

DATA SHEET

SACE® Tmax® XT Molded Case Circuit Breakers

XT5 – 400A/600A Frame Sizes



600 A frame available up to 600 V UL. Thermal-magnetic, MCS, MCP basic and advanced trip units. Max interrupt rating of 200 kA at 480 V, 100 kA at 600 V. Advanced electronic trip units are future-ready with the ability to download additional measurements and logic in the field.

Molded Case Circuit	Breaker (MCCB)		XT5					
Frame Size		[A]	400-6	00	'			
Poles		[No.]	3, 4					
Rated Voltage	(AC) 50-60 Hz	[V]	600					
	(DC)	[V] 600						
Versions	Fixed, Plug-in, Withdrawable							
Interrupting Ratings			N	S	Н	L	V	х
240 VAC		[kA]	65	100	150	200	200	200
480 VAC		[kA]	35	50	65	100	150	200
600Y/347 VAC		[kA]	-	-	-	-	-	-
600 VAC		[kA]	18	25	35	65	100	100
250 VDC 2p in series		[kA]	35	50	70	100	100	100
500 VDC 2p in series		[kA]	25	35	50	70	100	100
500 VDC 3p in series		[kA]	-	-	-	-	-	-
500 VDC 4p in series		[kA]	-	-	-	-	-	-
600 VDC 3p in series		[kA]	16	25	35	50	70	70
Mechanical Life		[No. Operations] 20,000						
	[No.	Hourly Operations]	perations] 120 (AC), 60 (DC)					
Dimensions - Fixed (W x D x H)	3p	[mm]/[in.]	[140 x 103 x 205]/[5.51 x 4.05 x 8.07]					
	4p	[mm]/[in.]	[186 x 103 x 205]/[7.32 x 4.05 x 8.07]					
Weight	Fixed 3p/4p	[kg - lb]	[3.25 - 7.17]/[4.15 - 9.15]					
	Plug-in (EF) 3p/4p	[kg - lb]	[5.15 - 11.35]/[6.65 - 14.66]					
	Withdrawable (EF) 3p/4	p [kg - lb]	[5.4 - 11.9]/[6.9 - 15.21]					

Compliance with standards

SACE® Tmax XT circuit-breakers and their accessories are constructed in compliance with1:

- · Standards:
 - UL489 (MCCB File # E93565 & MCCB Accessories File # E116596) and CSA C22.2; HACR Type;
- · Directives:
- EC "Low Voltage Directive" (LVD) N° 2014/35/EC;
- EC "Electromagnetic Compatibility Directive" (EMC) 2014/30/EC;
- · Shipping Registers approvals upon request.

Terminal options

Fixed version:

The standard fixed version of the SACE® Tmax XT circuit-breakers are supplied with front terminals (F) and can be fitted with the following types of terminals as accessories using special kits:

- Extended front (EF)
- Extended spread front (ES)
- Front for copper/aluminum cables (FCCuAI)
- Front for copper cables (FCCu)
- · For flexible busbars (FB)
- Multicable (MC)
- Rear oriented (R)

Plug-in and Withdrawable versions:

Please see the Tmax XT Technical Catalog for more details.

Trip unit options

- Thermal Magnetic Adjustable (TMA)
- Ekip Dip (LS/I, LSI, LIG, LSIG)
- Ekip Touch (LSI, LSIG)
- Ekip Touch Measuring (LSI, LSIG)
- Ekip Hi-Touch (LSI, LSIG)
- Ekip M Dip (I)
- Ekip M Touch (LRIU)
- Motor Circuit Protector (MCP)
- Thermal Magnetic Generator Protection (TMG)
- Ekip G Dip (LS/I)
- Ekip G Touch (LSIG)
- Ekip G Hi-Touch (LSIG)
- · Molded Case Switch (MCS)

Accessories

- · Terminal Options
- Auxiliary Contacts
- · Operating Mechanisms (Direct Handles, Extended Handles, Flange Handles, etc.)
- · Remote Control (Shunt Trip, Undervoltage Release, Motor Operator, etc.)
- · Safety and Protection (Terminal Covers, Phase Separators, Padlocks, Keylocks, IP Protection, etc.)
- Interlocks
- · Residual Current Devices

Customer Service

888-862-3290 abbinsidesalessupport@us.abb.com Monday - Friday, 7am - 5:30pm CST **Tech Support**

Included with the breaker

The breaker comes with breaker mounting hardware, terminal hardware, phase barriers, an insulation backplate, and lateral conduit for accessory wires.

Temperature rating

Tmax XT circuit breakers can be used in ambient air temperatures varying between -25°C and +70°C, and can be stored at temperatures between -40°C and +70°C. Please consult the temperature performance derating tables for temperature values outside of +40°C. The reference temperature for the trip units is +40°C. Note that the lug and wire insulation ratings are +75°C, so care should be exercised when operating near this temperature in order not to exceed these ratings.

100% rated

A Fixed XT5 (400A) breaker is suitable for continuous operation at 100% of rating up to 400A. For XT5 V-X 90°C wire needed, the wire size shall be based on the ampacity of 75°C rated wire.

Fixed XT5 (600A) N-S-H-L breaker versions are suitable for continuous operation at 100% of rating up to 600A with 90°C wire. The wire size shall be based on the ampacity of 75°C rated wire.

Current limiting

The XT5H, XT5L, and XT5V breakers have undergone tests per the UL489 Standard and are classified as UL current limiting circuit breakers. They have specific characteristics for limiting peak current and specific let-through energy. This pertains to only TMA and Ekip trip units up to 600A.

Single phase application

XT5 three pole circuit breakers, equipped with thermal-magnetic or Ekip Touch trip units, can be used in single phase applications. For this purpose, they are marked as follows according to UL standard: Suitable for single phase application up to 600VAC.

Reverse feed capabilities

Power can be supplied from the bottom terminals of the XT5 breaker up to 500V without a backplate on the bottom terminals. Above 500V, an accessory is needed on the bottom terminals.

Related links

Installation Instructions

Drawings

- XT5 Fixed 3-4p breaker (2D)
- XT5 Fixed 3p breaker (3D)
- XT5 Fixed 4p breaker (3D)
- Product complies with listed standards and directives as of the date of this publication

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