


# Construction characteristics

		XT1				
Size <sup>(G2.1)</sup>	[A]	160				
Poles	[No.]	3, 4				
Rated service voltage, $U_e$ <sup>(G2.4)</sup>	(AC) 50-60Hz	690				
	(DC)	500				
Rated insulation voltage, $U_i$ <sup>(G2.5)</sup>	[V]	800				
Rated impulse withstand voltage, $U_{imp}$ <sup>(G2.6)</sup>	[kV]	8				
Versions		Fixed, Plug-in <sup>(2)</sup>				
<b>Breaking capacities according to IEC 60947-2</b>		<b>B</b>	<b>C</b>	<b>N</b>	<b>S</b>	<b>H</b>
<b>Rated ultimate short-circuit breaking capacity, <math>I_{cu}</math><sup>(G2.7)</sup></b>						
I <sub>cu</sub> @ 220-230-240V 50-60Hz (AC)	[kA]	25	40	65	85	100
I <sub>cu</sub> @ 380V 50-60Hz (AC)	[kA]	18	25	36	50	70
I <sub>cu</sub> @ 415V 50-60Hz (AC)	[kA]	18	25	36	50	70
I <sub>cu</sub> @ 440V 50-60Hz (AC)	[kA]	15	25	36	50	65
I <sub>cu</sub> @ 500V 50-60Hz (AC)	[kA]	8	18	30	36	50
I <sub>cu</sub> @ 525V 50-60Hz (AC)	[kA]	6	8	22	35	35
I <sub>cu</sub> @ 690V 50-60Hz (AC)	[kA]	3	4	6	8	10
I <sub>cu</sub> @ 250V (DC) 2 poles in series	[kA]	18	25	36	50	70
I <sub>cu</sub> @ 500V (DC) 2 poles in series	[kA]	-	-	-	-	-
I <sub>cu</sub> @ 500V (DC) 3 poles in series <sup>(3)</sup>	[kA]	18	25	36	50	70
<b>Rated service short-circuit breaking capacity, <math>I_{cs}</math><sup>(G2.8)</sup></b>						
I <sub>cs</sub> @ 220-230-240V 50-60Hz (AC)	[kA]	100%	100%	75% (50)	75%	75%
I <sub>cs</sub> @ 380V 50-60Hz (AC)	[kA]	100%	100%	100%	100%	75%
I <sub>cs</sub> @ 415V 50-60Hz (AC)	[kA]	100%	100%	100%	75%	50% (37.5)
I <sub>cs</sub> @ 440V 50-60Hz (AC)	[kA]	75%	50%	50%	50%	50%
I <sub>cs</sub> @ 500V 50-60Hz (AC)	[kA]	100%	50%	50%	50%	50%
I <sub>cs</sub> @ 525V 50-60Hz (AC)	[kA]	100%	100%	50%	50%	50%
I <sub>cs</sub> @ 690V 50-60Hz (AC)	[kA]	100%	100%	75%	50%	50%
I <sub>cs</sub> @ 250V (DC) 2 poles in series	[kA]	100%	100%	100%	100%	75%
I <sub>cs</sub> @ 500V (DC) 2 poles in series	[kA]	-	-	-	-	-
I <sub>cs</sub> @ 500V (DC) 3 poles in series <sup>(3)</sup>	[kA]	100%	100%	100%	100%	75%
<b>Rated short-circuit making capacity, <math>I_{cm}</math><sup>(G2.10)</sup></b>						
I <sub>cm</sub> @ 220-230-240V 50-60Hz (AC)	[kA]	52.5	84	143	187	220
I <sub>cm</sub> @ 380V 50-60Hz (AC)	[kA]	36	52.5	75.6	105	154
I <sub>cm</sub> @ 415V 50-60Hz (AC)	[kA]	36	52.5	75.6	105	154
I <sub>cm</sub> @ 440V 50-60Hz (AC)	[kA]	30	52.5	75.6	105	143
I <sub>cm</sub> @ 500V 50-60Hz (AC)	[kA]	13.6	36	63	75.6	105
I <sub>cm</sub> @ 525V 50-60Hz (AC)	[kA]	9.18	13.6	46.2	73.5	73.5
I <sub>cm</sub> @ 690V 50-60Hz (AC)	[kA]	4.26	5.88	9.18	13.6	17
<b>Breaking capacities according to NEMA-AB1</b>						
@ 240V 50-60Hz (AC)	[kA]	25	40	65	85	100
@ 480V 50-60Hz (AC)	[kA]	8	18	30	36	65
Utilisation Category (IEC 60947-2)		A				
Reference Standard		IEC 60947-2				
Isolation behaviour		✓				
Mounted on DIN rail		DIN EN 50022				
Mechanical life <sup>(G2.14)</sup>	[No. Operations]	25000				
	[No. Hourly operations]	240				
Electrical life @ 415 V (AC) <sup>(G2.13)</sup>	[No. Operations]	8000				
	[No. Hourly operations]	120				
Dimensions - Fixed						
(Width x Depth x Height)		3 poles	[mm]	76.2 x 70 x 130		
		4 poles	[mm]	101.6 x 70 x 130		
<b>Total opening time</b>						
Circuit-breaker with shunt opening release	[ms]	15				
Circuit-breaker with undervoltage release	[ms]	15				
<b>Trip units for power distribution</b>						
TMD/TMA		■				
TMD		■				
Ekip LS/I						
Ekip I						
Ekip LSI						
Ekip LSIG						
Ekip E						
<b>Trip units for motor protection</b>						
MF/MA						
Ekip M-I						
Ekip M-LIU						
Ekip M-LRIU						
<b>Trip units for generator protection</b>						
TMG						
Ekip G-LS/I						
<b>Trip units for oversized Neutral Protection</b>						
Ekip N-LS/I						
<b>Interchangeable protection trip units</b>						
Weight Fixed		3/4 poles	[kg]	1.1 / 1.4		
Plug in (EF terminals)		3/4 poles	[kg]	2.21 / 2.82		
Withdrawable (EF terminals)		3/4 poles	[kg]			

<sup>(1)</sup> 90kA@690V only for XT1 160. Available shortly, please ask ABB SACE

<sup>(2)</sup> XT1 plug-in In max=125A

<sup>(3)</sup> XT1 500V DC 4 poles in series

<sup>(4)</sup> XT4 750V DC please ask ABB SACE for availability

■ Complete circuit-breaker  
▲ Loose trip unit

