

Formula DSA Molded case circuit breaker

Fixed thermal and fixed magnetic MCCB

Breaking capacity at 415VAC

	Icu
A	10kA
B	18kA
C	25kA
N	36kA
S	50kA

TMF	A			B			C			N		
Frame	In(A)	Poles	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)		
A1	25	3P	1SDA066512R1 ■	5,910	1SDA066699R1	7,880	1SDA066711R1	9,270	1SDA066723R1	11,240		
	32		1SDA068757R1 ■		1SDA068758R1 ■		1SDA068759R1 ■		1SDA068760R1			
	40		1SDA066514R1 ■		1SDA066701R1		1SDA066713R1		1SDA066725R1			
	50		1SDA066515R1 ■		1SDA066702R1		1SDA066714R1		1SDA066726R1			
	63		1SDA068768R1 ■		1SDA068769R1 ■		1SDA068770R1 ■		1SDA068771R1 ■			
	80		1SDA066518R1 ■		1SDA066705R1		1SDA066717R1 ■		1SDA066729R1			
	100		1SDA066520R1 ■		1SDA066707R1 ■		1SDA066719R1 ■		1SDA066731R1 ■			
A2	125		1SDA066521R1 ■	6,960	1SDA066708R1 ■	9,050	1SDA066720R1 ■	10,110	1SDA066732R1 ■	12,280		
	160				1SDA066549R1 ■	15,490	1SDA066776R1 ■	16,520	1SDA066782R1 ■	16,870		
	200				1SDA066551R1 ■	18,080	1SDA066778R1 ■	19,410	1SDA066784R1 ■	21,270		
	250				1SDA066553R1 ■	19,410	1SDA066780R1 ■	20,750	1SDA066786R1 ■	23,850		

TMF	A			B			C			N		
Frame	In(A)	Poles	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)		
A1	25	4P	1SDA066526R1	7,920	1SDA066735R1	10,260	1SDA066747R1	12,280	1SDA066759R1	14,020		
	32		1SDA068761R1 ■		1SDA068762R1		1SDA068763R1 ■		1SDA068764R1			
	40		1SDA066528R1		1SDA066737R1		1SDA066749R1		1SDA066761R1			
	50		1SDA066529R1		1SDA066738R1		1SDA066750R1		1SDA066762R1			
	63		1SDA068772R1 ■		1SDA068773R1 ■		1SDA068774R1 ■		1SDA068775R1 ■			
	80		1SDA066532R1		1SDA066741R1		1SDA066753R1		1SDA066765R1			
	100		1SDA066534R1 ■		1SDA066743R1 ■		1SDA066755R1 ■		1SDA066767R1 ■			
A2	125		1SDA066535R1 ■	8,460	1SDA066744R1 ■	11,280	1SDA066756R1 ■	13,390	1SDA066768R1 ■	15,280		
	160				1SDA066555R1 ■	20,250	1SDA066788R1 ■	21,540	1SDA066794R1 ■	22,030		
	200				1SDA066557R1 ■	23,120	1SDA066790R1 ■	24,940	1SDA066796R1 ■	27,540		
	250				1SDA066559R1 ■	25,210	1SDA066792R1 ■	28,570	1SDA066798R1 ■	30,360		

Accessories

Terminals				Terminals			
Front extended spread terminal - ES	Poles	Ordering code	L.P. (₹) 6 pieces	Front extended spread terminal - ES	Poles	Ordering code	L.P. (₹) 8 pieces
A1	3P	1SDA082242R1 ■	970	A1	4P	1SDA082243R1 ■	1,310
A2		1SDA082247R1 ■	2,650	A2		1SDA082248R1 ■	2,980

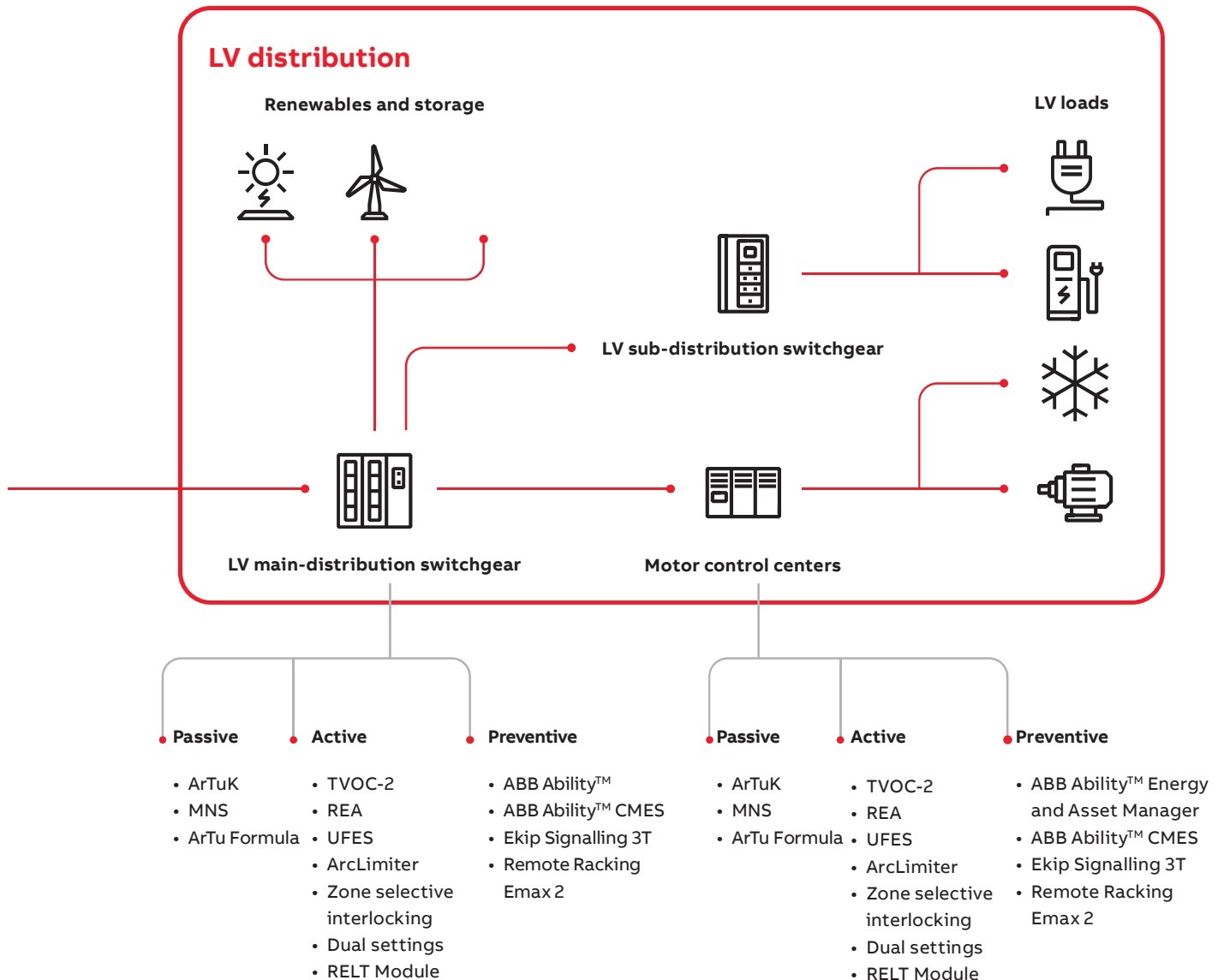
	Description	Ordering code	L.P. (₹)
Rotary handle	RHD - Direct Rotary handle A1-A2	1SDA066154R1 ■	2,320
	RHE - Extended Rotary handle A1-A2	1SDA066158R1 ■	2,180
Shunt opening release – SOR-C Cabled version	SOR-C 220...240 VAC - 220...250 VDC A1-A2	1SDA066137R1	2,880
	SOR-C 380...440 VAC A1-A2	1SDA066138R1	2,880
Auxiliary contacts – AUX-C Cabled version	AUX-C 1Q + 1SY 250 VAC/DC A1-A2	1SDA066149R1	2,900
	AUX-C 1Q 250V AC/DC A1-A2	1SDA066258R1 ■	1,310
Undervoltage release – UVR-C Cabled version	UVR-C 220...240 VAC - 220...250 VDC A1-A2	1SDA066146R1	4,830
	UVR-C 380...440 VAC A1-A2	1SDA066147R1	

Arc flash protection and mitigation solutions

Passive, active and preventive

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.



Arc Guard System TVOC-2



Arc Monitor with COM Module



Extension unit



Extension Supervised detectors



Detector cable



Supervised detectors



CSU-2LV



Rogowski coil



Optical cable

Ordering details

Description	Rated supply voltage	Type	Ordering code	LP.(₹)
Arc Monitor including one HMI and door mounting accessories	24...48V DC	TVOC-2-48	1SFA664001R1002	Upon request
Arc Monitor including one COM Module and door mounting accessories	100...240V AC/ 100...250V DC	TVOC-2-240	1SFA664001R1001	
	24...48V DC	TVOC-2-48-C	1SFA664001R1004	
	100...240V AC/ 100...250V DC	TVOC-2-240-C	1SFA664001R1003	

Accessories

Description	Type	Ordering code	LP.(₹)
Extension-10 optical inputs	TVOC-2-E1	1SFA664002R1001	Upon request
Extension-10 optical inputs for cable TVOC-2-DP60 only	TVOC-2-E3	1SFA664002R3001	
10 optical inputs for supervised detectors only ⁽¹⁾	TVOC-2-E6-S	1SFA664002R6001	
COM Module-with communication interface (Modbus RTU) and door mounting	TVOC-2-COM	1SFA664002R4001	

Detector

Description		Type	Ordering code	LP.(₹)
Cable length	1 m	TVOC-2-DP1	1SFA664003R1010	Upon request
	2 m	TVOC-2-DP2	1SFA664003R1020	
	4 m	TVOC-2-DP4	1SFA664003R1040	
	6 m	TVOC-2-DP6	1SFA664003R1060	
	8 m	TVOC-2-DP8	1SFA664003R1080	
	10 m	TVOC-2-DP10	1SFA664003R1100	
	15 m	TVOC-2-DP15	1SFA664003R1150	
	20 m	TVOC-2-DP20	1SFA664003R1200	
	25 m	TVOC-2-DP25	1SFA664003R1250	
	30 m	TVOC-2-DP30	1SFA664003R1300	
60 m ⁽¹⁾	TVOC-2-DP60	1SFA664003R3600		

Supervised detectors

Description	Type	Ordering code	LP.(₹)
Cable length	6 m	TVOC-2-DP4-S	1SFA664003R2040
	4 m	TVOC-2-DP6-S	1SFA664003R2060
	10 m	TVOC-2-DP10-S	1SFA664003R2100
	15 m	TVOC-2-DP15-S	1SFA664003R2150
	30 m	TVOC-2-DP30-S	1SFA664003R2300
			Upon request

Current sensing unit

Description	Type	Order code	LP.(₹)
Low voltage current sensing unit	CSU-2LV	1SFA664002R5001	Upon request
Medium voltage current sensing unit	CSU-2MV	1SFA664002R8001	

Diameter mm	Cable length	Type	Order code	LP.(₹)
Rogowski coil current sensors for low voltage applications				
120	5	RC120-05	1SFA664002R5001	Upon request
	10	RC120-10	1SFA664005R1210	
	15	RC120-15	1SFA664005R1215	
	30	RC120-30	1SFA664005R1230	
200	5	RC200-05	1SFA664005R2005	
	10	RC200-10	1SFA664005R2010	
	15	RC200-15	1SFA664005R2015	
	30	RC200-30	1SFA664005R2030	

