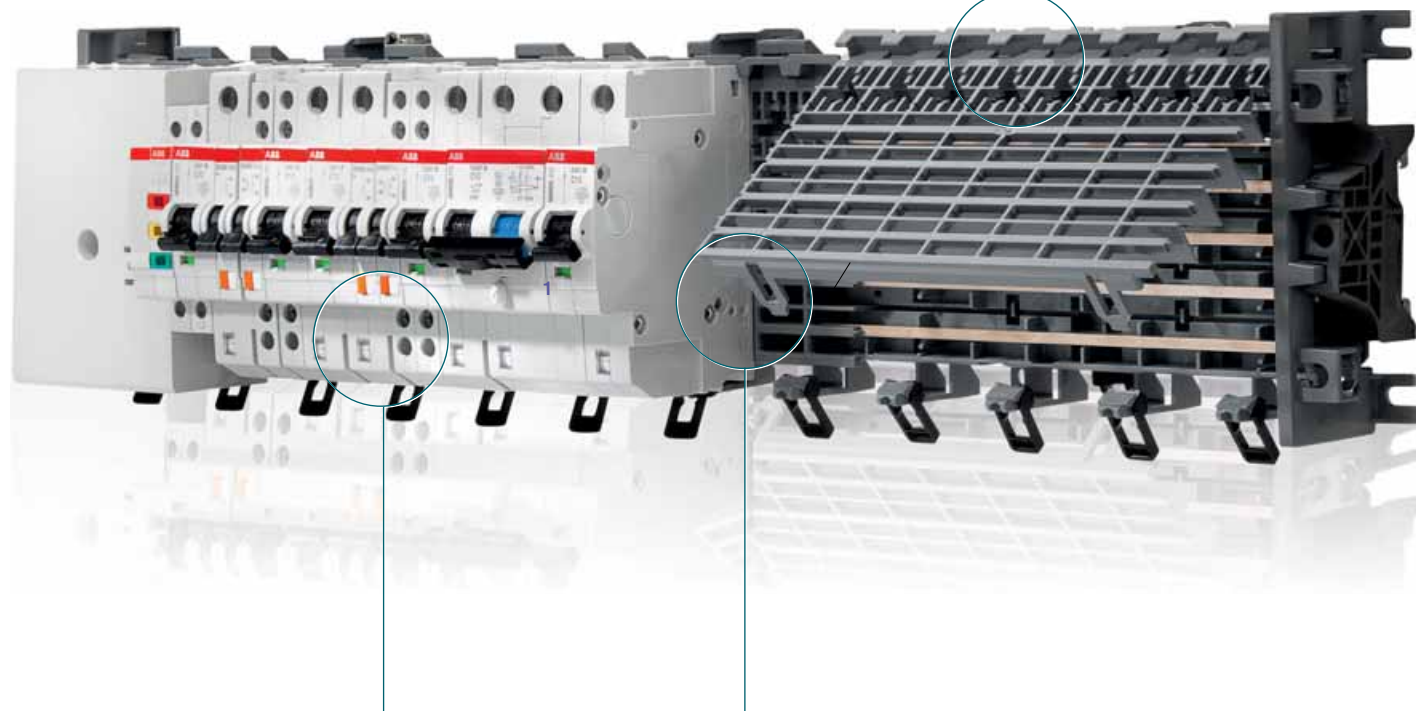
Description	Ordering Code	M.R.P.(₹)
AT3-R, Electro mechanical, 3 module time switch with reserve	2CSM204235R0601	3,460
D1, Digital time switch, 1 channel	2CSM258763R0621	6,750
D2, Digital time switch, 2 channel	2CSM256313R0621	8,775
TW1, Twilight time switch	2CSM204135R1341	6,100
LS-SP, sensor for Twilight time switch	2CSM204195R1341	1,900
E232-230, Stair case time switch (1-7 mins, with 15 secs incremental adjustable)	2CDE110000R0501	4,800
E232-230N, Stair case time switch (0.5-20 mins adjustable)	2CDE110003R0511	6,300
E213-16-002, double pole change over switch, 16 A	2CCA703045R0001	1,550
E213-25-002, double pole change over switch, 25 A	2CCA703046R0001	1,950
E214-16-202, group switch, 16 A (I-O-II)	2CCA703030R0001	1,700
E214-25-202, group switch, 16 A (I-O-II)	2CCA703031R0001	2,200

SMISLINE TP plug-in system

Changes are never been easier

SMISLINE TP ensures that load-free devices and components can be snapped on and off under voltage without the need for additional personal protective equipment to guard against electrical hazards.

3



It opens up to a completely new prospects for you when it comes to installation, operation and flexibility.

The world's first pluggable socket system.

SMISLINE TP plug-in system

Changes are never been easier

3



Even safer: Protection against electrical hazards

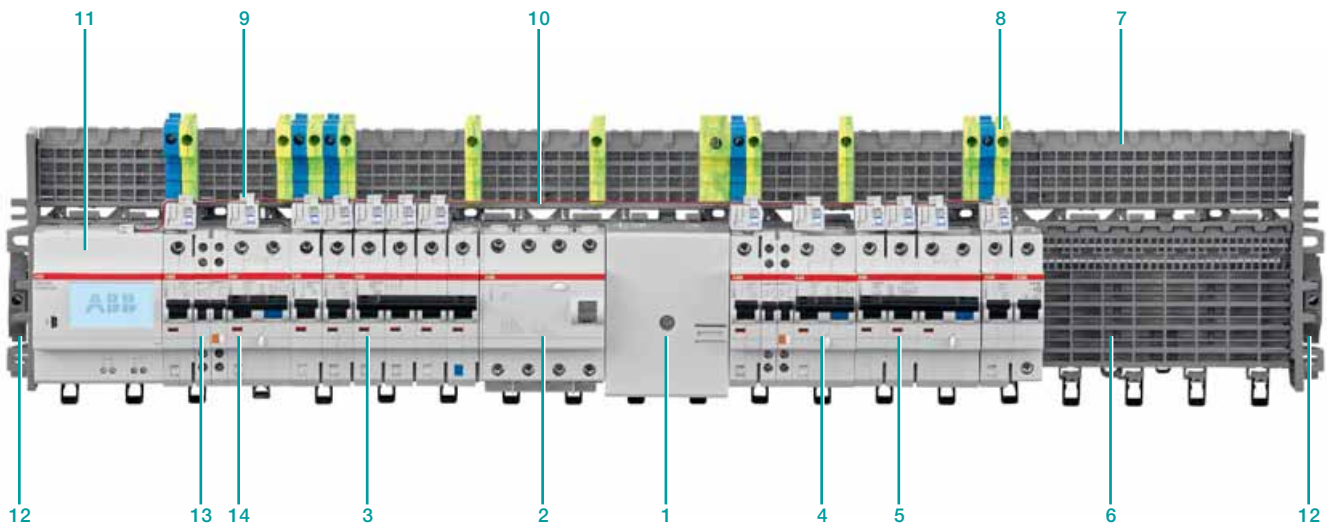
We have upgraded our unique SMISLINE socket system even further through the addition of a pioneering innovation. With the new SMISLINE TP system, components can now be plugged in or unplugged load-free without any risk from electrical current running through the body.

The SMISLINE TP pluggable socket system is completely finger-safe (IP2XB) – when devices are plugged in and unplugged, the system is always touch-proof. This means that SMISLINE TP prevents any danger to personnel from switching arcs or accidental arcing.

Even more flexible: make additions and changes during ongoing operation

Pluggable devices can be added and changed quickly, safely and simply during ongoing operation. And this can be done without any need for personal protective equipment.

This means that you benefit from more flexibility, savings on installation and maintenance – and improved safety. SMISLINE TP provides greater availability and operating safety than conventional systems.



- | | | |
|------------------------------------|---|----------------------|
| 1 Supply terminal | 6 Socket IP20 | 11 Control unit CMS |
| 2 Surge arrester OVR404 | 7 Additional socket IP20 | 12 Socket end piece |
| 3 Miniature circuit breaker S403NP | 8 Terminals | 13 Auxillary contact |
| 4 RCBO FS401 | 9 Sensor for current measurement system | 14 Signal contact |
| 5 RCBO FS403 | 10 Cabel Bus system CMS | |

ELR, Earth Leakage Relay - (Front Panel Mountable)



Front panel residual current relays are electronic devices used in combination with an external toroidal transformer. They are according to the protection standard IEC/EN 60947-2 Annex-M.

The sensitivity can be set from 0.03 A to 30 A, while the tripping time from 0 to 5 seconds.

Residual current relays are available in versions 48x48 mm, 72x72 mm, and 96x96 mm.

The Fail Safe function is available for versions ELR48P, ELR72P and ELR96P: the contacts switch when there is no auxiliary power.

The ELR96PF version is equipped with Fail Safe function, fault memory LED, and a frequency filter, that ensure continuity of service in the presence of harmonics.

ELR96PD has (in addition to these functions) a digital display for an instantaneous view of the residual current $I_{\Delta n}$.

Description	Ordering Code	Operating Voltage	Pack
ELR48P	2CSG252211R1202	110 V a.c./d.c. - 230 V a.c.	1
ELR48V24P	2CSG452211R1202	24-48 V a.c./d.c.	1
ELR72	2CSG252120R1202	110 V a.c./d.c. - 230 V a.c.	1
ELR72V24	2CSG452120R1202	24-48 V a.c./d.c.	1
ELR72P	2CSG152424R1202	110-230-400 V a.c.	1
ELR72V24P	2CSG452424R1202	24-48 V a.c./d.c.	1
ELR96	2CSG152130R1202	110-230-400 V a.c.	1
ELR96V24	2CSG452130R1202	24-48 V a.c./d.c.	1
ELR96P	2CSG152434R1202	110-230-400 V a.c.	1
ELR96V24P	2CSG452434R1202	24-48 V a.c./d.c.	1
ELR96PF	2CSG152435R1202	110-230-400 V a.c.	1
ELR96PD	2CSG152436R1202	110-230-400 V a.c.	1

3

RD3, Residual Current Relays - (Din Rail Mountable)



The RD3 family of electronic residual current relays provides residual current protection and monitoring functions according to IEC/EN 60947-2:2006 annex M and can be used in conjunction with all S 200 automatic devices and Tmax range moulded case devices up to T5, for industrial installations.

The RD3 residual current relays can provide status indications through two output contacts.

Description	Ordering Code	Operating Voltage	Pack
RD3-48	2CSJ201001R0001	12-48 a.c./d.c.	1
RD3	2CSJ201001R0002	230-400 a.c.	1
RD3M-48	2CSJ202001R0001	12-48 a.c./d.c.	1
RD3M	2CSJ202001R0002	230-400 a.c.	1
RD3P-48	2CSJ203001R0001	12-48 a.c./d.c.	1
RD3P	2CSJ203001R0002	230-400 a.c.	1

Toroidal transformers



Description	Ordering Code	Toroid useful diameter (mm)	Min measurable current (mA)	Max rated current ¹ (A)	Max capacity ² (A)	Pack
TRM	2CSM029000R1211	29 (modular version)	30	65	160	1
TR1	2CSG035100R1211	35	30	75	250	1
TR2	2CSG060100R1211	60	30	85	400	1
TR3	2CSG080100R1211	80	100	160	800	1
TR4	2CSG110100R1211	110	100	250	1,250	1
TR4/A	2CSG110200R1211	110 (openable version)	300	250	1,250	1
TR160	2CSG160100R1211	160	300	400	2,000	1
TR160A	2CSG160200R1211	160 (openable version)	500	400	2,000	1
TR5	2CSG210100R1211	210	300	630	3,200	1
TR5/A	2CSG210200R1211	210 (openable version)	500	630	3,200	1

¹ Shows toroidal transformers selection for use with ELR according to IEC/EN 60947-2 Annex M in combination with MCBs S200 range and MCCBs Tmax range up to T5

² Shows the technical features of the toroidal transformers

*Price against Request

Measurement devices – DMTME multimeters

3



DMTME multimeters

The instruments DMTME are digital multimeters that allow the measurement, in TRMS mode, of the principal electrical parameters in three-phase and single-phase 230/400 Vac networks, including the max/min/average detection of the main electrical parameters and the active and reactive energy count. The multiple measured variables are displayed locally on four red 7-segment LED displays providing easy readability and simultaneous display of the measures of the electrical parameters of the phases individually and of the whole network.

The instruments DMTME combine, in a single instrument, the functions of multiple devices: voltmeter, ammeter, power factor meter, wattmeter, varmeter, frequency meter, active and reactive energy meters; it allows remarkable financial savings thanks to the reduction of space taken up in the panel and also of time required for cabling, along with the advantage of providing clear readings on a single device.

The DMTME-I-485, DMTME-I-485-96 and DMTME-I-485-72 models are additionally equipped with two digital relays, fully programmable as either pulse outputs for remote metering of energy consumption, or as alarm outputs. The output relay can be set as NO or NC.

There is also an RS485 port for communicating the measured parameters and alarms over a Modbus network; used in addition to a converter of the CUS series, it allows direct connection to a central PC for remote supervision and control of the electrical network.

All versions come complete with Mini CD containing the instruction manual, technical documentation, Modbus communication protocol and the DMTME-SW tool, intended to be a first-hand PC-based application for the remote visualization of the measures.

DMTME modular multimeters

TRMS measure of VL-L, VL-N, A, W, Var, VA, kWh, kVar, PF in 230/400 V a.c. lines. Indirect connection through CT .../5 A. Auxiliary supply at 110 V a.c. and 230 V a.c.

Product Description	Product Code	RS485	Program.	Pack
DMTME	2CSM170040R1021	-	-	1
DMTME-I-485	2CSM180050R1021	✓	2	1

DMTME-96 panel multimeters

Auxiliary supply 230 V a.c. and 110 V a.c.

Product Description	Product Code	RS485	Program.	Dimension	Pack
DMTME-96	2CSG133030R4022	-	-	96x96	1
DMTME-I-485-96	2CSG163030R4022	✓	2	96x96	1

DMTME-72 panel multimeters

Auxiliary supply 230 V a.c. and 400 V a.c.

Product Description	Product Code	RS485	Program.	Dimension	Pack
DMTME-72	2CSG132030R4022	-	-	72x72	1
DMTME-I-485-72	2CSG162030R4022	✓	2	96x96	1

*Price against Request

M2M - Network Analyser

The measure of efficiency



The new M2M network analyser has advanced analysis functions which allow effective measurement of the main single-phase or three-phase electrical parameters: voltage, current, frequency, power factor, active and reactive power, active and reactive energy.

Fitted to low- and medium-voltage electrical panels, the new analyser allows the measurement and analysis in real time of electrical parameters, also verifying the quality of the energy thanks to THD measurement.

M2M also keeps the system's consumption under control, giving figures in CO₂ kg and Euros to ensure more efficient and rational use of energy. Bidirectional metering of energy and power on the 4 quadrants allows both production and consumption of energy to be monitored with a single device. Aside from optimising the use of loads, real time measurement contributes to containing both environmental and budgetary impact.

All information gathered by the analyser can be transmitted quickly to remote locations through specific communication interfaces – RS485, RJ45 or RS232, with the support of numerous protocols including Modbus RTU, Modbus TCP/IP and Profibus DP.

Interaction with the control and supervision systems is possible via different inputs and outputs, all programmable.

Features

- The importance of control
Measurement and advanced analysis of electrical parameters
- The value of flexibility
Versatility in its different applications and completeness of functions
- The advantages of communication
Intuitive analyser with multiple integrated functions, which communicates also via digital and analogue I/O
- Easy to install
- Ease of use

Type	Description	Protocol	Serial port	ABB code
M2M	2 digital outputs programmable as threshold alarms or pulses	-	-	2CSG299883R4052
M2M MODBUS	2 digital outputs programmable as threshold alarms or pulses	Modbus RTU	RS485	2CSG299893R4052
M2M ETHERNET	2 digital outputs programmable as threshold alarms or pulses	Modbus TCP/IP	RJ45	2CSG299903R4052
M2M PROFIBUS	2 digital outputs programmable as threshold alarms or pulses	Profibus	RS232	2CSG299913R4052
M2M ALARM	2 digital outputs programmable as threshold alarms or pulses, 2 programmable relay outputs	Modbus RTU	RS485	2CSG299923R4052
M2M I/O	2 digital outputs programmable as threshold alarms or pulses, 3 digital inputs and 2 analogue outputs	Modbus RTU	RS485	2CSG299933R4052

*Price against Request

Distribution Boards

Elegance Series

Elegance series (E-series) Distribution Boards are available in texture grey (Color code - RAL7035).

