

ABB ACB MCCB and Switchgear Price List PDF

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Region	India
Status	Current

Extracted from: ABB Electrification Products Price List, effective 11 May 2026

Original source pages: 12-98

This section was extracted without changing product descriptions, prices or technical content.

AIR CIRCUIT-BREAKERS

SACE Emax 2

The all-in-one innovation



The world of electrical power distribution changes fast and major new trends such as renewables, energy storage and microgrids are now crowding onto the stage. These trends lead to new customer and application demands.

To meet these demands, ABB has now unveiled the innovative Emax 2 all-in-one, the evolution of the Emax 2 into a multi-functional platform that is able to manage the next generation of electrical distribution systems such as microgrids.

Emax 2 all-in-one is the first circuit breaker that meets new grid requirements. It enables a direct communication to the new energy management cloud-computing platform ABB Ability™ Energy and Asset Management.

Smart plug and play architecture makes Emax 2 all-in-one easy to use. Leveraging also unmatched electrical performances, Emax 2 sets a new circuit breaker benchmark for the needs of today and tomorrow.

SACE Emax 2, the all-in-one solution to manage "low-voltage distribution systems".

Efficiency

New advanced functionalities, together with Protection trip units, Communication and system devices contribute to make SACE Emax 2 the circuit breaker that maximizes efficiency in all low-voltage electrical installation.

Control

SACE Emax 2 circuit breaker is the first single device ready to manage all the dynamics of a low-voltage electrical installation.

Managing loads in any condition is now possible, thanks to Advanced Functionalities such as:

- **Power controller**

Patented algorithm to reduce the peak of power consumed, allowing savings on electricity bills.

- **Embedded ATS functions**

An automatic transfer system used in all applications, where continuity is essential and where there are multi-source supplies.

- **Synchro-reclosing**

Synchronization and automatic reconnection of the Microgrid to the main grid when the power is back.

- **Interface protection system and Interface Device**

Check of grid-connected operation that shall be immediately and automatically interrupted in case of outage of the distribution grid or when the voltage and frequency values of the grid itself are out of the range of values defined by the Distribution System Operator (DSO).

- **Adaptive protection**

Network changes recognition and automatic set of thresholds to guarantee protection and co-ordination in on-grid and off-grid conditions.

The SACE Tmax XT range at a glance

The world of circuit breaking and circuit protection in your hands



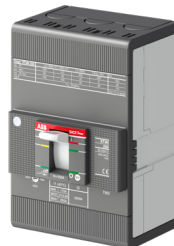
SACE Tmax XT1

Small, reliable, versatile. Your reliable partner for all standard applications.



SACE Tmax XT2

Compact yet powerful. It fits everywhere and is able to deal with all complex tasks.



SACE Tmax XT3

Small and experienced. For standard applications that need few efforts.



SACE Tmax XT4

A forward-thinking multitasker. It finds solutions for all levels of complexity.



SACE Tmax XT5

Compact, extremely powerful and flexible. It shows the world what a circuit-breaker of the future can do, today.



SACE Tmax XT6

Built to last. It completes all assignments it has been entrusted with.



SACE Tmax XT7 / XT7 M

The ultimate choice. It deals with the most heavy-duty demands effortlessly.



Data and connectivity

SACE Tmax XT sets new standards in plant and energy management with remote access, monitoring, and control.



Performance and protection

Continuity of service and equipment protection – SACE Tmax XT sets standards when extreme breaking capacity is needed.



Local connection and Remote communication

Bluetooth connectivity, Ekip Connect software, and multiple protocols make commissioning and device settings effortless.



Electrical performances

SACE Tmax XT is designed and tested to meet any installation requirement, even the most critical ones.



Cloud connectivity

Ekip Com HUB enables cloud connectivity for full ABB Ability™ Energy and Asset Management services.



Safety and reliability

With a focus on safety and reliability, cutting-edge design and expert engineering set new industry standards.



Ease of use and installation

Simplified selection, versatile accessories, and intuitive design enable quick upgrades for any project.

STOP ENERGY WASTE BEFORE IT STARTS AND UNLOCK SUSTAINABLE ROI

SENSORFACT | is now ABB

Energy management platform

Turn every installation into a sustainable success story by adding Sensorfact to your ABB hardware

Today's installations demand more than just reliable hardware. They require systems that guarantee instant visibility, maximum efficiency, and simple management from Day One.

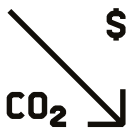
ABB has integrated the Sensorfact Energy Management platform directly with its low voltage solutions. This creates a fully integrated system that monitors energy and manages devices seamlessly - giving you the visibility and control to stay ahead.



SENSORFACT

Digitalize your project with smart energy management

Sensorfact's cloud-based platform helps industrial and commercial businesses optimize energy usage with smart, scalable solutions. By combining real-time monitoring, actionable insights, and seamless integration, Sensorfact helps companies reduce costs, improve efficiency, and meet sustainability goals. The platform's adaptive technology evolves with your operations, ensuring long-term value and measurable impact.



Actionable savings

Turn energy data into clear insights, helping you cut waste and generate savings. Advanced measurement is built directly into ABB circuit breakers, removing the needs of any accessories.



Intuitive from start

ABB devices cloud connectivity with pre-configured mapping, without disruption. Intuitive platform design makes it easy to use.



Personalized expertise

Our energy manager team turns your data into concrete actions that help you boost efficiency— whenever you need them.



Sensorfact customers unlock 14.3% energy savings potential on average, through our advisory-driven approach, an on-demand service delivering clear, actionable insights.



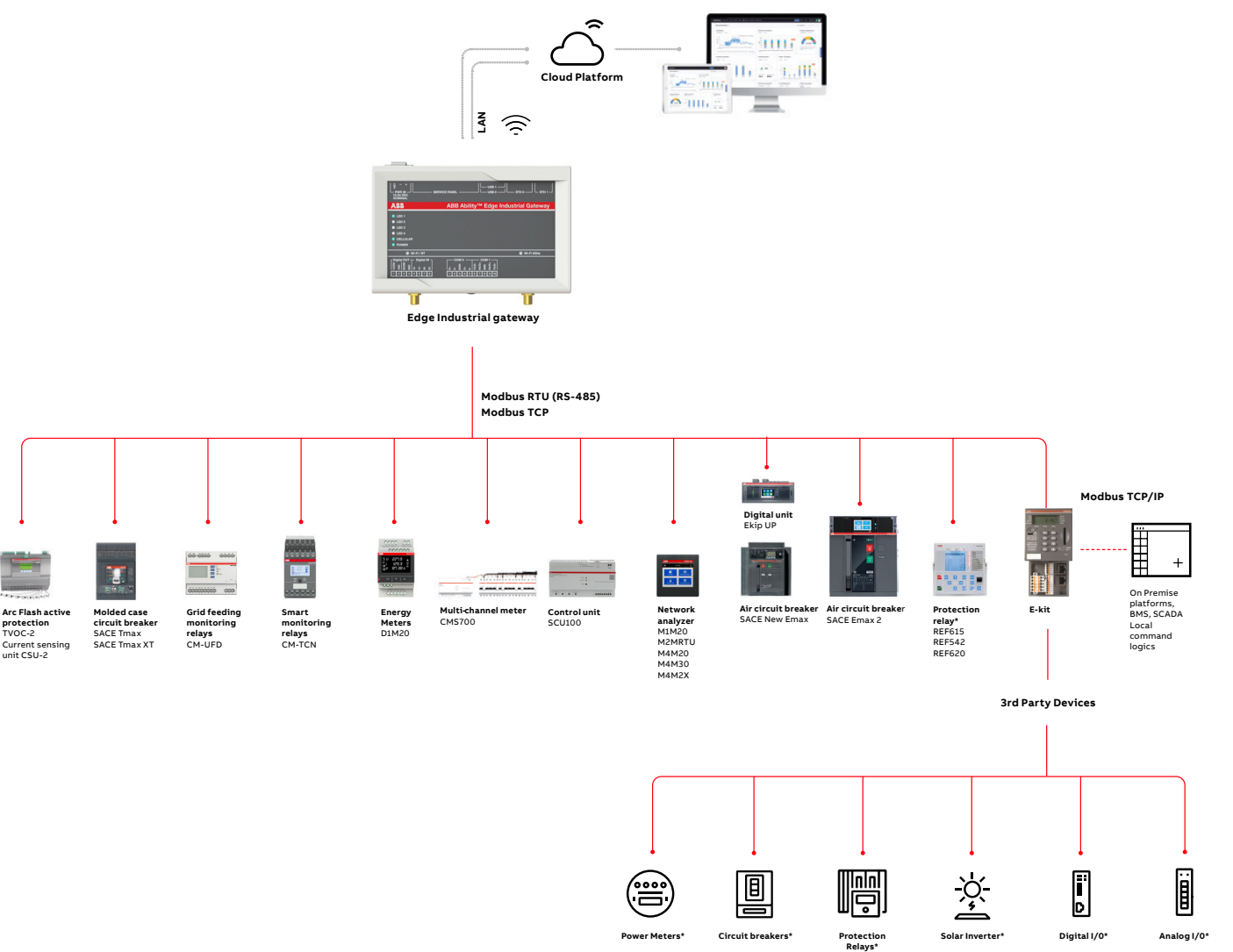
SENSORFACT™

Architecture

A simple architecture,
made for seamless integration
into any projects.

ABB devices are pre-configured to connect to Sensorfact,
gateways are compatible and cloud connectivity upgrades
can be done easily. Our team is here to support you.

Architecture layout with Edge Industrial Gateway

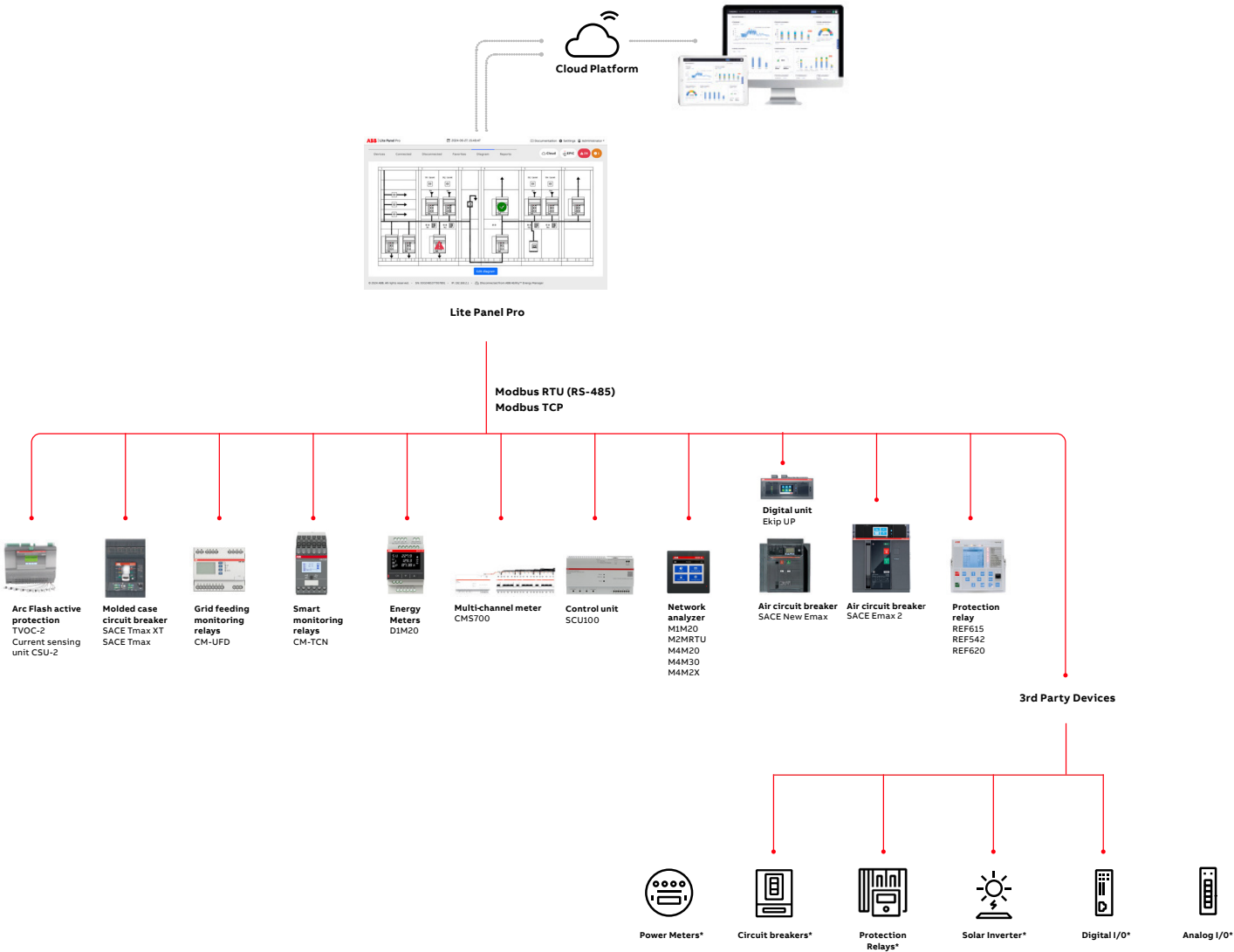


SENSORFACT™

Architecture

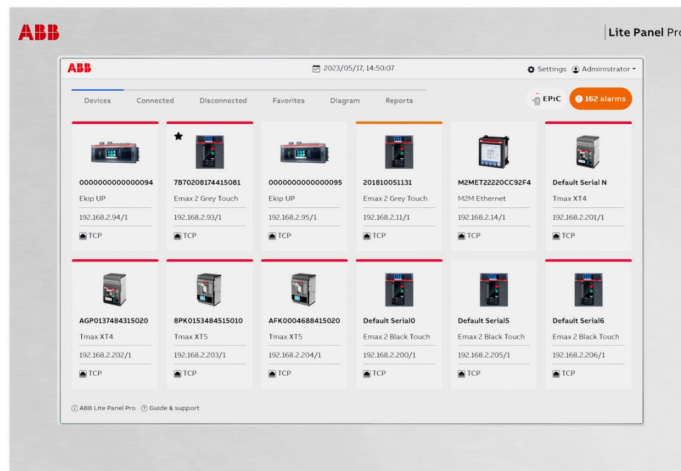


Architecture layout with Lite Panel Pro



Lite panel pro NEW

One panel, a multitude of features

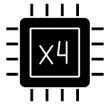


12" touchscreen

Ease of use with large display in-line with market requirements



Energy efficiency granted by ABB Ability™ Energy Manager ready



Future-proof hardware supporting product evolution with new software-enabled functionalities



Versatile switchboard panel display able to monitor and control connected Low Voltage devices

Simplified commissioning Automatic scanning and identification of ABB devices*.

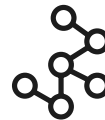
From Local Device Monitoring to Energy Management in the cloud



Integrated webserver
All HMI functionalities can be accessed remotely from any computer on the same network for a more convenient operation.



Reports
On-demand and scheduled reports are available (daily/weekly/monthly).



Single Line Diagram
Users can upload a single line diagram and tag connected devices to keep an eye on the whole switchboard.



Cloud ready
Provisioning of all connected devices to ABB Ability™ Energy Manager is possible directly from the panel, without the need for extra hardware (gateway).



Mobile ready
EPiC Mobile App is supported via the provided Wi-Fi dongle.



Local data storage
Data from connected field devices is saved onboard and available for user consultation at any time.



Third party device support via templates
Brownfield installations featuring non-ABB devices are supported using configurable device templates.



Protocol translator
Modbus RTU devices connected to the panel are rendered available for integration with 3rd party systems (e.g. SCADA, BMS) via Modbus TCP.

Digital Enabled Products

ABB showcases a further evolution in the low-voltage distribution business, establishing a new benchmark in terms of simplicity and performance.

ABB Ability™ Energy and Asset Manager enables the collection of relevant information from the ABB devices installed in the low-voltage power distribution system.

These devices can be connected to the cloud-computing platform to share data with Emax 2 (equipped with Ekip Com Hub) or with ABB Ability™ Edge Industrial gateway via Modbus RS-485, Modbus TCP and Ekip Link.

INFORMATION												COMMUNICATION
Family	Device	State	Current	Voltages	Power	Energy	Power factor	Power quality	Maintenance & diagnostics	Load management	Analog or pulse/ digital inputs	Protocol
Low voltage MCCB	Tmax XT	•	•	•	•	•	•	•	•	•	•	Modbus RS485, Modbus TCP, Ekip Com Hub
Low voltage ACB	Emax 2	•	•	•	•	•	•	•	•	•	•	Modbus RS485, Modbus TCP, Ekip Com Hub
Digital units	Ekip UP+	•	•	•	•	•	•	•		•	•	Modbus RS485, Modbus TCP, Ekip Com Hub
Low voltage switches and fusegear	TruONE ATS	•	•	•	•	•	•	•	•		•	Modbus RS485, Modbus TCP, Ekip Com Hub
	Slimline XR ITS 2.1	•	•	•	•	•	•		•			Modbus RS485
Digital inputs interface	Ekip signalling MODBUS TCP	•									•	Modbus TCP
Sub-Metering	EQ meters		•	•	•	•	•					Modbus RS485
Power meters	M4M		•	•	•	•	•	•				Modbus RS485, Modbus TCP
Energy management	System pro M compact® InSite	•	•	•	•	•	•	•		•	•	Modbus RS485, Modbus TCP
MV relays	615 Series	•	•	•	•	•	•	•	•	•	•	Modbus TCP
MV condition monitoring	SWICOM								•			Modbus TCP
And many others to come...			*Provided with dedicated accessories for communication and metering functions ** Only with ABB Ability™ EL gateway									

SENSORFACT™

Digital Energy Management



Gateways: Connectivity Hub

Edge Industrial Gateway

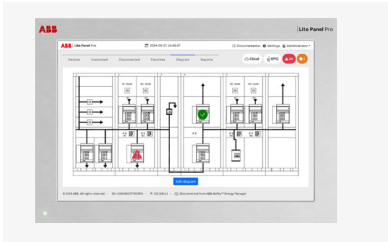


Collect all generated field device and parameter data, feeding it into Sensorfact—ideal for any project size.

Supports up to 45 Modbus TCP and 15 Modbus RTU devices

 [WEB PAGE](#)

Lite Panel Pro **NEW**



Versatile switchboard HMI with a large touchscreen display and an intuitive interface. It monitors connected Low Voltage devices on-premise and connects to Sensorfact.

Supports up to 90 Modbus TCP (included 30 Modbus RTU) devices

 [WEB PAGE](#)

Ekip Com Hub



Cartridge-type communication module inserted in an Emax 2, Tmax XT or Ekip UP/UP+ to connect to Sensorfact.

Supports up to 30 Modbus TCP and Modbus RTU devices

 [WEB PAGE](#)

ArTu K

Born certified

Fully checked and certified (IEC 60439-1 and IEC 61439-1 and 2 Standard) by an external independent organisation (Acea Lovag, CPRI & ERDA), 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 board, motor control center, power control center etc. upto 6300A with air and molded-case circuit-breakers and any internal segregations up to Form 4, and for floor-mounted secondary distribution switchgear with molded-case and modular circuit-breakers. The switchgear has been tested for Internal Arc (as per IEC 61641) and Seismic (as per IEC 60068).

Smart Low Voltage switchboard



The ArTu switchgear is noted for the following features:

- Integrated range of modular metalwork structures up to 6300 A with common accessories.
- Possibility of fulfilling all application requirements in terms of installation (floorstanding, modular and corner versions) and degree of protection (IP31, IP41, IP 42, IP54 & IP65).
- Maximum integration with modular apparatus and the molded-case and air circuit-breakers, so that additional drilling or adaptations are not required.
- Minimum switchgear assembly time, thanks to the simplicity of the kits, standardization of the small assembly items, self-supporting elements and the presence of clear reference points for assembly of the plates and panels – Segregations in kits up to Form 4.

The use and installation of the kits according to the instructions provided means that assembly and cabling times can be reduced to a minimum, for example, thanks to the reference points for positioning the panels and plates, and that respect of the insulation distances and the rated characteristics of the circuit-breakers are guaranteed.

Tmax XT circuit breakers

MCCB for power distribution & generator protection



Type	Iu (40° C) [A]	Ue [V]		Category	Release	Icu (380 - 415 V AC) [kA]									
		AC	DC			16	25	36	50	70	85	100	120	150	200
XT1	160	690	500	A	TMD/TMF	B	C	N	S	H					
XT2	160	690	500	A	TMD/TMA Ekip Dip LS/I Ekip Dip LIG / Dip LSIG Ekip C Dip LSIG Ekip Touch LSIG / Hi-Touch Ekip Touch Measuring LSIG Ekip G Dip LS/I Ekip G Touch LSIG / G Hi-Touch			N	S	H			L	V	
XT3	250	690	500	A	TMD TMG			N	S						
XT4	250	690	750	A	TMD/TMA Ekip Dip LS/I Ekip Dip LIG / Dip LSIG Ekip C Dip LSIG Ekip Touch LSIG / Hi-Touch Ekip Touch Measuring LSIG Ekip G Dip LS/I Ekip G Touch LSIG / G Hi-Touch			N	S	H			L	V	X
XT5	400 630	690	750	B (500 A) A (630 A)	TMA TMG Ekip Dip LS/I Ekip Dip LIG / Dip LSIG Ekip Touch LSIG / Hi-Touch Ekip Touch Measuring LSIG Ekip G Dip LS/I Ekip G Touch LSIG / G Hi-Touch			N	S	H			L		V, X
XT6	630 800	690	750	B (630A - 800 A)	TMA Ekip Dip LS/I Ekip Dip LIG / Dip LSIG Ekip G Dip LS/I			N	S	H					
XT7/ XT7M	1000 1250 1600	690		B	Ekip Dip LS/I Ekip Dip LIG / Dip LSIG Ekip Touch LSIG / Hi-Touch Ekip Touch Measuring LSIG Ekip G Dip LS/I Ekip G Touch LSIG / G Hi-Touch				S	H			L		

Trip Units

Thermal magnetic trip units

- TMF - Fixed thermal and fixed magnetic for power distribution
- TMD - Adjustable thermal (70-100% of In) and fixed magnetic (10 x In) for power distribution
- TMA - Adjustable thermal (70-100% of In) and adjustable magnetic (5-10 of In) for power distribution
- TMG - Adjustable thermal (70-100% of In) and low fixed magnetic (3 x In) for generator protection

Microprocessor based trip units

Ekip Dip LS/I Ekip G Dip LS/I	L = 0.40 - 1 In	Ekip Dip LIG	L = 0.40 - 1 In	Ekip Dip LSIG Ekip C Dip LSIG (XT2...XT6)	L = 0.4 - 1 In	Ekip Touch LSIG/ Touch measuring LSIG/ Hi-Touch LSIG Ekip G Touch LSIG/ G Hi-Touch LSIG	L = 0.4 - 1 In
	S = 1 - 10 In		I = 1 - 10 In		S = 1 - 10 In ⁽¹⁾		S = 0.6 - 10 In
	I = 1 - 10 In		G = 0.2 - 1 In		I = 1 - 10 In ⁽¹⁾ G = 0.2 - 1 In ⁽¹⁾		I = 1.5 - 10 In ⁽²⁾ G = 0.1 - 1 In

Note :

L = Overload S = Short circuit I = Instantaneous short circuit G = Earth fault

⁽¹⁾ for XT7 Dip, S = 0.6 to 10 In, I = 1.5 to 15 In, G = 0.1 to 1 In

⁽²⁾ for XT7 Touch, I = 1.5 to 15 In, G = 0.1 to 1 In

For detailed information about trip units, refer technical catalogue.