Optical cable

Description		Type	Order code	LP.(₹)
To transfer signals between TVOC-2 and CSU-2				
Cable length(2)	1 m	TVOC-2-OP1	1SFA664004R1010	Upon request
	2 m	TVOC-2-OP2	1SFA664004R1020	
	10 m	TVOC-2-OP10	1SFA664004R1100	
	15 m	TVOC-2-OP15	1SFA664004R1150	
	30 m	TVOC-2-OP30	1SFA664004R1300	

⁽¹⁾ Only to be used with TVOC-2-E3

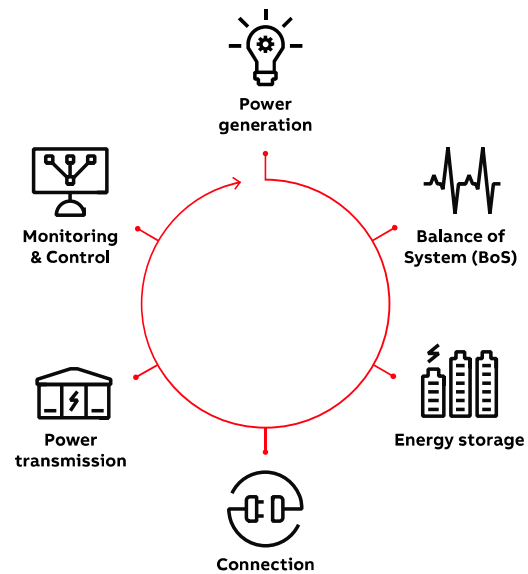
⁽²⁾ Available in lengths 0.5m to 30m. Refer technical catalogue for details

ABB's comprehensive range of LV products for renewable and battery energy storage application

Every renewable project starts with a promise: clean, reliable power that performs every day. ABB turns that promise into reality with a comprehensive portfolio of applications for solar, wind, grid and battery energy storage systems (BESS).

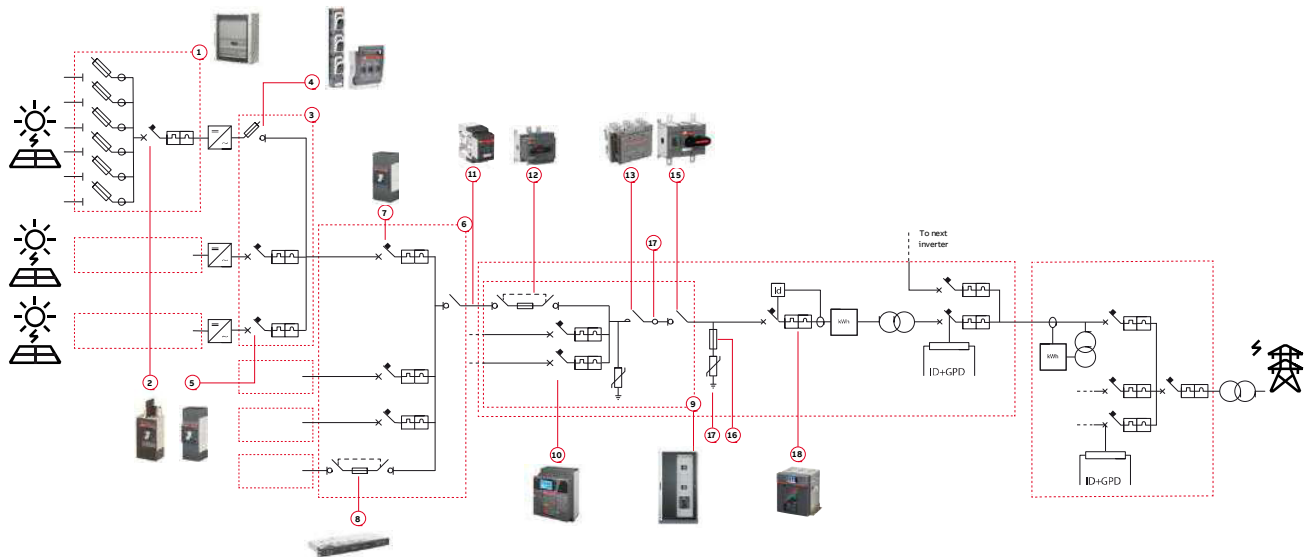
Our domain experts have engineered intelligent distribution applications that give you real-time visibility of your Renewable Energy assets—enabling remote plant monitoring, preventing outages, and cutting maintenance downtime, supported by robust switching and protection solutions. By combining cutting edge solution in photovoltaic, wind and ESS technologies up to 1500 V DC and 1200 V AC, ABB helps you achieve continuous operation, higher reliability, and stronger returns on investment.

As renewable penetration rises and balancing supply with end-user demand becomes more complex, ABB supports you across the entire value chain—from consulting and generation to storage, grid connection, transmission, monitoring, and optimization—so you can confidently play your role in the sustainable energy transition.



Solar application overview

Utility scale system String inverters



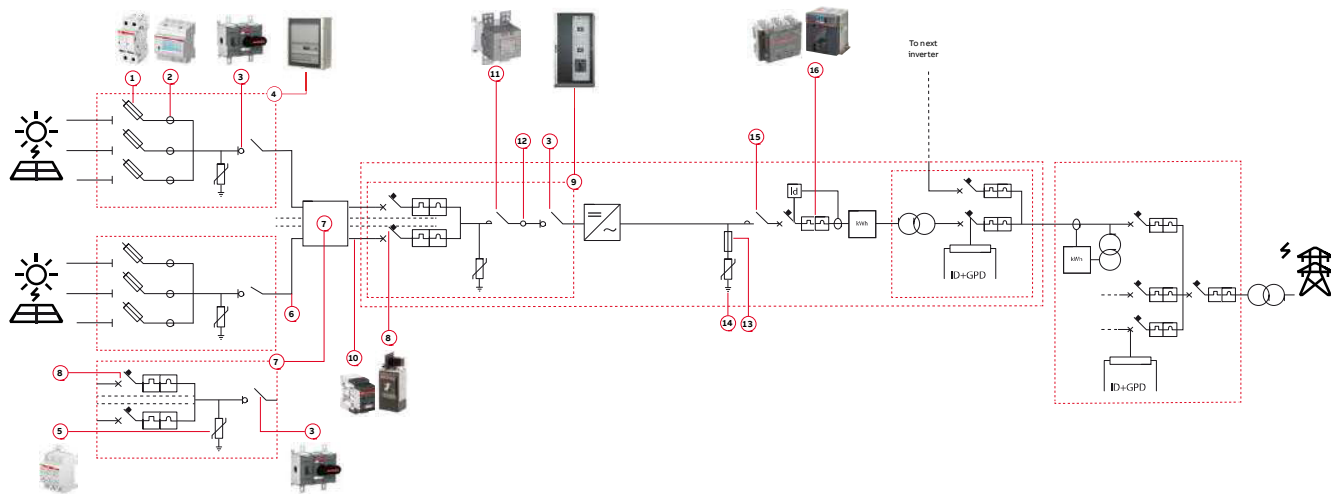
Low-voltage products:

1. String Combiner
2. MCCBs Tmax PV
3. Recombiner
4. Fuse Switch Disconnectors: InLine II and EasyLine
5. MCCBs for AC applications
6. Switchboard
7. MCCBs for AC applications
8. Switch Disconnectors Fuse: SlimLine XR

9. Switchboard

10. MCCBs: Tmax XT
11. Insulation monitoring devices: CM-IWx
12. Switch Fuse (up to 690V AC): OS
13. Contactors: AF seriesv
14. GFDI Application: S804U-PVS5
15. Switch-disconnectors: OT
16. Fuse disconnectors: E 90
17. Surge protection devices: OVR T1 / T1-T2 / T2 QS
18. MCCBs: Tmax XT, Tmax T ACB: Emax 2

Utility scale system Central inverters



Low-voltage products:

1. Fuse disconnectors: E 90 PV; Fuses: E 9F PV
2. Current measurement system: CMS
3. Switch-disconnectors: OTDC
4. String combiners: 1000V DC/1500V DC Switchboards
5. SPDs: OVR PV QS
6. String Monitoring Controller
7. Recombiner
8. MCCBs: Tmax PV

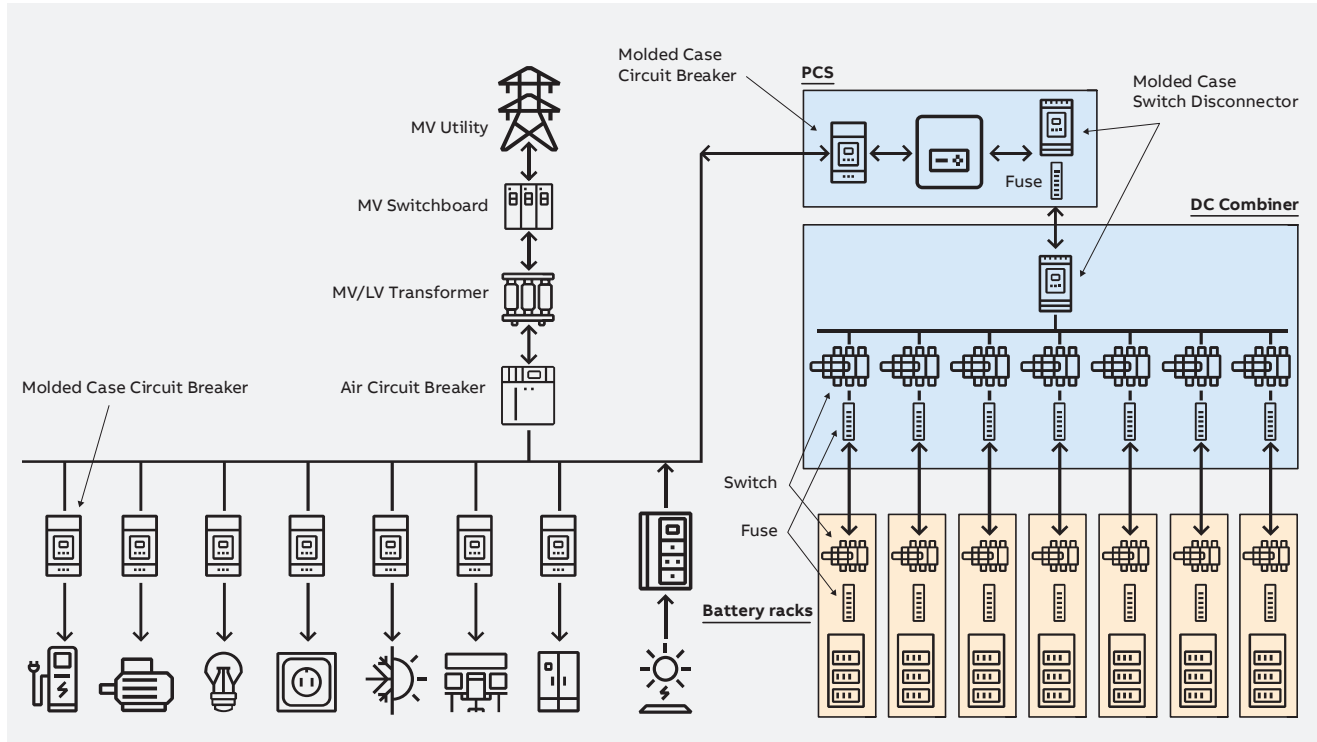
9. Switchboard

10. Insulation monitoring devices: CM-IWx
11. Contactors: GF and GAF series
12. GFDI Application: S804U-PVS5
13. Fuse disconnectors: E 90
14. SPDs: OVR T1 / T1-T2 / T2 QS
15. Contactors: AF Series
16. MCCBs: Tmax XT, Tmax T ACBs: Emax 2