Construction

Blending aesthetics, functionality and safety, the E-series of ABB Distribution Boards are manufactured with high precision, and high quality CRCA steel sheets. These Distribution Boards undergo a seven-tank phosphating process to ensure anti-rust conditioning, superior finish and lasting strength. Premier quality powder coating is applied using the latest techniques

Colour

ABB's E-series of Distribution Boards is available in Texture Grey (RAL 7035)

Installation

The E-Series of ABB Distribution Boards are universal Mounting Type, hence can be flush or wall Mounted. These Distribution Boards are provided with top and bottom removable gland plates with adequate no of Knock outs, which enable easy installation and connection of conduits of sizes up to 32mm dia Knock out

Protection

E-series Distribution Boards offer three types of protection-IP43 & IP54 degree with a metal door and IP30 degree without a door. The highest degree of attention has been paid to the safety aspect of the Distribution Boards, considering that they are installed in close proximity to people. An intermediate plate ensures total safety, as no live parts are exposed when the door is opened.



Distribution Boards

Elegance Series

SPN DB -E-SHC

Horizontal single phase consumer unit with provision for incoming 2 pole (MCB / Isolator / RCD) and single phase outgoing. Suitable for surface and flush mounting

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHC WD 4	NSYN8690SPNWD04	4 way	4+2	1,123
E-SHC WD 6	NSYN8690SPNWD06	6 way	6+2	1,209
E-SHC WD 8	NSYN8690SPNWD08	8 way	8+2	1,374
E-SHC WD 10	NSYN8690SPNWD10	10 way	10+2	1,435
E-SHC WD 12	NSYN8690SPNWD12	12 way	12+2	1,750
E-SHC WD 14	NSYN8690SPNWD14	14 way	14+2	1,785
E-SHC WD 16	NSYN8690SPNWD16	16 way	16+2	2,259
E-SHC WD 20	NSYN8690SPNWD20	20 way	20+2	2,542

IP 43 with metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHC M 4	NSYN8690SPN0M04	4 way	4+2	1,542
E-SHC M 6	NSYN8690SPN0M06	6 way	6+2	1,678
E-SHC M 8	NSYN8690SPN0M08	8 way	8+2	2,009
E-SHC M 10	NSYN8690SPN0M10	10 way	10+2	2,019
E-SHC M 12	NSYN8690SPN0M12	12 way	12+2	2,326
E-SHC M 14	NSYN8690SPN0M14	14 way	14+2	2,534
E-SHC M 16	NSYN8690SPN0M16	16 way	16+2	3,013
E-SHC M 20	NSYN8690SPN0M20	20 way	20+2	3,408

IP 43 Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHC P 4	NSYN8690SPN0P04	4 way	4+2	1,609
E-SHC P 6	NSYN8690SPN0P06	6 way	6+2	1,971
E-SHC P 8	NSYN8690SPN0P08	8 way	8+2	2,145
E-SHC P 10	NSYN8690SPN0P10	10 way	10+2	2,386
E-SHC P 12	NSYN8690SPN0P12	12 way	12+2	2,681
E-SHC P 14	NSYN8690SPN0P14	14 way	14+2	2,949
E-SHC P 16	NSYN8690SPN0P16	16 way	16+2	3,466
E-SHC P 20	NSYN8690SPN0P20	20 way	20+2	3,957

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHC M WP 4	NSYN8690SPNWP04	4 way	4+2	4,777
E-SHC M WP 6	NSYN8690SPNWP06	6 way	6+2	5,157
E-SHC M WP 8	NSYN8690SPNWP08	8 way	8+2	5,652
E-SHC M WP 10	NSYN8690SPNWP10	10 way	10+2	5,953
E-SHC M WP 12	NSYN8690SPNWP12	12 way	12+2	6,500
E-SHC M WP 14	NSYN8690SPNWP14	14 way	14+2	6,592
E-SHC M WP 16	NSYN8690SPNWP16	16 way	16+2	7,204
E-SHC M WP 20	NSYN8690SPNWP20	20 way	20+2	7,708



Distribution Boards

Elegance Series

3



TPN DB - E-SHDB

Horizontal three phase distribution board provision for incomer 8 pole (MCB / Isolator / RCD) and single phase outgoing suitable for both surface & flush mounting.

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHDB WD 4	NSYN8690TPNWD04	4 way	8+12	2,679
E-SHDB WD 6	NSYN8690TPNWD06	6 way	8+18	3,303
E-SHDB WD 8	NSYN8690TPNWD08	8 way	8+24	3,888
E-SHDB WD 12	NSYN8690TPNWD12	12 way	8+36	5,706
E-SHDB WD 16	NSYN8690TPNWD16	16 way	8+48	7,034

IP 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHDB M 4	NSYN8690TPN0M04	4 way	8+12	3,443
E-SHDB M 6	NSYN8690TPN0M06	6 way	8+18	4,124
E-SHDB M 8	NSYN8690TPN0M08	8 way	8+24	4,941
E-SHDB M 12	NSYN8690TPN0M12	12 way	8+36	7,406
E-SHDB M 16	NSYN8690TPN0M16	16 way	8+48	9,051

IP 43 with Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHDB P 4	NSYN8690TPN0P04	4 way	8+12	4,223
E-SHDB P 6	NSYN8690TPN0P06	6 way	8+18	5,213
E-SHDB P 8	NSYN8690TPN0P08	8 way	8+24	6,194
E-SHDB P 12	NSYN8690TPN0P12	12 way	8+36	9,499
E-SHDB P 16	NSYN8690TPN0P16	16 way	8+48	11,399

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHDB M WP 4	NSYN8690TPNWP04	4 way	8+12	10,506
E-SHDB M WP 6	NSYN8690TPNWP06	6 way	8+18	12,645
E-SHDB M WP 8	NSYN8690TPNWP08	8 way	8+24	13,826
E-SHDB M WP 12	NSYN8690TPNWP12	12 way	8+36	19,488
E-SHDB M WP 16	NSYN8690TPNWP16	16 way	8+48	23,388

Plug & Socket DB - E-SGK

Plug socket boards for single phase and three phase applications up to 63A (supplied completely with plug and socket).

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SGK 10 SP	NSYN8690SGKSP10 ■	10A SP	1	1,338
E-SGK 20 SP	NSYN8690SGKSP20 ■	20A SP	1	1,437
E-SGK 20 TP	NSYN8690SGKTP20 ■	20A TP	3	2,650
E-SGK 30 TP	NSYN8690SGKTP30 ■	30A TP	3	3,142
E-SGK 20 DPR	NSYN8690SGKDP20 ■	20A DP RCBO	4	1,516
E-SGK 25 FPR	NSYN8690SGKFP25 ■	25A FP RCBO	6	2,645
E-SGK 60 FP	NSYN8690SGKFP60 ■	60A FP	4	12,351

■ Stock items

Distribution Boards

Elegance Series

8 Segment DB - E-S8SEG -MCB I/C

Eight segment Distribution Board with phase segregation and separation between incoming and outgoing with provision for 8P (MCB / Isolator / RCD) + 4P(ACCL Provision) as incomer with single phase outgoings with complete wire sets.



IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-S8SEG WD 4	NSYN8690S7SWD04	4 way	8+12+12	7,725
E-S8SEG WD 6	NSYN8690S7SWD06	6 way	8+12+18	8,422
E-S8SEG WD 8	NSYN8690S7SWD08	8 way	8+12+24	8,937
E-S8SEG WD 12	NSYN8690S7SWD12	12 way	8+12+36	10,288

IP43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-S8SEG M 4	NSYN8690S7S0M04	4 way	8+12+12	8,441
E-S8SEG M 6	NSYN8690S7S0M06	6 way	8+12+18	9,511
E-S8SEG M 8	NSYN8690S7S0M08	8 way	8+12+24	10,619
E-S8SEG M 12	NSYN8690S7S0M12	12 way	8+12+36	13,556

7 Segment DB - E-S7SEG T1 -MCCB I/C

Seven segment Distribution Board with phase segregation and separation between incoming and outgoing with provision for 4P MCCB up to 160A incomer and 4P as sub-incomers (MCB / Isolator / RCD) with single phase outgoings with complete wire sets & bus bars.



IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-S7SEG WD 4T1	NSYN8690S7SWDT14	4 way	T-max+12+12	11,051
E-S7SEG WD 6T1	NSYN8690S7SWDT16	6 way	T-max+12+18	12,594
E-S7SEG WD 8T1	NSYN8690S7SWDT18	8 way	T-max+12+24	14,609
E-S7SEG WD 12T1	NSYN8690S7SWDT112	12 way	T-max+12+36	16,799

IP43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-S7SEG M 4 T1	NSYN8690S7S0MT14	4 way	T-max+12+12	12,352
E-S7SEG M 6 T1	NSYN8690S7S0MT16	6 way	T-max+12+18	14,144
E-S7SEG M 8 T1	NSYN8690S7S0MT18	8 way	T-max+12+24	16,172
E-S7SEG M 12 T1	NSYN8690S7S0MT112	12 way	T-max+12+36	18,611

Blanking Plate

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
Blank PL	NSYN8690BLPLP00		1	17

Distribution Boards

Elegance Series

3



Per Phase Isolation DB -E-SHPPI

Horizontal per-phase Isolation Distribution Board with provision for 8 pole (MCB / Isolator / RCD) as incomer and Single phase as outgoings with separate neutral and earth bars for per phase Isolation.

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHPPI WD 6	NSYN8690PPIWD06	6 way	8+18	5,457
E-SHPPI WD 8	NSYN8690PPIWD08	8 way	8+24	6,442
E-SHPPI WD 12	NSYN8690PPIWD12	12 way	8+36	8,504
E-SHPPI WD 16	NSYN8690PPIWD16	16 way	8+48	10,082

IP 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHPPI M 6	NSYN8690PPIOM06	6 way	8+18	6,599
E-SHPPI M 8	NSYN8690PPIOM08	8 way	8+24	7,838
E-SHPPI M 12	NSYN8690PPIOM12	12 way	8+36	10,608
E-SHPPI M 16	NSYN8690PPIOM16	16 way	8+48	12,669

IP 43 Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHPPI P 6	NSYN8690PPIOP06	6 way	8+18	7,341
E-SHPPI P 8	NSYN8690PPIOP08	8 way	8+24	8,683
E-SHPPI P 12	NSYN8690PPIOP12	12 way	8+36	12,168
E-SHPPI P 16	NSYN8690PPIOP16	16 way	8+48	14,357

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SHPPI M WP 6	NSYN8690PPIWP06	6 way	8+18	14,130
E-SHPPI M WP 8	NSYN8690PPIWP08	8 way	8+24	15,615
E-SHPPI M WP 12	NSYN8690PPIWP12	12 way	8+36	21,257
E-SHPPI M WP 16	NSYN8690PPIWP16	16 way	8+48	25,270



Per Phase Isolation DB -E-SVDB

Tier type per-phase Isolation Distribution Board with provision for 8 pole (MCB / Isolator / RCD) incomer and provision for 2 pole (MCB / Isolator / RCD) as sub-incomers with single phase outgoings with separate neutral and earth bards for per phase Isolation.

IP 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVDB M 6	NSYN8690SVD0M06	6 way	8+6+18	7,370
E-SVDB M 8	NSYN8690SVD0M08	8 way	8+6+24	9,391
E-SVDB M 12	NSYN8690SVD0M12	12 way	8+6+36	10,993

IP 43 Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVDB P 6	NSYN8690SVD0P06	6 way	8+6+18	8,193
E-SVDB P 8	NSYN8690SVD0P08	8 way	8+6+24	10,425
E-SVDB P 12	NSYN8690SVD0P12	12 way	8+6+36	12,135

Distribution Boards

Elegance Series

Enclosure-E-SEN

Metal enclosures, universal mounting suitable for SP, DP, FP, 6 pole & 8 pole arrangement.

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SEN 1P	NSYN8690SENSPP1 ■	1P Enclosure	1	376
E-SEN 2P	NSYN8690SENSPP2 ■	2P Enclosure	2	551
E-SEN 4P	NSYN8690SENSPP4 ■	4P Enclosure	4	554
E-SEN 6P	NSYN8690SENSPP6 ■	6P Enclosure	6	772
E-SEN 8P	NSYN8690SENSPP8 ■	8P Enclosure	8	897

Busbar SP I/C & SP O/G

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
13Mod Insulated Busbars	NSYN8690BUSSP13	13	13	337
14Mod Insulated Busbars	NSYN8690BUSSP14	14	14	399

Vertical DB 8P I/C & SP/TP O/G -E-SVTDB

Vertical three phase Distribution Board with provision for 8 pole (MCB / Isolator / RCD) incoming with three phase and single phase (TP/SP) outgoing, complete with insulated busbar arrangement.

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB WD 4	NSYN8690VTPWD04	4 way	8+12	7,545
E-SVTDB WD 6	NSYN8690VTPWD06	6 way	8+18	8,422
E-SVTDB WD 8	NSYN8690VTPWD08	8 way	8+24	9,300
E-SVTDB WD 12	NSYN8690VTPWD12	12 way	8+36	13,303

IP 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB M 4	NSYN8690VTPOM04	4 way	8+12	8,242
E-SVTDB M 6	NSYN8690VTPOM06	6 way	8+18	9,363
E-SVTDB M 8	NSYN8690VTPOM08	8 way	8+24	10,483
E-SVTDB M 12	NSYN8690VTPOM12	12 way	8+36	13,904

IP 43 Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB P 4	NSYN8690VTPOP04	4 way	8+12	10,743
E-SVTDB P 6	NSYN8690VTPOP06	6 way	8+18	12,199
E-SVTDB P 8	NSYN8690VTPOP08	8 way	8+24	13,654
E-SVTDB P 12	NSYN8690VTPOP12	12 way	8+36	18,221

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB M WP 4	NSYN8690VTPWP04	4 way	8+12	16,853
E-SVTDB M WP 6	NSYN8690VTPWP06	6 way	8+18	18,563
E-SVTDB M WP 8	NSYN8690VTPWP08	8 way	8+24	20,273
E-SVTDB M WP 12	NSYN8690VTPWP12	12 way	8+36	27,014



Distribution Boards

Elegance Series

3



Vertical DB 160A MCCB I/C & SP/TP MCB O/G -E-SVTDB T1

Vertical three phase Distribution Board with provision for 4 pole MCCB (T-max/T1) upto 160A as incomer with three phase and single

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB WD 4 T1	NSYN8690VTPWDT14	4 way	T-max+12	8,464
E-SVTDB WD 6 T1	NSYN8690VTPWDT16	6 way	T-max+18	9,858
E-SVTDB WD 8 T1	NSYN8690VTPWDT18	8 way	T-max+24	10,102
E-SVTDB WD 12 T1	NSYN8690VTPWDT112	12 way	T-max+36	15,153

IP43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB M 4 T1	NSYN8690VTP0MT14	4 way	T-max+12	9,888
E-SVTDB M 6 T1	NSYN8690VTP0MT16	6 way	T-max+18	11,155
E-SVTDB M 8 T1	NSYN8690VTP0MT18	8 way	T-max+24	12,421
E-SVTDB M 12 T1	NSYN8690VTP0MT112	12 way	T-max+36	16,532

IP54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB M WP 4T1	NSYN8690VTPWPT14	4 way	T-max+12	19,394
E-SVTDB M WP 6T1	NSYN8690VTPWPT16	6 way	T-max+18	21,354
E-SVTDB M WP 8T1	NSYN8690VTPWPT18	8 way	T-max+24	23,315
E-SVTDB M WP 12T1	NSYN8690VTPWPT112	12 way	T-max+36	31,307

Vertical DB 250A MCCB I/C & SP/TP MCB O/G -E-SVTDB T3

Vertical three phase Distribution Board with provision for 4 pole MCCB (T-max/T3) upto 250A as incomer with three phase and single phase (TP/SP) outgoing, complete with insulated busbar arrangement.

