


# Power breakers

## XT 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	[V]	690				
	(DC)	[V]	500				
Rated insulation voltage, $U_j$ <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>							
$I_{cu}$ @ 220-230-240V 50-60Hz (AC)		[kA]	25	40	65	85	100
$I_{cu}$ @ 380V 50-60Hz (AC)		[kA]	18	25	36	50	70
$I_{cu}$ @ 415V 50-60Hz (AC)		[kA]	18	25	36	50	70
$I_{cu}$ @ 440V 50-60Hz (AC)		[kA]	15	25	36	50	65
$I_{cu}$ @ 500V 50-60Hz (AC)		[kA]	8	18	30	36	50
$I_{cu}$ @ 525V 50-60Hz (AC)		[kA]	6	8	22	35	35
$I_{cu}$ @ 690V 50-60Hz (AC)		[kA]	3	4	6	8	10
$I_{cu}$ @ 250V (DC) 2 poles in series		[kA]	18	25	36	50	70
$I_{cu}$ @ 500V (DC) 2 poles in series		[kA]	-	-	-	-	-
$I_{cu}$ @ 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>							
$I_{cs}$ @ 220-230-240V 50-60Hz (AC)		[kA]	100%	100%	75% (50)	75%	75%
$I_{cs}$ @ 380V 50-60Hz (AC)		[kA]	100%	100%	100%	100%	75%
$I_{cs}$ @ 415V 50-60Hz (AC)		[kA]	100%	100%	100%	75%	50% (37.5)
$I_{cs}$ @ 440V 50-60Hz (AC)		[kA]	75%	50%	50%	50%	50%
$I_{cs}$ @ 500V 50-60Hz (AC)		[kA]	100%	50%	50%	50%	50%
$I_{cs}$ @ 525V 50-60Hz (AC)		[kA]	100%	100%	50%	50%	50%
$I_{cs}$ @ 690V 50-60Hz (AC)		[kA]	100%	100%	75%	50%	50%
$I_{cs}$ @ 250V (DC) 2 poles in series		[kA]	100%	100%	100%	100%	75%
$I_{cs}$ @ 500V (DC) 2 poles in series		[kA]	-	-	-	-	-
$I_{cs}$ @ 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>							
$I_{cm}$ @ 220-230-240V 50-60Hz (AC)		[kA]	52.5	84	143	187	220
$I_{cm}$ @ 380V 50-60Hz (AC)		[kA]	36	52.5	75.6	105	154
$I_{cm}$ @ 415V 50-60Hz (AC)		[kA]	36	52.5	75.6	105	154
$I_{cm}$ @ 440V 50-60Hz (AC)		[kA]	30	52.5	75.6	105	143
$I_{cm}$ @ 500V 50-60Hz (AC)		[kA]	13.6	36	63	75.6	105
$I_{cm}$ @ 525V 50-60Hz (AC)		[kA]	9.18	13.6	46.2	73.5	73.5
$I_{cm}$ @ 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)	[kg]	2.21 / 2.82				
	Withdrawable (EF terminals)	[kg]					

<sup>(1)</sup> 90kA@690V only for XT4 160. Available shortly, please ask ABB SACE

<sup>(2)</sup> XT1 plug-in  $I_n$  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

XT2						XT3		XT4				
160						250		160 / 250				
3, 4						3, 4		3, 4				
690						690		690				
500						500		500 <sup>(4)</sup>				
1000						800		1000				
8						8		8				
Fixed, Withdrawable, Plug-in						Fixed, Plug-in		Fixed, Withdrawable, Plug-in				
N	S	H	L	V		N	S	N	S	H	L	V
65	85	100	150	200		50	85	65	85	100	150	200
36	50	70	120	150		36	50	36	50	70	120	150
36	50	70	120	150		36	50	36	50	70	120	150
36	50	65	100	150		25	40	36	50	65	100	150
30	36	50	60	70		20	30	30	36	50	60	70
20	25	30	36	50		13	20	20	25	45	50	50
10	12	15	18	20		5	6	10	12	15	20	25 (90 <sup>(1)</sup> )
36	50	70	85	100		36	50	36	50	70	85	100
-	-	-	-	-		-	-	36	50	70	85	100
36	50	70	85	100		36	50	36	50	70	85	100
100%	100%	100%	100%	100%		75%	50%	100%	100%	100%	100%	100%
100%	100%	100%	100%	100%		75%	50% (27)	100%	100%	100%	100%	100%
100%	100%	100%	100%	100%		75%	50% (27)	100%	100%	100%	100%	100%
100%	100%	100%	100%	100%		75%	50%	100%	100%	100%	100%	100%
100%	100%	100%	100%	100%		75%	50%	100%	100%	100%	100%	100%
100%	100%	100%	100%	100%		75%	50%	100%	100%	100%	100%	100%
100%	100%	100%	100%	75%		75%	50%	100%	100%	100%	100%	75% (20)
100%	100%	100%	100%	100%		100%	75%	100%	100%	100%	100%	100%
-	-	-	-	-		-	-	100%	100%	100%	100%	100%
100%	100%	100%	100%	100%		100%	75%	100%	100%	100%	100%	100%
143	187	220	330	440		105	187	143	187	220	330	440
75.6	105	154	264	330		75.6	105	75.6	105	154	264	330
75.6	105	154	264	330		75.6	105	75.6	105	154	264	330
75.6	105	143	220	330		52.5	84	75.6	105	143	220	330
63	75.6	105	132	154		40	63	63	75.6	105	132	154
40	52.5	63	75.6	105		26	40	40	52.5	94.5	105	105
17	24	30	36	40		7.65	13.6	17	24	30	40	52.5
65	85	100	150	200		50	85	65	85	100	150	200
30	36	65	100	150		25	35	30	36	65	100	150
A IEC 60947-2						A IEC 60947-2		A IEC 60947-2				
✓ DIN EN 50022						✓ DIN EN 50022		✓ DIN EN 50022				
25000						25000		25000				
240						240		240				
8000						8000		8000				
120						120		120				
90 x 82.5 x 130						105 x 70 x 150		105 x 82.5 x 160				
120 x 82.5 x 130						140 x 70 x 150		140 x 82.5 x 160				
15						15		15				
15						15		15				
■						■		■				
■						■		■				
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▲						▲		▲				
✓						✓		✓				
1.2 / 1.6						1.7 / 2.1		2.5 / 3.5				
2.54 / 3.27						3.24 / 4.1		4.19 / 5.52				
3.32 / 4.04								5 / 6.76				