



US Brochure

Tmax XT

Molded case circuit breakers
Simply XTraordinary



XTraordinary benefits



ABB, a global leader in circuit breaker technology is making major investments in the United States to bring extraordinary technology to molded case circuit breakers. The new Tmax XT molded case circuit breaker line has been designed to provide world-class solutions that excel in:

Productivity—Reduce installation costs

- Snap-in accessories, no tools or hardware required
- Decreased space requirements

Efficiency—Ease of design with high flexibility

- Up to 600V AC/DC and UL/CSA/IEC in the same breaker
- Extended breaking capacities up to 200kA
- A full range of adjustable trip units
- Global certifications and naval registrations

Reliability—Maximize uptime

- Predictive maintenance
- Increased trouble shooting capabilities
- 25K mechanical operations as standard

Performance ratings



Molded case circuit breakers (MCCB)		XT1			XT2						XT3		XT4					
Frame size	(A)	125			125						225		250					
Rated	100% rated TM	up to 100A			up to 100A						fixed only		up to 250A ³					
	100% rated Ekip	---			X						---		up to 250A ³					
Rated voltage (V)	(AC) 50-60 Hz	480V (600Y)			600						480V (600Y)		600					
	DC	500			500						500		600					
Poles	(No)	3,4			3,4						3,4		2 (for N version),3,4					
Mounting styles		Fixed, plug-in			Fixed, plug-in, withdrawable						Fixed, plug-in		Fixed, plug-in, withdrawable					
Interrupting ratings (kA)		N	S	H	N	S	H	L ¹	V ¹	X	N	S	N	S	H ¹	L ¹	V ¹	X
	240 V (AC)	50	65	100	65	100	150	200	200	200	50	65	65	100	150	200	200	200
	480 V (AC)	25	35	65	25	35	65	100	150	200	25	35	25	35	65	100	150	200
	600Y/347 V (AC)	18	22	25	--	--	--	--	--	--	10	10	--	--	--	--	--	--
	600 V (AC)	--	--	--	18	22	25	35	42	45	--	--	18	22	25	50	65	100/65 ²
Mechanical life	No. operations	25,000			25,000						25,000		25,000					
Dimensions	W x D x H (in)	3 x 2.8 x 5.1			3.5 x 3.2 x 5.1						4.1 x 2.8 x 5.9		4.1 x 3.2 x 6.3					
Weight	(lbs)	1.4-3.0			1.6-3.5						2.1-4.6		3.5-7.7					
Trip units	TMF	X			X						X		X					
	TMA	---			X						---		X					
	Ekip LS/I	---			X						---		X					
	Ekip I	---			X						---		X					
	Ekip LSI	---			X						---		X					
	Ekip LSIG	---			X						---		X					
	Ekip E-LSIG	---			X						---		X					
	MCS	X			X						X		X					
	MCP	X			X						X		X					
Ekip-LIU	---			X						---		X						

¹Current limiting circuit breaker in 480V AC and 600V AC

²100kA up to 150A, 65kA from 175A up to 250A

³With E, EF, ES, FCCuAI installation

Options and accessories

Thermal magnetic fixed (TMF) and adjustable (TMA) trip units

- Overload—long delay (L) and instantaneous short circuit (I) protection.
- The adjustable (TMA) style comes with rotary switches on the face, which can quickly and easily adjust the threshold values of both the overload (up to 70%) and instantaneous (up to 50%) sensors.



Magnetic only trip units (MCP)

- Instantaneous short circuit (I).
- Primarily motor protection.
- Adjustable.



Electronic (Ekip) trip units

- L, S, I, G, U, UV, OV.
- XT2 and XT4 frames only.
- Electrical sensors adjustable up to 40% of rated current.
- LED lights indicate the status of the unit and each protection.
- When combined with an Ekip Com module, they are perfect for energy monitoring and remote breaker control.