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB WD 4 T3	NSYN8690VTPWDT34	4 way	250A T-max+12	15,649
E-SVTDB WD 6 T3	NSYN8690VTPWDT36	6 way	250A T-max+18	17,177
E-SVTDB WD 8 T3	NSYN8690VTPWDT38	8 way	250A T-max+24	17,410
E-SVTDB WD 12 T3	NSYN8690VTPWDT312	12 way	250A T-max+36	19,233

IP 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB M 4 T3	NSYN8690VTP0MT34	4 way	250A T-max+12	18,216
E-SVTDB M 6 T3	NSYN8690VTP0MT36	6 way	250A T-max+18	19,795
E-SVTDB M 8 T3	NSYN8690VTP0MT38	8 way	250A T-max+24	21,373
E-SVTDB M 12 T3	NSYN8690VTP0MT312	12 way	250A T-max+36	22,527

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVTDB M WP 4 T3	NSYN8690VTPWPT34	4 way	250A T-max+12	27,610
E-SVTDB M WP 6 T3	NSYN8690VTPWPT36	6 way	250A T-max+18	29,395
E-SVTDB M WP 8 T3	NSYN8690VTPWPT38	8 way	250A T-max+24	31,180
E-SVTDB M WP 12 T3	NSYN8690VTPWPT312	12 way	250A T-max+36	36,510



Distribution Boards

Elegance Series

Phase Selector DB -E- SPVS

Phase selector DBs-SPVS with inbuilt 3nos piano switches and 3nos phase selector switch of 63A



IP 30

Product Description	Product Code	No of Ways	No of Modules	MRP(INR)
E-SPVS WD 4(63A)	NSYN8690SPV4WD63	4 way	8+12	10,429
E-SPVS WD 6(63A)	NSYN8690SPV6WD63	6 way	8+18	11,093
E-SPVS WD 8(63A)	NSYN8690SPV8WD63	8 way	8+24	12,291
E-SPVS WD 12(63A)	NSYN8690SPV12WD63	12 way	8+36	13,493
E-SPVS WD 4(40A)	NSYN8690SPV4WD40	4 way	8+12	9,447
E-SPVS WD 6(40A)	NSYN8690SPV6WD40	6 way	8+18	10,046
E-SPVS WD 8(40A)	NSYN8690SPV8WD40	8 way	8+24	11,082
E-SPVS WD 12(40A)	NSYN8690SPV12WD40	12 way	8+36	12,275



1P 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	MRP(INR)
E-SPVS M 4(63A)	NSYN8690SPV4M63	4 way	8+12	11,841
E-SPVS M 6(63A)	NSYN8690SPV6M63	6 way	8+18	12,029
E-SPVS M 8(63A)	NSYN8690SPV8M63	8 way	8+24	12,890
E-SPVS M 12(63A)	NSYN8690SPV12M63	12 way	8+36	14,442
E-SPVS M 4(40A)	NSYN8690SPV4M40	4 way	8+12	10,727
E-SPVS M 6(40A)	NSYN8690SPV6M40	6 way	8+18	10,795
E-SPVS M 8(40A)	NSYN8690SPV8M40	8 way	8+24	11,781
E-SPVS M 12(40A)	NSYN8690SPV12M40	12 way	8+36	13,202

Flexy Tier DB - E-SVFL

Total flexibility as per site needs - configuration as per your choice of incomer & outgoings. Supply bus bars needs to be selected.



1P 43 with Metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVFL M 132	NSYN8690SVFM213	2 row of 13mod	26	4,204
E-SVFL M 133	NSYN8690SVFM313	3 row of 13mod	39	4,949
E-SVFL M 134	NSYN8690SVFM413	4 row of 13mod	52	5,469
E-SVFL M 142	NSYN8690SVFM214	2 row of 14mod	28	5,734
E-SVFL M 143	NSYN8690SVFM314	3 row of 14mod	42	6,414
E-SVFL M 144	NSYN8690SVFM414	4 row of 14mod	56	6,738

1P43 Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
E-SVFL P 132	NSYN8690SVFP213	2 row of 13mod	26	4,293
E-SVFL P 133	NSYN8690SVFP313	3 row of 13mod	39	5,054
E-SVFL P 134	NSYN8690SVFP413	4 row of 13mod	52	5,696
E-SVFL P 142	NSYN8690SVFP214	2 row of 14mod	28	6,467
E-SVFL P 143	NSYN8690SVFP314	3 row of 14mod	42	7,186
E-SVFL P 144	NSYN8690SVFP414	4 row of 14mod	56	7,564

Distribution Boards

Elegance Series

Cable End Box

Product Description	Product Code	No of Ways	M.R.P.(₹)
E-SHC WD 4/CEB	NSYN8690SPNWCE4	For 4 way SPN IP30 DB	448
E-SHC WD 6/CEB	NSYN8690SPNWCE6	For 6 way SPN IP30 DB	496
E-SHC WD 8/CEB	NSYN8690SPNWCE8	For 8 way SPN IP30 DB	522
E-SHC WD 10/CEB	NSYN8690SPNWCE10	For 10 way SPN IP30 DB	580
E-SHC WD 12/CEB	NSYN8690SPNWCE12	For 12 way SPN IP30 DB	637
E-SHC WD 14/CEB	NSYN8690SPNWCE14	For 14 way SPN IP30 DB	707
E-SHC WD 16/CEB	NSYN8690SPNWCE16	For 16 way SPN IP30 DB	808
E-SHC WD 20/CEB	NSYN8690SPNWCE20	For 20 way SPN IP30 DB	898
E-SHC M 4/CEB	NSYN8690SPNWCE4	For 4 way SPN IP 43 DB	522
E-SHC M 6/CEB	NSYN8690SPNWCE6	For 6 way SPN IP43 DB	568
E-SHC M 8/CEB	NSYN8690SPNWCE8	For 8 way SPN IP43 DB	602
E-SHC M 10/CEB	NSYN8690SPNWCE10	For 10 way SPN IP43 DB	637
E-SHC M 12/CEB	NSYN8690SPNWCE12	For 12 way SPN IP43 DB	714
E-SHC M 14/CEB	NSYN8690SPNWCE14	For 14 way SPN IP43 DB	774
E-SHC M 16/CEB	NSYN8690SPNWCE16	For 16 way SPN IP43 DB	944
E-SHC M 20/CEB	NSYN8690SPNWCE20	For 20 way TPN IP43 DB	1,186
E-SHDB WD 4/CEB	NSYN8690TPNWCE4	For 4 way TPN IP30 DB	774
E-SHDB WD 6/CEB	NSYN8690TPNWCE6	For 6 way TPN IP30 DB	808
E-SHDB WD 8/CEB	NSYN8690TPNWCE8	For 8 way TPN IP30 DB	992
E-SHDB WD 12/CEB	NSYN8690TPNWCE12	For 12 way TPN IP30 DB	1,488
E-SHDB WD 16/CEB	NSYN8690TPNWCE16	For 16 way TPN IP30 DB	1,937
E-SHDB M 4/CEB	NSYN8690TPNMCE4	For 4 way TPN IP43 DB	900
E-SHDB M 6/CEB	NSYN8690TPNMCE6	For 6 way TPN IP43 DB	944
E-SHDB M 8/CEB	NSYN8690TPNMCE8	For 8 way TPN IP43 DB	1,178
E-SHDB M 12/CEB	NSYN8690TPNMCE12	For 12 way TPN IP43 DB	1,488
E-SHDB M 16/CEB	NSYN8690TPNMCE16	For 16 way TPN IP43 DB	1,970
E-SHPPI WD 6/CEB	NSYN8690PPIWCE6	For 6way PPI IP30 DB	921
E-SHPPI WD 8/CEB	NSYN8690PPIWCE8	For 8way PPI IP30 DB	1,178
E-SHPPI WD 12/CEB	NSYN8690PPIWCE12	For 12way PPI IP30 DB	1,612
E-SHPPI WD 16/CEB	NSYN8690PPIWCE16	For 16way PPI IP30 DB	1,937
E-SHPPI M 6/CEB	NSYN8690PPIMCE6	For 6way PPI IP43 DB	1,032
E-SHPPI M 8/CEB	NSYN8690PPIMCE8	For 8way PPI IP43 DB	1,426
E-SHPPI M 12/CEB	NSYN8690PPIMCE12	For 12way PPI IP43 DB	2,046
E-SHPPI M 16/CEB	NSYN8690PPIMCE16	For 16way PPI IP43 DB	2,218
E-SVDB M 6/CEB	NSYN8690SVDMCE6	For 6way SVDB IP43 DB	945
E-SVDB M 8/CEB	NSYN8690SVDMCE8	For 8way SVDB IP43 DB	1,119
E-SVDB M 12/CEB	NSYN8690SVDMCE12	For 12way SVDB IP43 DB	1,290
E-SVFL 13M/CEB	NSYN8690SVFCE13	For all SVFL 13Mod DBs	1,178
E-SVFL 14M/CEB	NSYN8690SVFCE14	For all SVFL 14Mod DBs	1,426
E-SVTDB WD /CEB	NSYN8690VTPWCE1	For all SVTDBs(IP30DBs)	1,922
E-SVTDB M/CEB	NSYN8690VTPMCE1	For all SVTDBs(IP43DBs)	2,167
E-SVTDB WD T1/CEB	NSYN8690VTPWCET1	For all SVTDB T1(IP30 DBs)	2,701
E-SVTDB WD T3/CEB	NSYN8690VTPWCET3	For all SVTDB T3 DBs(IP30 DBs)	3,099
E-SVTDB M T1/CEB	NSYN8690VTPMCET1	For all SVTDB T1 DBs(IP43DBs)	2,727
E-SVTDB MT3/CEB	NSYN8690VTPMCET3	For all SVTDB T3 DBs(IP43DBs)	3,223

Distribution Boards

Classic Series



SPN DB - SHC

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHC WD 4	1SYN869006R0001	4 way	4+2	998
SHC WD 6	1SYN869007R0001	6 way	6+2	1,092
SHC WD 8	1SYN869008R0001	8 way	8+2	1,222
SHC WD 10	1SYN869006R0010	10 way	10+2	1,280
SHC WD 12	1SYN869009R0001	12 way	12+2	1,556
SHC WD 14	1SYN869010R0001	14 way	14+2	1,589
SHC WD 16	1SYN869006R0016	16 way	16+2	2,009
SHC WD 20	1SYN869006R0020	20 way	20+2	2,261

IP 43 with metal Door

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHC M 4	1SYN869001R0001	4 way	4+2	1,398
SHC M 6	1SYN869002R0001	6 way	6+2	1,545
SHC M 8	1SYN869003R0001	8 way	8+2	1,821
SHC M 10	1SYN869004R0101	10 way	10+2	1,851
SHC M 12	1SYN869004R0001	12 way	12+2	2,108
SHC M 14	1SYN869005R0001	14 way	14+2	2,288
SHC M 16	1SYN869001R0016	16 way	16+2	2,731
SHC M 20	1SYN869001R0020	20 way	20+2	3,089

Classic Series Distribution Boards are available in Ivory colors (Color code - RAL9010)

Distribution Boards

Classic Series

SPN DB - SHC

IP 43 Metal Door with Acrylic

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHC P 4	1SYN869011R0041	4 way	4+2	1,431
SHC P 6	1SYN869011R0042	6 way	6+2	1,746
SHC P 8	1SYN869013R0001	8 way	8+2	1,908
SHC P 10	1SYN869013R0002	10 way	10+2	2,112
SHC P 12	1SYN869015R0012	12 way	12+2	2,385
SHC P 14	1SYN869015R0001	14 way	14+2	2,619
SHC P 16	1SYN869011R0161	16 way	16+2	3,082
SHC P 20	1SYN869011R0201	20 way	20+2	3,519

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHC M WP 4	1SYN869002R0004	4 way	4+2	4,170
SHC M WP 6	1SYN869004R0020	6 way	6+2	4,492
SHC M WP 8	1SYN869002R0008	8 way	8+2	4,933
SHC M WP 10	1SYN869004R0021	10 way	10+2	5,181
SHC M WP 12	1SYN869002R0012	12 way	12+2	5,674
SHC M WP 14	1SYN869004R0022	14 way	14+2	5,743
SHC M WP 16	1SYN869004R0023	16 way	16+2	6,288
SHC M WP 20	1SYN869002R0013	20 way	20+2	6,728

TPN DB - SHDB

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHDB WD 4	1SYN869020R0001	4 way	8+12	2,391
SHDB WD 6	1SYN869021R0001	6 way	8+18	2,990
SHDB WD 8	1SYN869022R0001	8 way	8+24	3,547
SHDB WD 12	1SYN869023R0001	12 way	8+36	5,185
SHDB WD 16	1SYN869004R0024	16 way	8+48	6,324

IP 43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHDB M 4	1SYN869016R0001	4 way	8+12	3146
SHDB M 6	1SYN869017R0001	6 way	8+18	3863
SHDB M 8	1SYN869018R0001	8 way	8+24	4637
SHDB M 12	1SYN869019R0001	12 way	8+36	6921
SHDB M 16	1SYN869004R0025	16 way	8+48	8481

IP 43 METAL DOOR WITH ACRYLIC

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHDB P 4	1SYN869024R0001	4 way	8+12	3,794
SHDB P 6	1SYN869025R0001	6 way	8+18	4,679
SHDB P 8	1SYN869026R0001	8 way	8+24	5,551
SHDB P 12	1SYN869027R0006	12 way	8+36	8,473
SHDB P 16	1SYN869004R0026	16 way	8+48	10,160

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHDB M WP 4	1SYN869001R0004	4 way	8+12	9,194
SHDB M WP 6	1SYN869001R0006	6 way	8+18	11,068
SHDB M WP 8	1SYN869001R0008	8 way	8+24	12,115
SHDB M WP 12	1SYN869004R0027	12 way	8+36	17,096
SHDB M WP 16	1SYN869004R0028	16 way	8+48	20,506

Distribution Boards

Classic Series

BUSBAR SP I/C & SP O/G, BLANKING PLATE

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
13 Module Pin type Busbars	1SYN360025P0001	13	13	315
14 Module Pin type Busbars	1SYN869103R0013	14	14	373
Blank PL	1SYN869004R0059		1	15

Plug & Socket DB - SGK

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SGK 10 SP	1SYN869048R0001 ■	10A SP	1	1,244
SGK 20 SP	1SYN869043R0001 ■	20A SP	1	1,300
SGK 20 TP	1SYN869049R0001 ■	20A TP	3	2,458
SGK 30 TP	1SYN869044R0001 ■	30A TP	3	2,924
SGK 20 DPR	1SYN869051R0001 ■	20A DP RCBO	4	1,406
SGK 25 FPR	1SYN869052R0001 ■	25A FP RCBO	6	2,462
SGK 60 FP	1SYN869053R0001 ■	60A FP	4	11,441

ENCLOSURE-SEN

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SEN 1P	1SYN869054R0001 ■	1P Enclosure	1	334
SEN 2P	1SYN869055R0001 ■	2P Enclosure	2	490
SEN 4P	1SYN869056R0001 ■	4P Enclosure	4	493
SEN 6P	1SYN869057R0001 ■	6P Enclosure	6	687
SEN 8P	1SYN869004R0029 ■	8P Enclosure	8	797

7 SEGMENT DB - S7SEG

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
S7SEG WD 4	1SYN869062R0001	4 way	8+12+12	7,269
S7SEG WD 6	1SYN869063R0001	6 way	8+12+18	7,989
S7SEG WD 8	1SYN869064R0001	8 way	8+12+24	8,477
S7SEG WD 12	1SYN869065R0001	12 way	8+12+36	9,853

IP43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
S7SEG M 4	1SYN869058R0001	4 way	8+12+12	7,768
S7SEG M 6	1SYN869059R0001	6 way	8+12+18	8,765
S7SEG M 8	1SYN869060R0001	8 way	8+12+24	9,750
S7SEG M 12	1SYN869061R0001	12 way	8+12+36	12,365

7 SEGMENT DB MCCB I/C DB - S7SEG T1

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
S7SEG WD 4T1	1SYN869004R0033	4 way	T-max+12+12	10,017
S7SEG WD 6T1	1SYN869004R0034	6 way	T-max+12+18	11,416
S7SEG WD 8T1	1SYN869004R0035	8 way	T-max+12+24	13,242
S7SEG WD 12T1	1SYN869004R0036	12 way	T-max+12+36	15,228

IP43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
S7SEG M 4 T1	1SYN869004R0037	4 way	T-max+12+12	11,196
S7SEG M 6 T1	1SYN869004R0038	6 way	T-max+12+18	12,821
S7SEG M 8 T1	1SYN869004R0039	8 way	T-max+12+24	14,659
S7SEG M 12 T1	1SYN869004R0040	12 way	T-max+12+36	16,869

