

SACE Tmax XT automatic circuit-breakers for direct current (DC) distribution



Size		XT1				
Rated uninterrupted current	[A]	160				
Poles	[No.]	3, 4				
Rated service voltage, Ue	(DC) [V]	500				
Rated insulation voltage, Ui	(DC) [V]	800				
Rated impulse withstand voltage, Uimp	[kV]	8				
Versions		Fixed, Plug-in ⁽²⁾				
Breaking capacities according to IEC 60947-2		B	C	N	S	H
Rated ultimate short-circuit breaking capacity, Icu						
Icu @ 250V (DC) 2-pole in series	[kA]	18	25	36	50	70
Icu @ 500V (DC) 2-pole in series	[kA]	–	–	–	–	–
Icu @ 500V (DC) 3-pole in series ⁽¹⁾	[kA]	18	25	36	50	70
Icu @ 750V (DC) 3-pole in series	[kA]	–	–	–	–	–
Rated service short-circuit breaking capacity, Ics						
Ics @ 250V (DC) 2-pole in series	[kA]	100%	100%	100%	100%	75%
Ics @ 500V (DC) 2-pole in series	[kA]	–	–	–	–	–
Ics @ 500V (DC) 3-pole in series ⁽¹⁾	[kA]	100%	100%	100%	100%	75%
Ics @ 750V (DC) 3-pole in series	[kA]	–	–	–	–	–
Utilization Category (IEC 60947-2)		A				
Reference Standard		IEC 60947-2				
Insulation behaviour		✓				
Mounted on DIN rail		DIN EN 50022				
Mechanical life	[No. Operations]	25,000				
	[No. Hourly operations]	240				
Dimensions						
Fixed	3 poles	[mm]	76.2 x 70 x 130			
(Width x Depth x Height)	4 poles	[mm]	101.6 x 70 x 130			
Trip units for power distribution						
TMD/TMA						
TMD/TMF						
MF/MA						
Trip units with low magnetic (TMG)						
TMG						
Interchangeable trip units						
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]				

(1) XT1: a 4 poles in series connection is required to be used in 500 V DC installations.

(2) XT1 plug-in In max=125A



Fixed, Withdrawable, Plug-in					Fixed, Plug-in		
N	S	H	L	V	N	S	
36	50	70	85	100	36	50	
-	-	-	-	-	-	-	
36	50	70	85	100	36	50	
-	-	-	-	-	-	-	
100%	100%	100%	100%	100%	100%	75%	
-	-	-	-	-	-	-	
100%	100%	100%	100%	100%	100%	75%	
-	-	-	-	-	-	-	
A					A		
IEC 60947-2					IEC 60947-2		
✓					✓		
DIN EN 50022					DIN EN 50022		
25,000					25,000		
240					240		
90 x 82.5 x 130					105 x 70 x 150		
120 x 82.5 x 130					140 x 70 x 150		
■					■		
■					■		
■					■		
✓					■		
1.2 / 1.6					1.7 / 2.1		
2.54 / 3.27					3.24 / 4.1		
3.32 / 4.04							

SACE Tmax XT automatic circuit-breakers for direct current (DC) distribution



Size		XT4					
Rated uninterrupted current	[A]	160 / 250					
Poles	[No.]	3, 4					
Rated service voltage, Ue	(DC) [V]	750					
Rated insulation voltage, Ui	(DC) [V]	1000					
Rated impulse withstand voltage, Uimp	[kV]	8					
Versions	Fixed, Withdrawable, Plug-in						
Breaking capacities according to IEC 60947-2		N	S	H	L	V	X
Rated ultimate short-circuit breaking capacity, Icu							
Icu @ 250V (DC) 2 poles in series	[kA]	36	50	70	85	100	100
Icu @ 500V (DC) 2 poles in series	[kA]	36	50	70	85	100	100
Icu @ 500V (DC) 3 poles in series	[kA]	36	50	70	85	100	100
Icu @ 750V (DC) 3p in series	[kA]	-	-	-	-	50	70
Rated service short-circuit breaking capacity, Ics							
Ics @ 250V (DC) 2 poles in series	[kA]	100%	100%	100%	100%	100%	100%
Ics @ 500V (DC) 2 poles in series	[kA]	100%	100%	100%	100%	100%	100%
Ics @ 500V (DC) 3 poles in series	[kA]	100%	100%	100%	100%	100%	100%
Ics @ 750V (DC) 3 poles in series	[kA]	-	-	-	-	100%	100%
Utilization Category (IEC 60947-2)	A						
Reference Standard	IEC 60947-2						
Insulation behaviour	✓						
Mounted on DIN rail	DIN EN 50022						
Mechanical life	[No. Operations]	25,000					
	[No. Hourly operations]	240					
Dimensions							
Fixed	3 poles	[mm]	105 x 82.5 x 160				
(Width x Depth x Height)	4 poles	[mm]	140 x 82.5 x 160				
Trip units							
TMD/TMA	■						
TMD/TMF							
MF/MA	■						
Trip units with low magnetic (TMG)							
TMG							
Interchangeable trip units	✓						
Weight							
Fixed	3/4 poles	[kg]	2.5 / 3.5				
Plug in (EF terminals)	3/4 poles	[kg]	4.19 / 5.52				
Withdrawable (EF terminals)	3/4 poles	[kg]	5 / 6.76				



Fixed, Withdrawable, Plug-in						Fixed, Withdrawable		
N	S	H	L	V	X	N	S	H
25	35	50	70	85	100	35	50	70
25	35	50	70	85	100	20	35	50
-	-	-	-	-	-	-	-	-
-	-	-	-	85	100	18	24	36
100%	100%	100%	100%	100%	100%	100%	50% (35kA)	50%
100%	100%	100%	100%	100%	100%	100%	50%	50%
-	-	-	-	-	-	-	-	-
-	-	-	-	100%	100%	100%	75%	50%
A						A		
IEC 60947-2						IEC 60947-2		
✓						✓		
-						-		
20,000						20,000		
120						120		
140 x 103 x 205						210 x 103.5 x 268		
186 x 103 x 205						280 x 103.5 x 268		
■						■		
■						■		
✓						✓		
3.25 / 4.15						9.5 / 12		
5.15 / 6.65						-		
5.4 / 6.9						12.1 / 15.1		