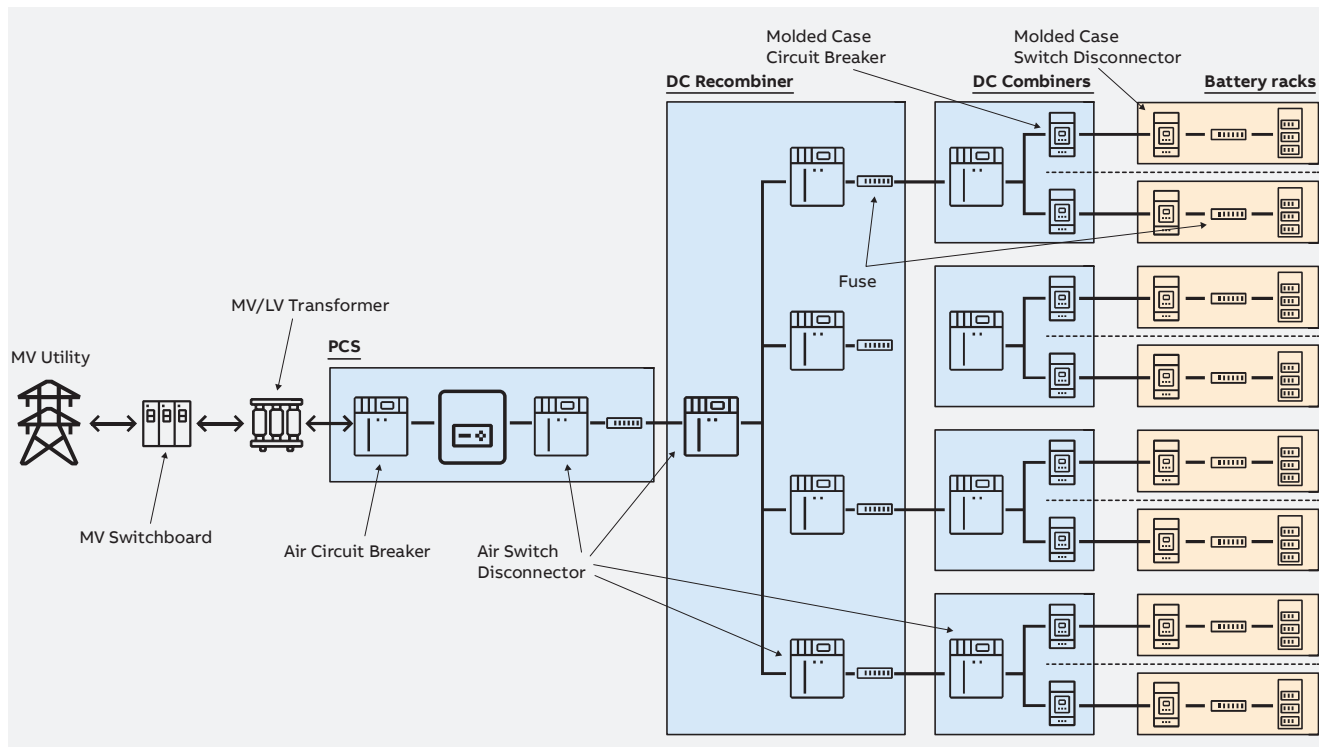
BESS application overview

Behind-the-meter Battery Energy Storage Systems

Commercial and Industrial scale – system architecture



Utility Scale - system architecture



SACE Emax 2/E9 and /E10

Range IEC circuit breakers at 800-900V and 1000V

Common data		
Rated service voltage Ue	[V]	800-900 (/E9), 1000 (/E10)
Rated insulation voltage Ui	[V]	1000
Rated impulse withstand voltage Uimp	[kV]	12*
Frequency	[Hz]	50 - 60
Version		Fixed - Withdrawable
Suitable for isolation according to		IEC 60947-2
Ultimate short circuit breaking Icu	[kA]	Upto 100**
Short circuit withstand current Icw	[kA]	Upto 90

(*) 15kV for E4.2/E10

(**) Icu value mentioned for 800V

- Smart, plug-and-play architecture, easy to use
- The best performance up to 1000V of any device on the market
- The first smart circuit-breaker that enables direct communication with ABB Ability™ EDCS
- Emax 2/E9 & / E10 all-in-one is the most compact circuit-breaker on the market



For further detail, consult
the Emax 2/E catalogue
for ACB >690Vac



SACE Emax 2/E12

Range IEC circuit breakers at 1000-1150-1200V up to 1380V

Common data		
Rated service voltage Ue	[V]	1200
Rated insulation voltage Ui	[V]	1500
Rated impulse withstand voltage Uimp	[kV]	15
Frequency	[Hz]	50-60
Number of poles		3
Version		Fixed- Withdrawable
Suitable for isolation according to		IEC 60947-2
Ultimate short circuit breaking Icu	[kA]	Upto 65
Short circuit withstand current Icw	[kA]	Upto 65

The SACE Emax2/E12 automatic circuit breakers have been certified according to IEC 60947-2. Three levels of performances are offered: "S" with essential performances, "H" with advanced breaking capacities (85kA@1000V, 65kA@1200V), and "V" with extended voltage range up to 1380V.

Devices are available in fixed and withdrawable versions, and can be fitted with a vast assortment of electrical and mechanical accessories already available for the standard SACE Emax 2 range.



For further detail, consult
the Emax 2/E catalogue
for ACB >690Vac

SACE Emax 2 MS/DC-E

Range IEC Air switch disconnectors at 1500 V DC



The SACE Emax 2 MS/DC-E IEC range has been developed for installations up to 1500V DC and 4000 A, with short-time withstand current up to 100 kA.

The SACE Emax 2 MS/DC-E is compliant with DC-PV2, the most demanding Utilization Category according to IEC 60947-3 Annex D, since it requires the ability to connect and disconnect PV circuits where significant overcurrents may occur and where current flow can be in either direction; these are common characteristics of centralized PV systems.

Because of dedicated shorting busbar (jumper) kits, all four poles can be connected in series to isolate a single polarity source, or alternatively for a dual polarity source 2 poles can be configured in series for the positive supply and the other 2 poles in series for the negative supply. SACE Emax 2 MS/DC-E can be fitted with a vast assortment of electrical and mechanical accessories already available for the standard SACE Emax 2 range. The IEC version has also achieved China CCC certification.

Common data

Rated service voltage Ue	[V]	1500
Rated insulation voltage Ui	[V]	1500
Rated impulse withstand voltage Uimp	[kV]	12
Number of poles		4
Version		Fixed - Withdrawable
Suitable for isolation according to		IEC 60947-3
Utilization category		DC22A, DC-PV2 (Annex D)



For further detail, please consult the SACE Emax 2 MS/DC-E technical catalogue

Tmax PV: Molded case switch disconnecter upto 1500V DC



Tmax PV is the latest generation product up to 1600 A/1100 V DC/1500V DC.

- IEC 60947-3 certification
- 4 different sizes
- 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 with MOE options

Rated current In (A)	Rated voltage	Description	Version / Poles	Ordering code	L.P. (₹)
250	1100 V DC	T4D/PV 250 4p F F 1100V DC	Fixed / 4p	1SDA069823R1	Upon request
500		T5D /PV 500 4p F F 1100V DC	Fixed / 4p	1SDA069824R1	
800		T6D/PV 800 4p F F 1100V DC	Fixed / 4p	1SDA069825R1	
1250		T7D/PV 1250 4p F F 1100V DC	Fixed / 4p	1SDA069826R1	
1250M		T7D/PV 1250 4p F F M 1100V DC	Fixed / 4p	1SDA069827R1	
1600		T7D/PV 1600 4p F F 1100V DC	Fixed / 4p	1SDA069828R1	
1600M		T7D/PV 1600 4p F F M 1100V DC	Fixed / 4p	1SDA069829R1	

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

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

For information contact our nearest sales office

■ Stock items

Tmax PV: Photovoltaic range

MCCB upto 1150 V AC



Tmax PV is the latest generation product up to 800A at 800V AC/1000V AC*/1150V AC*.

- IEC 60947-2 certification
- Available upto 3 different frame sizes depending on different voltage level
- Rated insulation voltage up to 1000V AC/1150V AC
- Protection settings available in thermal-magnetic, electronic trip unit (for power distribution, renewable application & motor protection application)
- Advantages like
 - excellent performance-dimensions
 - complete range of accessories for all requirements
 - remote control with Mororization options

Frame	800 V	1000 V	1150 V
T4	25 kA	20 kA	12 kA
T5	36 kA	20 kA	12 kA
T6	-	12 kA	-

Ultimate short Circuit Current (Icu) rating at different voltage level

Rated current In (A)	Rated voltage	Description	Version / Poles	Ordering code	L.P. (₹)
80	800 V AC	T4V-HA 250 TMA 80-800 3p F F 800V AC	Fixed / 3p	1SDA083658R1	Upon request
100		T4V-HA 250 TMA 100-1000 3p F F 800V AC	Fixed / 3p	1SDA083659R1	
125		T4V-HA 250 TMA 125-1250 3p F F 800V AC	Fixed / 3p	1SDA083660R1	
160		T4V-HA 250 TMA 160-1600 3p F F 800V AC	Fixed / 3p	1SDA083661R1	
200		T4V-HA 250 TMA 200-2000 3p F F 800V AC	Fixed / 3p	1SDA083662R1	
250		T4V-HA 250 TMA 250-2500 3p F F 800V AC	Fixed / 3p	1SDA083663R1	
320		T5V-HA 400 TMA 320-3200 3p F F 800V AC	Fixed / 3p	1SDA083664R1	
400		T5V-HA 400 TMA 400-4000 3p F F 800V AC	Fixed / 3p	1SDA083665R1	
500		T5V-HA 630 TMA 500-5000 3p F F 800V AC	Fixed / 3p	1SDA083666R1	
630		T5V-HA630 PR221DS-LS/I In630 3p FF800VAC	Fixed / 3p	1SDA083656R1	

Rated current In (A)	Rated voltage	Description	Version / Poles	Ordering code	L.P. (₹)
80	800 V AC	T4V-HA250 TMA80-800 4p FF 800V AC	Fixed / 4p	1SDA083647R1	Upon request
100		T4V-HA250 TMA100-1000 4p FF800V AC	Fixed / 4p	1SDA083648R1	
125		T4V-HA250 TMA125-1250 4pFF 800V AC N100%	Fixed / 4p	1SDA083649R1	
160		T4V-HA250 TMA160-1600 4pFF 800V AC N100%	Fixed / 4p	1SDA083650R1	
200		T4V-HA250 TMA200-2000 4pFF 800V AC N100%	Fixed / 4p	1SDA083651R1	
250		T4V-HA250 TMA250-2500 4pFF 800V AC N100%	Fixed / 4p	1SDA083652R1	
320		T5V-HA400 TMA320-3200 4pFF 800V AC N100%	Fixed / 4p	1SDA083653R1	
400		T5V-HA400 TMA400-4000 4pFF 800V AC N100%	Fixed / 4p	1SDA083654R1	
500		T5V-HA630 TMA500-5000 4pFF 800V AC N100%	Fixed / 4p	1SDA083655R1	
630		T5V-HA630 PR221DS-LS/I In630 4p FF800VAC	Fixed / 4p	1SDA083667R1	

Rated current In (A)	Rated voltage	Description	Version / Poles	Ordering code	L.P. (₹)
250	800 V AC	T4V-HA250 PR222DS-LSIG In250 3p FF800VAC	Fixed / 3p	1SDA107747R1	Upon request
320		T5X-HA400 PR222DS-LSIG In320 3p FF800VAC	Fixed / 3p	1SDA107746R1	
400		T5X-HA400 PR222DS-LSIG In400 3p FF800VAC	Fixed / 3p	1SDA107745R1	

Rated current In (A)	Rated voltage	Description	Version / Poles	Ordering code	L.P. (₹)
250	800 V AC	T4V-HA250 PR222DS-LSIG In250 4p FF800VAC	Fixed / 4p	1SDA113740R1	Upon request
320		T5X-HA400 PR222DS-LSIG In320 4p FF800VAC	Fixed / 4p	1SDA113737R1	
400		T5X-HA400 PR222DS-LSIG In400 4p FF800VAC	Fixed / 4p	1SDA113739R1	

For information on product and accessories selection suitable to application, contact our nearest sales office
For product selection 1000V AC and 1150 V AC MCCB, contact our nearest sales office.