■ Stock items

Distribution Boards

Classic Series

PER PHASE ISOLATION DB - SHPPI IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHPPI WD 6	1SYN8690108R0061	6 way	8+18	4,853
SHPPI WD 8	1SYN8690108R0081	8 way	8+24	5,729
SHPPI WD 12	1SYN869004R0045	12 way	8+36	7,563
SHPPI WD 16	1SYN869004R0046	16 way	8+48	8,966

IP 43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHPPI M 6	1SYN8690100R0061	6 way	8+18	5,869
SHPPI M 8	1SYN8690100R0081	8 way	8+24	6,971
SHPPI M 12	1SYN8690100R0121	12 way	8+36	9,434
SHPPI M 16	1SYN8690100R0161	16 way	8+48	11,267

IP 43 METAL DOOR WITH ACRYLIC

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHPPI P 6	1SYN8690101R0061	6 way	8+18	6,529
SHPPI P 8	1SYN8690101R0081	8 way	8+24	7,722
SHPPI P 12	1SYN8690101R0121	12 way	8+36	10,821
SHPPI P 16	1SYN8690101R0161	16 way	8+48	12,768

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SHPPI M WP 6	1SYN869004R0047	6 way	8+18	12,567
SHPPI M WP 8	1SYN869004R0048	8 way	8+24	13,887
SHPPI M WP 12	1SYN869004R0049	12 way	8+36	18,905
SHPPI M WP 16	1SYN869004R0050	16 way	8+48	22,473

PER PHASE ISOLATION DB -SVDB

IP 43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVDB M 6	1SYN869028R0001	6 way	8+6+18	6,555
SVDB M 8	1SYN869029R0001	8 way	8+6+24	8,352
SVDB M 12	1SYN869030R0001	12 way	8+6+36	9,777

IP 43 METAL DOOR WITH ACRYLIC

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVDB P 6	1SYN869004R0030	6 way	8+6+18	7,286
SVDB P 8	1SYN869004R0031	8 way	8+6+24	9,272
SVDB P 12	1SYN869004R0032	12 way	8+6+36	107,92

VERTICAL DB 8P I/C &SP/TP O/G -SVTDB

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB WD 4	1SYN869035R0001	4 way	8+12	6,750
SVTDB WD 6	1SYN869036R0001	6 way	8+18	7,426
SVTDB WD 8	1SYN869037R0001	8 way	8+24	8,320
SVTDB WD 12	1SYN869038R0001	12 way	8+36	12,010

IP 43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB M 4	1SYN869031R0001	4 way	8+12	7,666
SVTDB M 6	1SYN869032R0001	6 way	8+18	9,063
SVTDB M 8	1SYN869033R0001	8 way	8+24	9,596
SVTDB M 12	1SYN869034R0001	12 way	8+36	12,876

Distribution Boards

Classic Series

IP 43 METAL DOOR WITH ACRYLIC

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB P 4	1SYN869039R0001	4 way	8+12	9,613
SVTDB P 6	1SYN869040R0001	6 way	8+18	11,115
SVTDB P 8	1SYN869041R0001	8 way	8+24	12,216
SVTDB P 12	1SYN869042R0001	12 way	8+36	16,302

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB M WP 4	1SYN869004R0041	4 way	8+12	14,941
SVTDB M WP 6	1SYN869004R0015	6 way	8+18	17,227
SVTDB M WP 8	1SYN869004R0043	8 way	8+24	17,976
SVTDB M WP 12	1SYN869004R0044	12 way	8+36	23,949

VERTICAL DB 160A MCCB I/C & SP/TP MCB O/G -SVTDB T1

IP30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB WD 4 T1	1SYN869070R0001	4 way	T-max+12	7,672
SVTDB WD 6 T1	1SYN869071R0001	6 way	T-max+18	8,935
SVTDB WD 8 T1	1SYN869072R0001	8 way	T-max+24	9,157
SVTDB WD 12 T1	1SYN869073R0001	12 way	T-max+36	13,736

IP43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB M 4 T1	1SYN869066R0001	4 way	T-max+12	8,828
SVTDB M 6 T1	1SYN869067R0001	6 way	T-max+18	10,395
SVTDB M 8 T1	1SYN869068R0001	8 way	T-max+24	11,219
SVTDB M 12 T1	1SYN869069R0001	12 way	T-max+36	14,958

IP54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB M WP 4T1	1SYN869004R00060	4 way	T-max+12	17,027
SVTDB M WP 6T1	1SYN869004R00061	6 way	T-max+18	19,404
SVTDB M WP 8T1	1SYN869004R00062	8 way	T-max+24	20,470
SVTDB M WP 12T1	1SYN869004R00063	12 way	T-max+36	27,486

VERTICAL DB 250A MCCB I/C & SP/TP MCB O/G -SVTDB T3

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB WD 4 T3	1SYN869070R1004	4 way	250A T-max+12	13,787
SVTDB WD 6 T3	1SYN869070R0003	6 way	250A T-max+18	15,134
SVTDB WD 8 T3	1SYN869070R0004	8 way	250A T-max+24	15,338
SVTDB WD 12 T3	1SYN869070R0002	12 way	250A T-max+36	16,945

IP 43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB M 4 T3	1SYN869081R0003	4 way	250A T-max+12	16,675
SVTDB M 6 T3	1SYN869081R0004	6 way	250A T-max+18	18,305
SVTDB M 8 T3	1SYN869081R0005	8 way	250A T-max+24	19,626
SVTDB M 12 T3	1SYN869081R0012	12 way	250A T-max+36	20,496

IP 54

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVTDB M WP 4 T3	1SYN869005R00060	4 way	250A T-max+12	23,577
SVTDB M WP 6 T3	1SYN869005R00061	6 way	250A T-max+18	25,930
SVTDB M WP 8 T3	1SYN869005R00062	8 way	250A T-max+24	27,113
SVTDB M WP 12 T3	1SYN869005R00063	12 way	250A T-max+36	31,180

Distribution Boards

Classic Series

PHASE SELECTOR DB - SPVS

IP 30

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SPVS WD 4(63A)	1SYN869100SPWD1	4 way	8+12	9,606
SPVS WD 6(63A)	1SYN869100SPWD2	6 way	8+18	10,217
SPVS WD 8(63A)	1SYN869100SPWD3	8 way	8+24	11,270
SPVS WD 12(63A)	1SYN869100SPWD4	12 way	8+36	12,484
SPVS WD 4(40A)	1SYN869100SPWD5	4 way	8+12	8,646
SPVS WD 6(40A)	1SYN869100SPWD6	6 way	8+18	9,194
SPVS WD 8(40A)	1SYN869100SPWD7	8 way	8+24	10,143
SPVS WD 12(40A)	1SYN869100SPWD8	12 way	8+36	11,235

1P43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SPVS M 4(63A)	1SYN869100R0001	4 way	8+12	10,909
SPVS M 6(63A)	1SYN869100R0002	6 way	8+18	10,978
SPVS M 8(63A)	1SYN869100R0003	8 way	8+24	11,981
SPVS M 12(63A)	1SYN869100R0004	12 way	8+36	13,425
SPVS M 4(40A)	1SYN869100SP004	4 way	8+12	9,818
SPVS M 6(40A)	1SYN869100SP002	6 way	8+18	9,880
SPVS M 8(40A)	1SYN869100SP003	8 way	8+24	10,783
SPVS M 12(40A)	1SYN869100SP012	12 way	8+36	12,083

FLEXY TIER DB - SVFL

1P43 WITH METAL DOOR

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVFL M 132	1SYN869004R0051	2 row of 13mod	26	3,839
SVFL M 133	1SYN869103R0001	3 row of 13mod	39	4,536
SVFL M 134	1SYN869103R0002	4 row of 13mod	52	5,030
SVFL M 142	1SYN869004R0052	2 row of 14mod	28	5,198
SVFL M 143	1SYN869004R0053	3 row of 14mod	42	5,814
SVFL M 144	1SYN869103R0012	4 row of 14mod	56	6,108

1P43 METAL DOOR WITH ACRYLIC

Product Description	Product Code	No of Ways	No of Modules	M.R.P.(₹)
SVFL P 132	1SYN869004R0054	2 row of 13mod	26	3,892
SVFL P 133	1SYN869105R0001	3 row of 13mod	39	4,581
SVFL P 134	1SYN869105R0002	4 row of 13mod	52	5,163
SVFL P 142	1SYN869004R0055	2 row of 14mod	28	5,862
SVFL P 143	1SYN869004R0056	3 row of 14mod	42	6,513
SVFL P 144	1SYN869004R0057	4 row of 14mod	56	6,856

Distribution Boards

Classic Series

Cable End Box

Product Description	Product Code	No of Ways	M.R.P.(₹)
SHC WD 4/CEB	1SYN869004R0064	For 4 way SPN IP30 DB	402
SHC WD 6/CEB	1SYN869004R0065	For 6 way SPN IP30 DB	445
SHC WD 8/CEB	1SYN869004R0066	For 8 way SPN IP30 DB	469
SHC WD 10/CEB	1SYN869004R0067	For 10 way SPN IP30 DB	521
SHC WD 12/CEB	1SYN869004R0068	For 12 way SPN IP30 DB	571
SHC WD 14/CEB	1SYN869004RCE71	For 14 way SPN IP30 DB	635
SHC WD 16/CEB	1SYN869004R0070	For 16 way SPN IP30 DB	726
SHC WD 20/CEB	1SYN869004R0071	For 20 way SPN IP30 DB	806
SHC M 4/CEB	1SYN869103R0014	For 4 way SPN IP 43 DB	469
SHC M 6/CEB	1SYN869103R0015	For 6 way SPN IP43 DB	510
SHC M 8/CEB	1SYN869004R0082	For 8 way SPN IP43 DB	541
SHC M 10/CEB	1SYN869004R0083	For 10 way SPN IP43 DB	571
SHC M 12/CEB	1SYN869004R0084	For 12 way SPN IP43 DB	641
SHC M 14/CEB	1SYN869004R0085	For 14 way SPN IP43 DB	695
SHC M 16/CEB	1SYN869004R0086	For 16 way SPN IP43 DB	847
SHC M 20/CEB	1SYN869004R0087	For 20 way TPN IP43 DB	1,065
SHDB WD 4/CEB	1SYN869004R0072	For 4 way TPN IP30 DB	695
SHDB WD 6/CEB	1SYN869004R0073	For 6 way TPN IP30 DB	726
SHDB WD 8/CEB	1SYN869004R0074	For 8 way TPN IP30 DB	890
SHDB WD 12/CEB	1SYN869004R0075	For 12 way TPN IP30 DB	1,336
SHDB WD 16/CEB	1SYN869004R0076	For 16 way TPN IP30 DB	1,739
SHDB M 4/CEB	1SYN869004R0088	For 4 way TPN IP43 DB	808
SHDB M 6/CEB	1SYN869004R0089	For 6 way TPN IP43 DB	847
SHDB M 8/CEB	1SYN869004R0090	For 8 way TPN IP43 DB	1,057
SHDB M 12/CEB	1SYN869004R0091	For 12 way TPN IP43 DB	1,336
SHDB M 16/CEB	1SYN869004R0092	For 16 way TPN IP43 DB	1,769
SHPPI WD 6/CEB	1SYN869004R0077	For 6way PPI IP30 DB	827
SHPPI WD 8/CEB	1SYN869004R0078	For 8way PPI IP30 DB	1,057
SHPPI WD 12/CEB	1SYN869004R0079	For 12way PPI IP30 DB	1,447
SHPPI WD 16/CEB	1SYN869004R0080	For 16way PPI IP30 DB	1,739
SHPPI M 6/CEB	1SYN869004R0093	For 6way PPI IP43 DB	926
SHPPI M 8/CEB	1SYN869004R0094	For 8way PPI IP43 DB	1,280
SHPPI M 12/CEB	1SYN869004R0095	For 12way PPI IP43 DB	1,836
SHPPI M 16/CEB	1SYN869004R0096	For 16way PPI IP43 DB	1,991
SVDB M 6/CEB	1SYN869004R0097	For 6way SVDB IP43 DB	848
SVDB M 8/CEB	1SYN869004R0098	For 8way SVDB IP43 DB	1,005
SVDB M 12/CEB	1SYN869004R0099	For 12way SVDB IP43 DB	1,158
SVFL 13M/CEB	1SYN869004R0103	For all SVFL 13Mod DBs	1,057
SVFL 14M/CEB	1SYN869004R0104	For all SVFL 14Mod DBs	1,280
SVTDB WD /CEB	1SYN86900WD0104	For all SVTDBs(IP30DBs)	1,725
SVTDB M/CEB	1SYN869004R0100	For all SVTDBs(IP43DBs)	1,945
SVTDB WD T1/CEB	1SYN869004R0081	For all SVTDB T1 (IP30 DBs)	2,425
SVTDB WD T3/CEB	1SYN86900WD0304	For all SVTDB T3 DBs(IP30 DBs)	2,783
SVTDB M T1/CEB	1SYN869004R0102	For all SVTDB T1 DBs(IP43DBs)	2,449
SVTDB MT3/CEB	1SYN869004R1001	For all SVTDB T3 DBs(IP43DBs)	2,894

Distribution Boards

Gemini Switchboard

ABB SACE's Gemini range is revolutionizing the market of low voltage electric insulating switchboards. The reason for this is that it is the first switchboard made in thermoplastic material, to which the co-injection molding technique gives the same mechanical characteristics as polyester. This means that it is extremely sturdy, with its rigid covering and expanded

internal core. Moreover, it contains no fiber glass, a material that with time rises to the surface, jeopardizing the functioning and safety of switchboards made in polyester with which it is usually mixed. Available in 6 different sizes with transparent or opaque door, the Gemini switchboards are suitable for installation in any application context.

3



Compliance with Standard	:	IEC60670, EN 50298, 60439-1, 62208, 61439 – 1 & 2
Rated Service Voltage	:	1000V AC
Degree of Protection	:	IP 30 open door / IP66 closed door

* Details available on request

Distribution Boards

Mirage

The Mirage type tested Sub-Main Distribution Boards have been designed for easy handling and quick, simple installation. These boards guarantees the highest level of

safety and functionality combined with quality of production. Removable top and bottom gland plates are provided for ease of installation and cabling.