Tmax XT power distribution circuit breakers

Protection: TMD/TMF

XT1/XT3

Breaking capacity at 415VAC		
	Icu	Ics (Icu)
B	18kA	100%
C	25kA	100%
N	36kA	100%

Breaking capacity at 415VAC		
	Icu	Ics (Icu)
S	50kA	100% ¹⁾
H	70kA	100% ²⁾

TMD/TMF

			B		C	
Frame	In (A)	Poles	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)
XT1 160	16	3			1SDA080825R1	
	20		1SDA066800R1		1SDA080826R1	
	25		1SDA066801R1		1SDA067391R1	
	32		1SDA066802R1		1SDA067392R1	
	40		1SDA066803R1 ■	13,700	1SDA067393R1 ■	15,200
	50		1SDA066804R1 ■		1SDA067394R1 ■	
	63		1SDA066805R1 ■		1SDA067395R1 ■	
	80		1SDA066806R1 ■		1SDA067396R1 ■	
	100		1SDA066807R1 ■		1SDA067397R1 ■	
	125	4	1SDA066808R1 ■	20,740	1SDA067398R1 ■	23,750
	160		1SDA066809R1 ■	22,910	1SDA067399R1 ■	30,540
	16		1SDA066810R1		1SDA080840R1	
	20		1SDA066811R1		1SDA080841R1	
	25		1SDA066812R1		1SDA067400R1	
	32		1SDA066813R1 ■		1SDA067401R1 ■	
	40		1SDA066814R1 ■	19,200	1SDA067402R1 ■	21,990
	50		1SDA066815R1		1SDA067403R1 ■	
	63		1SDA066816R1 ■		1SDA067404R1 ■	
	80		1SDA066817R1 ■		1SDA067405R1 ■	
	100		1SDA066818R1 ■		1SDA067406R1 ■	
	125		1SDA066888R1 ■	25,320	1SDA067409R1 ■	28,960
	160		1SDA066821R1 ■	32,100	1SDA067410R1 ■	37,310

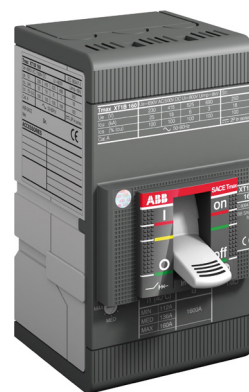
TMD / TMF

			N		S		H	
Frame	In (A)	Poles	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)
XT1 160	16	3	1SDA080827R1*		1SDA080830R1*		1SDA080835R1*	
	20		1SDA080828R1*		1SDA080831R1*		1SDA080836R1*	
	25		1SDA080829R1		1SDA080832R1		1SDA080837R1	
	32		1SDA067411R1		1SDA080833R1 ■		1SDA080838R1	
	40		1SDA067412R1 ■	19,670	1SDA080834R1 ■	20,500	1SDA080839R1	24,340
	50		1SDA067413R1 ■		1SDA067431R1		1SDA067449R1	
	63		1SDA067414R1 ■		1SDA067432R1 ■		1SDA067450R1	
	80		1SDA067415R1 ■		1SDA067433R1 ■		1SDA067451R1	
	100		1SDA067416R1 ■		1SDA067434R1 ■		1SDA067452R1	
	125	4	1SDA067417R1 ■	26,290	1SDA067435R1 ■	28,950	1SDA067453R1	36,790
	160		1SDA067418R1 ■	33,910	1SDA067436R1 ■	35,510	1SDA067454R1	41,970
	16		1SDA080842R1*		1SDA080845R1*		1SDA080850R1*	
	20		1SDA080843R1*		1SDA080846R1*		1SDA080851R1*	
	25		1SDA080844R1 ■		1SDA080847R1		1SDA080852R1	
	32		1SDA067419R1 ■		1SDA080848R1		1SDA080853R1	
	40		1SDA067420R1 ■	25,390	1SDA080849R1	30,240	1SDA080854R1	34,080
	50		1SDA067421R1		1SDA067439R1		1SDA067457R1	
	63		1SDA067422R1 ■		1SDA067440R1 ■		1SDA067458R1	
	80		1SDA067423R1 ■		1SDA067441R1		1SDA067459R1	
	100		1SDA067424R1 ■		1SDA067442R1 ■		1SDA067460R1	
	125		1SDA067427R1 ■	33,350	1SDA067445R1 ■	37,000	1SDA067463R1	43,870
	160		1SDA067428R1 ■	40,750	1SDA067446R1	41,250	1SDA067464R1	46,390
XT3 250	200	3	1SDA068058R1 ■	42,570	1SDA068220R1 ■	45,110		
	250		1SDA068059R1 ■	43,820	1SDA068221R1 ■	46,460		
XT3 250	200	4	1SDA068069R1 ■	48,750	1SDA068231R1 ■	52,470		
	250		1SDA068070R1 ■	50,000	1SDA068232R1 ■	53,730		

*TMF trip unit

Note: ¹⁾ for XT1 Ics = 75% Icu and XT3 Ics = 50% Icu. ²⁾ for XT1 Ics = 50% Icu

■ Stock items



Tmax XT power distribution circuit breakers

Protection: TMD/TMA - 3 Pole

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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



TMD / TMA*

			N		S		H	
Frame	In (A)	Poles	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)
XT2 160	1.6	3	1SDA067000R1	23,870	1SDA067540R1	28,720	1SDA067584R1	35,590
	2		1SDA067001R1		1SDA067541R1		1SDA067585R1	
	2.5		1SDA067002R1		1SDA067542R1		1SDA067586R1	
	3.2		1SDA067003R1		1SDA067543R1		1SDA067587R1	
	4		1SDA067004R1		1SDA067544R1		1SDA067588R1	
	5		1SDA067005R1		1SDA067545R1		1SDA067589R1	
	6.3		1SDA067006R1		1SDA067546R1		1SDA067590R1	
	8		1SDA067007R1		1SDA067547R1		1SDA067591R1	
	10		1SDA067008R1		1SDA067548R1 ■		1SDA067592R1	
	12.5		1SDA067009R1		1SDA067549R1		1SDA067593R1	
	16	3	1SDA067010R1 ■	21,890	1SDA067550R1 ■	25,640	1SDA067594R1	32,650
	20		1SDA067011R1 ■		1SDA067551R1		1SDA067595R1	
	25		1SDA067012R1		1SDA067552R1 ■		1SDA067596R1	
	32		1SDA067013R1 ■		1SDA067553R1 ■		1SDA067597R1	
	40		1SDA067014R1 ■		1SDA067554R1 ■		1SDA067598R1	
	50		1SDA067015R1		1SDA067555R1 ■		1SDA067599R1	
	63		1SDA067016R1 ■		1SDA067556R1 ■		1SDA067600R1 ■	
	80		1SDA067017R1		1SDA067557R1 ■		1SDA067601R1	
	100		1SDA067018R1 ■		1SDA067558R1 ■		1SDA067602R1 ■	
	125		1SDA067019R1 ■	32,620	1SDA067559R1 ■	38,070	1SDA067603R1 ■	59,820
XT4 250	160	3	1SDA067020R1 ■	34,840	1SDA067560R1 ■	39,470	1SDA067604R1	61,560
	200		1SDA068090R1 ■	49,210	1SDA068310R1 ■	50,890	1SDA068343R1	68,740
	225		1SDA068091R1	50,080	1SDA068311R1	52,320	1SDA068344R1	69,720
	250		1SDA068092R1 ■	51,080	1SDA068312R1 ■	53,880	1SDA068345R1 ■	71,310
	320		1SDA100344R1 ■	54,050	1SDA100414R1 ■	60,090	1SDA100484R1 ■	78,940
XT5 630	400	3	1SDA100345R1 ■	56,050	1SDA100415R1 ■	62,090	1SDA100485R1 ■	80,940
	500		1SDA100346R1 ■	71,270	1SDA100416R1 ■	79,750	1SDA100486R1 ■	1,02,630
	630		1SDA100347R1 ■	82,200	1SDA100417R1 ■	86,910	1SDA100487R1 ■	1,07,060
XT6 800	800	3	1SDA100718R1 ■	1,08,880	1SDA100740R1 ■	1,18,300	1SDA100762R1 ■	1,23,480

* 40 A onwards

■ Stock items

Tmax XT power distribution circuit breakers

Protection: TMD/TMA - 4 Pole

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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



TMD / TMA*

			N		S		H	
Frame	In (A)	Poles	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)
XT2160	1.6	4	1SDA067021R1	32,110	1SDA067561R1	35,280	1SDA067605R1	45,630
	2		1SDA067022R1		1SDA067562R1		1SDA067606R1	
	2.5		1SDA067023R1		1SDA067563R1		1SDA067607R1	
	3.2		1SDA067024R1		1SDA067564R1		1SDA067608R1	
	4		1SDA067025R1		1SDA067565R1		1SDA067609R1	
	5		1SDA067026R1		1SDA067566R1		1SDA067610R1	
	6.3		1SDA067027R1		1SDA067567R1		1SDA067611R1	
	8		1SDA067028R1		1SDA067568R1		1SDA067612R1	
	10		1SDA067029R1		1SDA067569R1		1SDA067613R1	
	12.5		1SDA067030R1		1SDA067570R1		1SDA067614R1	
	16		1SDA067031R1	27,210	1SDA067571R1	31,780	1SDA067615R1	41,860
	20		1SDA067032R1		1SDA067572R1		1SDA067616R1	
	25		1SDA067033R1		1SDA067573R1		1SDA067617R1	
	32		1SDA067034R1		1SDA067574R1 ■		1SDA067618R1	
	40		1SDA067035R1		1SDA067575R1		1SDA067619R1	
	50		1SDA067036R1		1SDA067576R1		1SDA067620R1	
	63		1SDA067037R1 ■		1SDA067577R1 ■		1SDA067621R1	
	80		1SDA067038R1		1SDA067578R1		1SDA067622R1	
	100		1SDA067039R1 ■		1SDA067579R1 ■		1SDA067623R1	
	125		1SDA067042R1 ■	40,630	1SDA067582R1 ■	44,100	1SDA067626R1	62,880
	160		1SDA067043R1 ■	43,870	1SDA067583R1 ■	46,460	1SDA067627R1	64,200
XT4 250	200		1SDA068109R1 ■	59,020	1SDA068329R1 ■	63,340	1SDA068362R1	85,500
	225		1SDA068110R1	61,000	1SDA068330R1	66,270	1SDA068363R1	87,780
	250		1SDA068111R1 ■	62,830	1SDA068331R1 ■	68,250	1SDA068364R1	90,410
	320		1SDA100383R1 ■	68,330	1SDA100453R1 ■	77,200	1SDA100519R1 ■	96,320
XT5 630	400		1SDA100385R1 ■	70,330	1SDA100455R1 ■	79,200	1SDA100521R1 ■	98,320
	500		1SDA100387R1 ■	88,670	1SDA100457R1 ■	99,970	1SDA100523R1 ■	1,24,240
	630		1SDA100389R1 ■	1,00,350	1SDA100459R1 ■	1,13,700	1SDA100525R1 ■	1,26,940
XT6 800	800		1SDA100731R1 ■	1,15,170	1SDA100753R1 ■	1,36,680	1SDA100775R1 ■	1,44,050

* 40 A onwards

Tmax XT power distribution circuit breakers

Protection: LS/I

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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



Tmax XT is the latest generation MCCB up to 1600 A / 690V AC

- Adjustable overload, selective short circuit/ instantaneous short circuit protection
- LEDs on the front provide type of fault indication information
- The trip unit records and stores trip history and event history
- Ekip Dip trip units include thermal memory function
- Communication of MCCB status possible on Modbus RTU/TCP using Ekip Com STA Module
- Front connector allows the connection of Ekip TT and Ekip T&P for testing and programming

XT2 / XT4 / XT5 / XT6

			N		S		H	
Frame	In (A)	Poles	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT2 160	10	3	1SDA067054R1	38,830	1SDA067800R1	46,600	1SDA067857R1	52,560
	25		1SDA067055R1		1SDA067801R1		1SDA067858R1	
	63		1SDA067056R1	33,470	1SDA067802R1	40,170	1SDA067859R1	51,020
	100		1SDA067057R1		1SDA067803R1		1SDA067860R1	
	160		1SDA067058R1		1SDA067804R1		1SDA067861R1	
XT4 250	250		1SDA068126R1	57,340	1SDA068475R1	66,630	1SDA068515R1	75,570
XT5 400	400		1SDA100354R1	87,260	1SDA100424R1	90,560	1SDA100490R1	1,03,070
XT5 630	630		1SDA100355R1	93,360	1SDA100425R1	95,680	1SDA100491R1	1,08,150
XT6 800	800		1SDA100719R1	1,15,780	1SDA100741R1	1,30,680	1SDA100763R1	1,56,090
XT2 160	10	4	1SDA067090R1	49,540	1SDA067833R1	58,300	1SDA067890R1	66,290
	25		1SDA067091R1		1SDA067834R1		1SDA067891R1	
	63		1SDA067092R1	43,070	1SDA067835R1	56,600	1SDA067892R1	64,350
	100		1SDA067093R1		1SDA067836R1		1SDA067893R1	
	160		1SDA067095R1		1SDA067838R1		1SDA067895R1	
XT4 250	250		1SDA068147R1	80,980	1SDA068495R1	85,960	1SDA068535R1	98,440
XT5 400	400		1SDA100396R1	98,170	1SDA100466R1	1,15,810	1SDA100528R1	1,32,000
XT5 630	630		1SDA100397R1	1,14,660	1SDA100467R1	1,23,820	1SDA100529R1	1,64,320
XT6 800	800		1SDA100732R1	1,30,820	1SDA100754R1	1,60,910	1SDA100776R1	1,91,480

Tmax XT power distribution circuit breakers

Protection: LIG

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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



Tmax XT is the latest generation product up to 1600 A / 690V AC

- Adjustable Overload, Instantaneous short circuit and Ground fault protection
- LEDs on the front provide type of fault indication information
- The trip unit records and stores trip history and event history
- Ekip Dip trip units include thermal memory function
- Communication of MCCB status possible Modbus RTU/TCP using Ekip Com STA Module
- Front connector allows the connection of Ekip TT, Ekip T&P for testing and programming

Tmax XT Ekip LIG

Ekip LIG		
Frame	In (A)	Poles
XT2 160	63	3
	100	
	160	
XT4 250	250	3
XT5 630	400	
	630	
XT6 800	800	3
XT2 160	63	
	100	
	160	
XT4 250	250	4
XT5 630	400	
	630	
XT6 800	800	4

N Version (Icu=Ics=36kA @ 415 V AC)	
Ordering Code	L.P.(₹)
1SDA100012R1 ■	53,070
1SDA100013R1 ■	
1SDA100014R1 ■	
1SDA100185R1 ■	61,370
1SDA100380R1	73,100
1SDA100381R1	89,310
1SDA100381R1	95,100
1SDA100728R1	1,32,960
1SDA100027R1 ■	61,750
1SDA100028R1 ■	
1SDA100029R1 ■	
1SDA100200R1 ■	74,710
1SDA100412R1	86,460
1SDA100412R1	1,00,370
1SDA100413R1	1,17,050
1SDA100738R1	1,61,930

S Version (Icu=Ics=50kA @ 415 V AC)	
Ordering Code	L.P.(₹)
1SDA100042R1 ■	57,770
1SDA100043R1 ■	
1SDA100044R1 ■	
1SDA100044R1 ■	69,300
1SDA100215R1 ■	77,030
1SDA100450R1	91,100
1SDA100451R1	1,00,840
1SDA100750R1	1,53,590
1SDA100057R1 ■	67,580
1SDA100058R1 ■	
1SDA100059R1 ■	
1SDA100230R1 ■	82,720
1SDA100230R1 ■	89,930
1SDA100482R1	1,05,840
1SDA100483R1	1,26,720
1SDA100760R1	1,82,810

H Version (Icu=Ics=70kA @ 415 V AC)	
Ordering Code	L.P.(₹)
1SDA100072R1 ■	68,970
1SDA100073R1 ■	
1SDA100074R1 ■	
1SDA100074R1 ■	78,980
1SDA100245R1 ■	90,990
1SDA100516R1	1,23,690
1SDA100517R1	1,29,940
1SDA100772R1	1,85,130
1SDA100087R1 ■	82,660
1SDA100088R1 ■	
1SDA100089R1 ■	
1SDA100260R1 ■	96,350
1SDA100260R1 ■	1,11,600
1SDA100544R1	1,33,380
1SDA100545R1	1,73,380
1SDA100782R1	2,31,390

■ Stock items

Tmax XT power distribution circuit breakers

Protection: Dip LSIG

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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



Tmax XT is the latest generation product up to 1600 A / 690V AC

- IEC 60947-2 certification
- Adjustable overload, selective short circuit, instantaneous short circuit and ground fault protection
- LEDs on the front provide type of fault indication information
- The trip unit records and stores trip history and event history
- Ekip Dip trip units include thermal memory function
- Communication of MCCB status possible Modbus RTU/TCP using Ekip Com STA Module
- Front connector allows the connection of Ekip TT, Ekip T&P for testing and programming

Tmax XT Ekip Dip LSIG

			N		S		H	
Frame	In (A)	Poles	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT2 160	10	3	1SDA100005R1	77,550	1SDA1000035R1	82,390	1SDA1000065R1	93,580
	25		1SDA100006R1		1SDA1000036R1		1SDA1000066R1	
	63		1SDA100007R1	75,550	1SDA1000037R1	80,390	1SDA1000067R1	91,580
	100		1SDA100008R1		1SDA1000038R1		1SDA1000068R1	
	160		1SDA100009R1	80,150	1SDA1000039R1	85,930	1SDA1000069R1	95,450
XT4 250	250	3	1SDA100180R1	84,210	1SDA100210R1	88,400	1SDA100240R1	99,300
	320A		1SDA100361R1	1,09,800	1SDA100431R1	1,13,250	1SDA100497R1	1,27,740
XT5 630	400A		1SDA100362R1	1,11,800	1SDA100432R1	1,15,250	1SDA100498R1	1,29,740
	630A		1SDA100363R1	1,23,040	1SDA100433R1	1,25,660	1SDA100499R1	1,42,470
XT6 800	800A		1SDA100723R1	1,62,250	1SDA100745R1	1,71,370	1SDA100767R1	1,95,020
XT2 160	10	4	1SDA100020R1	85,690	1SDA100050R1	88,850	1SDA100080R1	98,630
	25		1SDA100021R1		1SDA100051R1		1SDA100081R1	
	63		1SDA100022R1	83,690	1SDA100052R1	86,850	1SDA100082R1	96,630
	100		1SDA100023R1		1SDA100053R1		1SDA100083R1	
	160		1SDA100024R1	89,510	1SDA100054R1	91,550	1SDA100084R1	1,23,080
XT4 250	250	4	1SDA100195R1	1,04,340	1SDA100225R1	1,05,810	1SDA100255R1	1,26,650
	320A		1SDA100403R1	1,23,580	1SDA100473R1	1,27,390	1SDA100535R1	1,37,570
XT5 630	400A		1SDA100404R1	1,25,580	1SDA100474R1	1,29,390	1SDA100536R1	1,39,570
	630A		1SDA100405R1	1,47,760	1SDA100475R1	1,54,080	1SDA100537R1	1,79,980
XT6 800	800A		1SDA100736R1	1,81,820	1SDA100758R1	1,97,330	1SDA100780R1	2,47,100

Tmax XT power distribution circuit breakers

Protection: LS/I, LSIG

- IEC 60947-2 certification
- Rating available upto 1600A
- Performance upto 100kA
- For motorized version consider XT7M & Motor operator

XT7

Breaking capacity at 415VAC

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

XT7 Ekip Dip LS/I

Frame	In (A)	Poles	S		H	
			Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT7	800A	3	1SDA100826R1	Upon request	1SDA100890R1	Upon request
	1000A		1SDA100827R1		1SDA100891R1	
	1250A		1SDA100828R1		1SDA100892R1	
	1600A		1SDA100829R1		1SDA100893R1	
	800A	4	1SDA101114R1	Upon request	1SDA101170R1	Upon request
	1000A		1SDA101115R1		1SDA101171R1	
	1250A		1SDA101116R1		1SDA101172R1	
	1600A		1SDA101117R1		1SDA101173R1	

XT7 Ekip Dip LSIG

Frame	In (A)	Poles	S		H	
			Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT7	800A	3	1SDA100834R1	Upon request	1SDA100898R1	Upon request
	1000A		1SDA100835R1		1SDA100899R1	
	1250A		1SDA100836R1		1SDA100900R1	
	1600A		1SDA100837R1		1SDA100901R1	
	800A	4	1SDA101122R1	Upon request	1SDA101178R1	Upon request
	1000A		1SDA101123R1		1SDA101179R1	
	1250A		1SDA101124R1		1SDA101180R1	
	1600A		1SDA101125R1		1SDA101181R1	

XT7M Ekip Dip LS/I

Frame	In (A)	Poles	S		H	
			Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT7M	800A	3	1SDA101366R1	Upon request	1SDA101430R1	Upon request
	1000A		1SDA101367R1		1SDA101431R1	
	1250A		1SDA101368R1		1SDA101432R1	
	1600A		1SDA101369R1		1SDA101433R1	
	800A	4	1SDA101654R1	Upon request	1SDA101710R1	Upon request
	1000A		1SDA101655R1		1SDA101711R1	
	1250A		1SDA101656R1		1SDA101712R1	
	1600A		1SDA101657R1		1SDA101713R1	

XT7M Ekip Dip LSIG

Frame	In (A)	Poles	S		H	
			Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT7M	800A	3	1SDA101374R1	Upon request	1SDA101438R1	Upon request
	1000A		1SDA101375R1		1SDA101439R1	
	1250A		1SDA101376R1		1SDA101440R1	
	1600A		1SDA101377R1		1SDA101441R1	
	800A	4	1SDA101662R1	Upon request	1SDA101718R1	Upon request
	1000A		1SDA101663R1		1SDA101719R1	
	1250A		1SDA101664R1		1SDA101720R1	
	1600A		1SDA101665R1		1SDA101721R1	

* For XT7, XT7M Ekip Dip LIG MCCBs ordering code, refer Tmax XT technical catalogue



Tmax XT power distribution circuit breakers

Protection: C Dip LSIG

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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



Tmax XT C Dip LSIG is the latest generation product up to 250 A / 690V AC

- IEC 60947-2 certification
- Adjustable overload, selective short circuit, instantaneous short circuit and ground fault protection
- LEDs on the front provide type of fault indication information
- The trip unit records and stores trip history and event history
- Ekip Dip trip units include thermal memory function
- Communication of MCCB status & release data possible with C Dip Modbus RTU module
- Front connector allows the connection of Ekip TT, Ekip T&P for testing and programming

XT2 / XT4 Ekip C Dip LSIG
(Communication capable)

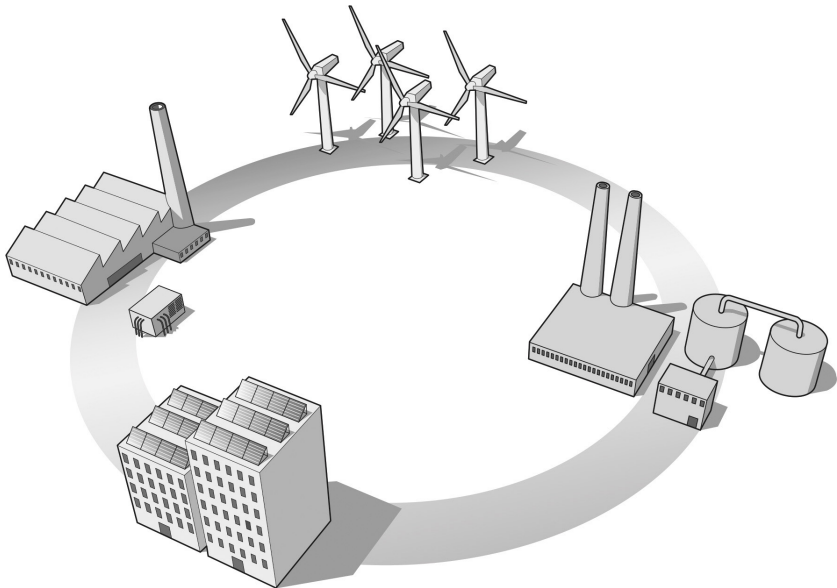
			N		S		H	
Frame	In (A)	Poles	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT2 160	25	3	1SDX272178R1	82,050	1SDX356683R1	86,890	1SDX357425R1	98,080
	63		1SDX268780R1	80,050	1SDX268791R1	84,890	1SDX268803R1	96,080
	100		1SDX268782R1		1SDX268793R1		1SDX268805R1	
	160		1SDX268781R1	84,650	1SDX268795R1	90,430	1SDX268807R1	99,950
XT4 250	250		1SDX268811R1	88,710	1SDX268816R1	92,900	1SDX268820R1	1,03,800
XT2 160	25	4	1SDX356687R1	90,190	1SDX356691R1	93,350	1SDX357427R1	1,03,130
	63		1SDX356689R1	88,190	1SDX356692R1	91,350	1SDX356709R1	1,01,130
	100		1SDX356695R1		1SDX356694R1		1SDX356710R1	
	160		1SDX356690R1	94,010	1SDX356693R1	96,050	1SDX356711R1	1,27,580
XT4 250	250		1SDX356716R1	1,08,840	1SDX356717R1	1,10,310	1SDX356718R1	1,31,150

Tmax XT Power distribution circuit breakers

Connectivity with Tmax XT

The following table provides a frame level overview of the communication capabilities available for Tmax XT MCCBs.