For further detail, please consult
the SACE TMAX for special
applicationtechnical catalogue

Tmax XT - XT5-HVA8: Photovoltaic range MCCB 800V AC NEW



- Enhanced ultimate breaking capacity (Icu) at 50 kA
- Single frame for 250- 320 - 400 Amps.
- The double break mechanism enhances the circuit breaker's arc interruption capability and overall performance.

TMAX XT5 -HVA8

Frame	In _{max}	Icu
XT5	250A	50kA
XT5	300A	50kA
XT5	400A	50kA

Rated current In (A)	Trip unit	Description	Version / Poles	Ordering code	L.P. (₹)
320	TMA	XT5X HVA8 320-3200 TMA 3P FF	Fixed / 3p	1SDA133713R1	Upon request
400		XT5X HVA8 400-4000 TMA 3P FF		1SDA133714R1	
250	LS/I	XT5X HVA8 400 EkipDip LS/I In=250 3P FF		1SDA133717R1	
320		XT5X HVA8 400 EkipDip LS/I In=320 3P FF		1SDA133718R1	
400		XT5X HVA8 400 EkipDip LS/I In=400 3P FF		1SDA133719R1	
250		XT5X HVA8 400 EkipDip LSIG In=250 3P FF		1SDA133723R1	
320	LSIG	XT5X HVA8 400 EkipDip LSIG In=320 3P FF		1SDA133724R1	
400		XT5X HVA8 400 EkipDip LSIG In=400 3P FF		1SDA133725R1	

Rated current In (A)	Trip unit	Description	Version / Poles	Ordering code	L.P. (₹)
320	TMA	XT5X HVA8 320-3200 TMA 4P FF	Fixed / 3p	1SDA133715R1	Upon request
250	LS/I	XT5X HVA8 400 EkipDip LS/I In=250 4P FF		1SDA133726R1	
320		XT5X HVA8 400 EkipDip LS/I In=320 4P FF		1SDA133727R1	
250	LSIG	XT5X HVA8 400 EkipDip LSIG In=250 4P FF		1SDA133730R1	
320		XT5X HVA8 400 EkipDip LSIG In=320 4P FF		1SDA133731R1	

Compatibility of accessories for Tmax XT5X - HVA8 :

Tmax XT5 -HVA8 MCCBs are compatible with accessories/spare parts of Tmax XT5 690V MCCB aligned with compatible trip unit option with below exception:

- Fixing parts and conversion kits: Tmax XT5 -HVA8 is only available in fixed version
- Extended spreader terminal is not compatible.
- Phase barrier installation is mandatory. Suitable phase barrier will be supplied with selected terminal option.
- Rear mechanical interlock, Residual current block & Rating plug are not compatible.



For further detail, please consult the
TMAX XT5 -HVA8 technical catalogue

DC switch disconnectors for PV application



OTDC 10A....1000A

- Compact DC switches for single & multi-circuit disconnecting
- Polarity independent design with visible contacts
- Optimized arc chamber with a long opening angle with patented DMB® - Dual Magnetic Breaking
- Flexible mechanism placement; 4 pole options available
- Quick make/quick break, immune to voltage peaks
- Direct or door mounted handle options
- Low power losses for high efficiency



Rated current In (A)	Rated voltage	Description	Ordering code	L.P. (₹)	Rated voltage	Description	Ordering code	L.P. (₹)
10	1000 V DC	OTDC16F2	1SCA121454R1001	Upon request	1500 V DC			Upon request
16		OTDC16F3	1SCA121457R1001					
25		OTDC25F3	1SCA121458R1001 ■					
32		OTDC32F3	1SCA121459R1001 ■					
100 - 200		OTDC200E11K - I	1SCA145988R1001					
250		OTDC250E11K - I	1SCA145994R1001					
315		OTDC315F11K	1SCA158258R1001			OTDC315FV11K	1SCA158260R1001	
400		OTDC400F11K	1SCA158266R1001			OTDC400FV11K	1SCA158268R1001	
500		OTDC500F11K	1SCA158274R1001			OTDC500FV11K	1SCA158276R1001	
630		OTDC630F11K	1SCA158282R1001			OTDC630FV11K	1SCA158284R1001	
800		OTDC800F11K	1SCA158854R1001			OTDC800FV11K	1SCA158857R1001	
1000		OTDC1000F22 *	1SCA161286R1001			OTDC1000FV22 *	1SCA161288R1001	

Note: The above are direct mounted handle version, we also offer door mounted handle as suffix P version of same ratings.

* Handle needs to be considered extra

Reach new heights with OTDC 2000 VDC **NEW**

Rated current In (A)	Rated voltage	Description	Ordering code	L.P. (₹)
400	2000 V DC	OTDC400FV21-WA	1SCA163138R1001	Upon request
500		OTDC500FV21-WA	1SCA163139R1001	
400		OTDC400UFV21-WA	1SCA162277R1001	

Certified according to UL98B up to 2000Vdc and IEC60947-3 up to 1500Vdc



High performance

With OTDC, you can have peace of mind. 3-pole switch design has been optimized to break 2000Vdc easily and reliably, across the complete lifespan of the installation.



Supreme Quality

OTDC M-series has supreme quality and safety is our priority number 1. Since the OTDC M-series has launched to sales in 2018 we have had ZERO quality cases related to the technical performance of the product.



Reduce the BOS costs

2000Vdc OTDCs are one of the components in the BOS that are helping to reduce installation time, reduce string size and reduce wire costs, due to the increase in voltage from 1500Vdc.

Fusegear

Easyline - XLP

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

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.

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
- Type tested 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



EasyLine Fuse Switch Disconnectors are developed and type tested according to IEC60947-3.

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

Fusegear - Fuse switch disconnecter

Description	Poles	Fuse size	Ordering code	L.P. (₹)
XLP000-6CC		000	1SEP201428R0001	6,710
XLP00-6BC		00	1SEP101890R0002	8,640
XLP1-6BC	3P	1	1SEP101891R0002	22,000
XLP2-6BC		2	1SEP101892R0002	34,400
XLP3-6BC		3	1SEP101975R0002	56,370

InLine II - ZLBM/ZHBM

Robust and reliable switching and protection

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, 630A, 800 and 1250A 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 185 mm 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
- Compatible dimensions to equivalent products in the market

Applications

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

Vertical Fuse Switch Disconnectors

InLine II - ZLBM/ZHBM



ZLBM - 1-pole, Depth 121 mm

Type	Ie [A]	Description	Order code	L.P. (₹)
Basic versions				
ZLBM00-1P-M8	160	3 x M8 Bolts	1SEP620010R1000	Upon request
ZLBM00-1P-V	160	3 x V-Clamps	1SEP620010R1020	
ZLBM1-1P-M12	250	3 x M12 Universal Bolts	1SEP620011R1000	
ZLBM1-1P-V	250	3 x V-Clamps	1SEP620011R1020	
ZLBM2-1P-M12	400	3 x M12 Universal Bolts	1SEP620012R1000	
ZLBM2-1P-V	400	3 x V-Clamps	1SEP620012R1020	
ZLBM3-1P-M12	630	3 x M12 Universal Bolts	1SEP620013R1000	
ZLBM3-1P-V	630	3 x V-Clamps	1SEP620013R1020	
ZLBM800A-1P-M12	800	12 x M12 Universal Bolts	1SEP620014R1000	
ZLBM910A-1P-M12	910	2 x 3 M12 bolts	1SEP620053R1000	
ZLBM910A-1P-M12-MB	910	2 x 3 M12 bolts, connection on rear side	1SEP620053R1050	
Long terminal cover, 3U shaped busbar versions				
ZLBM00-1P-3U-M8	160	3 x M8 Bolts	1SEP620170R1200	Upon request
ZLBM1-L-1P-3U-M12	250	3 x M12 Universal Bolts	1SEP620171R1200	
ZLBM2-L-1P-3U-M12	400	3 x M12 Universal Bolts	1SEP620172R1200	
ZLBM3-L-1P-3U-M12	630	3 x M12 Universal Bolts	1SEP620173R1200	



ZLBM - 3-pole, Depth 121 mm

Type	Ie [A]	Description	Order code	L.P. (₹)	
ZLBM00 3-pole, 100 mm busbar distance. Cable shroud included.					
ZLBM00-100-3P-M8	160	3 x M8 Bolt	1SEP620150R3000	Upon request	
Basic versions					
ZLBM00-3P-M8	160	3 x M8 Bolts	1SEP620010R3000		
ZLBM00-3P-V	160	3 x V-Clamps	1SEP620010R3020		
ZLBM1-3P-M12	250	3 x M12 Universal Bolt	1SEP620011R3000		
ZLBM1-3P-V	250	3 x V-Clamps	1SEP620011R3020		
ZLBM2-3P-M12	400	3 x M12 Universal Bolt	1SEP620012R3000		
ZLBM2-3P-V	400	3 x V-Clamps	1SEP620012R3020		
ZLBM3-3P-M12	630	3 x M12 Universal Bolt	1SEP620013R3000		
ZLBM3-3P-V	630	3 x V-Clamps	1SEP620013R3020		
ZLBM800A-3P-M12	800	12 x M12 Universal Bolts	1SEP620014R3000		
ZLBM800A-3P-V	800	12 x V-Clamps	1SEP620014R3020		
ZLBM910A-3P-M12	910	2 x 3 M12 bolts	1SEP620053R3000	Upon request	
ZLBM910A-3P-M12-MB	910	2 x 3 M12 bolts, connection on rear side	1SEP620053R3050		
ZLBM1250A-3P-M12	1250	12 x M12 Universal Bolt	1SEP620015R3000		
ZLBM1250A-3P-V	1250	12 x V-Clamps	1SEP620015R3020		
Without V-Clamps					
ZLBM00-3P-NOV	160	Without V-Clamps	1SEP620010R3010	Upon request	
ZLBM1-3P-NOV	250	Without V-Clamps	1SEP620011R3010		
ZLBM2-3P-NOV	400	Without V-Clamps	1SEP620012R3010		
ZLBM3-3P-NOV	630	Without V-Clamps	1SEP620013R3010		
Long terminal cover, 3U shaped busbar versions					
ZLBM00-3P-3U-M8	160	3 x M8 Bolts	1SEP620170R3200	Upon request	
ZLBM1-L-3P-3U-M12	250	3 x M12 Universal Bolts	1SEP620171R3200		
ZLBM2-L-3P-3U-M12	400	3 x M12 Universal Bolts	1SEP620172R3200		
ZLBM3-L-3P-3U-M12	630	3 x M12 Universal Bolts	1SEP620173R3200		

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 equipment 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 disconnectors OTDC upto 1000 A

The OTDC range of switch-disconnectors is specially designed for DC applications upto 2000 VDC. Thanks to a compact design, efficiency and reliability, OTDC switches bring photovoltaic installations to the next level.