Standard	:	IEC BS EN 61439 – 1 & 2
Max. Load	:	250 / 400 / 630 / 800 Amp
Type	:	Tmax & Formula
Max. Voltage	:	415V AC , 50 / 60 Hz
Degree of Protection	:	IP 42 (IP 20 for PAN assembly)
Range	:	4, 6, 8, 12 & 16 ways

Distribution Boards

Mirage DB with Tmax MCCB

Mirage 250

Incoming Tmax T3 250A & outgoing Tmax T1 160A

Product Code	No of Ways	No. of Poles
1SKS202242C3310	2 way	TP / SP
1SKS204242C3310	4 way	TP / SP
1SKS206242C3310	6 way	TP / SP
1SKS208242C3310	8 way	TP / SP
1SKS212242C3310	12 way	TP / SP
1SKS216242C3310	16 way	TP / SP

Mirage 400

Incoming Tmax T5 400A & outgoing Tmax T1 160A

Product Code	No of Ways	No. of Poles
1SKS404242C3319	4 way	TP / SP
1SKS406242C3319	6 way	TP / SP
1SKS408242C3319	8 way	TP / SP
1SKS412242C3319	12 way	TP / SP
1SKS416242C3319	16 way	TP / SP

Mirage 630

Incoming Tmax T5 630A & outgoing Tmax T1 160A

Product Code	No of Ways	No. of Poles
1SKS604242C3319	4 way	TP / SP
1SKS606242C3319	6 way	TP / SP
1SKS608242C3319	8 way	TP / SP
1SKS612242C3319	12 way	TP / SP
1SKS616242C3319	16 way	TP / SP

Mirage 800

Incoming Tmax T6 800A & outgoing Tmax T1 160A

Product Code	No of Ways	No. of Poles
1SKS804242C3311	4 way	TP / SP
1SKS806242C3311	6 way	TP / SP
1SKS808242C3311	8 way	TP / SP
1SKS812242C3311	12 way	TP / SP
1SKS816242C3311	16 way	TP / SP

For other ranges refer detailed catalogue (Mirage Panel Boards)

Common Neutral link is fixed in each panel board

•Price against Request

Distribution Boards

Mirage DB with Formula MCCB

Mirage 250

Incoming Tmax T3 250A & outgoing Formula A1 125A

Product Code	No of Ways	No. of Poles
1SKS202294C3310	2 way	TP / SP
1SKS204294C3310	4 way	TP / SP
1SKS206294C3310	6 way	TP / SP
1SKS208294C3310	8 way	TP / SP
1SKS212294C3310	12 way	TP / SP
1SKS216294C3310	16 way	TP / SP

Mirage 400

Incoming Tmax T5 400A & outgoing Formula A1 125A

Product Code	No of Ways	No. of Poles
1SKS404294C3310	4 way	TP / SP
1SKS406294C3310	6 way	TP / SP
1SKS408294C3310	8 way	TP / SP
1SKS412294C3310	12 way	TP / SP
1SKS416294C3310	16 way	TP / SP

Mirage 630

Incoming Tmax T5 630A & outgoing Formula A1 125A

Product Code	No of Ways	No. of Poles
1SKS604294C3310	4 way	TP / SP
1SKS606294C3310	6 way	TP / SP
1SKS608294C3310	8 way	TP / SP
1SKS612294C3310	12 way	TP / SP
1SKS616294C3310	16 way	TP / SP

For other ranges refer detailed catalogue (Mirage Panel Boards)

Common Neutral link is fixed in each panel board

▪Price against Request

Low Voltage Products

Wiring accessories

Wiring accessories

Wiring accessories - Cheiron	179
Wiring accessories - Snleo	181
Wiring accessories - Industrial plugs and sockets	184

Wiring accessories

Cheiron

Switch modules

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
6A 1 way switch	1M	20	CHSW0610	120
6A 2 way switch	1M	20	CHSW0620	145
6A Bell push	1M	20	CHSW06B0	172
6A 1 way switch with LED	1M	20	CHSW061L	160
6A Bell push with LED	1M	20	CHSW06BL	210
16A 1 way switch	1M	20	CHSW1610	190
16A 2 way switch	1M	20	CHSW1620	220
16A 1 way switch with LED	1M	20	CHSW161L	215
6A 1 way Mega switch with LED	2M	10	CHSW061M	240
6A 2 way Mega switch with LED	2M	10	CHSW062M	260
6A Mega Bell push with LED	2M	10	CHSW06BM	260
16A 1 way Mega switch with LED	2M	10	CHSW161M	280
16A 2 way Mega switch with LED	2M	10	CHSW162M	305
32A 1 way DP switch with LED	2M	10	CHSW321M	480
32A 2 way DP switch with LED	2M	10	CHSW322M	465

Socket modules

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
6A, 2+3 pin socket + FLAT	2M	15	CHSK0652	200
16A, 3 pin socket	3M	10	CHSK1633	275
6/16A socket	2M	15	CHSK1662	290
20A socket	2M	15	CHSK2062	295
6/16A socket	3M	10	CHSK1663	285
25A, 3 pin socket	3m	10	CHSK2533	325
6A, 2 pin socket	1m	20	CHSK0621	160
13A Universal socket	2M	15	CHSK13U2	250

Support modules

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
Step fan regulator	1M	20	CHSMSFR1	445
Step fan regulator	2M	10	CHSMSFR2	595
Dimmer 100 W	1M	20	CHSMD100	450
Dimmer 400 W	2M	10	CHSMD400	625
Dimmer 650 W	2M	10	CHSMD650	670
Buzzer	1M	20	CHSMBUZ1	260
Buzzer	2M	10	CHSMBUZ2	305
Blank plate	1M	40	CHSMBLNK	35
TV co-axial socket	1M	20	CHSMTVSK	140
RJ11 Tel. jack 2 pin	1M	20	CHSMRJ11	135
RJ45 Jack cat 6	1M	20	CHSMRJ45	610
Indicator	1M	20	CHSMINDI	245

Hospitality products

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
Electronic key tag	3M	5	CHSMEKT3	2200
Shaver socket	2M	10	CHSKSVR2	700
Room occupancy indicator	1M	10	CHSMROCI	290
"DND set 2 Switch, Bell, DND & MMR"		2	CHSMDNDS	950

Wiring accessories

Cheiron

Mounting plates

Oval	Qty/Pack	Cat. Ref.	MRP/Unit
1M Plate	20	CHPL01P	96
2M Plate	20	CHPL02P	96
3M Plate	20	CHPL03P	108
3M Power Plate	20	CHPL03SP	104
4M Plate	10	CHPL04P	128
6M Plate	10	CHPL06P	198
8M Plate	10	CHPL08P	225
9M Plate	10	CHPL09P	275
8MV Plate	5	CHPL08VP	285
12M Plate	5	CHPL12P	330
16M Plate	5	CHPL16P	380
18M Plate	5	CHPL18P	415

Contour	Qty/Pack	Cat. Ref.	M.R.P.(₹)
1M Plate	20	CHPL01C	98
2M Plate	20	CHPL02C	98
3M Plate	20	CHPL03C	110
3M Power Plate	20	CHPL03SC	105
4M Plate	10	CHPL04C	130
6M Plate	10	CHPL06C	200
8M Plate	10	CHPL08C	230
9M Plate	10	CHPL09C	280
8MV Plate	5	CHPL08VC	290
12M Plate	5	CHPL12C	340
16M Plate	5	CHPL16C	395
18M Plate	5	CHPL18C	425

Metal box

Description	Qty/Pack	Cat. Ref.	M.R.P.(₹)
Metal Box 1-2M	108	CMBZ3302	84
Metal Box 3M	82	CMBZ4303	92
Metal Box 4M	60	CMBZ5305	112
Metal Box 6-8MH	40	CMBZ8308	175
Metal Box 9M	39	CMBZ9310	240
Metal Box 8MV	26	CMBZ5508V	220
Metal Box 12-16M	16	CMBZ8616	290
Metal Box 24M	10	CMBZ8824	395
Metal Box (Spl for Cheiron plate)	16	CLFB1600	265

Special products

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
Down Lighter	3M	5	CHSMDNL3	550
Single Phase Starter 20	2M	10	CHSMST20	530
Single Phase Starter 25	2M	10	CHSMST25	550
Surge Protector	1M	5	CHSMSURG	1050
Ceiling Rose		25	CHSMCERO	90
Call Bell Indicator	1M	10	CHSMCLBI	450

Oval



Contour



Wiring accessories

Snieo

Switch modules

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
6A 1 way switch	1	25	CPW10610	108
6A 2 way switch	1	25	CPW10620	138
6A Bell Push	1	25	CPW106B0	165
6A 1 way switch LED	1	25	CPW1061L	150
6A Bell Push LED	1	25	CPW106BL	205
16A 1 way switch	1	25	CPW11610	175
16A 2 way switch	1	25	CPW11620	210
16A 1 way switch with LED	1	25	CPW1161L	205
20A DP Switch 1 way with LED	1	20	CPW1201L	298
6A 1 way Mega switch with LED	2	10	CPW2061L	235
6A 2 way Mega switch with LED	2	10	CPW2062L	245
6A Mega Bell Push with LED	2	10	CPW206BL	245
16A 1 way Mega switch with LED	2	10	CPW2161L	270
16A 2 way Mega switch with LED	2	10	CPW2162L	280
32A 1 way DP Switch with LED	2	10	CPW2321DPL	425

Socket modules

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
6A 2+3 Pin Socket - 2 Module	2	20	CPWS2065	170
6/16A Socket - 2 Module	2	10	CPWS2166	260
20A Socket	2	10	CPWS2020	270
13A Intel Socket - 2 Module	2	10	CPWS213U	240
6A 5 Pin Socket	3	10	CPWS3065	195
6/16A Socket	3	5	CPWS3166	265
16A 3 Pin Socket	3	10	CPWS3163	260
25A 3 Pin Socket	3	10	CPWS3253	295
13A Flat Pin Socket	3	10	CPWS313F	305
6A 2 Pin Socket	1	20	CPWS1062	150

Support modules

Description	Module size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
Fan Regulator - 1 Module	1	20	CPW1SFR4	425
Fan Regulator	2	10	CPW2SFR5	565
Dimmer 100W - 1 Module	1	20	CPW1D0400	395
Dimmer 400W	2	10	CPW2D0400	560
Dimmer 1000W	2	20	CPW1D1000	850
Blank Plate	1	80	CPW1BLNK	35
TV Socket	1	20	CPW1TVSK	135
RJ 11TEL 2 Pin	1	20	CPW1RJ11	125
RJ 45 Jack CAT 6	1	20	CPW1RJ45	600
Flex Outlet	1	20	CPW1FLEX	115
Foot Lamp Grid	4	10	CPW4FLGD	225
Buzzer	2	10	CPW2BZR	230
Indicator	1	20	CPW1IND	220
Buzzer 1 Module	1	20	CPW1BZR	250
Mount Screw 3" Long			MSCREW3	10
Ceiling Rose		25	SNSMCERO	95

Wiring accessories

Snieo

Snieo mounting plates

Description	Metal Box Size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
1 M Plate	3"x3"	25	SNWP3301	89
2 M Plate	3"x3"	25	SNWP3302	91
3 M Plate	4"x3"	20	SNWP4303	110
3 M Power Plate	4"x3"	20	SNWP4303S	108
4 M Plate	5"x3"	15	SNWP5304	125
5 M Plate	5"x3"	15	SNWP5305	130
6 M Plate	8"x3"	10	SNWP8306	170
8 M Plate	8"x3"	10	SNWP8308	212
10 M Plate	9"x3"	15	SNWP9310	235
8 M Plate Square	5"x5"	6	SNWP5508	240
12 M Plate	8"x6"	6	SNWP8612	290
16 M Plate	8"x6"	6	SNWP8616	320

Sleek mounting plates

Description	Metal Box Size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
1 M Plate	3"x3"	20	CSWP3301	99
2 M Plate	3"x3"	20	CSWP3302	99
3 M Plate	4"x3"	20	CSWP4303	125
4 M Plate	5"x3"	10	CSWP5304	140
5 M Plate	5"x3"	10	CSWP5305	145
6 M Plate	8"x3"	10	CSWP8306	180
8 M Plate	8"x3"	10	CSWP8308	230
9 M Plate	9"x3"	15	CSWP9309	245
8 M Plate Square	5"x5"	5	CSWP5508	260
12 M Plate	8"x6"	5	CSWP8612	305
16 M Plate	8"x6"	5	CSWP8616	335
24 M Plate	8"x8"	5	CSWP8824	495

Lumina mounting plates

Description	Metal Box Size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
1 M Plate	3"x3"	20	CLWP3301	110
2 M Plate	3"x3"	20	CLWP3302	110
3 M Plate	4"x3"	20	CLWP0300C	140
4 M Plate	5"x3"	10	CLWP0400C	155
5 M Plate	5"x3"	10	CLWP0500C	160
8 M Plate	8"x3"	10	CLWP0800C	255
9 M Plate	9"x3"	15	CLWP9309	270
10 M Plate	9"x3"	15	CLWP1000C	285
8 M Plate Square	5"x5"	5	CLWP0800CV	290
12 M Plate	8"x6"	5	CLWP1200C	335
16 M Plate	8"x6"	5	CLWP1600C	370
24 M Plate	8"x8"	5	CLWP8824	545

Wiring accessories

Snieo

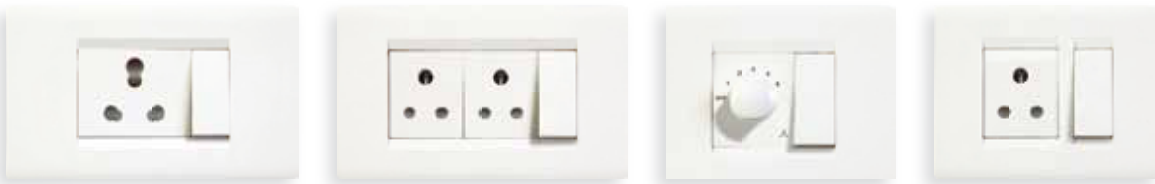
Hospitality products

Description	Cat. Ref.	M.R.P.(₹)
Mechanical Keytag fitted with Lumina Plate & 20A DP Switch (3M)	CPW320MKT	590
Call Bell Indicator	CPW1CBL	410
DND/MMR Set - External	CPWDNDSET	590
Switch Ste DND/MMR - Internal	CPW2SET	335
Room Occupied - Internal	CPW1OQP	260
Shaver Socket (110V - 230V set)	CPW1SVR	510

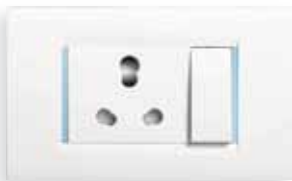
Metal box

Description	Metal Box Size	Qty/Pack	Cat. Ref.	M.R.P.(₹)
Metal Box 1-2M	3"x3"	108	CMBZ3302	84
Metal Box 3M	4"x3"	82	CMBZ4303	92
Metal Box 4-5M	5"x3"	60	CMBZ5305	112
Metal Box 6-8MH	8"x3"	40	CMBZ8308	175
Metal Box 9-10M	9"x3"	39	CMBZ9310	240
Metal Box 8MV	5"x5"	26	CMBZ5508V	220
Metal Box 12-16M	8"x6"	16	CMBZ8616	290
Metal Box 24M	8"x8"	10	CMBZ8824	395
Metal Box 12-16M (Spl for Sneio Plate)		285	CLFB1600	265

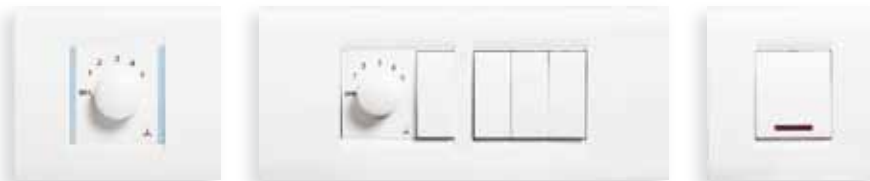
Snieo



Lumina



Sleek



Wiring accessories

Industrial plugs and sockets



Plugs

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216-P6-I	2CMA100202R1000	388
	32	IP44	232-P6-I	2CMA100204R1000	568
	63	IP44	263P6	2CMA166742R1000	2,075
	16	IP67	216P6W	2CMA166460R1000	1,200
	32	IP67	232P6W	2CMA166722R1000	1,675
	63	IP67	263P6W	2CMA166776R1000	2,905
	125	IP67	2125P6W	2CMA166810R1000	8,950
4 (3P+E)	16	IP44	316-P6	2CMA193506R1000	472
	32	IP44	332-P6	2CMA193515R1000	636
	63	IP44	363P6	2CMA166754R1000	2,200
	16	IP67	316P6W	2CMA166476R1000	1,300
	32	IP67	332P6W	2CMA166738R1000	1,730
	63	IP67	363P6W	2CMA166786R1000	3,500
	125	IP67	3125P6W	2CMA166816R1000	9,250
5 (4P+E)	16	IP44	416-P6-I	2CMA100203R1000	506
	32	IP44	432-P6-I	2CMA100205R1000	924
	63	IP44	463P6	2CMA166764R1000	2,316
	16	IP67	416P6W	2CMA166494R1000	1,400
	32	IP67	432P6W	2CMA166524R1000	1,860
	63	IP67	463P6W	2CMA166798R1000	3,800
	125	IP67	4125P6W	2CMA166828R1000	9,950

Surface socket outlets



Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216RS6	2CMA193098R1000	632
	32	IP44	232RS6	2CMA193122R1000	814
	63	IP44	263RS6	2CMA167476R1000	3,319
	16	IP67	216RS6W	2CMA167149R1000	1,920
	32	IP67	232RS6W	2CMA167172R1000	2,680
	63	IP67	263RS6W	2CMA167306R1000	4,650
	125	IP67	2125RS6W	2CMA167246R1000	14,300
4 (3P+E)	16	IP44	316RS6	2CMA193106R1000	632
	32	IP44	332RS6	2CMA193130R1000	854
	63	IP44	363RS6	2CMA167498R1000	3,430
	16	IP67	316RS6W	2CMA167157R1000	1,980
	32	IP67	332RS6W	2CMA167180R1000	2,770
	63	IP67	363RS6W	2CMA167316R1000	4,800
	125	IP67	3125RS6W	2CMA167252R1000	14,800
5 (4P+E)	16	IP44	416RS6	2CMA193115R1000	710
	32	IP44	432RS6	2CMA193139R1000	854
	63	IP44	463RS6	2CMA167484R1000	3,690
	16	IP67	416RS6W	2CMA167166R1000	2,130
	32	IP67	432RS6W	2CMA167189R1000	2,980
	63	IP67	463RS6W	2CMA167328R1000	5,170
	125	IP67	4125RS6W	2CMA167264R1000	15,900