- The stand-alone communication module (Modbus RTU or Modbus TCP) can be installed inside the circuit breaker to enable basic communication functions, such as status monitoring and remote control.
- The Ekip C Dip trip unit enhances these capabilities by allowing the transmission of release information in addition to status data through a dedicated Modbus RTU protocol.
- For advanced communication requirements, Ekip Touch trip units offer a comprehensive set of features, enabling detailed data exchange and extended integration options.



Circuit breaker	Trip unit Type	Module	Protocol
XT2-XT4	Switch disconnecter Thermomag Ekip Dip	Ekip Com STA	Modbus RTU
	Ekip C Dip	Ekip Com C Dip	Modbus RTU
	Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU Modbus TCP Profinet Ethernet/IP IEC61850 DeviceNet Profibus-DP
XT5	Switch disconnecter Thermomag Ekip Dip	Ekip Com STA	Modbus RTU Modbus TCP
	Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU Modbus TCP Profinet Ethernet/IP IEC61850 DeviceNet Profibus-DP
XT7-XT7M	Switch disconnecter Ekip Dip	-	-
	Ekip Touch / Hi-Touch	Ekip Com	Modbus RTU Modbus TCP Profinet Ethernet/IP IEC61850 DeviceNet Profibus-DP

Note: Check compatibility of communication module with internal accessories from Tmax XT technical catalogue

Tmax XT Power distribution circuit breakers

Breaking new grounds : Ekip Touch series

XT2 / XT4 (LCD display)



XT5 (Touch display)



- **Communication and connectivity:** Supports 7 onboard communication protocols :
Modbus RTU
Modbus TCP
Profibus
Profinet
Ethernet/IP
Devicenet
IEC61850
- **Digital upgrade:** Digital upgrading of measurements and protections using software package
- **Ease of use Interface:** LCD display for XT2/XT4 and Touch display for XT5. BLE (Bluetooth low energy enabled)
- **Commissioning:** The setting, testing and downloading of reports can be carried out directly from a smartphone, tablet or PC
- **Watchdog:** Tmax XT ensure high reliability thanks to an electronic circuit that periodically checks the continuity of the internal connections, such as the trip coil, rating plug and each current sensor (ANSI 74). In the event of an alarm, a message is shown on the display.
- **Internal over temperature protection:** Ekip Touch/ Ekip Touch measuring also features self-protection, which ensures the correct operation of the unit in overtemperatures (OT) inside the protection trip unit.
- **Maintenance features:**
Information of last 30 trips and 200 events.
No. of mechanical operations. Total operating time (in hours).
Contact wear and tear in %.
Date of maintenance operations performed.
Indication of maintenance operation needed.
Failure of circuit-breaker to open (ANSI 50BF)

Protections

L,S,I & G protections
Neutral protection
2nd instantaneous protection (2I)
MCR (making current release) - Closing on short circuit protection
Current unbalance
Harmonic distortion
2nd time delayed over current protection (S2)
Current thresholds
ROCOF (Rate of change of frequency)
Synchrocheck
Residual current protection (Rc)



Instantaneous measurements			Ekip Touch	Ekip Touch Measuring
Currents (RMS)	L1, L2, L3, Ne	[A]	●	●
Ground fault current (RMS)	Ig	[A]	●	●
Measuring package				
Phase-phase voltage (RMS)	U12, U23, U31	[V]	○	●
Phase-neutral voltage (RMS)	U1, U2, U3	[V]	○	●
Phase sequence			○	●
Frequency	f	[Hz]	○	●
Active power	P1, P2, P3, Ptot	[kW]	○	●
Reactive power	Q1, Q2, Q3, Qtot	[kVAR]	○	●
Apparent power	S1, S2, S3, Stot	[KVA]	○	●
Power factor	PF1, PF2, PF3, PF total		○	●
Peak factor	total		○	●
Active energy	Ep total, Ep positive, Ep negative	[kWh]	○	●
Reactive energy	Eq total, Ep positive, Ep negative	[kVARh]	○	●
Apparent energy	Es total	[KVAh]	○	●

● Available as standard

○ Available as software package to be ordered via offline software activation or during the circuit-breaker ordering phase

Tmax XT Power distribution circuit breakers

Breaking new grounds : Ekip Touch series

												
	Standard Protection	Standard Measures	Measuring Package	Voltage Protections	Frequency Protections	Power Protections	Adaptive Protections	Data Logger	Network Analyzer	Advanced Voltage Protections	ROCOF Protections	Power Controller
Ekip Touch	●	●	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Ekip Touch Measuring	●	●	●	↑	↑	↑	↑	↑	↑	↑	↑	↑
Ekip G Touch	●	●	●	↑	↑	↑	↑	●	↑	↑	↑	↑
Ekip M Touch	●	●	●	●	●	↑	●	↑	↑	↑	↑	↑
Ekip Hi-Touch	●	●	●	●	●	↑	●	●	●	↑	↑	↑
Ekip G Hi-Touch	●	●	●	●	●	●	●	●	●	●	●	↑

● Available by default

↑ Upgradable

↑ Some functions available. Upgradable with the full package.

Ekip Touch LSIG

			N		S		H	
Frame	Current rating	No. of poles	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)
XT2	100A	3	1SDX048780R1	Upon request	1SDX048814R1	Upon request	1SDX048850R1	Upon request
	160A		1SDX048781R1		1SDX048815R1		1SDX048851R1	
XT4	250A		1SDX049224R1		1SDX049232R1		1SDX049241R1	
	320A		1SDX049830R1		1SDX049906R1		1SDX049982R1	
XT5	400A		1SDX049831R1		1SDX049907R1		1SDX049983R1	
	630A		1SDX049857R1		1SDX049933R1		1SDX050009R1	
XT7	800A	4	Upon request	Upon request	1SDA100842R1	Upon request	1SDA100906R1	Upon request
	1000A				1SDA100843R1		1SDA100907R1	
	1250A				1SDA100844R1		1SDA100908R1	
	1600A				1SDA100845R1		1SDA100909R1	
XT2	100A				1SDX049027R1		1SDX049083R1	
	160A				1SDX049028R1		1SDX049084R1	
XT4	250A				1SDX049268R1		1SDX049282R1	
	320A				1SDX049870R1		1SDX050022R1	
XT5	400A				1SDX049871R1		1SDX050023R1	
	630A				1SDX049894R1		1SDX050046R1	
XT7*	800A				1SDA101130R1		1SDA101186R1	
	1000A				1SDA101131R1		1SDA101187R1	
	1250A				1SDA101132R1		1SDA101188R1	
	1600A				1SDA101133R1		1SDA101189R1	

Ekip Touch measuring LSIG

			N		S		H	
Frame	Current rating	No. of poles	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)	Ordering code	L.P.(₹)
XT2	100A	3	1SDX048788R1	Upon request	1SDX048822R1	Upon request	1SDX048858R1	Upon request
	160A		1SDX048789R1		1SDX048823R1		1SDX048859R1	
XT4	250A		1SDX049226R1		1SDX049234R1		1SDX049243R1	
	320A		1SDX049836R1		1SDX049912R1		1SDX049988R1	
XT5	400A		1SDX049837R1		1SDX049913R1		1SDX049989R1	
	630A		1SDX049859R1		1SDX049935R1		1SDX050011R1	
XT7	800A	4	Upon request	Upon request	1SDA100850R1	Upon request	1SDA100914R1	Upon request
	1000A				1SDA100851R1		1SDA100915R1	
	1250A				1SDA100852R1		1SDA100916R1	
	1600A				1SDA100853R1		1SDA100917R1	
XT2	100A				1SDX049035R1		1SDX049091R1	
	160A				1SDX049036R1		1SDX049092R1	
XT4	250A				1SDX049270R1		1SDX049284R1	
	320A				1SDX049876R1		1SDX050028R1	
XT5	400A				1SDX049877R1		1SDX050029R1	
	630A				1SDX049896R1		1SDX050048R1	
XT7*	800A				1SDA101138R1		1SDA101194R1	
	1000A				1SDA101139R1		1SDA101195R1	
	1250A				1SDA101140R1		1SDA101196R1	
	1600A				1SDA101141R1		1SDA101197R1	

* for motorized version please contact nearest branch office

Tmax XT circuit breakers

MCCB for motor protection

Type	Iu (40° C) [A]	Ue [V]		Category	Release	Icu (380 - 415 V AC) [kA]									
		AC	DC			16	25	36	50	70	85	100	120	150	200
XT1	160	690	500	A	MF/MA	B	C	N	S	H					
XT2	160	690	500	A	MF/MA Ekip M Dip I / Dip LIU Ekip M Touch LRIU			N	S	H			L	V	
XT3	250	690	500	A	MF/MA			N	S						
XT4	250	690	750	A	MA Ekip M Dip I / Dip LIU Ekip M Touch LRIU			N	S	H			L	V	X
XT5	400 630	690	750	B (500 A) A (630 A)	MA Ekip M Dip I / Dip LIU Ekip M Touch LRIU			N	S	H			L		V, X
XT6	630 800	690	750	B (630A - 800 A)	Ekip M Dip I / Dip LIU			N	S	H					
XT7 / XT7M	1000 1250 1600	690		B	Ekip M Dip I Ekip M Touch LRIU				S	H		L			

Trip Units

Magnetic trip units

- MF - Magnetic only trip unit with fixed magnetic thresholds for motor protection
- MA - Magnetic only trip unit with adjustable magnetic thresholds for motor protection

Microprocessor based electronic trip units

Ekip M Dip I	I = 1 - 10 I _n	Ekip M Dip LIU	L = 0.40 - 1 I _n	Ekip M Touch LRIU	L = 0.4 - 1 I _n
			I = 6 - 13 I _n U = On/Off		R = 2 - 10 I _l * I = 1.5 - 10 I _n ⁽¹⁾ U = On/Off

L = Overload I = Instantaneous short circuit R = Blocked rotor

U = phase loss (U): With selector in ON position, circuit breaker trips if at least one current phase is lower than 0.1xI_n and at least a second one higher than 0.25xI_n;

Note: For detailed information about trip units, refer technical catalogue.

* Setting for rotor blockage - stall, refer technical catalogue.

⁽¹⁾ for XT7 Touch, I = 1.5 to 15 I_n, G = 0.1 to 1 I_n

Tmax XT motor distribution

circuit breakers

Protection: Magnetic only and Microprocessor based

short circuit protection MCCBs

XT2/XT4/XT5/XT6

Breaking capacity at 415VAC

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

XT3

Breaking capacity at 415VAC

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



MF/MA*

Frame	In (A)	Poles
XT2 160	1	3
	2	
	4	
	8.5	
	12.5	
	20	
	32	
	52	
	80	
	100	
	160	
XT3 250	100	
	125	
	160	
	200	
XT4 250	200	
	320	
XT5 630	400	
	630	

N	
Ordering code	L.P. (₹)
1SDA067044R1	24,000
1SDA067045R1	
1SDA067046R1	
1SDA067047R1	
1SDA067048R1 ■	
1SDA067049R1 ■	23,670
1SDA067050R1 ■	
1SDA067051R1 ■	
1SDA067052R1 ■	
1SDA067053R1 ■	
1SDA076529R1	34,570
1SDA068071R1	29,110
1SDA068072R1	
1SDA068073R1	
1SDA068074R1	33,280
1SDA068121R1	59,460
1SDA100364R1	61,910
1SDA100365R1	
1SDA100366R1	72,410

S	
Ordering code	L.P. (₹)
1SDA067760R1	25,910
1SDA067761R1	
1SDA067762R1	
1SDA067763R1 ■	
1SDA067764R1 ■	
1SDA067765R1 ■	25,520
1SDA067766R1 ■	
1SDA067767R1 ■	
1SDA067768R1 ■	
1SDA067769R1 ■	
1SDA076530R1 ■	37,710
1SDA068279R1	30,250
1SDA068280R1	
1SDA068281R1	
1SDA068282R1 ■	34,240
1SDA068440R1 ■	64,670
1SDA100434R1	66,400
1SDA100435R1	82,490
1SDA100436R1	

H	
Ordering code	L.P. (₹)
1SDA067770R1	29,100
1SDA067771R1	
1SDA067772R1	
1SDA067773R1	
1SDA067774R1	
1SDA067775R1	27,940
1SDA067776R1	
1SDA067777R1	
1SDA067778R1	
1SDA067779R1	
1SDA076535R1	48,100
1SDA068450R1	78,310
1SDA100500R1	80,510
1SDA100501R1	
1SDA100502R1	1,05,320

* 20 amps onwards

Ekip M Dip I

Frame	In (A)	Poles
XT2 160	10	3
	25	
	63	
	100	
	160	
XT4 250	250	
XT5 630	400	
	630	
XT6 800	630	
	800	

N	
Ordering code	L.P. (₹)
1SDA067059R1	32,470
1SDA067060R1	
1SDA067061R1	
1SDA067062R1	
1SDA067063R1	39,980
1SDA068131R1 ■	61,320
1SDA100368R1	70,090
1SDA100369R1	86,610
1SDA107565R1	115,650
1SDA100725R1	120,650

S	
Ordering code	L.P. (₹)
1SDA067805R1	38,830
1SDA067806R1	
1SDA067807R1	
1SDA067808R1	
1SDA067809R1	52,220
1SDA068480R1 ■	66,500
1SDA100438R1 ■	99,620
1SDA100439R1 ■	123,150
1SDA107578R1	166,810
1SDA100747R1	171,810

H	
Ordering code	L.P. (₹)
1SDA067862R1	41,870
1SDA067863R1	
1SDA067864R1	
1SDA067865R1	
1SDA067866R1	56,920
1SDA068520R1	79,570
1SDA100504R1	140,980
1SDA100505R1	174,270
1SDA107591R1	234,390
1SDA100769R1	239,390

■ Stock items

Tmax XT switch disconnectors

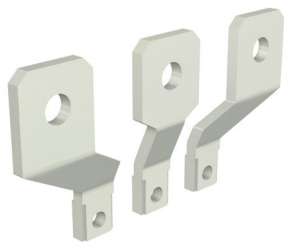
SACE Tmax XT switch-disconnectors

- IEC 60947-3 certification utilization category
- These devices are mainly used as:
 - General disconnection devices in sub-switchboards;
 - Switching and insulation devices for lines, busbars or groups of apparatus;
 - Bus ties.
- Switch-disconnector must be protected on the supply side by a coordinated device which safeguards it against short-circuits.
- Able to withstand The dynamic, thermal and current stresses with the right Making capacity(lcm)



Frame	In(A)	Icw kA (1s)	Poles	Ordering code	L.P.(₹)	Poles	Ordering code	L.P.(₹)
XT1D	160	2	3	1SDA068208R1	16,290	4	1SDA068209R1	24,050
XT3D	250	3		1SDA068210R1	35,710		1SDA068211R1	42,640
XT4D	250	3.6		1SDA068212R1	40,720		1SDA068213R1	53,970
XT5D	400	3.6		1SDA100546R1	59,070		1SDA100548R1	63,660
	630	3.6		1SDA100547R1	66,400		1SDA100549R1	81,020
XT6D	800	15		1SDA100784R1	80,930		1SDA100786R1	1,40,620
	1000	20		1SDA101906R1			1SDA101909R1	
XT7D	1250	20		1SDA101907R1			1SDA101910R1	
	1600	20		1SDA101908R1	Upon request		1SDA101911R1	Upon request
XT7D M	1000	20		1SDA101912R1			1SDA101915R1	
	1250	20		1SDA101913R1			1SDA101916R1	
	1600	20		1SDA101914R1			1SDA101917R1	

Tmax XT accessories



Accessories for Tmax MCCBs Extended spreaded terminals - ES

Frame	Kit ES 6 pcs	L.P. (₹)	Kit ES 8 pcs	L.P. (₹)
XT1	1SDA066891R1 ■	3,800	1SDA066892R1 ■	5,430
XT2	1SDA066895R1 ■	5,160	1SDA066896R1 ■	6,290
XT3	1SDA066899R1 ■	5,530	1SDA066900R1 ■	7,040
XT4	1SDA066903R1 ■	6,370	1SDA066904R1 ■	7,980
XT5	1SDA104738R1 (1/2 kit) ⁽¹⁾	4,480	1SDA104739R1 (1/2 kit) ⁽²⁾	5,940
XT6	1SDA113127R1 (Lower)	Upon request	1SDA104741R1 (1/2 Kit) ⁽²⁾	Upon request
	1SDA104740R1 (Upper)			
XT7-XT7M	1SDA073979R1 (1/2 Kit) ⁽¹⁾	Upon request	1SDA073980R1 (1/2 Kit) ⁽²⁾	Upon request

Note: Phase barrier supplied as standard with above copper spreaders.

(1) Code is for 3 pcs, if required for both top & bottom side order 2 quantities

(2) Code is for 4 pcs, if required for both top & bottom side order 2 quantities



Separator - PB

Frame	Description	3 P - 4 pcs	L.P. (₹)	4 P - 6 pcs	L.P. (₹)
XT1-XT3	PB 100mm XT1-XT3	1SDA066676R1	1,460	1SDA066681R1	2,130
	PB 200mm XT1-XT3	1SDA066678R1	1,920	1SDA066683R1	2,780
XT2-XT4	PB 100mm XT2-XT4	1SDA066675R1	1,630	1SDA066680R1	2,430
	PB 200mm XT2-XT4	1SDA066677R1 ■	2,430	1SDA066682R1	3,540
XT5	PB 100mm XT5	1SDA105002R1	1,790	1SDA105003R1	2,680
	PB 200mm XT5	1SDA105004R1	2,680	1SDA105005R1	3,890
XT6	PB 100mm XT6	1SDA105010R1	1,850	1SDA105011R1	2,950
	PB 200mm XT6	1SDA105012R1	3,170	1SDA105013R1	4,270



Auxiliary contact - AUX (Uncabled version)

Frame	Description	Ordering code	L.P. (₹)
XT1....XT6	AUX 1Q 250Vac/dc XT1...XT6	1SDA066422R1 ■	1,920
	AUX 1Q 24Vdc XT1...XT6	1SDA066423R1	2,900

Electrical signals

Auxiliary contact cabled-version - AUX - C

Frame	Description	Ordering code	L.P. (₹)
XT1....XT6	AUX-C 1Q+1SY 250V AC/DC XT1...XT6 F/P	1SDA066431R1 ■	3,250
	AUX-C 2Q+1SY 250VAC/DC XT1...XT6 F/P	1SDA066433R1 ■	5,110
	AUX-C 3Q+1SY 250VAC/DC XT2...XT6 F/P	1SDA066434R1 ■	6,320
	AUX-C 1Q+1SY 24Vdc XT1...XT6 F/P	1SDA066446R1 ■	4,680
	AUX-C 3Q+1SY 24VDC XT2...XT6 F/P	1SDA066448R1	7,290
XT2....XT4	AUX-C 3Q+2SY 250VAC/DC XT2-XT4 F/P	1SDA066436R1	7,730
	AUX-C 2Q+2SY+1S51 250VAC/DC XT2-XT4 F/P	1SDA066438R1	8,480
	AUX-C 2Q 400V AC XT2-XT4 F/P	1SDA066440R1	4,040
	AUX-C 1Q+1SY 400Vac XT2-XT4 F/P	1SDA066444R1	6,350
XT5	AUX-C 1Q + 1SY 400V AC/DC XT5 F/P	1SDA104784R1	12,290
	AUX-C 2Q 400V AC/DC XT5 F/P	1SDA104795R1	9,430
XT7-XT7M	AUX 4Q 400V	1SDA073750R1	Upon request
	S51 250V	1SDA073776R1	

Note : Q=Changeover contact;SY/S51= Trip indication contact ;F/P: Fixed/Plug-in ;

W: Withdrawable, for W Aux contact ordering code, refer Tmax XT technical catalogue



IP54 Protection for rotary handle

Frame	Description	Ordering code	L.P. (₹)
XT1....XT4	IP54 Protection for RHE	1SDA066587R1	4,120
XT5	IP54 Protection for RHD	1SDA104876R1	29,690
XT6	IP54 Protection for RHD	1SDA104877R1	32,650
XT7	IP54 Protection for RHD	1SDA104878R1	Upon Request

■ Stock items

Tmax XT accessories



Rotary handle operating mechanism

Frame	RHD	L.P. (₹)	RHE	L.P. (₹)
XT1-XT3 F/P (250mm rod)	1SDA066475R1 ■	3,350	1SDA082810R1 ■	3,090
XT1-XT3 F/P (500mm rod)			1SDA066479R1	3,420
XT2-XT4 F/P (250mm rod)	1SDA069053R1 ■	3,990	1SDA082811R1 ■	4,050
XT2-XT4 F/P (500mm rod)			1SDA069055R1	4,360
XT2-XT4 F/P-Left Lateral			1SDA069058R1	7,130
XT2-XT4 F/P-Right Lateral			1SDA069060R1	7,030
XT5 F/P	1SDA104826R1	7,200	1SDA104843R1	6,830
XT6 F/P	1SDA104832R1	9,660	1SDA104853R1	14,040
XT7 F/W	1SDA104838R1	18,710	1SDA104863R1	20,700

Note:- F/P: Fixed/Plug-in ; W: Withdrawable

Service releases

Shunt opening release - SOR

Frame	Description	Uncabled	L.P. (₹)	Cabled	L.P. (₹)
XT1... XT4	24-30 V AC/DC F/P	1SDA066314R1 ■	4,450	1SDA066322R1	6,750
	110...127V AC / 110...125V DC F/P	1SDA066316R1		1SDA066324R1	
	220...240 V ac-220...250 V DC F/P	1SDA066317R1 ■		1SDA066325R1	
	380-440 V ac F/P	1SDA066318R1		1SDA066326R1	
XT5-XT6	24...60V AC/DC F/P	1SDA104925R1	8,430	1SDA104933R1	16,680
	110...240Vac-110...250Vdc F/P	1SDA104926R1		1SDA104934R1	
	24...60V AC/DC	1SDA073668R1			
XT7-XT7M	110...120V AC/DC	1SDA073672R1	Upon request		
	220...240V AC/DC	1SDA073674R1			

Note: F/P: Fixed/Plug-in

Under voltage release - UVR

Frame	Description	Uncabled	L.P. (₹)	Cabled	L.P. (₹)
XT1...XT4	24-30 VAC/DC F/P	1SDA066389R1	8,170	1SDA066396R1	12,720
	110...127V AC / 110...125V DC F/P	1SDA066391R1		1SDA066398R1	
	220-240Vac-220-250V DC F/P	1SDA066392R1 ■		1SDA066399R1 ■	
	380-440 V AC F/P	1SDA066393R1 ■		1SDA066400R1	
XT5-XT6	24V AC/DC F/P	1SDA104941R1	17,210	1SDA104955R1	19,460
	110...127V AC - 110...125V DC Vac/dc F/P	1SDA104943R1		1SDA104957R1	
	220...240V AC-220...250V DC F/P	1SDA104944R1		1SDA104958R1	
	380...440V AC F/P	1SDA104945R1		1SDA104959R1	
XT7-XT7M	24...60V AC/DC	1SDA073694R1	Upon Request		
	110...120V AC/DC	1SDA073698R1			
	220...240V AC/DC	1SDA073700R1			