Switch disconnector fuses 16 – 1250 A

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 60 947-3.

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.

Auto Transfer Switches 40 – 4000 A

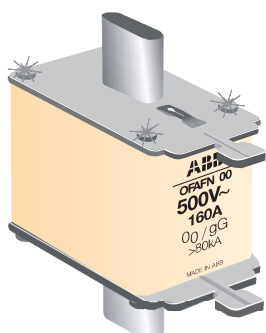
Technologies for external environment - Complete range 40-4000 A. ABB offers a wide selection of automatic transfer switches (ATS). They have the features and functionality that make them suitable for diverse applications.



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	Delivery batch [pcs]	Ordering code	L.P. (₹)
000	2	OFAFN000GG2	6	1SCA107747R1001 ■	770
	6	OFAFN000GG6	6	1SCA107748R1001 ■	
	10	OFAFN000GG10	6	1SCA107749R1001 ■	
	16	OFAFN000GG16	6	1SCA107750R1001 ■	
	20	OFAFN000GG20	6	1SCA107751R1001 ■	
	25	OFAFN000GG25	6	1SCA107751R1002 ■	
	32	OFAFN000GG32	6	1SCA107752R1001 ■	
00	63	OFAFN000GG63	6	1SCA107753R1001 ■	820
	6	OFAFN00GG6	6	1SCA107754R1001	1,180
	10	OFAFN00GG10	6	1SCA107755R1001	
	16	OFAFN00GG16	6	1SCA107756R1001	
	20	OFAFN00GG20	6	1SCA107757R1001	
	25	OFAFN00GG25	6	1SCA107758R1001	
	32	OFAFN00GG32	6	1SCA107759R1001 ■	
	50	OFAFN00GG50	6	1SCA107760R1001 ■	
	63	OFAFN00GG63	6	1SCA107761R1001 ■	
	80	OFAFN00GG80	6	1SCA107762R1001 ■	
	100	OFAFN00GG100	6	1SCA107763R1001 ■	
	125	OFAFN00GG125	6	1SCA107764R1001 ■	
	160	OFAFN00GG160	6	1SCA107765R1001 ■	1,280
0	160	OFAF0H160	3	1SCA022627R3170	2,210
	200	OFAF0H200	3	1SCA022629R5140 ■	
	32	OFAFN1GG32	6	1SCA107766R1001	1,680
1	50	OFAFN1GG50	6	1SCA107767R1001	1,650
	63	OFAFN1GG63	6	1SCA107768R1001	
	80	OFAFN1GG80	6	1SCA107769R1001	
	100	OFAFN1GG100	6	1SCA107770R1001	
	125	OFAFN1GG125	6	1SCA107771R1001	1,720
	160	OFAFN1GG160	6	1SCA107772R1001 ■	1,830
	200	OFAFN1GG200	3	1SCA107773R1001 ■	
2	250	OFAFN1GG250	3	1SCA107774R1001 ■	2,020
	100	OFAFN2GG100	3	1SCA107775R1001	2,400
	125	OFAFN2GG125	3	1SCA107776R1001	2,600
	250	OFAFN2GG250	3	1SCA107778R1001	
	315	OFAFN2GG315	3	1SCA107779R1001 ■	
3	400	OFAFN2GG400	3	1SCA107780R1001 ■	2,700
	315	OFAFN3GG315	3	1SCA107781R1001	3,780
	500	OFAFN3GG500	3	1SCA107783R1001 ■	4,250
	630	OFAFN3GG630	3	1SCA107784R1001 ■	4,320
	800	OFAFN3GG800	3	1SCA107785R1001 ■	5,270
4	1250	OFAF4H1250	1	1SCA022627R7830	Upon request
4a	1250	OFAF4AH1250	1	1SCA022637R4360	



Fuse size	Rated current In (A)	Description	Ordering code	L.P. (₹)
00	160	Fuse Base - DIN type	1SCA833001R2001 ■	760
1	250		1SCA833001R2002 ■	1510
2	400		1SCA833001R2003 ■	2750
3	630		1SCA833001R2004 ■	3390

■ 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	Delivery batch [pcs]	Ordering code	L.P. (₹)
Offset blade tag fuse link					
F1	2	OFFNF1GG2	10	1SCA107786R1001 ■	240
	4	OFFNF1GG4	10	1SCA107787R1001 ■	
	6	OFFNF1GG6	10	1SCA107788R1001 ■	
	10	OFFNF1GG10	10	1SCA107789R1001 ■	
	16	OFFNF1GG16	10	1SCA107790R1001 ■	280
	20	OFFNF1GG20	10	1SCA107791R1001 ■	
	25	OFFNF1GG25	10	1SCA107792R1001 ■	290
	32	OFFNF1GG32	10	1SCA107793R1001 ■	
Offset bolted tag fuse link					
A2	6	OFFNA2GG6	10	1SCA107795R1001	286
	10	OFFNA2GG10	10	1SCA107796R1001	
	16	OFFNA2GG16	10	1SCA107798R1001	
	20	OFFNA2GG20	10	1SCA107827R1001	
	25	OFFNA2GG25	10	1SCA107800R1001	
	32	OFFNA2GG32	10	1SCA107801R1001 ■	
A3	40	OFFNA3GG40	10	1SCA107803R1001 ■	410
	50	OFFNA3GG50	10	1SCA107804R1001	
	63	OFFNA3GG63	10	1SCA107805R1001 ■	
A4	50	OFFNA4GG50	10	1SCA107806R1001	790
	63	OFFNA4GG63	10	1SCA107807R1001	
	80	OFFNA4GG80	10	1SCA107808R1001	1,050
	100	OFFNA4GG100	10	1SCA107809R1001 ■	
	125	OFFNA4GG125	10	1SCA107810R1001 ■	
Central bolted tag fuse link					
B1	50	OFFNB1GG50	10	1SCA107811R1001	1,040
	63	OFFNB1GG63	10	1SCA107812R1001	
	80	OFFNB1GG80	10	1SCA107813R1001	1,260
	100	OFFNB1GG100	10	1SCA107814R1001	
B2	125	OFFNB2GG125	10	1SCA107816R1001	1,380
	160	OFFNB2GG160	5	1SCA107817R1001 ■	1,330
	200	OFFNB2GG200	5	1SCA107818R1001 ■	1,340
B3	250	OFFNB3GG250	1	1SCA107819R1001 ■	2,990
	315	OFFNB3GG315	1	1SCA107820R1001	3,230
B4	400	OFFNB4GG400	1	1SCA107822R1001	5,200
C1	400	OFFNC1GG400	1	1SCA107823R1001	5,850
C2	500	OFFNC2GG500	1	1SCA107824R1001	6,370
C2	630	OFFNC2GG630	1	1SCA107825R1001	6,650
C3	800	OFFNC3GG800	1	1SCA107826R1001	10,290



Fuse size	Rated current In [A]	Description	Delivery batch [pcs]	Ordering code	L.P. (₹)
F1	20	Control Fuse	100	1SYN833001R2005 ■	280
	32	Base	100	1SYN833001R2009 ■	350

■ Stock items

OESA/OS switch disconnecter fuse, DIN-type

DIN type

32 - 800A SDF supplied with shaft and handle, mechanism at the end of the switch fuse



Notes:

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

Contact our nearest sales office:

- For mechanism in between poles configuration
- For motorized switch disconnecter fuse requirement
- For 4th pole with fuse protection
- For Switch disconnecter fuse with direct mounting handle

Rated current In [A]	Poles	Recommend Fuse size	Description	Ordering code	L.P. (₹)
32	2	000/ 00	OESA0032D2	1SYN790290P0492	4,590
63			OESA0063D2	1SYN790290P0496	5,880
100		00	OESA00100D2	1SYN790290P0508	9,900
125			OESA125D2	1SYN790290P0511	14,400
160		0	OESA00160D2	1SYN790290P0503	15,710
200			OS200D02P	1SCA022759R9220	21,580
250		0-1	OS250D02P	1SCA022760R0170	24,530
315		0-2	OS315D02P	1SYN833040R2012	30,230
400			OS400D02P	1SCA022811R2740	34,610
630		3	OS630D02P	1SCA107745R1001	58,930
800			OS800D02P	1SCA022837R2650	72,310
1250		4	OS1250D02P	1SCA114051R1001	Upon request
32	3	000/ 00	OESA00-32	1SYN790290P0493 ■	4,860
63			OESA 00-63	1SYN790290P0497 ■	6,630
100		00	OESA00100	1SYN790290P0509 ■	12,970
125			OESA 00125	1SYN790290P0500 ■	16,690
160		0	OESA00-160	1SYN790290P0504 ■	17,860
200			OS200D03P	1SYN022709R9500 ■	24,400
250		0-1	OS250D03P	1SYN022719R0090	28,540
315		0-2	OS315D03P	1SYN953046P3001 ■	34,910
400			OS400D03P	1SYN022719R0250 ■	41,900
630		3	OS630D03P	1SYN022825R2830 ■	69,100
800			OS800D03P	1SYN022825R4880 ■	74,530
1250		4	OS1250D03P	1SCA105475R1001	Upon request
32	TPN	000/ 00	OESA0032N ■	1SYN790290P0494	5,000
63			OESA0063N ■	1SYN790290P0498	6,640
100		00	OESA00100N ■	1SYN790290P0499	9,820
125			OESA00125N ■	1SYN790290P0501	17,630
160		0	OESA00160N ■	1SYN790290P0505	18,810
200			OS200D03N3P	1SYN022749R8710 ■	25,340
250		0-1	OS250D03N3P	1SYN022749R9430 ■	29,480
315		0-2	OS315D03N3P	1SYN953047P3001 ■	33,940
400			OS400D03N3P	1SYN022753R9320 ■	41,700
630		3	OS630D03N3P	1SYN100858R1001 ■	69,080
800			OS800D03N3P	1SYN100859R1001 ■	76,310
1250		4	OS1250D03N3P	1SCA107932R1001	Upon request
32	4	000/ 00	OESA 00-32A4	1SYN790290P0495	5,700
63			OESA 00-63A4	1SYN790290P0507 ■	7,670
100		00	OESA00100A4	1SYN790290P0510	12,150
125			OESA00125A4	1SYN790290P0502	20,240
160		0	OESA 00-160A4	1SYN790290P0506	22,510
200			OS200D04N2P	1SYN022709R9680	32,330
250		0-1	OS250D04N2P	1SYN022719R2380	37,230
315		0-2	OS315D04N2P	1SYN953048P3001 ■	45,840
400			OS400D04N2P	1SYN022719R2460 ■	50,260
630		3	OS630D04N2P	1SYN022825R4290 ■	84,980
800			OS800D04N2P	1SYN022825R5180 ■	1,01,370
1250		4	OS1250D04N2P	1SCA105248R1001	Upon request

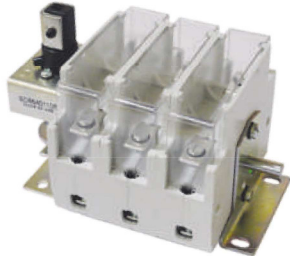
■ Stock items

OESA/OS switch disconnecter fuse, BS-type

BS

32 - 800A SDF supplied with shaft and handle

Mechanism at the end of the switch fuse



Note:
4th pole of all SFUs are 100% rated and are in the switched neutral (SN) version.