Wiring accessories

Industrial plugs and sockets



Panel mounted socket - Unified straight flange

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216RU6-I	2CMA100210R1000	560
	32		232RU6-I	2CMA100212R1000	780
	63		263RU6	2CMA167510R1000	2,910
4 (3P+E)	16		316RU6	2CMA193178R1000	580
	32		332RU6	2CMA193250R1000	810
	63		363RU6	2CMA167520R1000	3,010
5 (4P+E)	16		416RU6-I	2CMA100211R1000	620
	32		432RU6-I	2CMA100213R1000	870
	63		463RU6	2CMA167532R1000	3,230

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	63	IP67	263RU6W	2CMA167374R1000	4,320
	125		2125RU6W	2CMA167133R1000	12,512
	16		216RAU6W	2CMA166996R1000	1,675
	32		232RAU6W	2CMA166948R1000	2,345
	63		263RAU6W	2CMA167442R1000	4,065
4 (3P+E)	63		363RU6W	2CMA167384R1000	4,470
	125		3125RU6W	2CMA167136R1000	12,930
	16		316RAU6W	2CMA167012R1000	1,730
	32		332RAU6W	2CMA166964R1000	2,425
	63		363RAU6W	2CMA167452R1000	4,202
5 (4P+E)	63		463RU6W	2CMA167396R1000	4,800
	125		4125RU6W	2CMA167142R1000	13,900
	16		416RAU6W	2CMA167030R1000	1,860
	32		432RAU6W	2CMA166982R1000	2,600
	63		463RAU6W	2CMA167464R1000	4,518

Panel mounted socket - Unified angled flange

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216RAU6-I	2CMA100218R1000	560
	32		232RAU6-I	2CMA100220R1000	780
	63		263RAU6	2CMA167408R1000	2,900
4 (3P+E)	16		316RAU6	2CMA193226R1000	580
	32		332RAU6	2CMA193274R1000	810
	63		363RAU6	2CMA167418R1000	3,000
5 (4P+E)	16		416RAU6-I	2CMA100219R1000	620
	32		432RAU6-I	2CMA100221R1000	870
	63		463RAU6	2CMA167430R1000	3,230

Panel mounted socket - Minimized angled flange

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216RAM6-I	2CMA100214R1000	560
	32		232RAM6-I	2CMA100216R1000	780
5 (4P+E)	16		416RAM6-I	2CMA100215R1000	620
	32		432RAM6-I	2CMA100217R1000	870

Wiring accessories

Industrial plugs and sockets

4



Connectors

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216-C6-I	2CMA100206R1000	536
	32		232-C6-I	2CMA100208R1000	742
	63		263C6	2CMA166840R1000	2,800
	16	IP67	216C6W	2CMA166538R1000	1,615
	32		232C6W	2CMA166584R1000	2,270
	63		263C6W	2CMA166874R1000	3,930
125	2125C6W		2CMA166918R1000	12,070	
4 (3P+E)	16	IP44	316-C6	2CMA193523R1000	628
	32		332-C6	2CMA193529R1000	804
	63		363C6	2CMA166850R1000	2,900
	16	IP67	316C6W	2CMA166554R1000	1,670
	32		332C6W	2CMA166604R1000	2,338
	63		363C6W	2CMA166894R1000	4,050
125	3125C6W		2CMA166924R1000	12,500	
5 (4P+E)	16	IP44	416-C6-I	2CMA100207R1000	700
	32		432-C6-I	2CMA100209R1000	1,042
	63		463C6	2CMA166862R1000	3,200
	16	IP67	416C6W	2CMA166572R1000	1,800
	32		432C6W	2CMA166618R1000	2,500
	63		463C6W	2CMA166906R1000	4,400
125	4125C6W		2CMA166936R1000	13,400	

Switched interlocked socket outlet with provision without MCB / RCD

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP67	216MP6W	2CMA162878R1000	10,500
	32		232MP6W	2CMA163172R1000	11,400
5 (4P+E)	16		416MP6W	2CMA162895R1000	14,200
	32		432MP6W	2CMA163193R1000	15,400

Surface socket outlet with protection

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP67	216RP6WP	2CMA164572R1000	7,600
	32		232RP6WP	2CMA164602R1000	9,000
5 (4P+E)	16		416RP6WP	2CMA164589R1000	9,000
	32		432RP6WP	2CMA164619R1000	10,500

Wiring accessories

Industrial plugs and sockets



Switched interlocked socket outlet - Metal (Alluminium)

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	NA	NA	NA
	32		NA	NA	NA
	63		263MM6	2CMA168031R1000	24,576
	125		2125MM6	2CMA168047R1000	89,772
4 (3P+E)	16		316MM6	2CMA167975R1000	13,444
	32		332MM6	2CMA167993R1000	15,460
	63		363MM6	2CMA168036R1000	26,888
	125		3125MM6	2CMA168048R1000	92,766
5 (4P+E)	16		416MM6	2CMA167984R1000	14,456
	32		432MM6	2CMA168002R1000	16,624
	63		463MM6	2CMA168042R1000	28,915
	125		4125MM6	2CMA168053R1000	99,600

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Switched interlocked socket outlet - Horizontal thermoplastic

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216MHS6	2CMA167622R1000	8,100
	32		232MHS6	2CMA167669R1000	9,300
	63		263MHS6	2CMA167715R1000	16,200
	16	IP67	216MHS6W	2CMA167801R1000	8,900
	32		232MHS6W	2CMA167848R1000	10,240
	63		263MHS6W	2CMA167894R1000	18,620
4 (3P+E)	16	IP44	316MHS6	2CMA167631R1000	8,400
	32		332MHS6	2CMA167677R1000	9,600
	63		363MHS6	2CMA167721R1000	16,750
	16	IP67	316MHS6W	2CMA167809R1000	9,200
	32		332MHS6W	2CMA167856R1000	10,580
	63		363MHS6W	2CMA167899R1000	19,240
5 (4P+E)	16	IP44	416MHS6	2CMA167640R1000	9,000
	32		432MHS6	2CMA167686R1000	10,400
	63		463MHS6	2CMA167727R1000	18,000
	16	IP67	416MHS6W	2CMA167818R1000	9,900
	32		432MHS6W	2CMA167865R1000	11,400
	63		463MHS6W	2CMA167905R1000	20,690



Wiring accessories

Industrial plugs and sockets



Switch interlock socket outlet vertical thermoplastic

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216MVS6	2CMA167646R1000	8,100
	32		232MVS6	2CMA167692R1000	9,400
	16	IP67	216MVS6W	2CMA167824R1000	8,900
	32		232MVS6W	2CMA167871R1000	10,240
4 (3P+E)	16	IP44	316MVS6	2CMA167654R1000	8,400
	32		332MVS6	2CMA167700R1000	9,600
	16	IP67	316MVS6W	2CMA167832R1000	9,200
	32		332MVS6W	2CMA167879R1000	10,600
5 (4P+E)	16	IP44	416MVS6	2CMA167663R1000	9,000
	32		432MVS6	2CMA167709R1000	10,350
	16	IP67	416MVS6W	2CMA167842R1000	9,900
	32		432MVS6W	2CMA167888R1000	11,400

4

Plug and sockets in metal enclosure with MCB / RCB provision

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP30	216RAU6SPNE	1SYN880110R0001	1,940
	32		232RAU6SPNE	1SYN880113R0001	2,484
	63		263RAU6SPNE	1SYN880116R0001	9,026
4 (3P+E)	16	IP30	316RAU6TPE	1SYN880111R0001	2,064
	32		332RAU6TPE	1SYN880114R0001	3,050
	63		363RAU6TPE	1SYN880117R0001	9,252
5 (4P+E)	16	IP30	416RAU6TPNE	1SYN880112R0001	2,064
	32		432RAU6TPNE	1SYN880115R0001	3,050
	63		463RAU6TPNE	1SYN880118R0001	9,692

Panel mountings inlets

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216B6	2CMA193338R1000	650
	32		232BU6	2CMA193434R1000	1,592
	63		263BU6	2CMA167212R1000	2,714
	63	IP67	263BU6W	2CMA168104R1000	3,618
	125		2125BU6W	2CMA167195R1000	6,332
4 (3P+E)	16	IP44	316B6	2CMA193346R1000	800
	32		332BU6	2CMA193441R1000	1,792
	63		363BU6	2CMA167222R1000	3,166
	63	IP67	363BU6W	2CMA168109R1000	4,522
	125		3125BU6W	2CMA167198R1000	7,236
5 (4P+E)	16	IP44	416B6	2CMA193355R1000	1,094
	32		432BU6	2CMA193451R1000	1,990
	63	IP67	463BU6	2CMA167234R1000	4,522
	63		463BU6W	2CMA168115R1000	5,428
	125		4125BU6W	2CMA167204R1000	9,046



Wiring accessories

Industrial plugs and sockets



Surface inlets

Terminals / Pole	Current rating (A)	Protection	Type	Order code	M.R.P.(₹)
3 (2P+E)	16	IP44	216BS6	2CMA193289R1000	996
	32		232BS6	2CMA193314R1000	1,592
	63		263BS6	2CMA167544R1000	5,428
	16	IP67	216BS6W	2CMA167044R1000	4,522
	63		232BS6W	2CMA167090R1000	4,522
	125		263BS6W	2CMA167340R1000	6,362
4 (3P+E)	16	IP44	316BS6	2CMA193298R1000	1,494
	32		332BS6	2CMA193322R1000	1,792
	63		363BS6	2CMA167554R1000	6,332
	16	IP67	216BS6W	2CMA167060R1000	4,522
	63		332BS6W	2CMA167104R1000	5,428
	125		363BS6W	2CMA167350R1000	7,688
5 (4P+E)	16	IP44	416BS6	2CMA193307R1000	1,094
	32		432BS6	2CMA193331R1000	1,990
	63		463BS6	2CMA167566R1000	7,236
	16	IP67	416BS6W	2CMA167078R1000	6,332
	63		432BS6W	2CMA167122R1000	6,332
	125		463BS6W	2CMA167362R1000	9,046

Low Voltage Products

Capacitors and Filter modules

Capacitors and Filter modules

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ABB's comprehensive range of Low Voltage Capacitors and Filter modules

The range of ABB Low Voltage Capacitors and Filter modules ranks amongst the most extensive on the market with a full range of innovative solutions for various applications, helping to optimise resources, reduce energy costs, boost productivity.

- Q Cap - L (normal duty and heavy duty) capacitors
 - Cylindrical type
 - Box type

- CLMD heavy duty capacitors
- Filter modules
- APFC relays
- APP capacitors



Q Cap - L capacitors



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415 VOLTS, 3 PHASE, 50 Hz Cylindrical Type - Normal Duty

Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414004-101	LV Capacitor CYL ND 1 kvar F5 V415.	PC	285	12
1HYC414004-102	LV Capacitor CYL ND 2 kvar F5 V415.	PC	575	12
1HYC414004-103	LV Capacitor CYL ND 3 kvar F5 V415.	PC	862	12
1HYC414004-104	LV Capacitor CYL ND 4 kvar F5 V415.	PC	1,150	12
1HYC414004-105	LV Capacitor CYL ND 5 kvar F5 V415.	PC	1,167	12
1HYC414004-106	LV Capacitor CYL ND 6.3 kvar F5 V415.	PC	1,470	6
1HYC414004-107	LV Capacitor CYL ND 7.5 kvar F5 V415.	PC	1,750	6
1HYC414004-108	LV Capacitor CYL ND 10 kvar F5 V415.	PC	1,933	6
1HYC414004-109	LV Capacitor CYL ND 12.5 kvar F5 V415.	PC	2,912	6
1HYC414004-110	LV Capacitor CYL ND 15 kvar F5 V415.	PC	3,495	5
1HYC414004-111	LV Capacitor CYL ND 20 kvar F5 V415.	PC	4,662	2
1HYC414004-112	LV Capacitor CYL ND 25 kvar F5 V415.	PC	5,828	2



440 VOLTS, 3 PHASE, 50 Hz Cylindrical Type - Normal Duty

Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414005-101	LV Capacitor CYL ND 1 kvar F5 V440.	PC	272	12
1HYC414005-102	LV Capacitor CYL ND 2.1 kvar F5 V440.	PC	575	12
1HYC414005-103	LV Capacitor CYL ND 3 kvar F5 V440.	PC	821	12
1HYC414005-104	LV Capacitor CYL ND 4.2 kvar F5 V440.	PC	1,150	12
1HYC414005-105	LV Capacitor CYL ND 5 kvar F5 V440.	PC	1,108	12
1HYC414005-106	LV Capacitor CYL ND 6 kvar F5 V440.	PC	1,331	6
1HYC414005-107	LV Capacitor CYL ND 7.5 kvar F5 V440.	PC	1,665	6
1HYC414005-108	LV Capacitor CYL ND 10 kvar F5 V440.	PC	2,222	6
1HYC414005-109	LV Capacitor CYL ND 12.5 kvar F5 V440.	PC	2,775	5
1HYC414005-110	LV Capacitor CYL ND 15 kvar F5 V440.	PC	3,330	5
1HYC414005-111	LV Capacitor CYL ND 20 kvar F5 V440.	PC	4,440	5
1HYC414005-112	LV Capacitor CYL ND 25 kvar F5 V440.	PC	5,550	5



415 VOLTS, 3 PHASE, 50 Hz Cylindrical Type- Heavy Duty

Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414006-101	LV Capacitor CYL HD 1 kvar F5 V415.	PC	441	12
1HYC414006-102	LV Capacitor CYL HD 2 kvar F5 V415.	PC	885	1
1HYC414006-103	LV Capacitor CYL HD 3 kvar F5 V415.	PC	1,328	1
1HYC414006-104	LV Capacitor CYL HD 4 kvar F5 V415.	PC	1,770	4
1HYC414006-105	LV Capacitor CYL HD 5 kvar F5 V415.	PC	1,981	2
1HYC414006-106	LV Capacitor CYL HD 8 kvar F5 V415.	PC	3,171	2
1HYC414006-107	LV Capacitor CYL HD 9 kvar F5 V415.	PC	3,571	2
1HYC414006-108	LV Capacitor CYL HD 10 kvar F5 V415.	PC	3,965	2
1HYC414006-109	LV Capacitor CYL HD 12.5 kvar F5 V415.	PC	4,957	2
1HYC414006-110	LV Capacitor CYL HD 15 kvar F5 V415.	PC	5,820	2
1HYC414006-111	LV Capacitor CYL HD 20 kvar F5 V415.	PC	7,750	2
1HYC414006-112	LV Capacitor CYL HD 25 kvar F5 V415.	PC	9,700	2

Q Cap - L capacitors



440 VOLTS, 3 PHASE, 50 Hz Cylindrical Type - Heavy Duty

Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414007-101	LV Capacitor CYL HD 1 kvar F5 V440.	PC	421	12
1HYC414007-102	LV Capacitor CYL HD 2 kvar F5 V440.	PC	842	12
1HYC414007-103	LV Capacitor CYL HD 3 kvar F5 V440.	PC	1,265	4
1HYC414007-104	LV Capacitor CYL HD 4 kvar F5 V440.	PC	1,687	4
1HYC414007-105	LV Capacitor CYL HD 5 kvar F5 V440.	PC	1,888	4
1HYC414007-106	LV Capacitor CYL HD 6 kvar F5 V440.	PC	2,266	2
1HYC414007-107	LV Capacitor CYL HD 7.5 kvar F5 V440.	PC	2,831	2
1HYC414007-108	LV Capacitor CYL HD 10 kvar F5 V440.	PC	3,777	2
1HYC414007-109	LV Capacitor CYL HD 12.5 kvar F5 V440.	PC	4,721	2
1HYC414007-110	LV Capacitor CYL HD 15 kvar F5 V440.	PC	5,666	2
1HYC414007-111	LV Capacitor CYL HD 20 kvar F5 V440.	PC	7,554	4
1HYC414007-112	LV Capacitor CYL HD 25 kvar F5 V440.	PC	9,443	4