Plug-in circuit breakers

Plug-in mounting allows quick breaker change out without disturbing power connections. Accessories which provide multiple termination options are available. Perfect for critical power and marine applications.



Drawout (withdrawable) circuit breakers

Drawout breakers mount quickly and easily to a racking system. This provides a quick change means without disturbing power connections used for heavier breakers. Tmax XT is the only MCCB on the market today which allows you to rack out the breaker with the door closed. Perfect for critical power, industrial, and utility applications.



Ekip display and meter

The Ekip display and meter provide visual, real-time monitoring of electronic trip units to verify performance levels and assist in trouble shooting. They quickly and easily snap on and are interchangeable to move from breaker to breaker.

- The Ekip display provides a means to adjust protection levels and visually monitor fluctuations in current values and alarms.
- The Ekip meter indicates the current level being utilized by each phase in real-time. It helps you quickly and easily determine if a breaker is tripping due to a start-up issue or if it is a current build over time. It has LED indicator lights for each protection to determine what type of fault is occurring.



Ekip Com

XT2 and XT4 can be equipped with an Ekip Com module for power monitoring and remote control. There are four different configurations which provide a combination of Modbus and/or internal bus communication. This provides the ability to read the settings and program each protection level, read the state of the circuit breaker, remotely open/close the breaker, and have visibility on the panel through the ABB HMI030 interface.



Test and configuration accessories

EKIP T&P and TT test and configuration accessories can be used to quickly and safely verify your breaker is operating properly, prior to energizing the system.

- The Ekip T&P kit monitors, configures, and tests electronic trip units. It has the ability to program and record the trip levels to provide the capability of transferring these settings to multiple breakers.
- Ekip TT allows verification the electronic trip unit's opening solenoid and trip mechanism are functioning properly. They can test the LED signals and supply auxiliary power to show the most recent protection interruption, all in a small footprint, which makes it pocket sized.



Service releases

These releases snap-in requiring no tools or hardware and are a common accessory across the Tmax XT line.

- Shunt opening release (SOR) opens the breaker when it receives a signal from an externally wired contact. This is an instantaneous interrupt and will not restart unless manually reset. Perfect for emergency stops.
- Undervoltage release (UVR) opens the breaker when the control power significantly drops or is lost. It will not restart unless manually reset to ensure safe start-up.



Auxiliary contacts

Auxiliary contacts provide the ability to route information on the operating state of the circuit breaker outside of the breaker. (i.e. turn on a fan or light when the breaker contacts open).

- Snap-in place, no tools or hardware needed.
- Three styles available open/closed (ON/OFF - Q), trip indicator (bell alarm - SY), or trip unit trip (fault-trip indicator - S51).
- Can be wired normally open (NO-A) or normally closed (NC-B).
- Available either pre-assembled into the breaker, or separately.
- Come with easy to use push-in wire terminals, or pre-wired with 3 feet of 20 AWG.



Power lugs

A wide assortment of power lugs are available to connect power to and from the circuit breaker. They are compatible for cable or bus bars and can be ordered pre-installed or as a separate accessory kit.



Motor operator

Motor operators open and close the circuit breaker either in the remote mode via the electric controls or locally direct from the front via special mechanisms.

- Motor operator with direct action (MOD). Available for the XT1 and XT3.
- Stored energy motor operator (MOE) and electric stored energy motor operator (MOE-E). Available for the XT2 and XT4.



Rotary handles

Rotary handles make manually operating the circuit breaker easier. They are available as direct, standard front extended, left and right side extended, and long handle (pistol grip). They can be ordered in standard gray or emergency red on a yellow background.



Padlocks and key locks

Padlocks and key locks prevent the circuit breaker from being closed and/or opened. They can be fitted:

- Directly on the front of the circuit breaker.
- On the rotary handle.
- On the motor operator.
- And more.

These locks are OSHA LOTO compliant and do not prevent the mechanism from releasing if a fault occurs.



Contact us

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