Note: F/P: Fixed/Plug-in

Accessories for Ekip Dip trip units

Frame	Description	Ordering code	L.P. (₹)
XT2-XT4	EKIP COM RTU for XT2-XT4 Ekip C Dip F/P	1SDA122799R1	32,960
	KIT x CONNECTION Vaux 24Vdc XT2-XT4 F/P	1SDA066980R1	6,630

Note:- F/P: Fixed/Plug-in

■ Stock items

Tmax XT accessories



Motor operator with direct action - MOD

Frame	Description	Ordering code	L.P.(₹)
XT1-XT3	MOD XT1-XT3 24 V dc	1SDA066457R1	45,290
	MOD XT1-XT3 48...60 V dc	1SDA066458R1	
	MOD XT1-XT3 110...125 V ac/dc	1SDA066459R1	37,250
	MOD XT1-XT3 220...250 V ac/dc	1SDA066460R1 ■	
	MOD XT1-XT3 380...440 V ac	1SDA066461R1	45,290
	MOD XT1-XT3 480...525 V ac	1SDA066462R1	



Stored Energy Motor Operator - MOE, Stored energy motor operator with electronics - MOE-E

Frame	Description	MOE	L.P. (₹)	MOE-E	L.P. (₹)
XT2-XT4	24 V DC	1SDA066463R1	64,530	1SDA066469R1	77,430
	110...125V AC/DC	1SDA066465R1	53,170	1SDA066471R1	63,810
	220...250 V AC / DC	1SDA066466R1 ■		1SDA066472R1	
	380...440 V AC	1SDA066467R1	64,530	1SDA066473R1	77,430
XT5	24 V DC	1SDA104879R1	91,860	1SDA104899R1	1,10,240
	110...125V AC/DC	1SDA104883R1	75,920	1SDA104903R1	91,100
	220...250V AC/DC	1SDA104885R1		1SDA104905R1	
XT6	24 V DC	1SDA104889R1	Upon request		
	110...125V AC/DC	1SDA104893R1			
	220...250V AC/DC	1SDA104895R1			



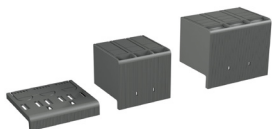
Time delay device for under voltage release- UVD

Frame	Description	Ordering code	L.P. (₹)
XT1....XT6	UVD XT1...XT6 24...30 Vac/dc	1SDA051357R1	75,910
	UVD XT1...XT4 110...125V AC/DC	1SDA051360R1	74,660
	UVD XT1...XT4 220...250V AC/DC	1SDA051361R1	
	UVDXT5...XT6 24...30V AC/DC	1SDA101983R1	83,510
	UVD XT5...XT6 110...125V AC/DC	1SDA101981R1	82,130
	UVD XT5...XT6 220...250 Vac/dc	1SDA101982R1	
XT7-XT7M	UVD 24/30 Vac/dc	1SDA038316R1	Upon request
	UVD 110/127 Vac/dc	1SDA038319R1	
	UVD 220...250 Vac/dc	1SDA038320R1	



Low insulating terminal covers - LTC

Frame	Description	3 Pole-2 pcs	L.P. (₹)	4 Pole-2 pcs	L.P. (₹)
XT1....XT4	LTC XT1	1SDA066655R1	3,860	1SDA066656R1	4,670
	LTC XT2	1SDA066657R1		1SDA066659R1	
	LTC XT3	1SDA066660R1	4,070	1SDA066661R1	5,210
	LTC XT4	1SDA066662R1		1SDA066663R1	5,940
XT5	LTC XT5	1SDA105018R1	5,530	1SDA105019R1	7,510
XT6	LTC XT6	1SDA105020R1	6,030	1SDA105021R1	8,280
XT7-XT7M	LTC XT7	1SDA107475R1	Upon request	1SDA107476R1	Upon request

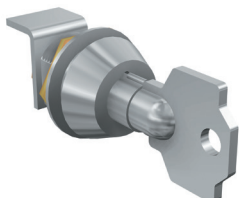
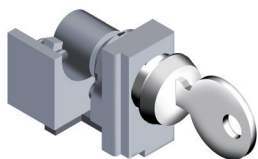


High insulating terminal covers - HTC

Frame	Description	3 Pole-2 pcs	L.P. (₹)	4 Pole-2 pcs	L.P. (₹)
XT1....XT4	HTC XT1	1SDA066664R1	5,270	1SDA066665R1	7,260
	HTC XT2	1SDA066666R1	5,960	1SDA066667R1	8,190
	HTC XT3	1SDA066668R1	6,450	1SDA066669R1	8,970
	HTC XT4	1SDA066670R1	7,180	1SDA066671R1	9,900
XT7-XT7M	HTC XT7	1SDA105029R1	Upon request	1SDA105030R1	Upon request

Tmax XT accessories

Key lock Key Lock - KLC



Frame	Description	Ordering code	L.P. (₹)
XT1....XT4	KLC XT1 RONIS Key Lock Diff.Key, Removable In Open Pos.	1SDA066593R1	4,000
	KLC XT1 RONIS Key Lock Same Key Type A, Removable in Open Pos.	1SDA066594R1	
	KLC XT1 RONIS Key Lock Same Key Type B, Removable in Open Pos.	1SDA066595R1	
	KLC XT2-XT4 RONIS Key Lock Diff.Key, Removable In Open Pos.	1SDA066599R1	
	KLC XT2-XT4 RONIS Key Lock Same Key Type A, Removable in Open Pos.	1SDA066600R1 ■	
	KLC XT2-XT4 RONIS Key Lock Same Key Type B, Removable in Open Pos.	1SDA066601R1	
	KLC XT3 RONIS Key Lock Diff.Key, Removable In Open Pos.	1SDA066605R1	
	KLC XT3 RONIS Key Lock Same Key Type A, Removable in Open Pos.	1SDA066606R1	
XT5-XT6	KLC XT3 RONIS Key Lock Same Key Type B, Removable in Open Pos.	1SDA066607R1	6,980
	KLC XT5-XT6 RONIS Key Lock Diff.Key, Removable In Open Pos.	1SDA105066R1	
	KLC XT5-XT6 RONIS Key Lock Same Key Type A, Removable in Open Pos.	1SDA105062R1	
XT7	KLC XT5-XT6 RONIS Key Lock Same Key Type B, Removable in Open Pos.	1SDA105063R1	Upon request
	KLC XT7 RONIS Key Lock Diff.Key, Removable In Open Pos.	1SDA105075R1	
	KLC XT7 RONIS Key Lock Same Key Type A, Removable in Open Pos.	1SDA105071R1	
	KLC XT7 RONIS Key Lock Same Key Type B, Removable in Open Pos.	1SDA105072R1	

Key Lock for Rotary Handle & FLD - RHL



Frame	Description	Ordering code	L.P. (₹)
XT1....XT4	RHL XT1...XT4 KEY LOCK RONIS Diff. Keys	1SDA066617R1 ■	3,170
	RHL XT1...XT4 KEY LOCK RONIS TYPE A	1SDA066618R1 ■	
	RHL XT1...XT4 KEY LOCK RONIS TYPE B	1SDA066619R1	
XT5	RHL XT5 KEY LOCK RONIS Diff. Keys	1SDA105081R1	6,110
	RHL XT5 KEY LOCK RONIS TYPE A	1SDA105082R1	
	RHL XT5 KEY LOCK RONIS TYPE B	1SDA105083R1	
XT6 - XT7	RHL XT6-XT7 KEY LOCK RONIS Diff. Keys	1SDA105091R1	
	RHL XT6-XT7 KEY LOCK RONIS TYPE A	1SDA105086R1	
	RHL XT6-XT7 KEY LOCK RONIS TYPE B	1SDA105087R1	

Key lock for motor operated- MOL



Frame	Description	Ordering code	L.P. (₹)
XT1-XT3	MOL-D XT1-XT3 KEY LOCK RONIS DIFF. KEY	1SDA066623R1	6,750
	MOL-S XT1-XT3 KEY LOCK RONIS TYPE A	1SDA066624R1	
	MOL-S XT1-XT3 KEY LOCK RONIS TYPE B	1SDA066625R1	
XT2-XT4	MOL-D XT2-XT4 KEY LOCK RONIS DIFF. KEY	1SDA066629R1	
	MOL-S XT2-XT4 KEY LOCK RONIS TYPE A	1SDA066630R1	
	MOL-S XT2-XT4 KEY LOCK RONIS TYPE B	1SDA066631R1	
XT5-XT6	MOL-D XT5-XT6 KEY LOCK RONIS DIFF. KEY	1SDA105092R1	11,830
	MOL-S XT5-XT6 KEY LOCK RONIS TYPE A	1SDA105093R1	
	MOL-S XT5-XT6 KEY LOCK RONIS TYPE B	1SDA105095R1	

Key Lock or Fixed Part- KLF



Frame	Description	Ordering code	L.P. (₹)
XT2-XT4	KL-D Ronis key lock different keys	1SDA066298R1	6,300
	KL-S Ronis key lock Same key Type A	1SDA066300R1	
XT5-XT6	KL-D Ronis key lock different keys	1SDA105109R1	9,130
	KL-S Ronis key lock Same key Type A	1SDA105110R1	

Note : For other combinations of keylock, contact nearest sales office

Test and configuration unit



Frame	Description	Ordering code	L.P. (₹)
XT2 - XT7	Ekip TT Trip test unit	1SDA066988R1	13,490

■ Stock items

Tmax XT accessories



Pad Lock - PLL

Frame	Description	Ordering code	L.P. (₹)
XT1....XT4	PLL XT1-XT3 REMOV.PADL.DEVICE OPEN PLUG	1SDA066588R1	2,970
	PLL XT1-XT3 PADLOCKS DEVICE OPEN	1SDA066589R1	
	PLL XT2-XT4 PADLOCKS DEVICE OPEN	1SDA066590R1	
	PLL XT1-XT3 PADLOCKS DEVICE OP/CL	1SDA066591R1	
	PLL XT2-XT4 PADLOCKS DEVICE OP/CL	1SDA066592R1	
XT5-XT6	PLL XT5 REM.PADLOCKS DEVICE OPEN	1SDA105100R1	7,720
	PLL XT5 PADLOCKS DEVICE OPEN	1SDA105099R1	
	PLL XT5 PADLOCKS DEVICE OP/CL	1SDA105098R1	
	PLL XT6 REM.PADLOCKS DEVICE OPEN	1SDA105103R1	
	PLL XT6 PADLOCKS DEVICE OPEN	1SDA105102R1	
XT7	PLL XT6 PADLOCKS DEVICE OP/CL	1SDA105101R1	Upon Request
	PLL XT7 PADLOCKS DEVICE OPEN	1SDA105104R1	

Mechanical interlock between circuit breakers

Frame	Description	Ordering code	L.P. (₹)
XT1.....XT4	MIR-HR XT1..XT4 MECH INTERLOCK HOR. 2 CB**	1SDA066637R1	25,210
	MIR-VR XT1..XT4 MECH INTERLOCK VER. 2 CB**	1SDA066638R1	
	MIR-P PLATE x XT1 F	1SDA066639R1	8,830
	MIR-P PLATE x XT2 F	1SDA066641R1	
	MIR-P PLATE x XT3 F	1SDA066643R1	
	MIR-P PLATE x XT4 F	1SDA066645R1	
XT5	MIR-H XT5 MECH,LOCK REAR HO. 2 C.BREAKER	1SDA105117R1	47,380
	MIR-V XT5 MECH,LOCK REAR VE. 2 C.BREAKER	1SDA105119R1	
		MIR-P x XT5 F	1SDA105122R1
XT6	MIR-H XT6 MECH,LOCK REAR HO. 2 C.BREAKER	1SDA105118R1	59,690
	MIR-V XT6 MECH,LOCK REAR HO. 2 C.BREAKER	1SDA105120R1	
		MIR-P x XT6 F	1SDA105126R1
XT7	Cable Kit for Interlock XT7	Contact nearest sales office	Upon request
	Cable Kit for Interlock XT7		
	Plate for Interlock XT7		
	Plate for Interlock XT7		

Note : ** Following must be ordered to make the rear interlock.

1. A MIR-HR or MIR-VR
2. A plate MIR-P for each circuit breaker to be interlocked
3. Order 1 No. of frame and 2 Nos. of plate per interlocking set for XT1 ... XT6
4. Order 2 Nos. of plate and 1 No. of Cable per interlocking set for XT7



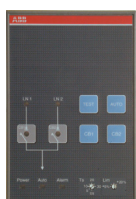
Residual current devices		3 Pole		4 Pole	
Frame	Description	Ordering code	L.P. (₹)	Ordering code	L.P. (₹)
XT1	RC Inst x XT1	1SDA067122R1	41,230	1SDA067124R1	47,710
	RC Sel x XT1	1SDA067123R1		1SDA067125R1	
	RC Sel 200 x XT1			1SDA067121R1	59,450
XT2	RC Sel x XT2			1SDA067126R1	87,190
XT3	RC Inst x XT3	1SDA067127R1	1,02,160	1SDA067129R1	1,09,860
	RC Sel x XT3	1SDA067128R1		1SDA067130R1	
	RC B Type x XT3			1SDA067132R1	1,70,600
XT5	RC Sel x XT5			1SDA105131R1	Upon request



Automation transfer switch - ATS

Automatic transfer switch			
Frame	Description	Ordering code	L.P. (₹)
XT2-XT4/ XT5-	ATS021	1SDA065523R1	Upon request
XT7/ E1.2-E6.2	ATS022	1SDA065524R1	

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



■ Stock items

Tmax XT conversion kit

Plug-in Kit



Fixed part of a plug-in circuit-breaker

+



Fixed circuit-breaker

+



Moving part of a plug-in circuit-breaker

+



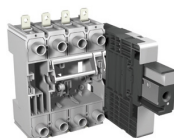
Connectors*

=



Plug-in circuit-breaker

Drawout Kit



Fixed part of a withdrawable circuit-breaker

+



Fixed circuit-breaker

+



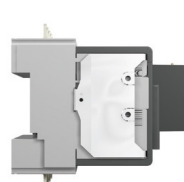
Moving part of a withdrawable circuit-breaker

+



Frontal accessory FLD**

=



Withdrawable circuit-breaker

Plug-in and drawout conversion

Frame	Description	3 Pole	L.P. (₹)	4 Pole	L.P. (₹)
XT1	Plug-in moving part	1SDA066276R1	8,220	1SDA066277R1	11,380
	Plug-in fixed part	1SDA068183R1	15,070	1SDA068185R1	21,420
XT2	Plug-in moving part	1SDA066278R1	9,160	1SDA066279R1	12,430
	Plug-in fixed part	1SDA068187R1	16,470	1SDA068190R1	23,370
XT3	Plug-in moving part	1SDA066280R1	11,360	1SDA066281R1	13,970
	Plug-in fixed part	1SDA068192R1	16,960	1SDA068194R1	24,600
XT4	Plug-in moving part	1SDA066282R1	13,320	1SDA066283R1	18,120
	Plug-in fixed part	1SDA068196R1	18,330	1SDA068198R1	25,390
XT5 400	Plug-in moving part	1SDA104707R1	Upon Request	1SDA104708R1	Upon Request
	Plug-in fixed part	1SDA104668R1		1SDA104672R1	
XT5 630	Plug-in moving part	1SDA104709R1	Upon Request	1SDA104710R1	Upon Request
	Plug-in fixed part	1SDA104676R1		1SDA104679R1	
XT2	Drawout moving part	1SDA066284R1	15,130	1SDA066285R1	21,420
	Drawout fixed part	1SDA068200R1	33,770	1SDA068202R1	46,520
XT4	Drawout moving part	1SDA066286R1	17,240	1SDA066287R1	23,370
	Drawout fixed part	1SDA068204R1	35,440	1SDA068206R1	49,180
XT5 400	Drawout moving part	1SDA104711R1	Upon Request	1SDA104712R1	Upon Request
	Drawout fixed part	1SDA104682R1		1SDA104686R1	
XT5 630	Drawout moving part	1SDA104713R1	Upon Request	1SDA104714R1	Upon Request
	Drawout fixed part	1SDA104690R1		1SDA104693R1	
XT6	Drawout moving part	1SDA104715R1	Upon Request	1SDA104716R1	Upon Request
	Drawout fixed part	1SDA104696R1		1SDA104699R1	
XT7	Drawout moving part	1SDA104702R1	Upon Request	1SDA104704R1	Upon Request
	Drawout fixed part	1SDA104717R1		1SDA104718R1	

Note:

* For plugin MCCB with electrical accessories, connectors to be ordered

(1) For withdrawable MCCB with shunt opening and undervoltage release dedicated connectors are available

** FLD or rotary handle or motor operator is mandatory to select for a drawout MCCB

Connectors



Description	Ordering code	L.P. (₹)
Socket-plug panel connector with 3PINS (XT1...XT4)	1SDA066409R1	2,610
Socket-plug panel connector with 6PINS (XT1...XT4)	1SDA066410R1	4,990
Socket-plug panel connector with 9PINS (XT1...XT4)	1SDA066411R1	7,520
Socket-plug panel connector with 15PINS (XT1...XT4)	1SDA066412R1	12,350
Socket-plug connector of moving part 12PINS (XT2...XT4)	1SDA066413R1	13,320
Socket-plug connector of fixed part 12PINS (XT2...XT4)	1SDA066414R1	
Connector 4th pole SOR-PS-SOR (XT2...XT4)	1SDA066415R1 ⁽¹⁾	2,590
Connector 4th pole UVR (XT2...XT4)	1SDA066418R1 ⁽¹⁾	2,380
Connector 4th pole YO (XT5)	1SDA104968R1 ⁽¹⁾	2,660
Connector 4th pole YU (XT5)	1SDA104970R1 ⁽¹⁾	2,440

Note: For Plug-in MCCB Accessories, refer Tmax XT common accessories section

Tmax XT (Withdrawable) accessories



Rotary handle operating mechanism

Frame	RHD	L.P. (₹)	RHE	L.P. (₹)
XT2-XT4 W	1SDA066476R1	4,560	1SDA066480R1 ■	5,280
XT5 W STAND. DIRECT	1SDA104828R1	8,350	1SDA104844R1	13,250
XT6 W STAND. DIRECT	1SDA104834R1	14,450	1SDA104854R1	16,850
XT7 F/W	1SDA104838R1	18,710	1SDA104863R1	20,700

Service releases

Shunt opening release - SOR



Frame	Description	Code	L.P. (₹)
XT1... XT4	24-30 V AC/DC W	1SDA066329R1	11,450
	110-127V AC / 110-125V DC Vac/dc W	1SDA066331R1	
	220...240 V ac-220...250 V DC W	1SDA066332R1	
	380-440 V AC W	1SDA066333R1	
XT5	110..240 Vac - 110..250 Vdc W	1SDA104930R1	18,010
XT6	110..240 Vac - 110..250 Vdc W	1SDA104938R1	18,010
XT7-XT7M	220...240V AC/DC	1SDA073674R1	Upon request

Note: W: Withdrawable

Under voltage release - UVR



Frame	Description	Code	L.P. (₹)
XT1....XT4	24-30 VAC/DC W	1SDA066403R1	13,770
	110...127V AC / 110...125V DC Vac/dc W	1SDA066405R1	
	220-240Vac-220-250V DC W	1SDA066406R1	
	380-440 V AC W	1SDA066407R1	
XT5	110..127V AC - 110..125V DC Vac/dc W	1SDA104950R1	20,820
	220..240 Vac - 220..250 Vdc W	1SDA104951R1	
XT6	110..127V AC - 110..125V DC Vac/dc W	1SDA104964R1	20,820
	220..240 Vac - 220..250 Vdc W	1SDA104965R1	
XT7-XT7M	220...240V AC/DC	1SDA073700R1	Upon Request

Note: W: Withdrawable

Accessories for electronic trip units

Frame	Description	Ordering code	L.P. (₹)
XT2-XT4	EKIP COM RTU for XT2-XT4 Ekip C Dip W	1SDA122800R1	Upon request
	KIT x CONNECTION Vaux 24Vdc XT2-XT4 W	1SDA066981R1	7,430

Note:- W: Withdrawable

ABB ArTu Formula Switchboard **NEW**

Low voltage main distribution switchboard

ArTu Formula is ABB's latest main distribution switchboard solution, featuring a fixed type design with rated currents of up to 4000A and short-circuit ratings of up to 50kA. It is engineered with the fundamental objectives of

enhancing flexibility for users regarding product and feature selection and ensuring simplicity, enabling a better fit between requirements and solutions and ensuring maximal value realization.



Type tested assembly

Fully compliant with IEC 61439-1 and IEC 61439-2 standards.



Versatile applications

Supports various applications, including PCC, MCC and PDB, with segregation types up to Form 4B, IP ratings up to IP54, and current ratings from 250A to 4000A.



Functional floor space

Increases functional floor space in buildings.



Fast & efficient assemblies

Optimized standardization of parts and assembly procedures enhances efficiency.



AIR CIRCUIT-BREAKERS

SACE Formula Air

Simplicity and safety, up to 50kA

Formula Air is an ideal solution for main installation requirements, from distribution switchboards to onboard compartments. This comprehensive range offers the most suitable solution for each specific set of requirements. Easy to use Formula Air products are also easy to order.

Possibility to change, on site, the orientation of the rear terminals from horizontal to vertical or vice versa which allows adaptability to accommodate last minutes changes busbar design.

Front terminals are available for breakers up to 1600A in fixed version to have switchboard with compact dimensions.

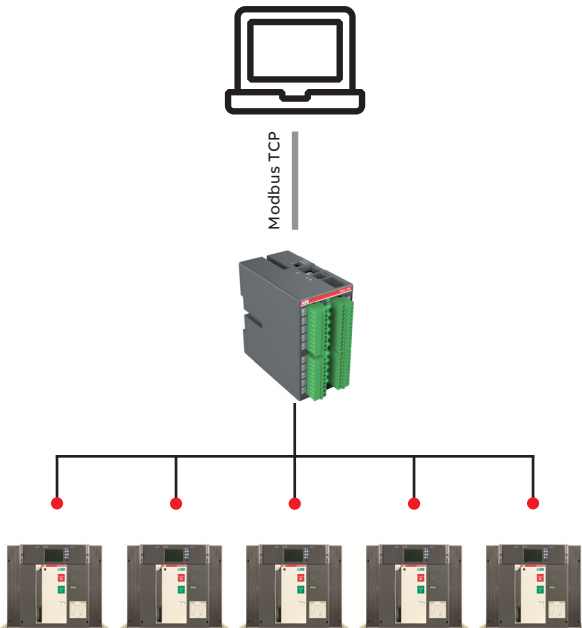
With high mechanical and electrical life Formula Air circuit breakers offer high longevity to the installation.

The ACBs are available in 3 sizes up to 4000A with performance level up to 50kA which are equipped with Ek 1 and Ek 2 trip units.

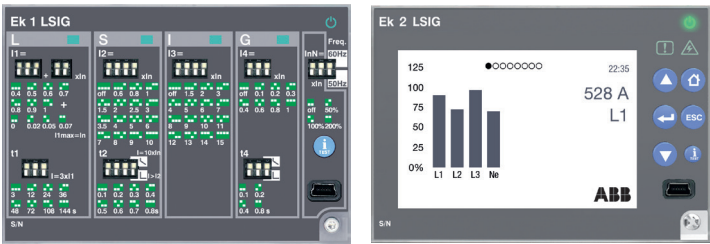


Ratings available

Frame	630A	800A	1000A	1250A	1600A	2000A	2500A	3200A	4000A
FA1	•	•	•	•	•				
FA2					•	•			
FA4							•	•	•



Communication made easy. Formula Air circuit breakers can communicate the status on Modbus TCP protocol through a Ekip signalling 10k signalling module. It can control up to 5 ACBs and communicate status of 5 breakers.