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415 VOLTS, 3 PHASE, 50 Hz Box Type - Normal Duty



Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414008-101	LV Capacitor BOX NDW 1 kvar F5 V415.	PC	340	1
1HYC414008-102	LV Capacitor BOX NDW 2 kvar F5 V415.	PC	600	1
1HYC414008-103	LV Capacitor BOX NDW 3 kvar F5 V415.	PC	901	1
1HYC414008-104	LV Capacitor BOX NDW 4 kvar F5 V415.	PC	1,202	1
1HYC414008-105	LV Capacitor BOX ND 5 kvar F5 V415.	PC	1,503	1
1HYC414008-106	LV Capacitor BOX ND 6 kvar F5 V415.	PC	1,805	1
1HYC414008-107	LV Capacitor BOX ND 7.5 kvar F5 V415.	PC	2,258	1
1HYC414008-108	LV Capacitor BOX ND 10 kvar F5 V415.	PC	2,816	1
1HYC414008-109	LV Capacitor BOX ND 12.5 kvar F5 V415.	PC	3,521	1
1HYC414008-110	LV Capacitor BOX ND 15 kvar F5 V415.	PC	4,224	1
1HYC414008-111	LV Capacitor BOX ND 17.5 kvar F5 V415.	PC	4,775	1
1HYC414008-112	LV Capacitor BOX ND 20 kvar F5 V415.	PC	5,634	1
1HYC414008-113	LV Capacitor BOX ND 22.5 kvar F5 V415.	PC	6,800	1
1HYC414008-114	LV Capacitor BOX ND 25 kvar F5 V415.	PC	7,041	1

Note : 1-4 Kvar will be available in wire type only

Q Cap - L capacitors

440 VOLTS, 3 PHASE, 50 Hz Box Type - Normal Duty



Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414009-101	LV Capacitor BOX NDW 1 kvar F5 V440.	PC	315	1
1HYC414009-102	LV Capacitor BOX NDW 2 kvar F5 V440.	PC	561	1
1HYC414009-103	LV Capacitor BOX NDW 3 kvar F5 V440.	PC	842	1
1HYC414009-104	LV Capacitor BOX NDW 4 kvar F5 V440.	PC	1,123	1
1HYC414009-105	LV Capacitor BOX ND 5 kvar F5 V440.	PC	1,405	1
1HYC414009-106	LV Capacitor BOX ND 6 kvar F5 V440.	PC	1,687	1
1HYC414009-107	LV Capacitor BOX ND 7.5 kvar F5 V440.	PC	2,111	1
1HYC414009-108	LV Capacitor BOX ND 10 kvar F5 V440.	PC	2,631	1
1HYC414009-109	LV Capacitor BOX ND 12.5 kvar F5 V440.	PC	3,290	1
1HYC414009-110	LV Capacitor BOX ND 15 kvar F5 V440.	PC	3,951	1
1HYC414009-111	LV Capacitor BOX ND 17.5 kvar F5 V440.	PC	4,600	1
1HYC414009-112	LV Capacitor BOX ND 20 kvar F5 V440.	PC	5,265	1
1HYC414009-113	LV Capacitor BOX ND 22.5 kvar F5 V440.	PC	5,900	1
1HYC414009-114	LV Capacitor BOX ND 25 kvar F5 V440.	PC	6,581	1

Note : 1-4 Kvar will be available in wire type only

415 VOLTS, 3 PHASE, 50 Hz Box Type - Heavy Duty



Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414011-101	LV Capacitor BOX HD 1 kvar F5 V415.	PC	535	1
1HYC414011-102	LV Capacitor BOX HD 2 kvar F5 V415.	PC	1,071	1
1HYC414011-103	LV Capacitor BOX HD 3 kvar F5 V415.	PC	1,611	1
1HYC414011-104	LV Capacitor BOX HD 4 kvar F5 V415.	PC	2,145	1
1HYC414011-105	LV Capacitor BOX HD 5 kvar F5 V415.	PC	2,191	1
1HYC414011-106	LV Capacitor BOX HD 6 kvar F5 V415.	PC	2,790	1
1HYC414011-107	LV Capacitor BOX HD 7.5 kvar F5 V415.	PC	3,288	1
1HYC414011-108	LV Capacitor BOX HD 10 kvar F5 V415.	PC	4,090	1
1HYC414011-109	LV Capacitor BOX HD 12.5 kvar F5 V415.	PC	5,112	1
1HYC414011-110	LV Capacitor BOX HD 15 kvar F5 V415.	PC	6,135	1
1HYC414011-111	LV Capacitor BOX HD 17.5 kvar F5 V415.	PC	7,158	1
1HYC414011-112	LV Capacitor BOX HD 20 kvar F5 V415.	PC	8,181	1
1HYC414011-113	LV Capacitor BOX HD 22.5 kvar F5 V415.	PC	9,205	1
1HYC414011-114	LV Capacitor BOX HD 25 kvar F5 V415.	PC	10,227	1

Q Cap - L capacitors

440 VOLTS, 3 PHASE, 50 Hz Box Type - Heavy Duty



Ordering code	Description	Unit	M.R.P.(₹)	Delivery batch (units)
1HYC414012-101	LV Capacitor BOX HD 1 kvar F5 V440.	PC	501	1
1HYC414012-102	LV Capacitor BOX HD 2 kvar F5 V440.	PC	1,001	1
1HYC414012-103	LV Capacitor BOX HD 3 kvar F5 V440.	PC	1,503	1
1HYC414012-104	LV Capacitor BOX HD 4 kvar F5 V440.	PC	2,005	1
1HYC414012-105	LV Capacitor BOX HD 5 kvar F5 V440.	PC	2,048	1
1HYC414012-106	LV Capacitor BOX HD 6 kvar F5 V440.	PC	2,458	1
1HYC414012-107	LV Capacitor BOX HD 7.5 kvar F5 V440.	PC	3,073	1
1HYC414012-108	LV Capacitor BOX HD 10 kvar F5 V440.	PC	3,822	1
1HYC414012-109	LV Capacitor BOX HD 12.5 kvar F5 V440.	PC	4,782	1
1HYC414012-110	LV Capacitor BOX HD 15 kvar F5 V440.	PC	5,735	1
1HYC414012-111	LV Capacitor BOX HD 17.5 kvar F5 V440.	PC	6,690	1
1HYC414012-112	LV Capacitor BOX HD 20 kvar F5 V440.	PC	7,645	1
1HYC414012-113	LV Capacitor BOX HD 22.5 kvar F5 V440.	PC	8,601	1
1HYC414012-114	LV Capacitor BOX HD 25 kvar F5 V440.	PC	9,558	1

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CLMD series for heavy duty applications

415 Volts, 3 Phase, 50 Hz



Voltage	Ordering code	Description	Rating in kvar	M.R.P.(₹)
415 V	1HYC414000-172	CLMD 13	15	6,120
	1HYC414000-143	CLMD 43	20	9,600
	1HYC414000-009	CLMD 43	25	10,200
	1HYC414000-069	CLMD 43	30	12,240
	1HYC414000-003	CLMD 53	40	16,320
	1HYC414000-013	CLMD 53	50	20,400
	1HYC414000-142	CLMD 63	60	24,480
	1HYC414000-029	CLMD 63	75	30,600
	1HYC414000-086	CLMD 83	100	40,800

440 Volts, 3 Phase 50 Hz

Voltage	Ordering code	Description	Rating in kvar	M.R.P.(₹)
440 V	1HYC414000-005	CLMD 13	15	5,850
	1HYC414000-007	CLMD 43	20	9,240
	1HYC414000-008	CLMD 43	25	9,750
	1HYC414000-021	CLMD 43	30	11,700
	1HYC414000-012	CLMD 53	40	15,600
	1HYC414000-001	CLMD 53	50	19,500
	1HYC414000-011	CLMD 53	60	23,400
	1HYC414000-042	CLMD 63	75	29,250
	1HYC414000-067	CLMD 83	100	39,000

CLMD series for heavy duty applications



CLMD 33 – Slim design Capacitors for panel mounting 415 Volts, 3 phase 50 Hz

Voltage	Ordering code	Description	Rating in kvar	M.R.P.(₹)
415 V	1HYC414000-065	CLMD 33C	9	4,590
	1HYC414000-088	CLMD 33C	12.5	4,800
	1HYC414000-097	CLMD 33C	15	5,760
	1HYC414000-053	CLMD 33	25	9,300
	1HYC414000-147	CLMD 33	30	11,160

440 Volts, 3 Phase 50 Hz

Voltage	Ordering code	Description	Rating in kvar	M.R.P.(₹)
440 V	1HYC414000-066	CLMD 33C	10	4,560
	1HYC414000-096	CLMD 33C	12.5	4,428
	1HYC414000-119	CLMD 33C	15	5,310
	1HYC414000-010	CLMD 33	25	8,850
	1HYC414000-146	CLMD 33	30	10,620

CLMD series for 480 V & 525 V heavy duty applications



480 Volts, 3 Phase, 50 Hz

Voltage	Ordering code	Description	Rating in kvar	M.R.P.(₹)
480 V	1HYC414000-239	CLMD 13	10	6,440
	1HYC414000-240	CLMD 33	15	6,992
	1HYC414000-157	CLMD 43	20	8,096
	1HYC414000-098	CLMD 33	25	9,016
	1HYC414000-241	CLMD 53	34	10,120
	1HYC414000-108	CLMD 53	50	12,420
	1HYC414000-242	CLMD 63	69	14,582
	1HYC414000-243	CLMD 63	75	15,640

525 Volts, 3 Phase 50 Hz

Voltage	Ordering code	Description	Rating in kvar	M.R.P.(₹)
525 V	1HYC414000-230	CLMD 13	10	7,000
	1HYC414000-101	CLMD 33C	15	7,600
	1HYC414000-124	CLMD 43	20	8,800
	1HYC414000-109	CLMD 33	25	9,800
	1HYC414000-044	CLMD 53	34	11,000
	1HYC414000-095	CLMD 53	50	13,500
	1HYC414000-045	CLMD 63	69	15,850
	1HYC414000-080	CLMD 63	75	17,000

APP type for heavy duty applications



415 Volts, 3 Phase, 50 Hz

Rating in Kvar	Ordering code	M.R.P.(₹)
5	YC1H416000-102	1,875
10	YC1H416000-103	3,750
15	YC1H416000-104	5,625
20	YC1H416000-105	7,500
25	YC1H416000-106	9,375
50	YC1H416000-107	18,750
75	YC1H416000-108	28,125
100	YC1H416000-109	37,500

440 Volts, 3 Phase, 50 Hz

Rating in Kvar	Ordering code	M.R.P.(₹)
5	YC1H416000-111	1,825
10	YC1H416000-113	3,650
15	YC1H416000-114	5,475
20	YC1H416000-115	7,300
25	YC1H416000-119	9,125
50	YC1H416000-116	18,250
75	YC1H416000-117	27,375
100	YC1H416000-118	36,500

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APFC relays



Type	Ordering code	No of steps	M.R.P.(₹)
RVC 6	1HYC418006-014	6 Steps	16,400
RVC 8	1HYC418006-015	8 Steps	19,600
RVC 10	1HYC418006-016	10 Steps	21,300
RVC 12	1HYC418006-017	12 Steps	22,800

Type	Ordering code	No of steps	M.R.P.(₹)
RVT 6	1HYC418006-018	6 Steps	45,400
RVT 12	1HYC418006-020	12 steps	54,000
RVT 6 with Modbus adapter kit	1HYC418006-051	6 Steps	62,600
RVT 12 with Modbus adapter kit	1HYC418006-050	12 Steps	71,200

Filter Module (CLMD Capacitor + 7% copper wound detuned reactor)



Bus voltage	Effective kvar at bus voltage	Capacitor		M.R.P.(₹)
		Cap voltage (volts)	Cap output (kvar)	
415 V	10	525	15	15,890
	20	525	30	24,600
	25	525	37.5	32,000
	50	525	75	52,460
	75	525	2 x 56	84,020
	100	525	2 x 75	99,910
440 V	10	525	13.5	16,110
	20	525	26.5	24,820
	25	525	34	30,910
	50	525	67	52,020
	75	525	2 x 50	79,010
	100	525	2 x 67	98,820

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Filter module (Cylindrical and box type capacitor + 7% Detuned reactors)



Type	BUS Voltage	Effective KVAR at Bus Voltage	Heavy Duty Capacitor		7% Aluminium Reactor		M.R.P.(₹)
			"Cap Voltage (Volts)"	"Cap Output (KVAR)"	"Reactor Current rating (Amps)"		
BOX	415V	5	480	6.22	7.65	6,287	
		10	480	12.44	14.96	8,622	
		12.5	480	15.55	19.13	9,812	
		15	480	18.66	22.96	11,347	
		20	480	24.88	30.6	14,616	
		25	480	31.1	38.26	17,060	
BOX	415V	5	480	6.22	7.65	7,171	
		10	480	12.44	14.96	9,544	
		12.5	480	15.55	19.13	11,147	
		15	480	18.66	22.96	12,928	
		20	480	24.88	30.6	15,449	
		25	480	31.1	38.26	18,689	

Type	BUS Voltage	Effective KVAR at Bus Voltage	Heavy Duty Capacitor		7% Aluminium Reactor		M.R.P.(₹)
			"Cap Voltage (Volts)"	"Cap Output (KVAR)"	"Reactor Current rating (Amps)"		
BOX	440V	5	525	6.6	7.21	6,989	
		10	525	13.24	14.56	8,926	
		12.5	525	16.55	18.04	10,552	
		15	525	19.86	21.65	11,851	
		20	525	26.48	28.86	15,923	
		25	525	33.1	36.08	18,275	

Filter module (Cylindrical and box type capacitor + 7% Detuned reactors)



		7% Copper Reactor				
BOX	440V	5	525	6.6	7.21	7,808
		10	525	13.24	14.56	9,932
		12.5	525	16.55	18.04	11,792
		15	525	19.86	21.65	13,718
		20	525	26.48	28.86	17,377
		25	525	33.1	36.08	20,158

			Heavy Duty Capacitor		7% Aluminium Reactor	
Type	BUS Voltage	Effective KVAR at Bus Voltage	"Cap Voltage (Volts)"	"Cap Output (KVAR)"	"Reactor Current rating (Amps)"	M.R.P.(₹)
CYL	415V	5	480	6.22	7.65	6,593
		10	480	12.44	14.96	8,172
		12.5	480	15.55	19.13	9,628
		15	480	18.66	22.96	11,165
		20	480	24.88	30.6	15,048
		25	480	31.1	38.26	16,447

		7% Copper Reactor				
CYL	415V	5	480	6.22	7.65	7,477
		10	480	12.44	14.96	9,094
		12.5	480	15.55	19.13	10,964
		15	480	18.66	22.96	12,746
		20	480	24.88	30.6	15,881
		25	480	31.1	38.26	18,076

			Heavy Duty Capacitor		7% Aluminium Reactor	
Type	BUS Voltage	Effective KVAR at Bus Voltage	"Cap Voltage (Volts)"	"Cap Output (KVAR)"	"Reactor Current rating (Amps)"	M.R.P.(₹)
CYL	440V	5	525	6.6	7.21	6,817
		10	525	13.24	14.56	9,348
		12.5	525	16.55	18.04	11,083
		15	525	19.86	21.65	12,514
		20	525	26.48	28.86	16,829
		25	525	33.1	36.08	19,385

		7% Copper Reactor				
CYL	440V	5	525	6.6	7.21	7,636
		10	525	13.24	14.56	10,354
		12.5	525	16.55	18.04	12,323
		15	525	19.86	21.65	14,380
		20	525	26.48	28.86	18,284
		25	525	33.1	36.08	21,268

Note : The reactor shall be manufactured through authorized ABB System House as per ABB Design & specifications.