Contact our nearest sales office:

- For 1250A switch disconnecter fuse requirement
- For mechanism in between poles configuration
- For motorized switch disconnecter fuse requirement
- For 4th pole with fuse protection

Rated current In [A]	Poles	Recommend Fuse size	Description	Ordering code	L.P. (₹)
32	2	A2	OESA32G2	1SYN790290P0512	4,080
63		A3	OESA63G2	1SYN790290P0516	5,970
100		A4	OESA100G2	1SYN790290P0520	12,700
125			OESA125G2	1SYN790290P0524	15,520
160		B2	OESA160B2	1SYN790290P0528	17,060
200		B1-B2	OS200B02P	1SCA022769R7820	23,870
250		B1-B3	OS250B02P	1SCA022769R9440	26,080
315		B1-B4	OS315B02P	1SCA022817R3450	31,450
400			OS400B02P	1SCA022813R7220	37,380
630		C1-C2	OS630B02P	1SCA113529R1001	63,280
800		C1-C3	OS800B02P	1SCA022837R6480	74,100
1250		D1	OS1250B02P	1SCA114070R1001	Upon request
32	3	A2	OESA32G1	1SYN790290P0513	4,800
63		A3	OESA63G1	1SYN790290P0517 ■	6,500
100		A4	OESA100G1	1SYN790290P0521 ■	12,480
125			OESA125G1	1SYN790290P0525	15,800
160		B2	OESA160B3	1SYN790290P0529	17,230
200		B1-B2	OS200B03P	1SYN022709R9330	21,170
250		B1-B3	OS250B03P	1SYN022750R6660	26,010
315		B1-B4	OS315B03P	1SYN022719R0680	36,990
400			OS400B03P	1SYN022719R0840	38,410
630		C1-C2	OS630B03P	1SYN022825R5850	66,690
800		C1-C3	OS800B03P	1SYN022825R7550	82,570
1250		D1	OS1250B03P	1SCA105250R1001	Upon request
32	TPN	A2	OESA32G1N ■	1SYN790290P0514 ■	5,060
63		A3	OESA63G1N ■	1SYN790290P0518 ■	6,760
100		A4	OESA100G1N ■	1SYN790290P0522 ■	13,420
125			OESA125G1N ■	1SYN790290P0526 ■	17,000
160		B2	OESA160B3N ■	1SYN790290P0530	18,150
200		B1-B2	OS200B03N3P	1SYN022750R0620 ■	26,150
250		B1-B3	OS250B03N3P	1SYN022750R08010 ■	29,970
315		B1-B4	OS315B03N3P	1SYN022753R8940	34,880
400			OS400B03N3P	1SYN022753R9160	42,070
630		C1-C2	OS630B03N3P	1SYN100860R1001	72,920
800		C1-C3	OS800B03N3P	1SYN100861R1001	80,210
1250		D1	OS1250B03N3P	1SCA107936R1001	Upon request
32	4	A2	OESA32G4	1SYN790290P0515	6,090
63		A3	OESA63G4	1SYN790290P0519	7,680
100		A4	OESA100G4	1SYN790290P0523	18,020
125			OESA125G4 ■	1SYN790290P0527	21,670
160		B2	OESA160B4	1SYN790290P0531	26,130
200		B1-B2	OS200B04N2P	1SYN022709R9410	34,390
250		B1-B3	OS250B04N2P	1SYN022750R7800	40,950
315		B1-B4	OS315B04N2P	1SYN022719R2710	50,670
400			OS400B04N2P	1SYN022719R2890	58,260
630		C1-C2	OS630B04N2P	1SYN022825R6230	96,940
800		C1-C3	OS800B04N2P	1SYN022825R8010	1,05,010
1250		D1	OS1250B04N2P	1SCA105469R1001	Upon request

■ Stock items

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



Phase barriers

Frame	Pole	Height (mm)	Description	Ordering code	L.P. (₹)
OS200...400	3	100	PB100 low	1SDA054970R1 ■	1,970
	4	100	PB100 low	1SDA054971R1 ■	2,800

Auxiliary contacts

Frame	Contact function	Description	Ordering Code	L.P. (₹)
OESA 32...160	1NO+1NC	OESAZX 15	1SYN790290P0532	940
	2NO+2NC	OESAZX 16	1SYN790290P0533	1,790
OS200...800	1NO	OA1G10	1SCA022353R4970	980
	1NC	OA3G01	1SCA022456R7410	1,090
Screw mounting to the left side of the switch		OEA28	1SCA022714R8810 ■	1,280

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

Fuse monitor

Frame	Rated voltage [Vac]	Description	Ordering code	L.P. (₹)
OS200...800	100...260	OFS260	1SCA022716R0180	12,910
	380...690	OFS690	1SCA022715R9920	13,200

Wrapped neutral link

Frame	Description	Ordering code	L.P. (₹)
OESA32...63	OESAZX87	1SYN790290P0534	860
OESA100	OESAZX 86/1	1SYN790290P0535	1,490
OESA125...160	OESAZX86	1SYN790290P0536	1,630
OS200...250	OXN250	1SCA022752R9950	7,350
OS315...400	OXN400	1SCA022770R3060	19,180
OS630...800	OXN800S	1SCA022831R4880	21,980

Handle adaptor

Frame	Description	Ordering code	L.P. (₹)
OHB145...OHB175	OHBZX200	1SCA125960R1001	2,200

Handles

Frame	Description	Ordering code	L.P. (₹)
OESA32...63	YASDB51	1SYN790290P0537	1,370
OESA100...160	YASDB10	1SYN790290P0538	2,040
OS200...250	OHB80J6	1SCA022381R0240 ■	2,650
OS315...400	OHB145J12	1SCA022381R2110	3,420
OS630...800	OHB175J12	1SCA022381R2450	3,840

Shaft

Frame	Description	Ordering code	L.P. (₹)
OESA/OS32...250	EXP6X210	1SCA022295R6080	730
OS315...400	EXP12X250	1SCA022325R6980	1,430
OS630...800	EXP12X280	1SCA022137R5140	1,750

Fuse covers for OESA switch disconnecter fuse

Frame	Type	Description	Ordering code	L.P. (₹)
32...63	DIN	Fuse cover	1SYN833035R2012	170
32...63	BS		1SYN833036R2012	170
100...160	DIN		1SYN833037R2012	190

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

■ Stock items

OT Plus Switch disconnectors NEW

One giant leap to progress



OTG3...100G2-3BS



OT63...100G2-4BSN2



OT100...160G3-3BS



OT63...100G2-3DS



OT63...100G2-4DSN2



OT100...160G3-3DS

Front operated switch disconnectors, base and DIN-rail mounting with screw terminals.

Including padlockable direct mounted handle, and protected terminal clamps

Power Distribution <415VAC

Rated current In [A]	Pole	Frame size	Description	Ordering code	L.P.(₹)
63	3	G2	OT63G2-3BS	1SCA162548R1001	Upon request
80		G2	OT80G2-3BS	1SCA162549R1001	
100		G2	OT80G2-3BS	1SCA162547R1001	
100		G3	OT100G3-3BS	1SCA162507R1001	
125		G3	OT125G3-3BS	1SCA162521R1001	
160	4	G3	OT160G3-3BS	1SCA162522R1001	Upon request
63		G2	OT63G2-4BSN2	1SCA162559R1001	
80		G2	OT80G2-4BSN2	1SCA162561R1001	
100		G2	OT100G2-4BSN2	1SCA162557R1001	
100		G3	OT100G3-4BSN2	1SCA162513R1001	
125		G3	OT125G3-4BSN2	1SCA162526R1001	
160		G3	OT160G3-4BSN2	1SCA162528R1001	

Motor loads <415VAC

Rated current In [A]	Pole	Frame size	Description	Ordering code	L.P.(₹)
63	3	G2	OT63G2-3BS	1SCA162548R1001	Upon request
80		G2	OT80G2-3BS	1SCA162549R1001	
100		G3	OT100G3-3BS	1SCA162507R1001	
125		G3	OT125G3-3BS	1SCA162521R1001	
63	4	G2	OT63G2-4BSN2	1SCA162559R1001	Upon request
80		G2	OT80G2-4BSN2	1SCA162561R1001	
100		G3	OT100G3-4BSN2	1SCA162513R1001	
125		G3	OT125G3-4BSN2	1SCA162526R1001	

Door mounted switch disconnectors, with screw terminals

Including protected terminal clamps IP20 from front. External operating handle and shaft are not included.

Power Distribution <415VAC

Rated current In [A]	Pole	Frame size	Description	Ordering code	L.P.(₹)
63	3	G2	OT63G2-3DS	1SCA162567R1001	Upon request
80		G2	OT80G2-3DS	1SCA162569R1001	
100		G2	OT100G2-3DS	1SCA162565R1001	
100		G3	OT100G3-3DS	1SCA162515R1001	
125		G3	OT125G3-3DS	1SCA162531R1001	
160	4	G3	OT160G3-3DS	1SCA162532R1001	Upon request
63		G2	OT63G2-4DSN2	1SCA162568R1001	
80		G2	OT80G2-4DSN2	1SCA162570R1001	
100		G2	OT100G2-4DSN2	1SCA162566R1001	
100		G3	OT100G3-4DSN2	1SCA162518R1001	
125		G3	OT125G3-4DSN2	1SCA162535R1001	
160		G3	OT160G3-4DSN2	1SCA162536R1001	

Motor loads <415VAC

Rated current In [A]	Pole	Frame size	Description	Ordering code	L.P.(₹)
63	3	G2	OT63G2-3DS	1SCA162567R1001	Upon request
80		G2	OT80G2-3DS	1SCA162569R1001	
100		G3	OT100G3-3DS	1SCA162515R1001	
125		G3	OT125G3-3DS	1SCA162531R1001	
63	4	G2	OT63G2-4DSN2	1SCA162568R1001	Upon request
80		G2	OT80G2-4DSN2	1SCA162570R1001	
100		G3	OT100G3-4DSN2	1SCA162518R1001	
125		G3	OT125G3-4DSN2	1SCA162535R1001	

OT switch disconnectors



Front operated switch-disconnectors with direct knob type handle

Rated current In [A]	Pole	Description	Ordering code	L.P.(₹)	Pole	Description	Ordering code	L.P.(₹)
16	3	OT16F3	1SCA104811R1001	2,050	4	OT16F4N2	1SCA104829R1001	2,540
25		OT25F3	1SCA104857R1001 ■	2,130		OT25F4N2	1SCA104886R1001	2,660
40		OT40F3	1SCA104902R1001	2,420		OT40F4N2	1SCA104932R1001	2,990
63		OT63F3	1SCA105332R1001	2,620		OT63F4N2	1SCA105365R1001	3,510
80		OT80F3	1SCA105798R1001	5,140		OT80F4N2	1SCA105413R1001	6,420
100		OT100F3	1SCA105004R1001	7,060		OT100F4N2	1SCA105018R1001	8,830
125		OT125F3	1SCA105033R1001	7,230		OT125F4N2	1SCA105051R1001	8,990



Door mounted switch-disconnectors with snap on and screw type mounting
Handle for screw and snap on mounting to be ordered separately

Rated current In [A]	Pole	Description	Ordering code	L.P.(₹)	Pole	Description	Ordering code	L.P.(₹)
16	3	OT16FT3	1SCA104838R1001 ■	2,250	4	OT16FT4N2	1SCA105711R1001	2,790
25		OT25FT3	1SCA104884R1001	2,780		OT25FT4N2	1SCA104900R1001	3,470
40		OT40FT3	1SCA104940R1001 ■	3,330		OT40FT4N2	1SCA104956R1001	4,160
63		OT63FT3	1SCA105382R1001	4,580		OT63FT4N2	1SCA105393R1001	5,740
80		OT80FT3	1SCA105431R1001	5,650		OT80FT4N2	1SCA105499R1001	7,060
100		OT100FT3	1SCA105023R1001	9,410		OT100FT4N2	1SCA105031R1001	11,730
125		OT125FT3	1SCA105060R1001	11,980		OT125FT4N2	1SCA105066R1001	15,020

OT switch disconnector accessories 16..160 A

Screw mounting, hole distance 36 mm

Padlockable with max. 3 padlocks, IP65, hole distance 36/48 mm, NEMA 1, 3R, 12



Accessories for OT 16..125 F, OT63...100G2-BS, OT30...160G3-BS

Frame	Description	Ordering code	L.P. (₹)
OT 16..125F, OT63...100G2-BS, OT30...160G3-BS	Black	OHBS2AJ 1SCA105213R1001	1,040
	Red - yellow	OHYS2AJ 1SCA105296R1001	1,250



Accessories for OT 16..125 FT OT63...100G2-DS, OT30...160G3-DS

Frame	Description	Ordering code	L.P. (₹)
OT 16..125FT, OT63...100G2-DS, OT30...160G3-DS	Black	OHBS2RJ 1SCA105232R1001	1,210
	Red - yellow	OHYS2RJ 1SCA105323R1001	1,330

Note:

For any different arrangement, kindly contact our nearest sales office.

Shafts

Suitable for all the switches in this section, OT16...125F OT63...100G2-BS, OT30...160G3-BS



Frame	Description	Ordering code	L.P. (₹)
OT16...125F OT63...100G2-BS, OT30...160G3-BS	OX56X130	1SCA101655R1001 ■	830

■ Stock items

OT switch disconnectors



Contact our nearest sales office:

- For door mounted switch disconnector
- For different configuration of Shaft and Handle (selector type)
- For 6 & 8 pole switch disconnector requirement
- 1 pole switch disconnector also available on request



Note:

Contact our nearest sales office

- For requirement of motorized isolators
- For mechanism in between poles configuration
- For switch disconnector with direct mounted handle
- For side operated switches

■ Stock items

Front operated switch-disconnectors

OT 16A-3200A switch disconnector supplied with extended shaft and IP 65 pistol type handle

Rated current In [A]	Poles	Description	Ordering code	L.P. (₹)
160	2	OT160EV02P	1SCA120508R1001	10,590
200		OT200E02P	1SCA022751R1400	11,240
250		OT250E02P	1SCA022735R2500	13,860
315		OT315E02P	1SCA022866R5590	15,940
400		OT400E02P	1SCA022741R7210	21,480
630		OT630E02P	1SCA022866R5670	27,670
800		OT800E02P	1SCA022835R4830	33,230
1000		OT1000E02P	1SCA105795R1001	75,100
1250		OT1250E02P	1SCA106136R1001	91,800
1600		OT1600E02P	1SCA106142R1001	1,24,660
2000	3	OT2000E02P	1SCA120025R1001	Upon Request
2500		OT2500E02P	1SCA113956R1001	
3200		OT3200E02P	1SCA128581R1001	
4000		OT4000E02P	1SCA128595R1001	
16	3	OT16F3	1SYN104811R1001 ■	3,820
25		OT25F3	1SYN104857R1001 ■	3,870
40		OT40F3	1SYN104902R1001 ■	4,020
63		OT63F3	1SYN105332R1001 ■	4,050
80		OT80F3	1SYN105798R1001 ■	6,480
100		OT100F3	1SYN105004R1001 ■	8,640
125		OT125F3	1SYN105033R1001 ■	8,790
160		OT160G03P	1SCA135139R1001	11,150
160		OT160EV03P	1SCA120514R1001 ■	11,720
200		OT200E03P	1SCA022712R0800 ■	12,860
250	3	OT250E03P	1SCA022710R0100 ■	16,440
315		OT315E03P	1SCA022718R8510 ■	22,570
400		OT400E03P	1SCA022718R8780 ■	25,240
630		OT630E03P	1SCA022718R8940 ■	29,540
800		OT800E03P	1SCA022718R9410 ■	36,900
1000		OT1000E03P	1SCA022860R5930 ■	76,140
1250		OT1250E03P	1SCA022860R6230 ■	99,040
1600		OT1600E03P	1SCA022860R6580 ■	1,30,840
2000		OT2000E03P	1SCA108036R1001	Upon Request
2500		OT2500E03P	1SCA104972R1001 ■	
3200	4	OT3200E03P	1SCA128481R1001	
4000		OT4000E03P	1SCA124848R1001	
16		OT16F4N2	1SYN104829R1001	4,090
25		OT25F4N2	1SYN104886R1001	4,270
40		OT40F4N2	1SYN104932R1001 ■	4,360
63		OT63F4N2	1SYN105365R1001	4,970
80		OT80F4N2	1SYN105413R1001 ■	8,510
100		OT100F4N2	1SYN105018R1001 ■	9,410
125		OT125F4N2	1SYN105051R1001 ■	9,440
160		OT160G04P	1SCA135140R1001	15,320
160	4	OT160EV04P	1SCA120521R1001 ■	16,440
200		OT200E04P	1SCA022713R4930 ■	16,790
250		OT250E04P	1SCA022710R0520 ■	19,160
315		OT315E04P	1SCA022719R1730 ■	25,500
400		OT400E04P	1SCA022719R1810 ■	27,180
630		OT630E04P	1SCA022719R2030 ■	35,070
800		OT800E04P	1SCA022719R2110 ■	41,480
1000		OT1000E04P	1SCA022860R6150	99,620
1250		OT1250E04P	1SCA022860R6310	1,22,910
1600		OT1600E04P	1SCA022860R6740	1,57,550
2000	4	OT2000E04P	1SCA108038R1001	Upon request
2500		OT2500E04P	1SCA105140R1001	
3200		OT3200E04P	1SCA128482R1001	
4000		OT4000E04P	1SCA124856R1001	

OT switch disconnector accessories



Handles

Frame	Description	Ordering code	L.P. (₹)
OT16...125	OHB45J6	1SCA022380R8770 ■	1,640
OT160...250	OHB65J6	1SCA022380R9660 ■	2,220
OT315...400	OHB95J12	1SCA022381R0830	2,430
OT630...800	OHB125J12	1SCA022381R1560 ■	2,630
OT1000...4000	OHB274J12	1SCA115920R1001 ■	7,760



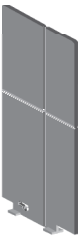
Shaft

Frame	Description	Ordering code	L.P. (₹)
OT16...125	OMP6X170	1SCA108224R1001 ■	610
OT160...250	OMP6X210	1SCA022295R6080	730
OT315...800	OMP12X185	1SCA022325R6710	1,090
OT1000...4000	OMP12X280	1SCA022137R5140	1,750



Auxiliary contact

Frame	Contact function	Description	Ordering code	L.P. (₹)
OT16...4000	1NO	OA1G10	1SCA022353R4970 ■	980
OT16...125	1NC	OA1G01	1SCA022353R4890 ■	980
OT160EV...4000	1NC	OA3G01	1SCA022456R7410 ■	1,090



Phase barrier

Frame	Poles	Description	Ordering code	L.P. (₹)
OT160...OT800	3	PB100 low	1SDA054970R1	1,970
OT160...OT800	4	PB100 low	1SDA054971R1	2,800
OT1000...2500	3 & 4	OTB1600/6	1SCA100768R1001	6,980
OT3200...4000	3 & 4	OTB4000/6	1SCA129040R1001	6,680



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	L.P. (₹)
OT16...125	100	OTZW24	1SCA022639R5610	3,560
OT160...250	190	OTZW10	1SCA022431R5280	4,310
OT315...400	250	OETLZW14	1SCA022077R3410	10,930
OT315...800	300	OETLZW3	1SCA022049R0380	10,900
OT315...4000	500	OETLZW15	1SCA022081R9340	12,670



Terminal shrouds snap-on mounting, transparent

For 3-pole switches

Frame	Description	Ordering code	L.P. (₹)
OT 16...40F3	OTS40T3	1SCA105317R1001	650
OT63...80F3	OTS63T3	1SCA022353R6750 ■	470
OT 100...125F3	OTS125T3	1SCA022379R9680	940

Note:

For requirement of terminal shrouds for higher current rating, contact our nearest sales office

■ Stock items

Safety switches & enclosed switch-disconnectors

Wide range of enclosed heavy duty switches
From 16 to 1600 Amperes, 690 V



Reliable in extreme conditions

All our enclosed safety switches are built to last and resist the wear of harsh operating conditions. The enclosures are made of high-quality, UV-resistant materials and the degree of protection is up to IP65. All switches are suitable for use both indoors and outdoors.



Safety and protection

Our design is based on ensuring safety and preventing electrical accidents. To make maintenance and installation as safe as possible, we have included features such as padlockable handles, cover interlocks and gas pressure relief functions to our products.



Speed up your project

We can help speed up your project by making the selection of the right switch as quick and easy as possible. Our web-based selection tool, e-Configure, enables you to select the best switch for your particular application in the easiest way possible.

Safety switches & enclosed switch-disconnectors

Enclosed switches are designed and used as main switches for applications, which need to be isolated from the network. The range includes front operated and side operated switch disconnectors, switch fuses and changeover switches enclosed in plastic, steel sheet or stainless steel sheet and aluminium enclosures. They are rated for utilization categories including disconnecting as well as making and breaking the load. In addition, the switch fuses equipped with fuse links protects the application and the cables from overload currents and short circuits.

Plastic enclosures

The plastic enclosures are most suitable for locations with high chemical and moisture requirements. In addition, they are light and easy to install and handle.

Steel sheet enclosures

The steel sheet enclosures are hot dip galvanized and the surface is polyester powder painted. The enclosures are durable and robust for various environments.

Stainless steel sheet enclosures

The stainless steel sheet enclosures are made of AISI 304 stainless steel. They are used particularly in the food and beverage industry and in locations where high hygiene is required. The smooth surface does not require any painting and is easy to clean.

Aluminum alloy enclosures

Aluminum enclosures have very good impact strength and protection against UV light. They are suitable both for indoor and outdoor use in medium to heavy-duty applications.

Safety for personnel – reliable position indication

- Padlocking in the OFF-position with one, three or six (with the shackle L6) padlocks against unintentional start-up. The handle cannot be padlocked in the OFF-position if one of the contacts is not in the OFF position
- The cover cannot be removed if the handle is padlocked
- Door interlock in the ON-position
- Arc proof, short circuit durability function: Expander washers in aluminium enclosures with $I_e > 160$ A and door locking release in large metal sheet enclosures type MSC
- Door interlock defeatable with rectangular and pistol type handles

Enclosed switch disconnectors - ONE20

ONE20

Switches can be used as main switches or for local isolation in various applications, such as HVAC, residential water pumps and heat pumps or commercial lighting.

Features

- Available in 2-, 3- and 4-pole versions
- Thermal current (I_{th}) 20A
- Color options: light grey, dark grey, red-yellow
- Weather proof enclosure due to high IP class (IP67) and
- UV resistant material



2 Pole			3 Pole			4 Pole		
Description	Ordering code	L.P. (₹)	Description	Ordering code	L.P. (₹)	Description	Ordering code	L.P. (₹)
ONE20M2W	1SCA138456R1001	1,750	ONE20M3W	1SCA138457R1001	2,600	ONE20M4W	1SCA138459R1001	3,020
ONE20M2G	1SCA135532R1001	1,750	ONE20M3G	1SCA135535R1001	2,600	ONE20M4G	1SCA135538R1001	3,020
ONE20M2Y	1SCA135533R1001	1,750	ONE20M3Y	1SCA135536R1001	2,600	ONE20M4Y	1SCA135540R1001	3,020

Fire rated enclosed switch-disconnectors

The answer to your fire safety needs

Fire rated enclosed switch-disconnectors maintain the power supply to fans or other smoke extraction equipment in case of fire. Typical environments are tunnels, highrise buildings, parking spaces or commercial buildings.

Fire rated switch-disconnectors maintain the power to the essential equipment such as smoke extraction or ventilation fans to facilitate safe evacuation of buildings, car parks, constructions or other public areas in case of fire. These switch-disconnectors are generally installed near the extraction fan for isolation of power supply and have been tested in conjunction with fan equipment to meet the stringent thermal requirements of fire safety.

We offer fire rated enclosed switch-disconnectors from 20 A to 800 A, available in 2-, 3-, 4- and 6-pole versions, in IP65 aluminium or steel sheet enclosures. All the switches are supplied with padlockable handles. Depending of version they can be padlocked in both OFF- and ON-position. The F200, F300 and F400 series are EMC compatible when equipped with EMC-cabling accessories.

Our fire rated enclosed switch-disconnectors have been tested by a third-party laboratory according to the standard EN 12101-3. According to this standard, the switch should lead current after the test, but the switch does not have to be operated. We offer three different classes of fire rated enclosed switch-disconnectors:

- F200
200°C in 120 min
- F300
300°C in 120 min, in order to also cover F200 applications
- F400
400°C in 120 min



Fire rated enclosed switch-disconnectors

The answer to your fire safety needs

Public safety is a priority for ABB. With the new fire rated enclosed switch-disconnectors, we provide a solution to meet all the thermal requirements to keep public areas smoke-free, facilitating a safe evacuation in case of fire. They are ideal for the ventilation or smoke extraction system to keep the air smoke-free.



Safety and protection

Public safety first

Our rated enclosed switch-disconnectors maintain the power and provide isolation to essential smoke extraction and ventilation equipment. Padlocking is possible in OFF- or ON/OFF-positions depending on the version.

20 A to 800 A, available in 2-, 3-, 4- and 6-pole versions in IP65 aluminium or steel sheet enclosures.



Reliable in extreme conditions

Designed to perform

The material has been specially designed for installations where the power supply must be maintained even at high temperatures. To ensure a safe and reliable operation in abnormally hot environments, our switches have been tested according to the standard EN 12101-3.

Auxiliary contacts are included in the F200 series and depending on the version, also in F400 series.



The F200, F300 and F400 series are all EMC compatible when equipped with EMC cabling accessories.

All the switches are supplied with padlockable handles. Depending on the version, they can be padlocked in both OFF- and ON-position.

Kabeldon low voltage switchgear system



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.
- 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.

Change-over and Automatic Transfer Switch Solutions

Power continuity is critical for modern facilities, from data centers and hospitals to industrial plants and commercial buildings. Transfer switches play a vital role in ensuring uninterrupted power supply by manually or automatically switching electrical loads between primary and backup power sources.

ABB, offers the most comprehensive portfolio in the industry. This portfolio spans from simple manual changeover switches to sophisticated automatic transfer systems with cloud connectivity and predictive maintenance capabilities.



OTC Manual Changeover Switches

Manual transfer switches are the simplest and most cost-effective solution for transferring loads between two power sources. These switches require physical operation by an operator who manually moves a handle or lever to switch between sources.

- **Current ratings** - 16 to 3200 Amp
- **Transition types** - Delayed: I-O-II
Closed: I-I+II-II
- **Standards** - UL98 & IEC 60947-3.

OTM Motor-Operated Changeover Switches

OTM (Open Type Motorized) switches provide reliable remote operated power transfer with electric motor drive. These switches are ideal for applications requiring remote switching capability without full automation.

- **Current ratings** - 40 to 3200 Amp
- **Transition types** - Delayed: I-O-II
- **Standards** - IEC 60947-6-1

Automatic Transfer Switches

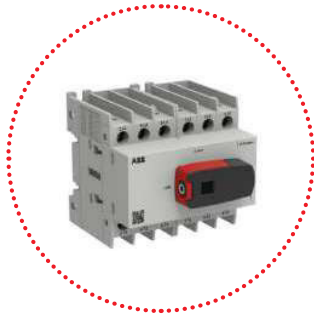
Automatic Transfer Switches represent a significant advancement in power continuity technology. These systems continuously monitor both power sources and automatically transfer loads when the primary source fails, without any human intervention.

- **Current ratings** - 40 to 4000 Amp
- **Transition types** - Open: I-II
Delayed: I-O-II & Close: I-I & II-II
- **Standards** - UL 1008 IEC 60947-6-1

OT Plus change-over switches **NEW**

One giant leap to progress

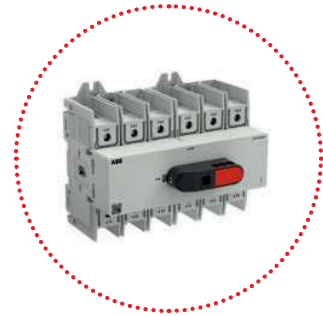
The OT plus change-over switch range offers a smarter, safer and more reliable performance to suit needs from 16A to 160A with 3 and 4 pole options. With greater adaptability, the OT plus change-over switches are able to cater to a broad range of applications than ever before.



G1 frame - 16A-63A



G2 frame - 63A-100A



G3 frame - 30A-160A



Adaptable

Support more applications, thanks to adjustable fourth-pole timing, which allows two different time offsets within the same switch: simultaneous or early-make / latebreak. Find the right fit and install faster with overlapping current ratings, and user-friendly auxiliary contacts.



Sustainable

Go greener with a range that cuts power losses by up 27%, that is designed for a circular economy and made with high portion of recycled materials. Additionally, the OT Plus switch is over 95% recyclable.



Reliable

Improve safety for people and assets, thanks to our true fourthpole design, which reduces the risk of faults. Simplify and strengthen security with pre-installed lockable operating handle

OT Plus change-over switches

Front operated change-over switches, base and DIN-rail mounting.

Including padlockable direct mounted handle, and protected terminal clamps IP20 from front. External operating handle and shaft are not included.



OTC63...80G2-3BS



OTC63...100G3-4BS

Operational voltage: <415VAC

Rated current In [A]	Pole	Frame size	Description	Ordering code	L.P. (₹)	Pole	Description	Ordering code	L.P. (₹)
16	3	G1	OTC16G1-3BS	1SCA163737R1001	Upon request	4	OTC16G1-4BS	1SCA163744R1001	Upon request
25		G1	OTC25G1-3BS	1SCA163765R1001			OTC25G1-4BS	1SCA163772R1001	
40		G1	OTC40G1-3BS	1SCA163793R1001			OTC40G1-4BS	1SCA163800R1001	
63		G2	OTC63G2-3BS	1SCA162734R1001			OTC63G2-4BS	1SCA162736R1001	
80		G2	OTC80G2-3BS	1SCA162737R1001			OTC80G2-4BS	1SCA162738R1001	
100		G3	OTC100G3-3BS	1SCA162747R1001			OTC100G3-4BS	1SCA162748R1001	
125		G3	OTC125G3-3BS	1SCA162749R1001			OTC125G3-4BS	1SCA162750R1001	
160		G3	OTC160G3-3BS	1SCA162751R1001			OTC160G3-4BS	1SCA162752R1001	

Optional accessories for change-over switches

NEW

Ordering information



OHBS9



AUXGB-11



OZXA

Handle knobs for base and DIN-rail mounted switches Non-padlockable

Frame	Description	Ordering code	L.P. (₹)
OTC63G2-...OTC80G2-	OHBS59/1	1SCA108689R1001	Upon request
OTC30G3-...OTC160G3-	OHR59/1	1SCA108690R1001	

Auxiliary contacts for OTC63G2-...160G3

Frame	Description	Ordering code	L.P. (₹)
OTC63G2-...OTC100G2-_BS	AUXGB-11	1SCA162594R1001	Upon request
OTC30G3-...OTC160G3-_BS			

Parallel connection kits

Frame	Description	Ordering code	L.P. (₹)
OTC63G2-...OTC80G2	OZXA42	1SCA164225R1001	Upon request
	OZXA43	1SCA164226R1001	
OTC30G3-...OTC160G3	OZXA40	1SCA022790R3910	
	OZXA41	1SCA022790R4040	

OT manual changeover switches



Manual changeover switches, I-O-II -operation

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

Rated current In [A]	Poles	Description	Ordering code	L.P.(₹)	Poles	Description	Ordering code	L.P.(₹)
16	3	OT16F3C	1SYN104816R1001 ■	6,590	4	OT16F4C	1SYN104831R1001	7,730
25		OT25F3C	1SYN104863R1001 ■	8,280		OT25F4C	1SYN104877R1001	8,720
40		OT40F3C	1SYN104913R1001 ■	9,000		OT40F4C	1SYN104934R1001 ■	9,620
63		OT63F3C	1SYN105338R1001 ■	11,720		OT63F4C	1SYN105369R1001 ■	12,380
80		OT80F3C	1SYN105402R1001	12,870		OT80F4C	1SYN105418R1001 ■	13,720
100		OT100F3C	1SYN105008R1001 ■	17,220		OT100F4C	1SYN105019R1001	18,400
125		OT125F3C	1SYN105037R1001 ■	20,510		OT125F4C	1SYN105054R1001 ■	20,150
160		OT160E03CP	1SYN022772R6510 ■	22,840		OT160E04CP	1SYN022775R9440 ■	26,550
200		OT200E03CP	1SYN022771R7520 ■	24,520		OT200E04CP	1SYN022771R7280 ■	30,830
250		OT250E03CP	1SYN022771R3450 ■	31,760		OT250E04CP	1SYN022775R4640 ■	34,550
315		OT315E03CP	1SYN022772R6780 ■	34,290		OT315E04CP	1SYN022775R7150 ■	40,970
400		OT400E03CP	1SYN022771R8500 ■	49,130		OT400E04CP	1SYN022771R8680 ■	54,390
630		OT630E03CP	1SYN022785R6050 ■	64,990		OT630E04CP	1SYN022785R6130 ■	73,440
800		OT800E03CP	1SYN022785R6300	88,710		OT800E04CP	1SYN022785R6210 ■	92,020
1000		OT1000E03CP	1SYN022872R1680 ■	2,17,950		OT1000E04CP	1SYN022872R1500	2,54,760
1250		OT1250E03CP	1SYN022872R0790	2,42,140		OT1250E04CP	1SYN022872R1250	2,76,310
1600	4	OT1600E03CP	1SYN022872R1840	2,98,630		OT1600E04CP	1SYN022872R2310	3,41,120
2000		OT2000E03CP	1SYN103908R1001			OT2000E04CP	1SYN103912R1001	
2500		OT2500E03CP	1SYN105615R1001	Upon request		OT2500E04CP	1SYN103906R1001	Upon request
3200		OT3200E03CP	1SYN129156R1001			OT3200E04CP	1SYN129158R1001	

Note: Contact our nearest sales office:

- For 6 pole change over
- For manual/motorized bypass switch
- For wide phase manual change over

■ Stock items