Protection releases

Parameters	EK 1 - LI	EK1- LSIG	EK2-LSIG
Neutral protection	•	•	•
Switchable thermal memory	•	•	•
Graphical display with current metering			•
Closing on short-circuit (MCR)			•
Start-up function			•
Instantaneous earth fault (G-ANSI 50N)			•
Current unbalance protection			•
Watchdog function	•	•	•
Contact wear Indication			•
Display of No. of operation			•
Display of last maintenance date			•
Zone Selectivity for S & G protections			•
Display of 20 trip history & 100 events			•
Test function	•	•	•
Download breaker maintenance data from ACB	•	•	•

SACE Formula Air

Product details

- Range from 630A to 4000A in 3 frame sizes and 2 types of protection release
- $I_{cu} = I_{cs} = I_{cw}/1 \text{ sec} = 50\text{kA}$ at 440V
- Available in fixed and draw out versions
- Trip history - Last 20 trip history and Last 100 events with time stamping
- Switchable thermal memory
- Fully rated neutral with built-in protection
- Terminal orientation changeable at site for ease of termination
- New push-in type accessory terminal box
- Clear marking of accessory cabinet and terminal box for easy identification
- Interchangeable protection units

Draw - out version

Pole	Current Rating (In)	Icu/Icw (1s) kA @ 415V	CB/Frame	EK1 LI	EK1 LSIG	EK2 LSIG
				MDO	MDO	MDO
				HR/VR	HR/VR	HR/VR
3P	800A	50/50kA	FA1	3,51,670	3,57,170	3,71,170
	1000A	50/50kA	FA1	3,66,740	3,72,240	3,86,240
	1250A	50/50kA	FA1	4,05,680	4,11,180	4,25,180
	1600A	50/50kA	FA1	4,67,060	4,72,560	4,86,560
	1600A	50/50kA	FA2	4,68,840	4,74,340	4,88,340
	2000A	50/50kA	FA2	6,58,130	6,63,630	6,77,630
	2500A	50/50kA	FA4	8,13,870	8,19,370	8,33,370
	3200A	50/50kA	FA4	9,74,930	9,80,430	9,94,430
4P	4000A	50/50kA	FA4	11,99,440	12,04,940	12,18,940
	800A	50/50kA	FA1	4,44,620	4,50,120	4,64,120
	1000A	50/50kA	FA1	4,65,740	4,71,240	4,85,240
	1250A	50/50kA	FA1	5,12,270	5,17,770	5,31,770
	1600A	50/50kA	FA1	5,52,860	5,58,360	5,72,360
	1600A	50/50kA	FA2	5,73,210	5,78,710	5,92,710
	2000A	50/50kA	FA2	8,05,750	8,11,250	8,25,250
	2500A	50/50kA	FA4	9,78,780	9,84,280	9,98,280
	3200A	50/50kA	FA4	11,95,260	12,00,760	12,14,760
	4000A	50/50kA	FA4	15,34,720	15,40,220	15,54,220

Fixed version

Pole	Current Rating (In)	Icu/Icw (1s) kA @ 415V	CB/Frame	EK1 LI	EK1 LSIG	EK2 LSIG
				MF	MF	MF
				F-HR/VR	F-HR/VR	F-HR/VR
3P	800A	50/50kA	FA1	2,58,600	2,64,100	2,78,100
	1000A	50/50kA	FA1	2,80,440	2,85,940	2,99,940
	1250A	50/50kA	FA1	3,20,310	3,25,810	3,39,810
	1600A	50/50kA	FA1	3,40,560	3,46,060	3,60,060
	1600A	50/50kA	FA2	3,68,540	3,74,040	3,88,040
	2000A	50/50kA	FA2	4,88,580	4,94,080	5,08,080
	2500A	50/50kA	FA4	5,98,480	6,03,980	6,17,980
	3200A	50/50kA	FA4	8,64,480	8,69,980	8,83,980
4P	4000A	50/50kA	FA4	10,70,330	10,75,830	10,89,830
	800A	50/50kA	FA1	3,26,810	3,32,310	3,46,310
	1000A	50/50kA	FA1	3,52,790	3,58,290	3,72,290
	1250A	50/50kA	FA1	4,00,500	4,06,000	4,20,000
	1600A	50/50kA	FA1	4,41,980	4,47,480	4,61,480
	1600A	50/50kA	FA2	4,84,020	4,89,520	5,03,520
	2000A	50/50kA	FA2	6,41,000	6,46,500	6,60,500
	2500A	50/50kA	FA4	7,66,150	7,71,650	7,85,650
	3200A	50/50kA	FA4	10,64,810	10,70,310	10,84,310
	4000A	50/50kA	FA4	13,28,390	13,33,890	13,47,890

1) MF : Manually operated fixed breaker with Micro-processor release - 4 NO + 4 NC Aux. contact as standard (FA1..FA4)

2) MDO : Manually operated drawout breakers with Micro-processor releases - 4 NO + 4 NC Aux. contact as standard (FA1...FA4)

SACE Formula Air

Accessories

Description	Order Code	List Price (₹)
ELECTRICAL ACCESSORIES		
CONVERSION KIT FROM MDO to EDO FA1		98,990
CONVERSION KIT FROM MDO to EDO FA2_FA4		98,990
(Comprises Closing Coil, Opening Coil & Motor Operator) Specify the coil voltages while ordering Conversion Kit		
UNDER VOLTAGE RELEASE FA 220-240VAC/DC	1SDA080523R1	13,160
SHUNT OPENING COIL FA 220-240VAC/DC	1SDA080519R1	12,570
SHUNT Closing COIL FA 220-240VAC/DC	1SDA080521R1	12,570
MOTOR OPERATOR FA1 220-240VAC/DC	1SDA085086R1	73,850
MOTOR OPERATOR FA2-FA4 220-240VAC/DC	1SDA080525R1	73,850
TRIP INDICATION FA1	1SDA085093R1	8,840
TRIP INDICATION FA2-FA4	1SDA080538R1	
Open/closed auxiliary contacts- AUX 15Q 400V FA1 #	1SDA085090R1	34,350
Open/closed auxiliary contacts - AUX 6Q FA2/FA4	1SDA080532R1	24,730
MECHANICAL ACCESSORIES		
MECH.OPERATION COUNTER FA1	1SDA085094R1	13,740
MECH.OPERATION COUNTER FA2-FA4	1SDA080540R1	13,740
KEY LOCK IN OPEN POS. DIFF. KEYS FA1	1SDA085095R1	8,950
KEY LOCK IN OPEN POS. DIFF. KEYS FA2-FA4	1SDA080541R1	8,950
KEY LOCK IN OPEN POS. SAME KEYS FA1	1SDA085096R1	8,950
KEY LOCK IN OPEN POS. SAME KEYS FA2-FA4	1SDA080542R1	8,950
KEYLOCK IN RACK - IN/TEST/RACK - OUT POS. Diff Keys FA1	1SDA085104R1	11,130
KEYLOCK IN RACK - IN/TEST/RACK - OUT POS. Diff Keys FA2-FA4	1SDA080550R1	11,130
KEYLOCK IN RACK - IN/TEST/RACK - OUT POS. Same Keys FA1	1SDA085105R1	11,130
KEYLOCK IN RACK - IN/TEST/RACK - OUT POS. Same Keys FA2-FA4	1SDA080551R1	11,130
Protection for Opening and Closing Push Button FA1	1SDA085115R1	2,710
Protection for Opening and Closing Push Button FA2-FA4	1SDA080561R1	2,710
IP 54 Cover FA1	1SDA085118R1	19,680
IP 54 Cover (Diff Keys) FA2-FA4	1SDA080568R1	19,680
MODULE		
Ek SUPPLY 110-240VAC/DC FA	1SDA080584R1	24,220

Note:

- All fixed parts are supplied as HR-HR configuration, however, it can be converted to HR/VR configuration
- All fixed ACBs are considered with rear HR-HR Terminals which can be converted to HR/VR configuration as per requirement
- All ACBs are suitable for floor mounting
- To arrive at the disconnecter (MS Version) price, please reduce the LP of breakers with LI release by ₹15,000/- and add the price of the Aux. contact, if required. Safety shutter is inbuilt as standard in the fixed part.
- All requirement of Electrically operated ACBs (FA1-FA4 frame) with required control voltage will be factory fitted with Shunt Opening Coil, Shunt Closing Coil, Motor Operator as standard supply.
- ATO (Assembly to order), ACB with accessories fitment can be supplied from the factory fitted while ordering to ABB.
- For other accessories and voltages please contact nearest sales office.

** Price considered is for 240V, for other voltages, please contact the nearest sales office

For FA1 below material needs to be considered with AUX 15Q
 Plate for fixed - floor mounted - 1SDA079783R1
 Plate for withdrawable - 1SDA079784R1

SACE Formula DSP P1-P4

Performance made simple



The new SACE FORMULA DSP family consists of four frames (P1, P2, P3 and P4) reaching up to 160A, 250A, 630A and 800A respectively. The four frames are available with thermal-magnetic trip units to cover the most common AC and DC fields. Availability of most requested accessories guarantees the possibility to fulfil the main applications needs.



Easy to install

Click-in fixing for accessories to guarantee time saving and fast installations.



Quality

ABB long experience in molded-case circuit breakers design is a guarantee of quality.



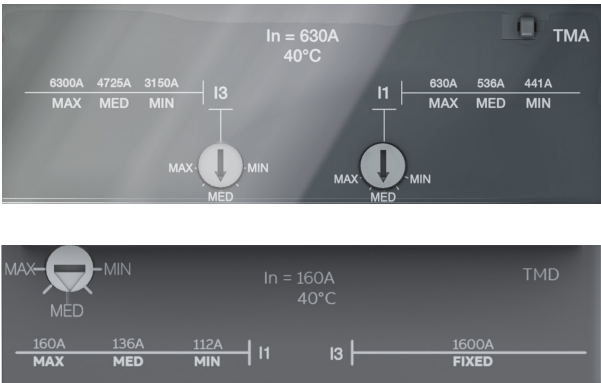
Simplified selection

Availability of a short list of codes enables simplified product selection and easy ordering.



Sustainability

Compliance with the international regulations of product materials and environmental health and safety.



- Compliance to IEC 60947-2 standards
- Offering from 40A to 800A in 4 frame sizes
- Available upto 50kA performance levels (Icu = Ics)
- Circuit breakers for AC and DC applications
- Double insulation
- Isolation behaviour
- Positive operation
- Accessories covering the main standard applications and needs

Power distribution protection

Field of application		Trip Unit					L – Overload Protection				I – Short-circuit Protection			
							Current Threshold		Trip Time		Current Threshold		Trip Time	
Power Distribution Protection		TMD	70% to 100% x In					Fixed		Fixed		Fixed instantaneous		
		TMA	70% to 100% x In					Fixed		5 to 10 x In		Fixed instantaneous		
	In [A]	40	63	80	100	125	160	200	250	320	400	630	800	
TMD	P1	●	●	●	●	●	●							
	P2							●	●					
TMA	P3									●	●	●		
	P4												●	

SACE Formula DSP P1-P4

Molded case circuit breaker

Breaking capacity at 415VAC		
	Icu	Ics (Icu)
B	18kA	100%
C	25kA	100%
N	36kA	100%
S	50kA	100%

TMD/TMA		B			C		N		S		
Frame	In	Poles	Ordering Code	L.P. (₹)	Ordering Code	L.P. (₹)	Ordering Code	L.P. (₹)	Ordering Code	L.P. (₹)	
P1 160	40	3P	1SDA116207R1	10,780	1SDA116231R1	11,400	1SDA116255R1	15,260			
	63		1SDA116209R1		1SDA116233R1		1SDA116257R1				
	80		1SDA116210R1		1SDA116234R1		1SDA116258R1				
	100		1SDA116211R1		1SDA116235R1		1SDA116259R1				
	125		1SDA116212R1	13,620	1SDA116236R1	16,530	1SDA116260R1	17,240			
	160		1SDA116213R1	15,570	1SDA116237R1	21,430	1SDA116261R1	22,950			
P2 250	200				1SDA116325R1	29,260	1SDA116337R1	33,120			
	250				1SDA116326R1	34,020	1SDA116338R1	36,760			
P3 630	320						1SDA116371R1	50,020	1SDA116380R1	53,810	
	400						1SDA116372R1	50,020	1SDA116381R1	53,810	
	630						1SDA116373R1	64,900	1SDA116382R1	67,800	
P4 800	800						1SDA116398R1	99,710	1SDA116401R1	1,11,940	

TMD/TMA		B			C		N		S		
Frame	In	Poles	Ordering Code	L.P. (₹)	Ordering Code	L.P. (₹)	Ordering Code	L.P. (₹)	Ordering Code	L.P. (₹)	
P1 160	40	4P	1SDA116218R1	14,270	1SDA116242R1	15,730	1SDA116266R1	19,360			
	63		1SDA116220R1		1SDA116244R1		1SDA116268R1				
	80		1SDA116221R1		1SDA116245R1		1SDA116269R1				
	100		1SDA116222R1		1SDA116246R1		1SDA116270R1				
	125		1SDA116225R1	16,730	1SDA116249R1	20,340	1SDA116273R1	22,360			
	160		1SDA116226R1	21,260	1SDA116250R1	25,990	1SDA116274R1	28,070			
P2 250	200				1SDA116333R1	36,270	1SDA116345R1	40,730			
	250				1SDA116334R1	41,110	1SDA116346R1	44,540			
P3 630	320						1SDA116377R1	62,240	1SDA116386R1	67,520	
	400						1SDA116378R1	62,240	1SDA116387R1	67,520	
	630						1SDA116379R1	79,940	1SDA116388R1	88,940	
P4 800	800						1SDA116400R1	1,07,610	1SDA116403R1	1,26,480	

SACE Formula DSP P1-P4

Accessories



Terminals (supplied with phase barrier)

Size	Type	6 pcs (kit for 3p)	L.P (₹)	8 pcs (kit for 4p)	L.P (₹)
P1	ES Extended spread front terminals 47mm	1SDA116501R1	2,390	1SDA116502R1	3,190
P2	ES Extended spread front terminals 70mm	1SDA116505R1	3,260	1SDA116506R1	4,150
P3	ES Extended spread front terminals 80mm	1SDA116509R1	6,410	1SDA116510R1	8,530
P4	EF Extended front terminals 70mm (1/2 kit)	1SDA104736R1 ⁽¹⁾	6,730	1SDA104737R1 ⁽²⁾	8,530

(1) Code is for 3 pcs, if required for both top & bottom side order 2 quantities

(2) Code is for 4 pcs, if required for both top & bottom side order 2 quantities



Auxiliary contacts - AUX

Size	Type	24V DC	L.P (₹)	250V AC	L.P (₹)
P1-P4	AUX Q or SY	1SDA116439R1	2,340	1SDA116440R1	1,480

Service releases

Size	Voltages	SOR	L.P (₹)	UVR	L.P (₹)
P1-P2	24-30V AC/DC	1SDA116448R1	4,050	1SDA116454R1	5,330
	110...127V AC / 110...125V DC	1SDA116445R1	3,780	1SDA116452R1	5,190
	220...240V AC / 220...250V DC	1SDA116447R1	3,780	1SDA116453R1	
	UVR 380-440V AC			1SDA116455R1	
P3-P4	24...30 VAC/DC	1SDA116461R1	5,030	1SDA116467R1	10,590
	110...127 VAC - 110...125 VDC	1SDA116459R1	5,030	1SDA116464R1	
	220...240 VAC – 220...250 VDC			1SDA116466R1	
	380...440 VAC			1SDA116468R1	



Rotary handles

Size	Type	RHD	L.P (₹)	RHE	L.P (₹)
P1-P2	Rotary Handle	1SDA116477R1	2,460	1SDA116483R1	2,780
P3	Rotary Handle	1SDA116478R1	5,520	1SDA116485R1	5,070
P4	Rotary Handle	1SDA116480R1	7,540	1SDA116488R1	9,880

RHE is with 250mm shaft



Locking arrangement - Padlock / Keylock

Size	Type	Padlock	L.P (₹)	Keylock*	L.P (₹)
P1-P2	Locking arrangement	1SDA116491R1	2,380	1SDA066617R1	3,200
P3	Locking arrangement	1SDA116493R1	4,350	1SDA105081R1	6,170
P4	Locking arrangement	1SDA116495R1	5,990	1SDA105091R1	

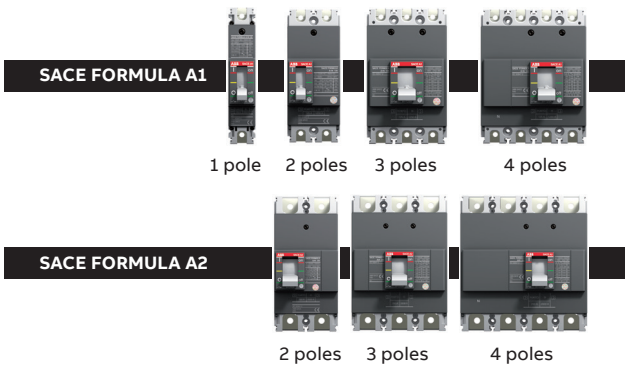
* Keylock mounted on mechanism of RHE on MCCB or on RHD

Formula DSA Molded case circuit breaker

New low voltage molded case circuit breakers up to 250A

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



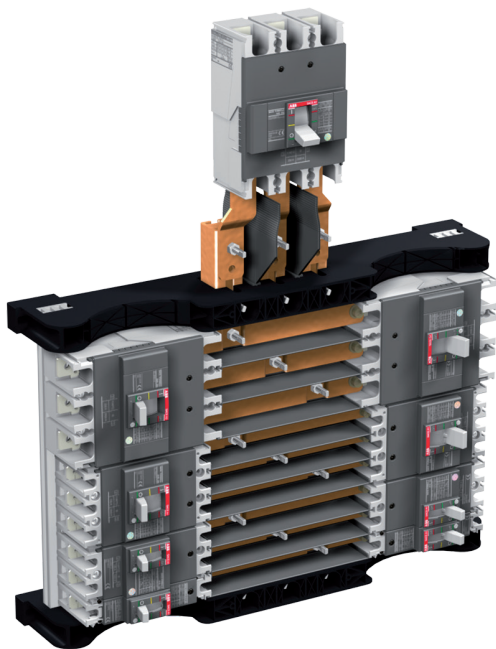
FORMULA A1

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

FORMULA A2

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

FORMULA link system



- FORMULA link in accordance with IEC 61439 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
Incoming breaker		A2
Outgoing breaker		A1
Rated operational voltage 50/60 Hz	[V]	550AC
Rated insulation voltage	[V]	690AC
Rated short time withstand current (1s)	[KA]	30

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 ■					
	125		1SDA066521R1 ■	6,960	1SDA066708R1 ■	9,050	1SDA066720R1 ■	10,110	1SDA066732R1 ■		12,280
A2	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 ■					
	125		1SDA066535R1 ■	8,460	1SDA066744R1 ■	11,280	1SDA066756R1 ■	13,390	1SDA066768R1 ■		15,280
A2	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

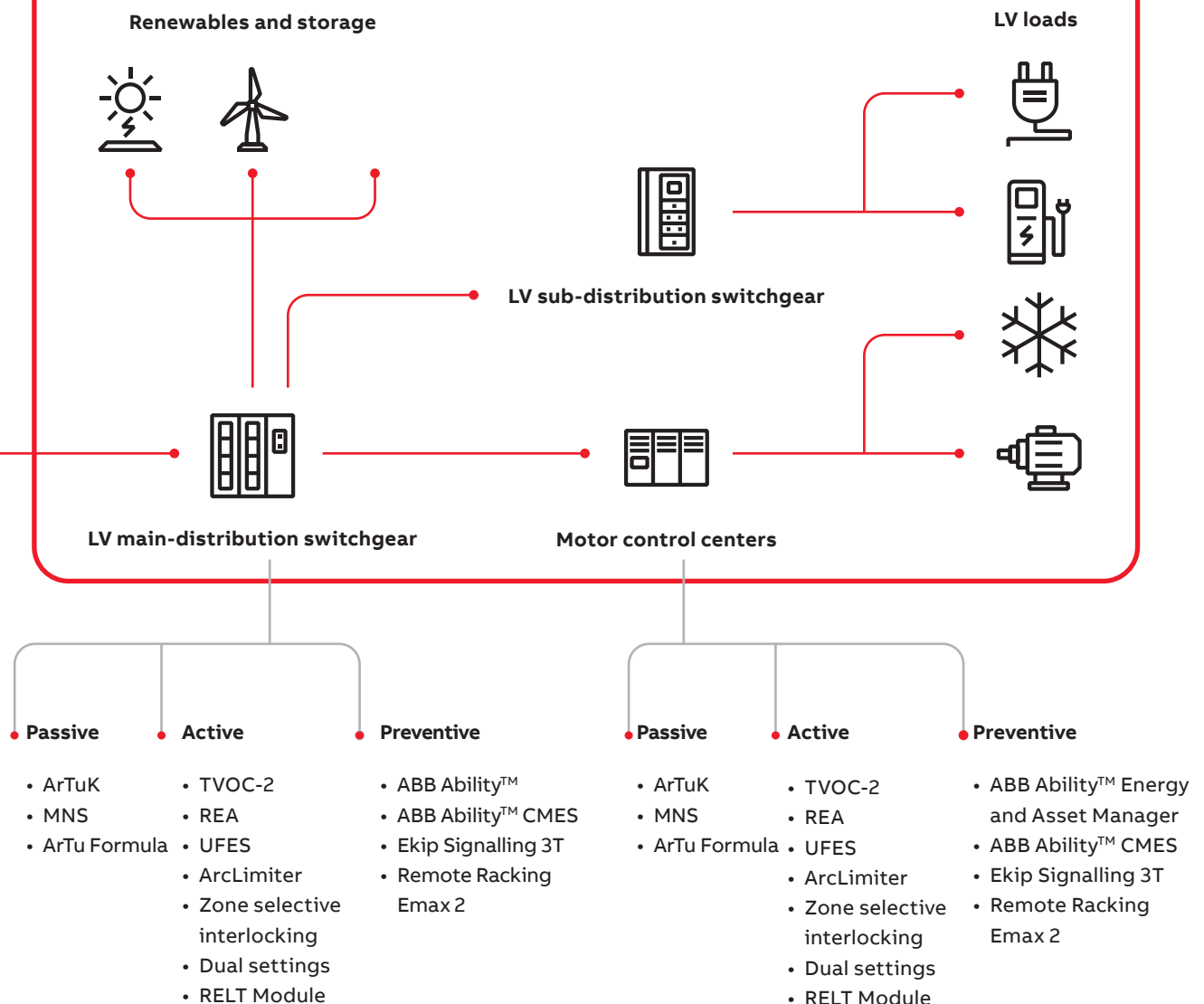
Passive, active and preventive

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.



LV distribution



Arc Guard System TVOC-2



Arc Monitor with COM Module



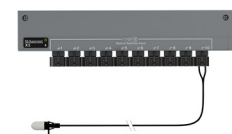
Extension unit



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
	100...240V AC/ 100...250V DC	TVOC-2-240	1SFA664001R1001	
Arc Monitor including one COM Module and door mounting accessories	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
	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

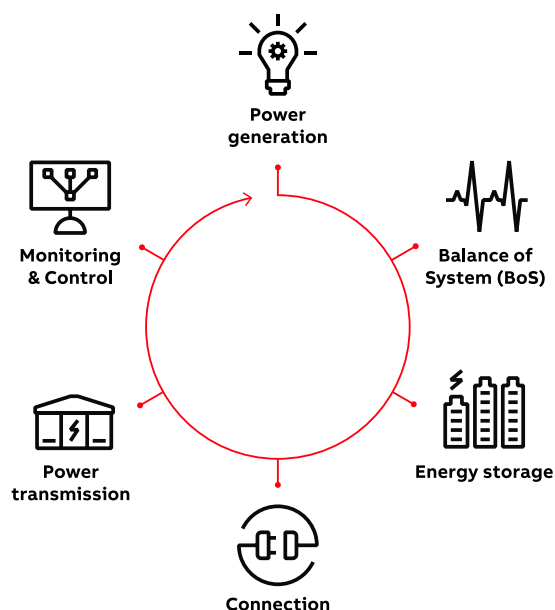
⁽²⁾ Available in lengths 0.5m to 30m. Refer technical catalogue for details

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).

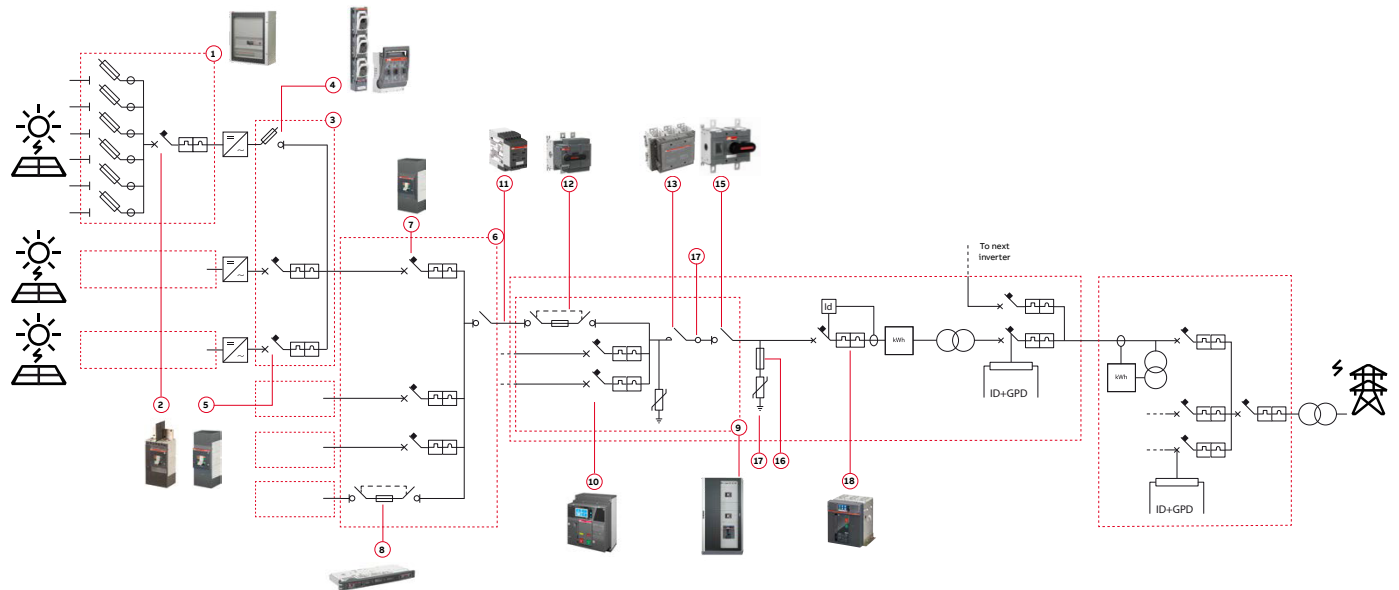
Our domain experts have engineered intelligent distribution applications that give you real-time visibility of your Renewable Energy assets—enabling remote plant monitoring, preventing outages, and cutting maintenance downtime, supported by robust switching and protection solutions. By combining cutting 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



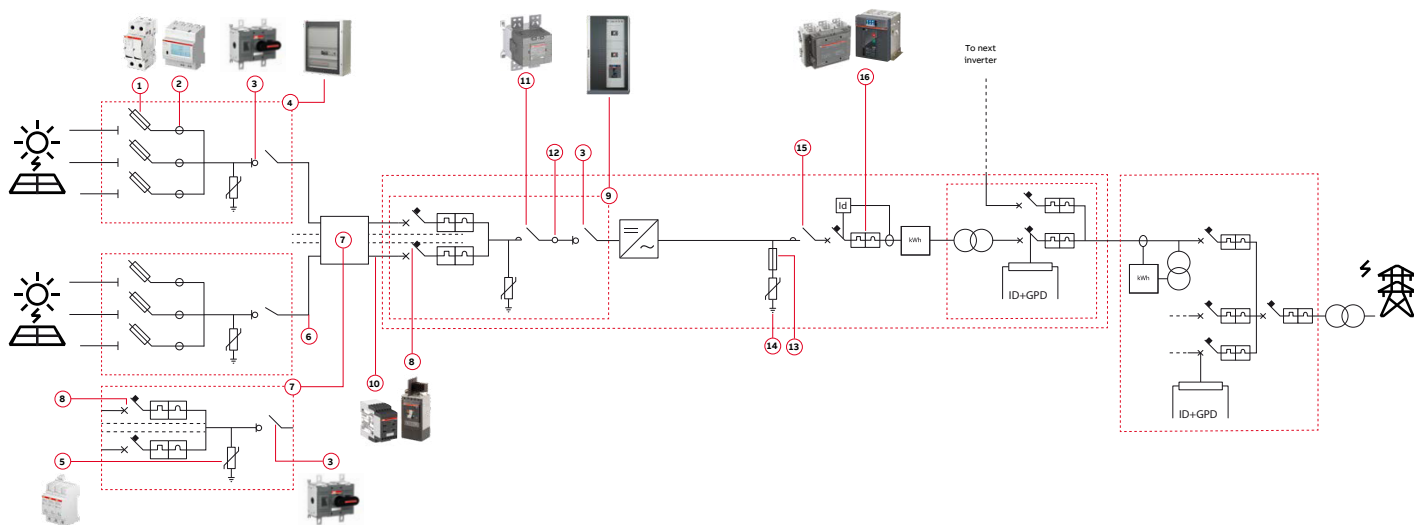
Low-voltage products:

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

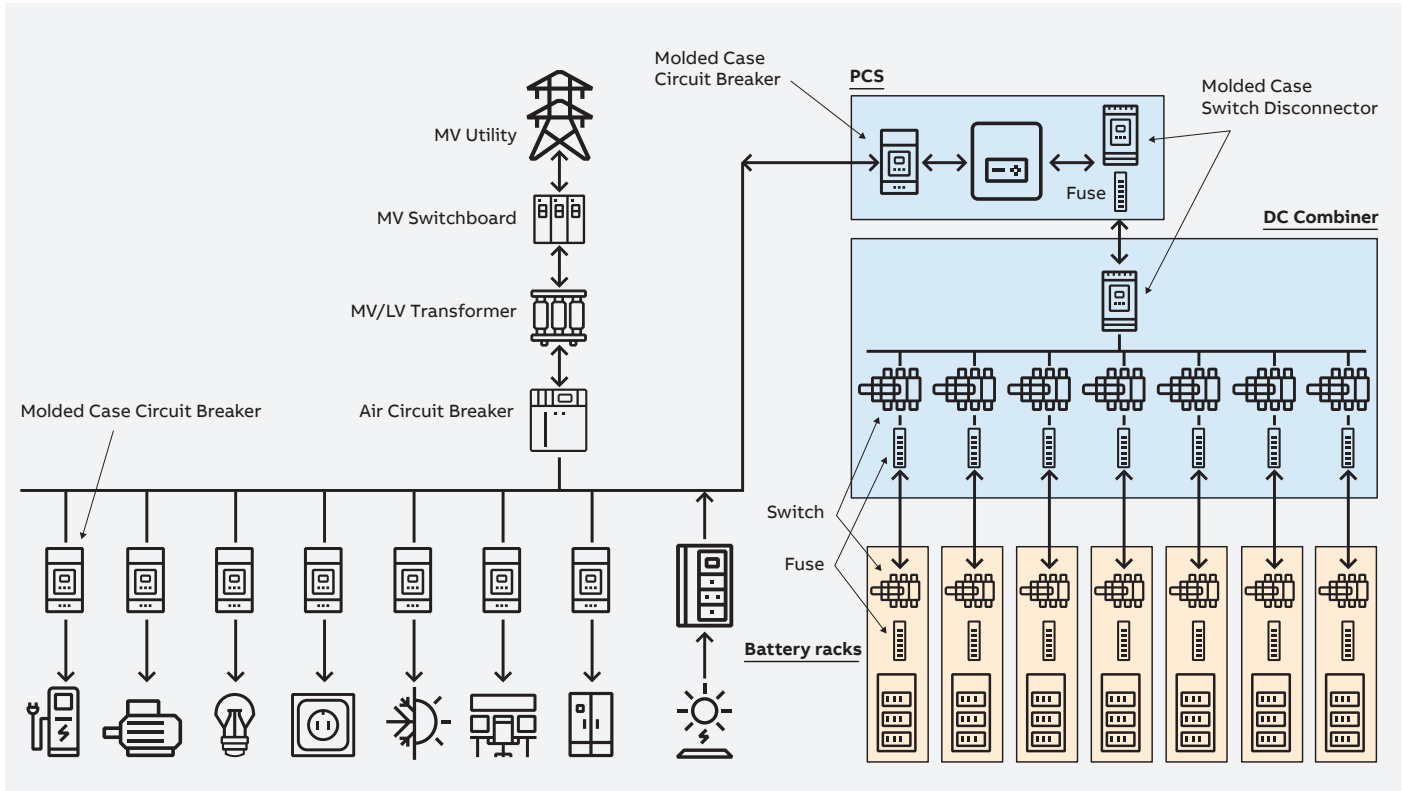
9. Switchboard

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

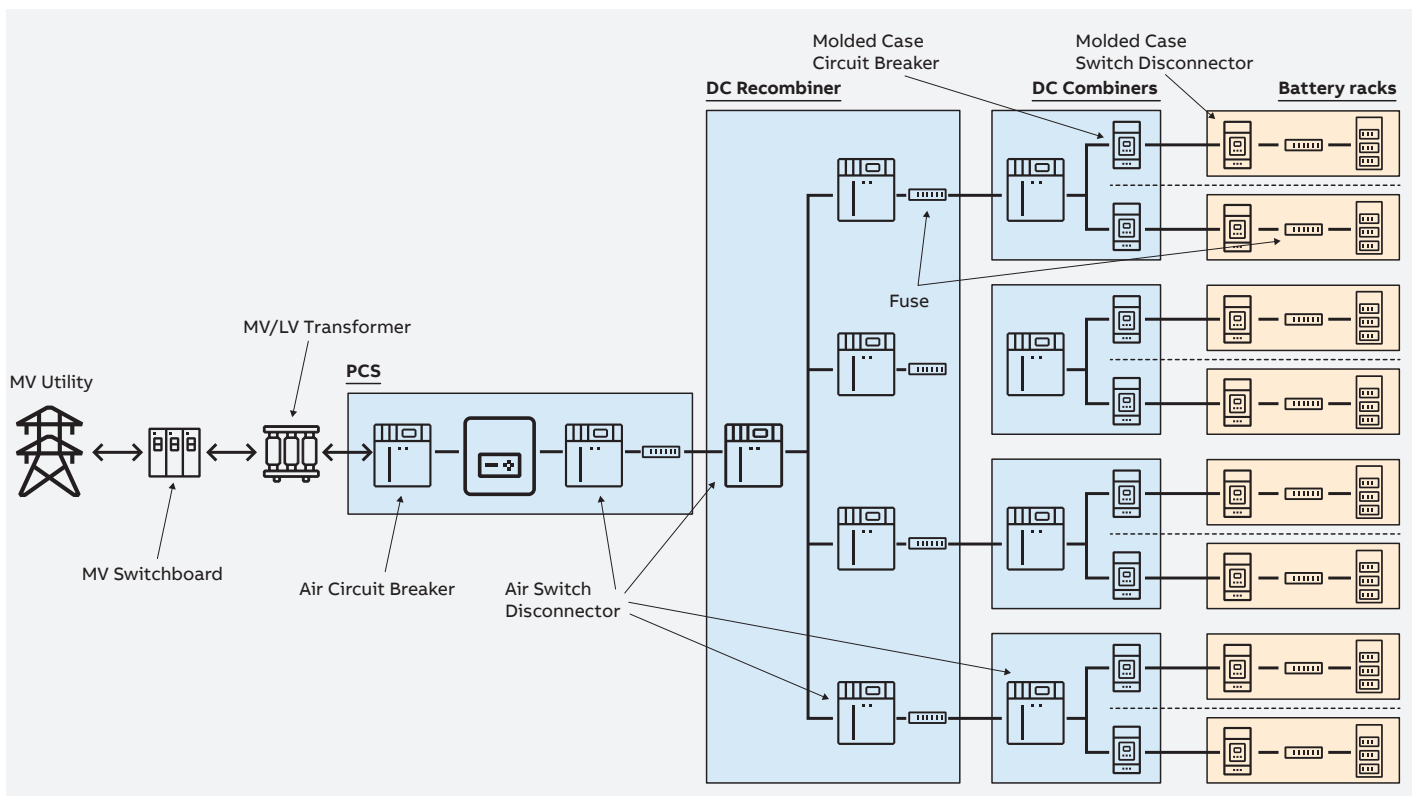
BESS application overview

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.

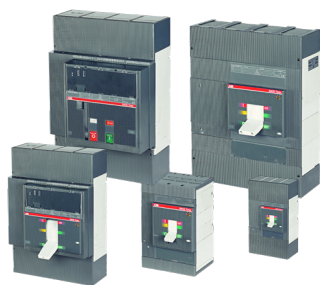
Because of dedicated shorting busbar (jumper) kits, all four poles can be connected in series to isolate a single polarity source, or alternatively for a dual polarity source 2 poles can be configured in series for the positive supply and the other 2 poles in series for the negative supply. SACE Emax 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	

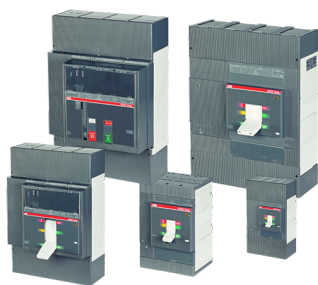
Rated current In (A)	Rated voltage	Description	Version / Poles	Ordering code	L.P. (₹)
250	1500V DC	T4D/PV-E 250 4p F F 1500V DC	Fixed / 4p	1SDA073559R1	Upon request
500		T5D/PV-E 500 4p F F 1500V DC	Fixed / 4p	1SDA076898R1	
1250		T7D/PV-E 1250 4p F F M 1500V DC	Fixed / 4p	1SDA073560R1	
1600		T7D/PV-E 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

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		XT5X HVA8 400 EkipDip LS/I In=250 3P FF		1SDA133717R1	
320	LS/I	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 :

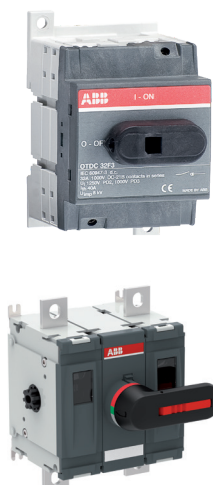
Tmax XT5 -HVA8 MCCBs are compatible with accessories/spare parts of Tmax XT5 690V MCCB aligned with compatible trip unit option with below exception:

- 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	
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

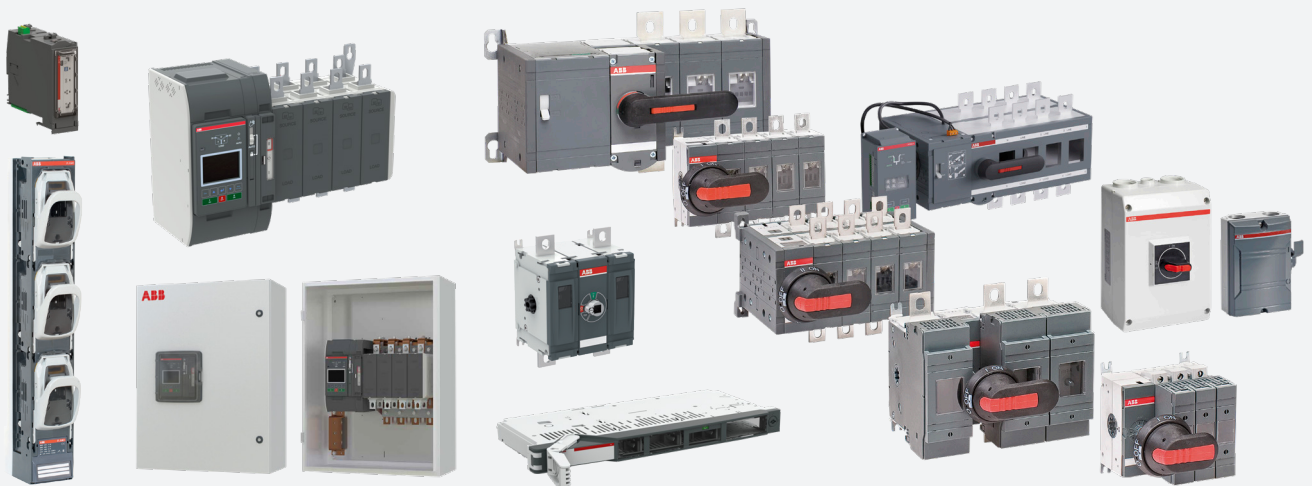
The ABB enclosed switches are suitable for power distribution in factories and buildings, as local motor isolators and as main switches. Each incoming supply shall be provided with a hand operated main switch-disconnector according to the Machine Directive EN 60204 and isolate reliably the electrical 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

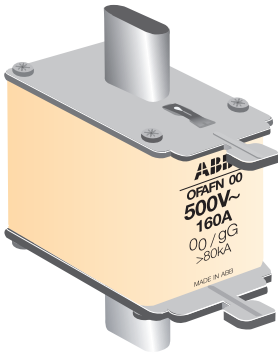
Technologies for external environment - Complete range 40-4000 A. ABB offers a wide selection of automatic transfer switches (ATS). They have the features and functionality that make them suitable for diverse applications.



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 ■	
1	32	OFAFN1GG32	6	1SCA107766R1001	1,680
	50	OFAFN1GG50	6	1SCA107767R1001	1,650
	63	OFAFN1GG63	6	1SCA107768R1001	
	80	OFAFN1GG80	6	1SCA107769R1001	
	100	OFAFN1GG100	6	1SCA107770R1001	
	125	OFAFN1GG125	6	1SCA107771R1001	
	160	OFAFN1GG160	6	1SCA107772R1001 ■	
	200	OFAFN1GG200	3	1SCA107773R1001 ■	
	250	OFAFN1GG250	3	1SCA107774R1001 ■	
	100	OFAFN2GG100	3	1SCA107775R1001	2,400
2	125	OFAFN2GG125	3	1SCA107776R1001	2,600
	250	OFAFN2GG250	3	1SCA107778R1001	
	315	OFAFN2GG315	3	1SCA107779R1001 ■	
	400	OFAFN2GG400	3	1SCA107780R1001 ■	
	315	OFAFN3GG315	3	1SCA107781R1001	3,780
3	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.



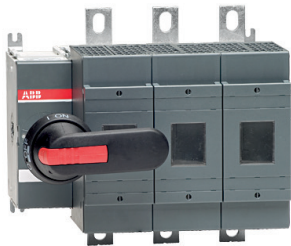
Fuse size	Rated current In [A]	Description	Delivery batch [pcs]	Ordering code	L.P. (₹)
Offset blade tag fuse link					
F1	2	OFFNF1GG2	10	1SCA107786R1001 ■	240
	4	OFFNF1GG4	10	1SCA107787R1001 ■	
	6	OFFNF1GG6	10	1SCA107788R1001 ■	
	10	OFFNF1GG10	10	1SCA107789R1001 ■	
	16	OFFNF1GG16	10	1SCA107790R1001 ■	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 ■	1,070
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 Base	100	1SYN833001R2005 ■	280
	32		100	1SYN833001R2009 ■	350

■ Stock items

OESA/OS switch disconnecter fuse, DIN-type



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

DIN type

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

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

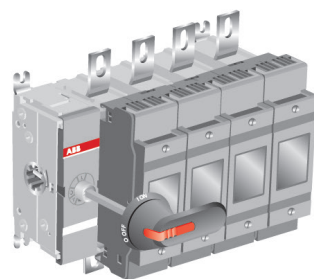
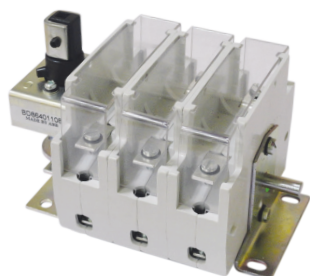
■ Stock items

OESA/OS switch disconnecter fuse, BS-type

BS

32 - 800A SDF supplied with shaft and handle

Mechanism at the end of the switch fuse



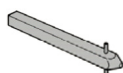
Note:
4th pole of all SFUs are 100% rated and are in the switched neutral (SN) version.

- 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	1SYN022750R8010 ■	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	OXP6X210	1SCA022295R6080	730
OS315...400	OXP12X250	1SCA022325R6980	1,430
OS630...800	OXP12X280	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

OT Plus Switch disconnectors NEW

One giant leap to progress



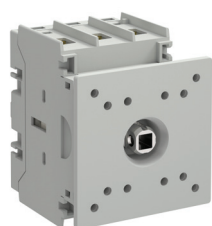
OTG3...100G2-3BS



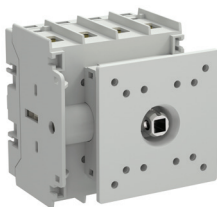
OTG3...100G2-4BSN2



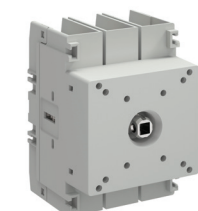
OT100...160G3-3BS



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,	Black	OHBS2RJ	1SCA105232R1001	1,210
OT30...160G3-DS	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	OXS6X130	1SCA101655R1001 ■	830

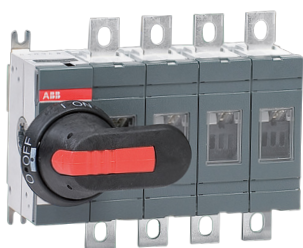
■ Stock items

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

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		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		OT3200E03P	1SCA128481R1001	
4000		OT4000E03P	1SCA124848R1001	
16	4	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		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		OT2000E04P	1SCA108038R1001	Upon request
2500		OT2500E04P	1SCA105140R1001	
3200		OT3200E04P	1SCA128482R1001	
4000		OT4000E04P	1SCA124856R1001	

■ Stock items

OT switch disconnecter 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	EXP6X170	1SCA108224R1001 ■	610
OT160...250	EXP6X210	1SCA022295R6080	730
OT315...800	EXP12X185	1SCA022325R6710	1,090
OT1000...4000	EXP12X280	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

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

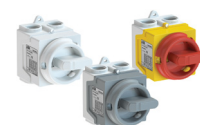
Enclosed switch disconnectors - ONE20

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

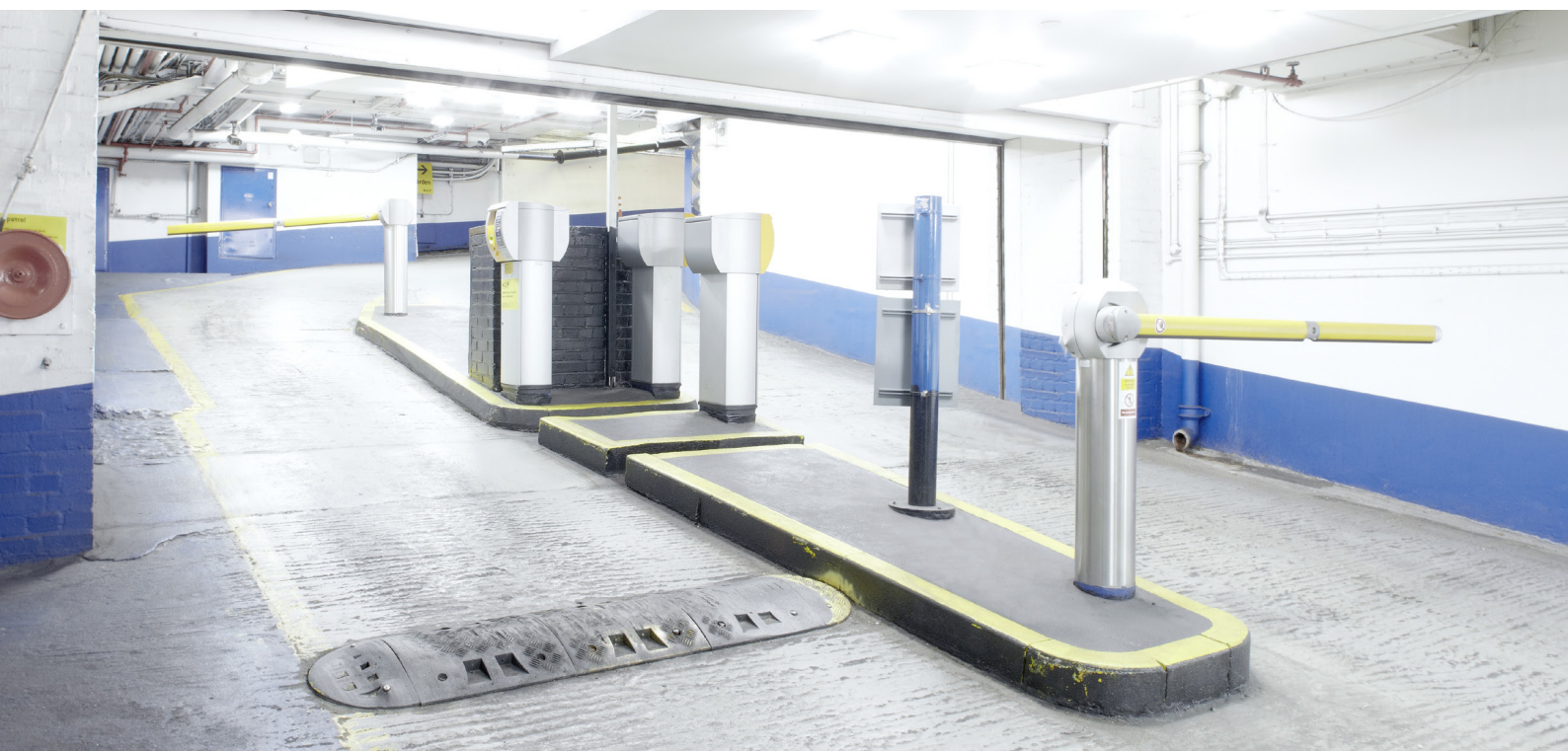
Fire rated enclosed switch-disconnectors maintain the power supply to fans or other smoke extraction equipment in case of fire. Typical environments are tunnels, highrise buildings, parking spaces or commercial buildings.

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

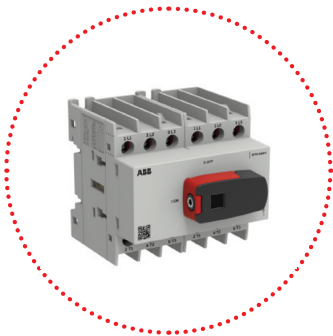
Automatic Transfer Switches represent a significant advancement in power continuity technology. These systems continuously monitor both power sources and automatically transfer loads when the primary source fails, without any human intervention.

- **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

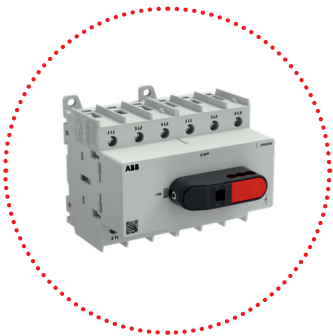
OT Plus change-over switches NEW

One giant leap to progress

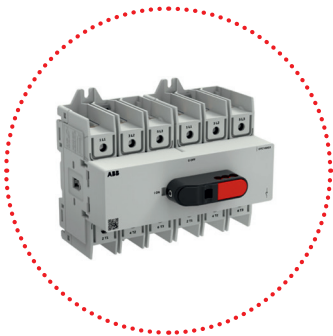
The OT plus change-over switch range offers a smarter, safer and more reliable performance to suit needs from 16A to 160A with 3 and 4 pole options. With greater adaptability, the OT plus change-over switches are able to cater to a broad range of applications than ever before.



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

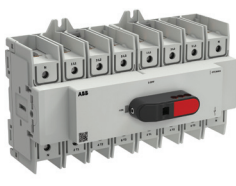
OT Plus change-over switches

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

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-	OHR559/1	1SCA108690R1001	



AUXGB-11

Auxiliary contacts for OTC63G2-...160G3

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



OZXA

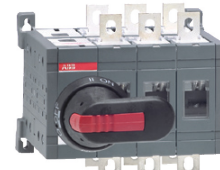
Parallel connection kits

Frame	Description	Ordering code	L.P. (₹)
OTC63G2-...OTC80G2	OZXA42	1SCA164225R1001	Upon request
	OZXA43	1SCA164226R1001	
	OZXA40	1SCA022790R3910	
OTC30G3-...OTC160G3	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		OT1600E03CP	1SYN022872R1840	2,98,630		OT1600E04CP	1SYN022872R2310	3,41,120
2000		OT2000E03CP	1SYN103908R1001	Upon request		OT2000E04CP	1SYN103912R1001	Upon request
2500		OT2500E03CP	1SYN105615R1001			OT2500E04CP	1SYN103906R1001	
3200		OT3200E03CP	1SYN129156R1001			OT3200E04CP	1SYN129158R1001	

Note: Contact our nearest sales office:

1. For 6 pole change over
2. For manual/motorized bypass switch
3. For wide phase manual change over

■ Stock items

OT motorized changeover switches

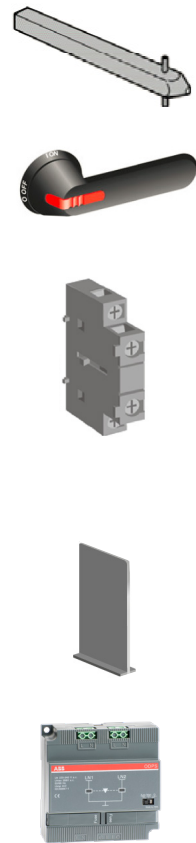


Changeover switches, motor operation, I-O-II -operation
Supplied with bridging bars and handle

Rated current In [A]	Poles	Description	Ordering code	L.P.(₹)	Poles	Description	Ordering code	L.P.(₹)
40	3	OTM40F3CMA230V	1SYN120096R1001	52,280	4	OTM40F4CMA230V	1SYN120102R1001	55,250
63		OTM63F3CMA230V	1SYN120095R1001	55,270		OTM63F4CMA230V	1SYN120101R1001 ■	58,210
80		OTM80F3CMA230V	1SYN120093R1001	60,300		OTM80F4CMA230V	1SYN120100R1001	61,170
100		OTM100F3CMA230V	1SYN120071R1001	63,280		OTM100F4CMA230V	1SYN120098R1001 ■	63,160
125		OTM125F3CMA230V	1SYN120070R1001	65,310		OTM125F4CMA230V	1SYN120097R1001 ■	67,100
160		OTM160E3CM230C	1SYN022845R8610	92,780		OTM160E4CM230C	1SYN022848R1510 ■	97,050
200		OTM200E3CM230C	1SYN022845R8960	96,320		OTM200E4CM230C	1SYN022846R1590 ■	99,930
250		OTM250E3CM230C	1SYN022845R9260	1,18,800		OTM250E4CM230C	1SYN022846R1910 ■	1,22,340
315		OTM315E3CM230C	1SYN022847R1210	1,20,070		OTM315E4CM230C	1SYN022847R2870 ■	1,24,890
400		OTM400E3CM230C	1SYN022847R1630	1,44,480		OTM400E4CM230C	1SYN022847R3250 ■	1,56,750
630		OTM630E3CM230C	1SYN103567R1001	1,93,400		OTM630E4CM230C	1SYN022873R1990 ■	1,99,590
800		OTM800E3CM230C	1SYN103570R1001	2,59,110		OTM800E4CM230C	1SYN022872R8340 ■	2,70,570
1000		OTM1000E3CM230C	1SYN112677R1001	3,46,970		OTM1000E4CM230C	1SYN112703R1001	3,52,550
1250		OTM1250E3CM230C	1SYN112676R1001	4,13,800		OTM1250E4CM230C	1SYN112702R1001	4,20,200
1600		OTM1600E3CM230C	1SYN112678R1001	5,09,540		OTM1600E4CM230C	1SYN112704R1001	5,27,650
2000		OTM2000E3CM230C	1SYN112709R1001	Upon request		OTM2000E4CM230C	1SYN112712R1001	Upon request
2500		OTM2500E3CM230C	1SYN112710R1001	Upon request		OTM2500E4CM230C	1SYN112713R1001	Upon request

Note:
Contact nearest sales office for making selection.
• Motor voltage Ue 110-240 V AC/DC (OTM40...125A)
• Motor voltage Ue 220-240 V AC (OTM160...2500A)
• Motor voltage Ue 110...125 V AC/DC (OTM160...2500A)
• Motor voltage Ue = 48V DC (OTM160...2500A)

Accessories for changeovers (manual, motorized, ATS)



Shaft				Handle		
Frame	Description	Ordering code	L.P. (₹)	Description	Ordering code	L.P. (₹)
OT16...125F_C	EXP6X170	1SCA108224R1001	610	OHB45J6E311	1SCA022817R2130 ■	3,640
OT160...250_C	EXP6x161	1SCA022067R1760 ■	610	OHB65J6E011	1SCA022383R2480 ■	4,240
OT315...400_C	EXP12x166	1SCA022325R7100 ■	920	OHB95J12E011	1SCA022621R0760 ■	4,610
OT630...800_C	EXP12x185	1SCA022325R6710	1,090	OHB125J12E011	1SCA022589R3340 ■	5,100
OT630...3200_C					1SCA022873R4230	11,130

Auxiliary contacts					
Frame	Contact functions	Installation side	Description	Ordering code	L.P. (₹)
OT16...125F_C OTM40...125	1NO	Right	OA1G10	1SCA022353R4970	980
	1NC	Right	OA8G01	1SCA022744R2240 ■	1,570
	1NO	Left	OA7G10	1SCA022673R1140 ■	1,390
	1NC	Left	OA1G01	1SCA022353R4890 ■	980
OT160...3200 OTM160...2500	1NO	Right	OA1G10	1SCA022353R4970	980
	1NC	Right	OA3G01	1SCA022456R7410	1,090

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	L.P. (₹)
OT160...800 OTM160...800	3	PB100 low	1SDA054970R1	1,970
	4	PB100 low	1SDA054971R1	2,800

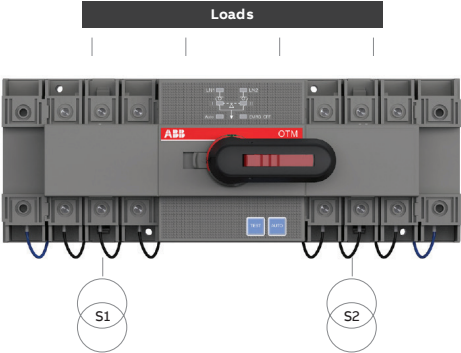
Basic ATS controller for motorised change over			
Frame	Description	Ordering code	L.P. (₹)
40...2500A	ODPS230	1SCA122946R1001 ■	23,750

Note: Contact our nearest sales office for more information

■ Stock items

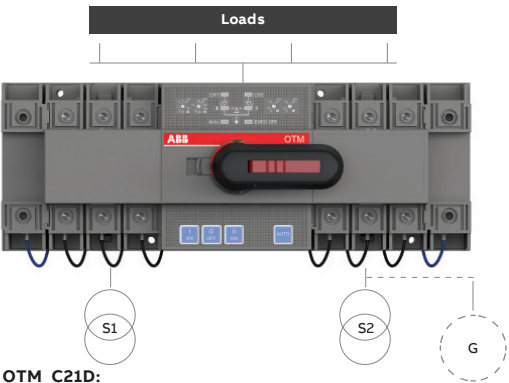
Compact ATS

The innovative all-in-one solution that delivers all the safety and performance you would expect from a product supplying your most valuable assets. An automatic transfer switch does not need to be complex and difficult to use. Compared to conventional solutions, the ABB Compact ATS offers 100% easier and simpler operation in a 40% more compact package.



OTM_C20D:

- For Network/Network application
- Fixed version with pre-defined delay times and voltage thresholds



OTM_C21D:

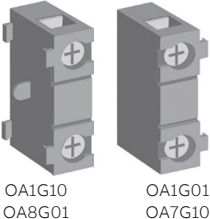
- For Network/Network and Network/Genset applications
- Adjustable version with configurable transfer and back-switching delays Adjustable over and under-voltage thresholds

Automatic transfer switches, I - O - II operation
Supplied with bridging bars and direct mounted handle

Rated current In [A]	Pole	Description	Ordering code	L.P.(₹)
40	4	OTM40F4C20D400C	1SYN151252R1001	74,350
63		OTM63F4C20D400C	1SYN151254R1001	78,250
125		OTM125F4C20D400C	1SYN151250R1001	92,190
40		OTM40F4C21D400C	1SYN151253R1001	1,12,930
63		OTM63F4C21D400C	1SYN151255R1001	1,18,210
125		OTM125F4C21D400C	1SYN151251R1001	1,33,530
40		OTM40F4CB21D400C	1SYN150580R1001	1,12,930
63		OTM63F4CB21D400C	1SYN150586R1001	1,18,210
125		OTM125F4CB21D400C	1SYN150574R1001	1,33,530

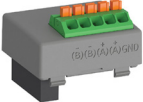
Note:
• For 2 pole & 3 pole requirement, contact nearest sales office

Accessories for Compact ATS



OA1G10
OA8G01

OA1G01
OA7G10



Communication Module

Auxiliary Contacts (IP20)					
Model	Applicable Switch	Contact Functionality	Mounting Position	Order Code	L.P.(₹)
OA1G10	OTM32...2500E_C_D	1 NO	Right	1SCA022353R4970	980
OA8G01	OTM32...125F_C OTM32...125F_C_D	1 NC	Right	1SCA022744R2240	1,570
OA7G10		1 NO	Left	1SCA022673R1140	1,390
OA1G01		1 NC		1SCA022353R4890	980
OA3G01	OTM32...2500E_C_D	1 NC	Right	1SCA022456R7410	1,090

Modbus RTU Communication Module			
Product Model	Applicable Switch	Order Code	L.P.(₹)
Modbus RTU Communication Module	OTM32-125F_C21D	1SCA161952R1001	Upon request

OTM_DPT Automatic transfer switch **NEW**

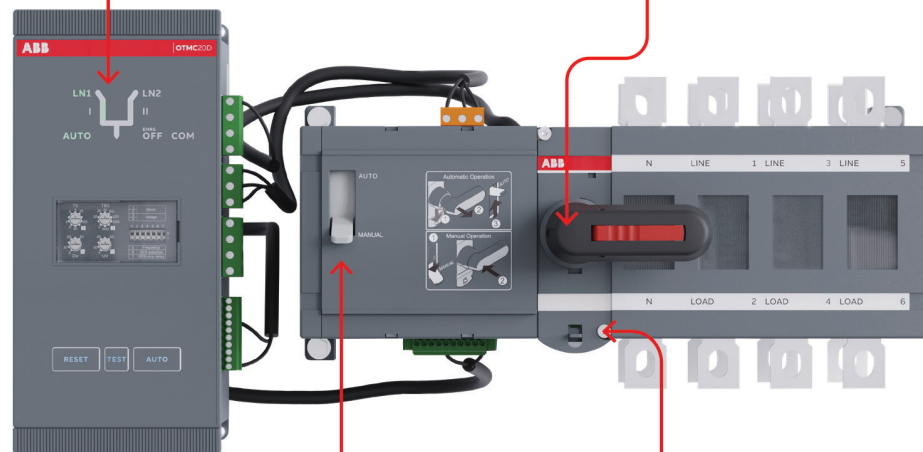
Operating controls

LED Panel
Monitoring supply sources and switches

Lockable operating handle
for emergency manual operation

Auto-Manual switch selection
Switch between modes of operation

Locking switch
for Auto position



OTM_C_D Dual Power Automatic Transfer Switch

- Rated current up to 2500A
- Equipped with 20D/21D controllers
- Features isolation functionality
- Clearly visible switch break for instant status indication
- Capable of short-term overload and short-circuit current handling
- Supports load switching capability
- Reliable mechanical and electrical interlocks ensure electrical safety
- Allows for manual, electric, and automatic operation
- Patented built-in clutch design for smoother manual operation
- Offers 3 stable switch positions: I-O-II
- Single-phase detection capability
- 21D enables Modbus RTU communication functionality

OTM_DPT Automatic transfer switches

A smooth and safe transition from one power source to another is of the utmost importance. In case of power source failure, whether planned or unplanned, a rapid switch to back-up power is often crucial. The OTM_C_D automatic transfer switch ensures continuous power supply even under overload conditions. The transfer switch is suitable for applications in all walks of life

OTM_E_C20D

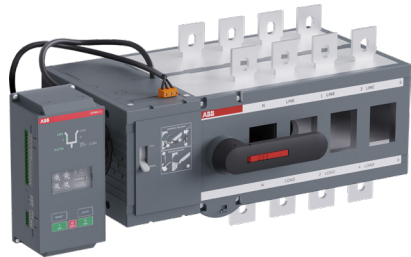
Control Unit for Automatic transfer switching equipment. Can be used with PC class TSE. Has functions like voltage loss, phase loss, under and over voltage, time delay settings, fire protection, etc.



Rated current In [A]	Poles	Description	Ordering code	L.P.(₹)
160	4	OTM160E4C20D380CI	1SCA163882R1001	1,49,910
200		OTM200E4C20D380CI	1SCA163884R1001	1,52,500
250		OTM250E4C20D380CI	1SCA163886R1001	1,80,070
315		OTM315E4C20D380CI	1SCA163888R1001	1,82,240
400		OTM400E4C20D380CI	1SCA163890R1001	2,01,960
630		OTM630E4C20D380CI	1SCA163892R1001	2,64,100
800		OTM800E4C20D380CI	1SCA163894R1001	3,45,710
1000		OTM1000E4C20D380CI	1SCA163910R1001	4,95,490
1250		OTM1250E4C20D380CI	1SCA163912R1001	5,33,120
1600		OTM1600E4C20D380CI	1SCA163914R1001	6,33,480

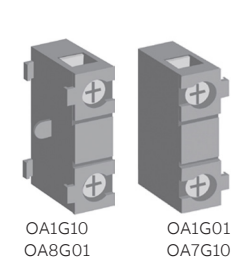
OTM_E_C21D

Advanced version of Control Unit with Modbus communication and Generator control functions like start, stop, generator exerciser in addition to basic functions of 20DN.



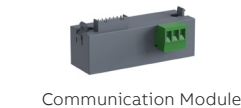
Rated current In [A]	Poles	Description	Ordering code	L.P.(₹)
160	4	OTM160E4C21D380CI	1SCA163896R1001	1,64,170
200		OTM200E4C21D380CI	1SCA163898R1001	1,66,750
250		OTM250E4C21D380CI	1SCA163900R1001	1,94,330
315		OTM315E4C21D380CI	1SCA163902R1001	1,96,500
400		OTM400E4C21D380CI	1SCA163904R1001	2,16,220
630		OTM630E4C21D380CI	1SCA163906R1001	2,83,110
800		OTM800E4C21D380CI	1SCA163908R1001	3,64,720
1000		OTM1000E4C21D380CI	1SCA163920R1001	5,20,580
1250		OTM1250E4C21D380CI	1SCA163922R1001	5,58,210
1600		OTM1600E4C21D380CI	1SCA163924R1001	6,58,560

Accessories for OTM_DPT Automatic transfer switch



Auxiliary Contacts (IP20)

Model	Applicable Switch	Contact Functionality	Mounting Position	Order Code	L.P.(₹)
OA1G10	OTM32...2500E_C_D	1 NO	Right	1SCA022353R4970	980
OA8G01		1 NC	Right	1SCA022744R2240	1,570
OA7G10	OTM32...125F_C	1 NO	Left	1SCA022673R1140	1,390
OA1G01	OTM32...125F_C_D	1 NC		1SCA022353R4890	980
OA3G01	OTM32...2500E_C_D	1 NC	Right	1SCA0224567410	1,090



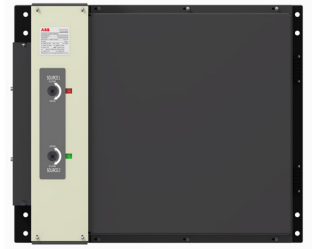
Modbus RTU Communication Module

Product Model	Applicable Switch	Order Code	L.P.(₹)
Modbus RTU Communication Module	OTM160-2500E_C21D	2TFC800547R1001	Upon request

Note:
• For 3 pole requirement, contact nearest sales office

The world's first true ATS is here Introducing TruONE.

A critical breakthrough for
critical power

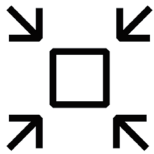


Proactive outage prevention

- Contact wear monitoring¹ including real-time status and predicted contact end-of-life
- Minimum 3 embedded temperature sensors
- High current protection and alarm
- 24/7 monitoring and customizable text or email alerts available with ABB Ability™ Energy and Asset Manager

24/7
monitoring

Minimum
3
embedded
temperature sensors



Simplified service

- Quick swap HMI
- 95% fewer spare parts than legacy Zenith offering
- ABB HMI navigation and programming tool common to all ABB LV components

95%
fewer spare parts



Easier to install, commission and operate

- Color touchscreen HMI with intuitive menu navigation, measurements display, and 250 event log
- Ekip Connect software helps reduce commissioning time by 50%
- Five factory programmed packages available; IO can be re-programmed in seconds

Up to
50%
faster commissioning
with Ekip™ Connect



High performance

- High time-based withstand and closing ratings (WCR) and even higher co-ordinated WCR, minimum of 100kA in each frame
- Short-time withstand ratings in every frame
- Fast controller response to outage recovery and fast switching (<50ms)

Fast switching
<50ms

¹ Contact wear monitoring features available only on 100-1200A OT and DT range. Additional features to track overload operations and average transfer current are available as standard on all ZBTS products.

Automatic transfer switches - IEC

Ordering Information



Delayed transition – Open style, Level 2 Level 3 & Level 4 controls

I-O-II –operation with stable OFF position between positions I and II.

Delivery includes handle for manual operation, RJ45 connection cable between detachable HMI and ATS frame.

Terminal connection kits (bolts, nuts and washers) available as accessory.

TruONE (200 - 1600 Amp) Bottom entry - Source 1 and Source 2 connections on bottom, load connections on top

Poles	Rated current [A]	Level 2 DIP controls		Level 3 LCD controls		Level 4 Touch controls		L.P. (₹)
		Order number	Type	Order number	Type	Order number	Type	
4	200	1SCA153427R1001	AXB200E3S2QB	1SCA153429R1001	AXB200E3S3QB	1SCA153431R1001	AXB200E3S4QB	Upon request
4	250	1SCA153456R1001	AXB250E3S2QB	1SCA152435R1001	AXB250E3S3QB	1SCA152794R1001	AXB250E3S4QB	
4	315	1SCA153501R1001	AXB315E3S2QB	1SCA152046R1001	AXB315E3S3QB	1SCA153504R1001	AXB315E3S4QB	
4	400	1SCA153515R1001	AXB400E3S2QB	1SCA153517R1001	AXB400E3S3QB	1SCA152048R1001	AXB400E3S4QB	
4	500	1SCA151025R1001	AXB500E3S2QB	1SCA151741R1001	AXB500E3S3QB	1SCA150003R1001	AXB500E3S4QB	
4	630	1SCA151054R1001	AXB630E3S2QB	1SCA151057R1001	AXB630E3S3QB	1SCA151060R1001	AXB630E3S4QB	
4	800	1SCA150934R1001	AXB800E3S2QB	1SCA149958R1001	AXB800E3S3QB	1SCA149959R1001	AXB800E3S4QB	
4	1000	1SCA153577R1001	AXB1000E3S2QB	1SCA153579R1001	AXB1000E3S3QB	1SCA151491R1001	AXB1000E3S4QB	
4	1250	1SCA153610R1001	AXB1250E3S2QB	1SCA153612R1001	AXB1250E3S3QB	1SCA153614R1001	AXB1250E3S4QB	
4	1600	1SCA153622R1001	AXB1600E3S2QB	1SCA152412R1001	AXB1600E3S3QB	1SCA152414R1001	AXB1600E3S4QB	

Note:

Contact nearest sales office for making selection.

- For 30 - 1200 Amp (OX_U)
- For 2 pole & 3 pole requirement, contact nearest sales office
- For overlapping neutral
- For open transition



Delayed transition – Open style, Level 3 & Level 4 controls

I-O-II – operation with stable OFF position between positions I and II.

Delivery includes handle for manual operation, RJ45 connection cable between detachable HMI and ATS frame.

Terminal connection kits (bolts, nuts and washers) available as accessory.

TruONE R5 (1600 - 4000Amp) Bottom entry - Source 1 and Source 2 connections on bottom, load connections on top

Poles	Rated current [A]	Level 3 LCD controls		Level 4 Touch controls		L.P. (₹)
		Order number	Type	Order number	Type	
4	1600	2TFC360024R1001	AXB1600G3S3KM	2TFC360024R1006	AXB1600G3S4KM	Upon request
4	2000	2TFC360024R1002	AXB2000G3S3KM	2TFC360024R1007	AXB2000G3S4KM	
4	2500	2TFC360024R1003	AXB2500G3S3KM	2TFC360024R1008	AXB2500G3S4KM	
4	3200	2TFC360024R1004	AXB3200G3S3KM	2TFC360024R1009	AXB3200G3S4KM	
4	4000	2TFC360024R1005	AXB4000G3S3KM	2TFC360024R1010	AXB4000G3S4KM	

Note:

Contact nearest sales office for making selection.

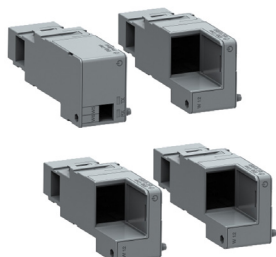
- For 3 pole requirement, contact nearest sales office
- For overlapping neutral
- For open & closed transition

Accessories

Automatic transfer switches TruONE.



OXEA1



EKIP COM



OXEB_

Auxiliary power supply module

Suitable for switches	Aux voltage	Type	Order number	L.P.(₹)
OX30...1600	12-24Vdc	OXEA1	1SCA148926R1001*	Upon request

Communication modules for Level 3 and Level 4 controllers

Suitable for switches	Protocol	Type	Order number	L.P.(₹)
OX30...1600	Modbus RTU	Ekip Com Modbus RTU-OX	1SDA104051R1	Upon request
OX30...1600	Modbus TCP	Ekip Com Modbus TCP-OX	1SDA104052R1	
OX30...1600	Profibus DP	Ekip Com Profibus	1SDA074152R1	
OX30...1600	Profinet	Ekip Com Profinet	1SDA074153R1	
OX30...1600	EtherNet/IP	Ekip Com EtherNet / IP	1SDA074155R1	
OX30...1600	DeviceNet	Ekip Com DeviceNet	1SDA074154R1	

Phase barriers

Suitable for switches	No. of poles	Units/type [pcs]	Type	Order number	L.P.(₹)
OX30...1600	3	4	OXEB1600/4	1SCA150201R1001	Upon request
OX30...1600	4	6	OXEB1600/6	1SCA150202R1001	

* The OXEA1 auxiliary power supply module is used for: a) connecting connectivity modules (signalling and communication) to the switch b) powering the ATS controller and connectivity modules from auxiliary 12-24 Vdc power supply, to keep them operational during power failures.

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, monitoring and safety applications.

The business unit is comprised of 3 main product families:

- Control & protection
- Electronic relays
- Safety products

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, starters, manual motor starters, a wide range of electronic relays and overload relays, together with an extended range of pilot devices.

Our offering

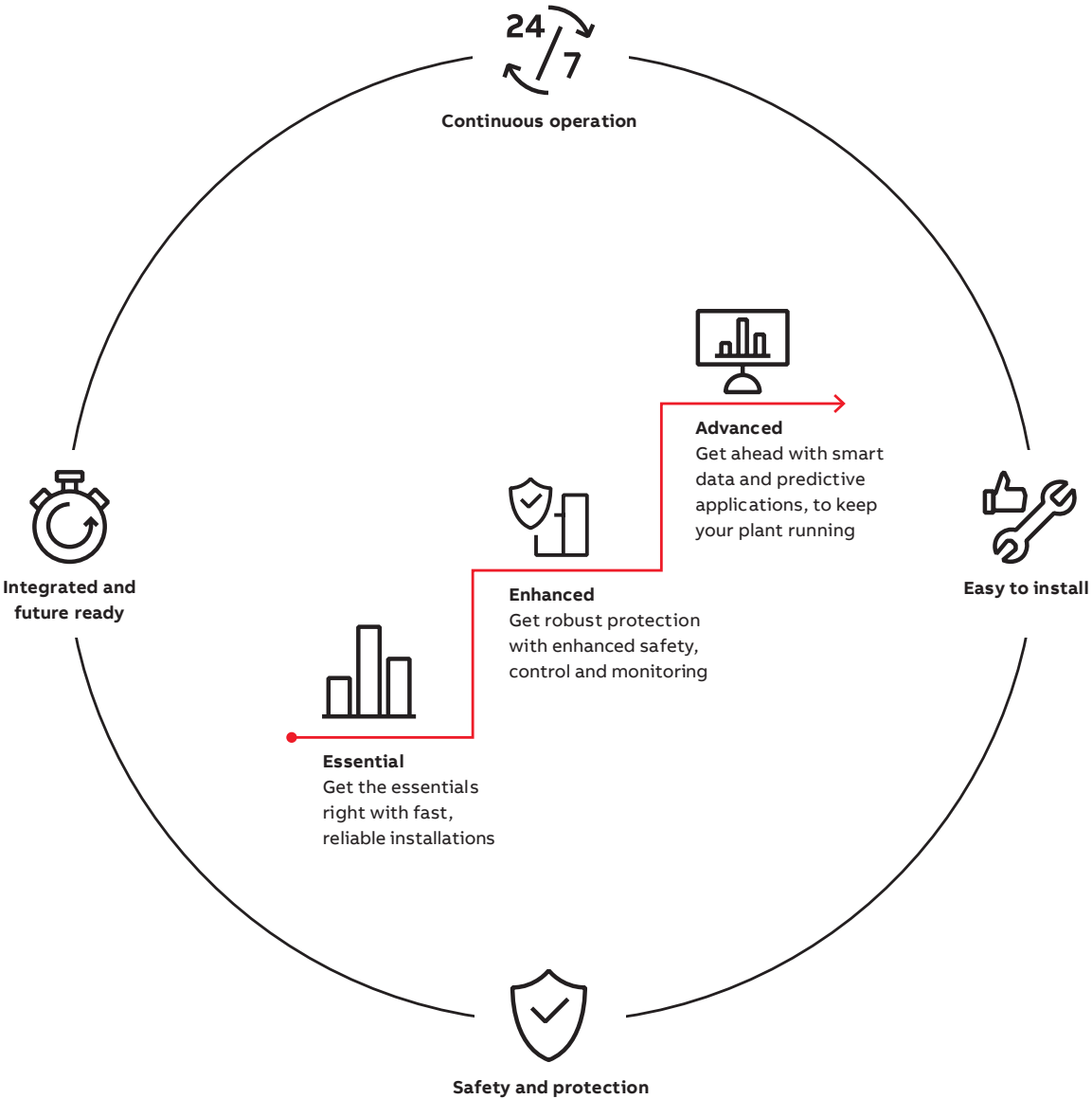
- Contactors
- Manual motor starters
- Thermal overload relays
- Electronic overload relays
- Intelligent motor management systems
 - Universal motor controllers
 - Communication fieldbus plugs
- Electronic products and relays
 - Timers
 - Measuring and monitoring relays
 - Power supplies
 - Interface relays & optocouplers
- Jokab safety systems
- Pilot devices
- Softstarters
- Hybrid starters



Motor starting and protection

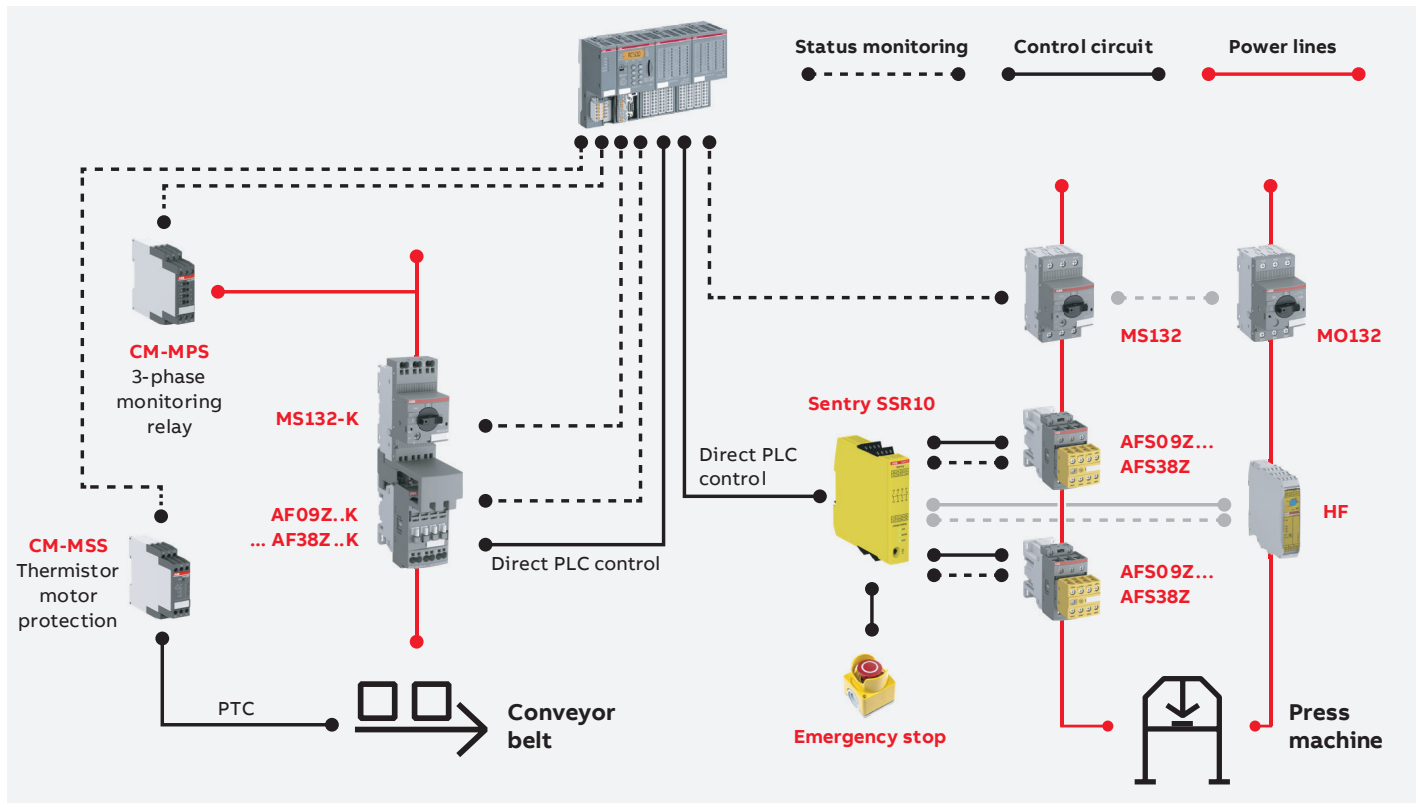
Keep things moving with protection and control - at every level.

Our broad portfolio of motor starting and protection solutions are fully scalable, allowing you to keep things moving whatever the extent of your operations.



Enhanced solutions

Get robust protection with enhanced safety, control and monitoring



Safety and protection

Enhanced safety and protection for solutions with higher specification requirements.

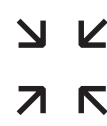
- Integration in machine manufacturer's systems complying with main standards EN ISO 13849, EN 62061 and IEC / EN 61508
- Trouble-free and economic operation of machines and installations, thanks to the monitoring of all important parameters in your three-phase network
- Prevent overheating, overload and insufficient cooling. Irregularities are signaled early to avoid plant downtime



Speed up your projects

Reduce time in planning, designing, assembly and delivery of custom panels to market.

- Use the same starters in Europe, Asia and North America as one contactor coil now handles 100 V – 250 V AC / DC, 50 / 60 Hz
- Push-in Spring allows you to insert both ferruled and rigid cables without the need to use any tools, boosting your productivity like never before
- With more than 1800 tested and validated co-ordination tables available in the SOC tool, you can quickly and easily choose the right ABB solution



Space-saving

Space is usually very limited for control panels, but our compact solutions are designed to easily fit into your application.

- Motor starters can be controlled directly by PLC thanks to AF contactor versions with low consumption coil, external or built-in PLC interface. No need for interface relays, which requires extra space
- Motor starters up to 3 kW / 3 hp require 90 % less space thanks to ABB's HF electronic compact starter. At just 22.5 mm width, it still provides motor starting functionalities with embedded protection and safety

Advanced solutions

Get ahead with intelligent, predictive operations, thanks to integrated data and advanced connectivity



Universal motor controller UMC100.3



Novolink modules for AF contactors



Softstarter PTSX



Integrated and future ready

Data and precise measurements accessible via flexible communication options ensure reliable operations and efficient energy management. Adapt to future needs without big investments.

- The UMC100.3 is compatible with more communication protocols than any other motor controller. This allows you to have software that enables predictive maintenance and acts as an intelligent data hub



Continuous operation

Detect problems earlier and prevent plant stand-stills with integrated protection functions as well as extensive diagnostic and status information.

- Protect your motors at all times with the UMC100.3, even if your control or communication system (Ethernet or Fieldbus) breaks down
- Softstarters help increase your motors lifetime by protecting it from electrical stress. Starting currents are easily optimized to your load, application and motor size

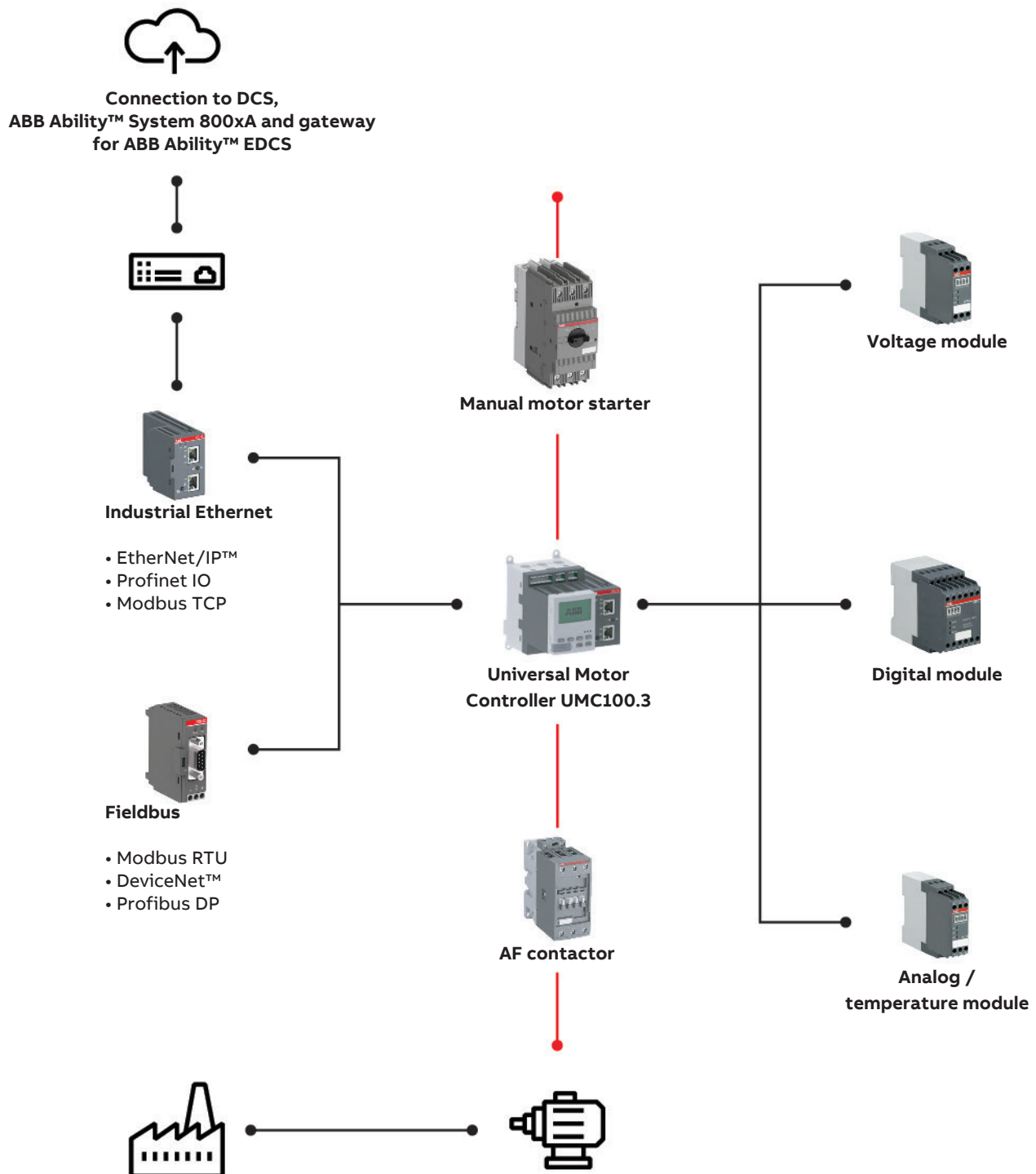


Speed up your project

Design, commissioning, and maintenance are easy, cutting costs and saving you time. ABB's flexible designs allow you to have a tailor-made solution.

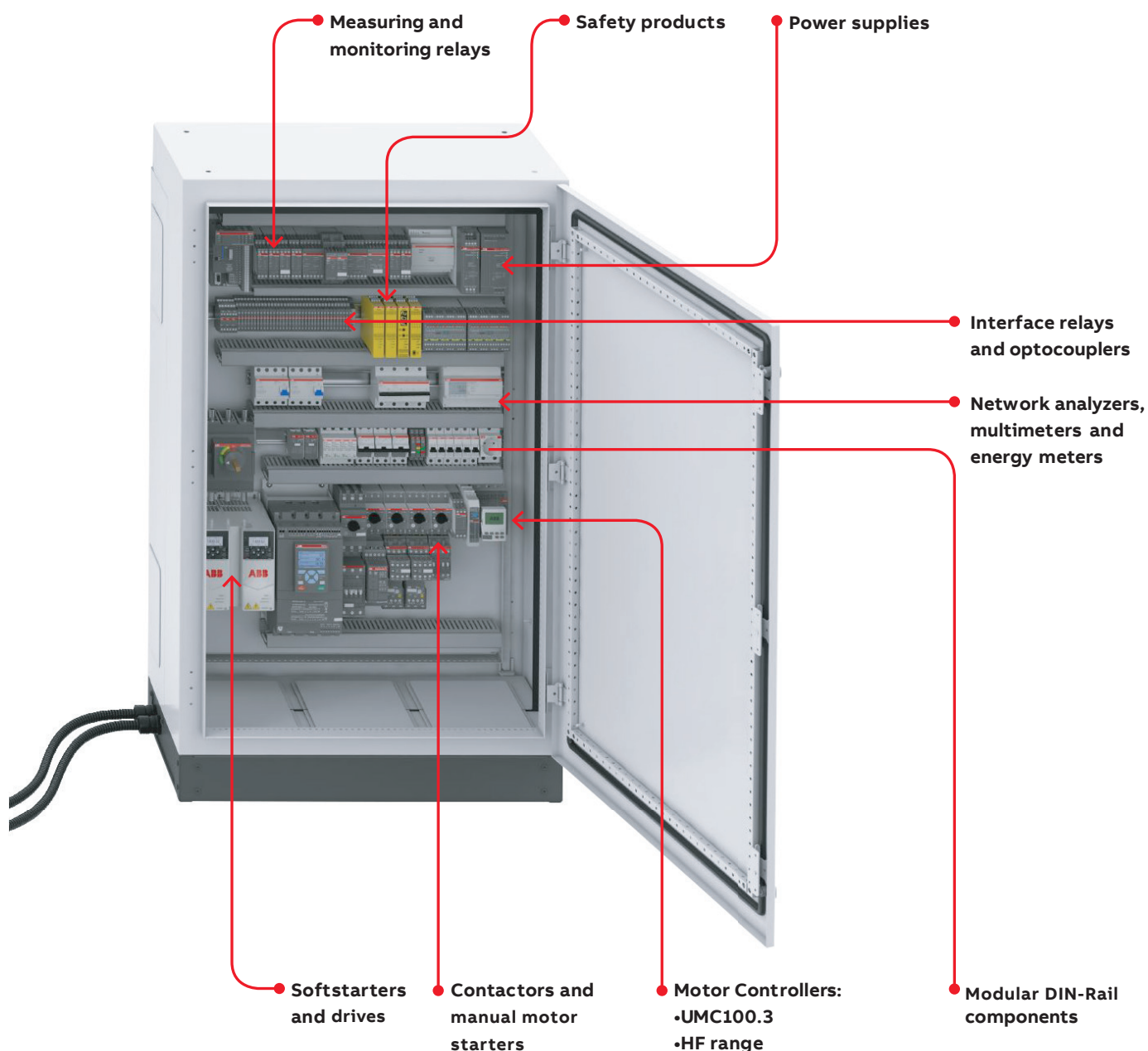
- With the UMC100.3, simple software configuration means that you are always in control. Parameters can be set via quality FDI-based software or directly using the operating panel
- Reduce your installation time and panel size by having all features you need built into your softstarter

UMC100.3 application examples



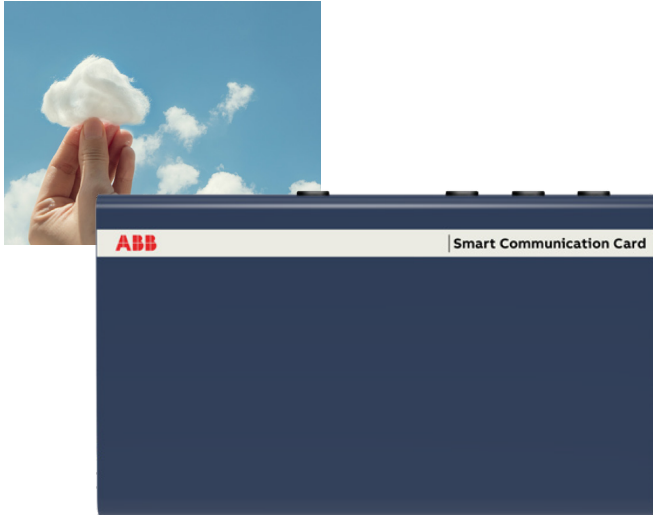
Complete solutions for control panels

ABB's broad portfolio offers all you need for your application, at every level.



Smart communication card **NEW**

A piece of cloud for everyone



Digitalization is not the future – it is there.

Introducing Smart Communication Card to enable connecting your devices to the ABB Ability™ Energy & Assets Manager and third party cloud-based portals.

Connect your devices to ABB Ability™ and other cloud-based platforms by selecting one of multiple options including MQTT, https, OPC UA.

Speed up your project with user-friendly web-based tool to configure and commission the Novolink Communication Card.