Low Voltage Products

Others Details

Capacitors and Filter modules

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Service portfolio	
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Type 2 coordination

MS132 DOL-NS

SCPD type : MMS
 Rated voltage : 400/415 V
 Short circuit current : 50 kA
 Starting type : DOL-NS
 Coordination type : IEC Type 2
 Overload relay : Embedded
 Frequency : 50-60 Hz

Motor		Manual Motor Starter			Contactor
Rated Power	Rated Current	Type	Instantaneous Tripping Current	Current setting range	Type
[kW]	[A]		[A]	[A]	
0.06	0.2	MS132-0,25	2.44	0.16 - 0.25	A9
0.09	0.3	MS132-0,40	3.9	0.25 - 0.40	A9
0.12	0.44	MS132-0,63	6.14	0.40 - 0.63	A9
0.18	0.6	MS132-0,63	6.14	0.40 - 0.63	A9
0.25	0.85	MS132-1,0	11.5	0.63 - 1.00	A9
0.37	1.1	MS132-1,6	18.4	1.00 - 1.60	A9
0.55	1.5	MS132-1,6	18.4	1.00 - 1.60	A9
0.75	1.9	MS132-2,5	28.75	1.60 - 2.50	A9
1.1	2.7	MS132-4,0	50	2.50 - 4.00	A16
1.5	3.6	MS132-4,0	50	2.50 - 4.00	A16
2.2	4.9	MS132-6,3	78.75	4.00 - 6.30	A26
3	6.5	MS132-10	150	6.30 - 10.00	A26
4	8.5	MS132-10	150	6.30 - 10.00	A26
5.5	11.5	MS132-12	180	8.00 - 12.00	A26
7.5	15.5	MS132-16	240	10.00 - 16.00	A30
11	22	MS132-25	375	20.00 - 25.00	A30
15	29	MS132-32	480	25.00 - 32.00	A30
18.5	35	MS450-40	520	28.00 - 40.00	A40

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MS116 SD - NS

Coordination type : IEC Type 2
 SCPD type : MMS
 Rated voltage : 400/415 V
 Short circuit current : 50 kA
 Starting type : SD-NS
 Overload relay : Embedded
 Frequency : 50-60 Hz

Rated Power	Rated Current	Type	Instantaneous Tripping Current	Current setting range	Line	Delta	Star
[kW]	[A]		[A]	[A]			
0.06	0.22	MS116-0,25	3	0.16 - 0.25	A9	A9	A9
0.09	0.34	MS116-0,40	4.8	0.25 - 0.40	A9	A9	A9
0.12	0.44	MS116-0,63	7.56	0.40 - 0.63	A9	A9	A9
0.18	0.72	MS116-1,00	12	0.63 - 1.00	A9	A9	A9
0.25	0.83	MS116-1,00	12	0.63 - 1.00	A9	A9	A9
0.37	1.12	MS116-1,60	19.2	1.00 - 1.60	A9	A9	A9
0.55	1.45	MS116-1,60	19.2	1.00 - 1.60	A9	A9	A9
0.75	1.9	MS116-2,50	30	1.60 - 2.50	A9	A9	A9
1.1	2.59	MS116-4,00	48	2.50 - 4.00	A16	A16	A9
1.5	3.45	MS116-4,00	48	2.50 - 4.00	A16	A16	A9
2	4	MS116-6,30	75.6	4.00 - 6.30	A16	A16	A9
2.2	4.8	MS116-6,30	75.6	4.00 - 6.30	A16	A16	A9

Type 2 coordination

MCCB DOL-NS

SCPD type : MCCB
 Rated voltage : 400/415 V
 Short circuit current : 50 kA
 Starting type : DOL-NS
 Coordination type : IEC Type 2
 Overload relay : TOL
 Frequency : 50-60 Hz

Motor		Moulded Case Circuit Breakers		Contactor	Overload Relay	
Rated Power	Rated Current		Instantaneous Tripping Current			Current setting range
[kW]	[A]	Type	[A]	Type	Type	[A]
0.37	1.1	T2S160 MF 1.6	21	A9	TA25DU1.4	1 - 1.4
0.55	1.5	T2S160 MF 1.6	21	A9	TA25DU1.8	1.3 - 1.8
0.75	1.9	T2S160 MF 2	26	A9	TA25DU2.4	1.7 - 2.4
1.1	2.8	T2S160 MF 3.2	42	A9	TA25DU4	2.8 - 4
1.5	3.5	T2S160 MF 4	52	A16	TA25DU5	3.5 - 5
2.2	5	T2S160 MF 5	65	A26	TA25DU6.5	4.5 - 6.5
3	6.6	T2S160 MF 8.5	110	A26	TA25DU8.5	6 - 8.5
4	8.6	T2S160 MF 11	145	A30	TA25DU11	7.5 - 11
5.5	11.5	T2S160 MF 12.5	163	A30	TA25DU14	10 - 14
7.5	15.2	T2S160 MA 20	210	A30	TA25DU19	13 - 19
11	22	T2S160 MA 32	288	A30	TA42DU25	18 - 25
15	28.5	T2S160 MA 52	392	A50	TA75DU42	29 - 42
18.5	36	T2S160 MA 52	469	A50	TA75DU52	36 - 52
22	42	T2S160 MA 52	547	A50	TA75DU52	36 - 52
30	56	T2S160 MA 80	840	A63	TA75DU80	60 - 80
37	68	T2S160 MA 80	960	A75	TA75DU80	60 - 80
45	83	T2S160 MA 100	1200	A95	TA110DU110	80 - 110
55	98	T3S250 MA 160	1440	A110	TA110DU110	80 - 110
75	135	T3S250 MA 200	1800	A145	TA200DU175	130 - 175
90	158	T3S250 MA 200	2400	A185	TA200DU200	150 - 200
110	193	T4S320 PR221-I In320	2720	A210	EF370-380	115 - 380
132	232	T5S400 PR221-I In400	3200	A260	EF370-380	115 - 380
160	282	T5S400 PR221-I In400	4000	A300	EF370-380	115 - 380
200	349	T5S630 PR221-I In630	5040	AF400	EF460-500	150 - 500
250	430	T6S630 PR221-I In630	6300	AF460	EF460-500	150 - 500
290	520	T6S800 PR221-I In800	7200	AF580	EF750-800	250 - 800
315	545	T6S800 PR221-I In800	8000	AF580	EF750-800	250 - 800
355	610	T6S800 PR221-I In800	8000	AF750	EF750-800	250 - 800

Type 2 coordination

MCCB SD-NS

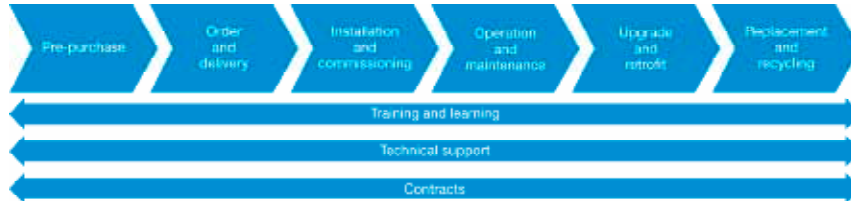
SCPD type : MCCB
 Rated voltage : 400/415 V
 Short circuit current : 50 kA
 Starting type : SD-NS
 Coordination type : IEC Type 2
 Overload relay : TOL
 Frequency : 50-60 Hz

Motor		MCCB		Contactor			Thermal release	
Pe [kW]	Ie [A]	type	Im [A]	line type	delta type	star type	type	[A]
18.5	36	T2S160 MA52	469	A50	A50	A26	TA75DU25	18-25
22	42	T2S160 MA52	547	A50	A50	A26	TA75DU32	22-32
30	56	T2S160 MA80	720	A63	A63	A30	TA75DU42	29-42
37	68	T2S160 MA80	840	A75	A75	A30	TA75DU52	36-52
45	83	T2S160 MA100	1050	A75	A75	A30	TA75DU63	45-63
55	98	T2S160 MA100	1200	A75	A75	A40	TA75DU63	45-63
75	135	T3S250 MA160	1700	A95	A95	A75	TA110DU90	66-90
90	158	T3S250 MA200	2000	A110	A110	A95	TA110DU110	80-110
110	193	T3S250 MA200	2400	A145	A145	A95	TA200DU135	100-135
132	232	T4S320 PR221-I In320	2880	A145	A145	A110	EF205-210	63-210
160	282	T5S400 PR221-I In400	3600	A185	A185	A145	EF205-210	63-210
200	349	T5S630 PR221-I In630	4410	A210	A210	A185	EF370-380	115-380
250	430	T5S630 PR221-I In630	5670	A260	A260	A210	EF370-380	115-380
290	520	T6S630 PR221-I In630	6300	AF400	AF400	A260	E500DU500	150-500
315	545	T6S800 PR221-I In800	7200	AF400	AF400	A260	E500DU500	150-500
355	610	T6S800 PR221-I In800	8000	AF400	AF400	A260	E500DU500	150-500

Service Portfolio

Low Voltage Products Division delivers a vast range of services to cover the whole product lifecycle

The services offered by ABB's Low Voltage Products and Systems span the entire value chain, from the moment a customer makes the first enquiry to disposal and recycling of the product. Throughout the value chain, ABB provides training, technical support and customized contracts. All of this is supported by one of the most extensive country sales and service network.



Installation and commissioning

ABB provides comprehensive installation and commissioning services to achieve a problem-free start up, by following installation and commissioning procedures. The use of service personnel from ABB LP Service ensures that the switchgear is installed in a safe and correct way.

manager of an electrical site can find it convenient to have certain maintenance capabilities available within his own team.

The courses mainly cover:

- Operating equipment
- Maintenance principles
- Repairs for small faults

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Operation and maintenance

ABB can guide the customer through a fast and efficient fault finding procedure as well as analyze the operation of the product and the customer's process. From site surveys to preventive, predictive maintenance and reconditioning, ABB has all the options covered to keep its customers' processes operational.

Technical support

At each stage of the value chain, an ABB expert is available to offer advice to keep the customer's process or plant operational.

Upgrade and retrofits

Upgrades

An existing ABB product can often be upgraded to the latest software or hardware to improve the performance of the application. Existing processes can be economically modernized by upgrading with the latest technology.

Spare parts

Availability of original spare parts is essential for fast and efficient maintenance activities. This becomes even more critical when the product was produced some years ago and has components in it which are no longer in production. ABB LP Service is the only one able to supply original and guaranteed spare parts. These can be easily selected and ordered through the authorized channel.

Retrofits

Replacing old LV Switchgear of any make with ABB's latest versions can be done using the ABB special conversion kits which enable quick installation without structural modifications to the original compartment. In addition complete "turnkey" solutions are available. Specific conversion kits have been developed in order to replace old components with new ones that can be found in the latest switchgears.

Replacement and Recycling

ABB can advise on the best replacement products while ensuring that the existing products are disposed of in a way that meets all local regulations.

Maintenance contracts

In addition to the corrective maintenance of a faulty unit, which includes any type of emergency intervention, there is a complete preventive maintenance service package, ensuring those who manage the plant gain considerable advantages in terms of reliability, safety and reduction of costs. Also Customized contracts can be devised between the customer and ABB. Depending on the severity of the intervention needed, it can often be done on-site by our skilled and experienced engineers and is a faster way of resolution. ABB LP Service has an effective service network across the country and dedicated service workshops. For all your service requirements, contact our nearest Sales office.

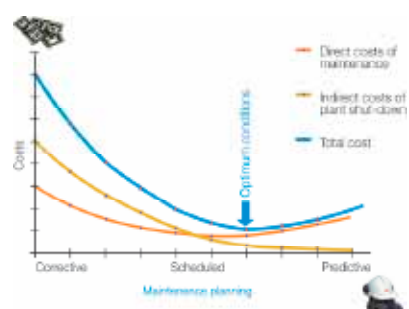
Entire value chain services

The main services available throughout the entire value chain include:

Training and learning – Hands on

ABB LP Service carries out training programs. Those trainings can be either general or bespoke and have the aim of providing the personnel in charge of management/maintenance with the necessary know-how to achieve an excellent level of operating ability in certain situations. The

Benefits of Maintenance Contracts



General conditions of sale

General terms and conditions of sale:

- All prices mentioned in this price list are in Indian rupees(INR)
- Prices are based on Ex-work basis
- Prices indicated are Maximum retail price (maximum recommended selling price) unless otherwise marked(Inclusive of duties and taxes)
- Items marked # are with list prices are inclusive of excise duty/counter veiling duty, However exclusive of all taxes and levies
- Prices are subject to revision without prior notice

Terms of delivery: Ex- work, Nelamangala or any other ABB warehouse in India

Standard delivery terms

Ex stock or 30 working days

Address of Nelamangala Warehouse

ABB INDIA LIMITED
#126, Hanchipura Village, Kasaba Hobli
Nelamangala Taluk, Bangalore 562123
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Peenya Industrial Area 560058
Bangalore, Karnataka, India
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Fax: +91 80 22949389

LV Capacitor factory:
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IV Phase, Peenya Industrial Area
Bangalore – 560 058
Email : lvcapacitors-sales@in.abb.com

Haridwar
ABB India Limited.
Plot No. 1, Sector 1B, I.I.E. SIDCUL
Haridwar – 249403 INDIA
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Fax : +91 1334-235349

Classic Products

Isomax “S” Range of MCCB’s
OETL upto 2500 Amps Load Break Switches
OESA 200 to 800 Switches

Warranty Policy:

ABB guarantee the supply according to the law. Upon expiration, the warranty expires even if the devices have not been operated for any reason. In the case of faults, as long as this does not depend on assembly errors by the Customer or third parties, on incorrect use of the materials, lack of or incorrect maintenance, normal wear and tear, faults caused by inexperience or negligence by the purchaser or by transport, by the improper storage of the materials, or failure by the Customer to adopt measures to reduce eventual dysfunction, overload with respect to the contractual limits, by unauthorized intervention, by tampering or action effected by the Customer, to force majeure, ABB will, throughout the warranty period, repair or replace any defective part of supply free of charge, in the shortest possible time, at its premises. Where the repair cannot be executed at ABB premises, except as otherwise agreed, all the supplementary or relevant expenses shall be borne by the customer.

Repair or replacement will be executed only if the customer has performed all its obligations to that date. The Customer may not suspend performance of the obligations in any case in which this warranty is invoked. The term for the repair or replacement of the faulty supply will be agreed by ABB and the customer. The shipment of any supply claimed to be faulty by the Customer to ABB and subsequently by ABB to the Customer, shall be at the risk and under the responsibility of the customer, who shall arrange adequate insurance coverage. The supply repaired or replaced is shipped at the expense and risk of the customer. Any dispute about a shipment has no effect on the remainder of the supply. The products replaced by ABB become the property of ABB.

Any claim regarding the supply, machinery, plant or components not compliant with the specifications or the contractual documentation must be raised in writing, within a maximum term of 8 days from delivery, when the time limit for action expires. In the case of systems, this term is 60 days from execution of the disputed service when the time limit for action expires.

In the case of latent defects, the terms indicated above run from the date of discovery. Once the warranty period has expired claims are not accepted, even for latent defect. Where the claim is timely and justified, ABB's obligation is limited to replacement of the goods found not in compliance or repetition of execution of the non-compliant service, excluding all rights to the Customer to seek termination of the contract and/or compensation of damages.

General conditions of sale

With reference to the provision of spare parts, ABB reserves the right to provide materials either from the original supplier or from equivalent supplier.

Warranty Period:

- 1. Breakers & Switches:** The Warranty period is 12 months from the date of commissioning or 18 months from the date of ABB's invoice, whichever is earlier.
- 2. Control Products:** The Warranty period is 12 months from the date of commissioning or 18 months from the date of ABB's invoice, whichever is earlier.
- 3. Enclosures & Din Rail Components:** The warranty period is 5 years from the date of ABB's invoice if the components are used in ABB's enclosure. If non- ABB enclosure is used, Warranty period is 12 months from the date of commissioning or 18 months from the date of ABB's invoice, whichever is earlier.
- 4a. Wiring Accessories:** 10 years of warrantee The company at its discretion will repair or replace products if they have any manufacturing defect within 10 years from date of purchases for switches (without LED Lamp) and Power Sockets. For other ABB wiring accessories, the warrantee will be for 2 years. ABB mounting boxes are not covered under warrantee. Warrantee for all the products will not be valid: If devices are not used with original ABB Mounting Boxes. If devices are altered, dismantled, rectified or tampered. Warrantee states Company's entire liability. This does not extend to cover consequential losses or damage or installation cost arising from defective products. Since product improvement is a continuous process, the data furnished in this brochure may undergo revision. For the latest information, you may contact our nearest sales office.
- 4b. Plug & Sockets:** The Warranty period is 12 months from the date of commissioning or 18 months from the date of ABB's invoice, whichever is earlier.
- 5. LV Capacitor:** The warranty is 12 months from the date of commissioning or 18 months from the date of ABB's invoice. Whichever is earlier.

Liability Clause:

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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www.abb.com/lowvoltage

Products available at:

