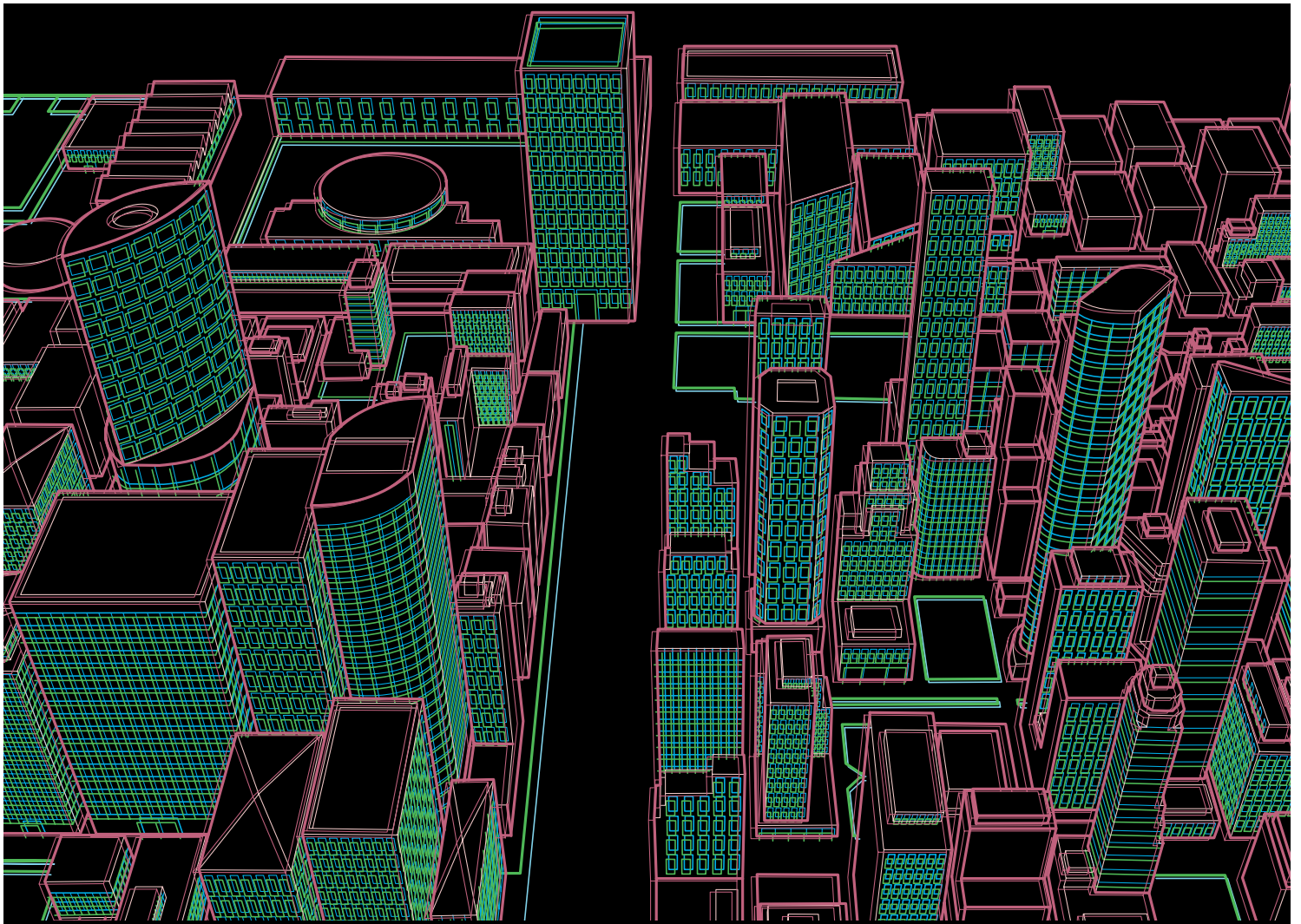




Brochure | April 2012

Moulded-case circuit-breakers overview SACE Tmax

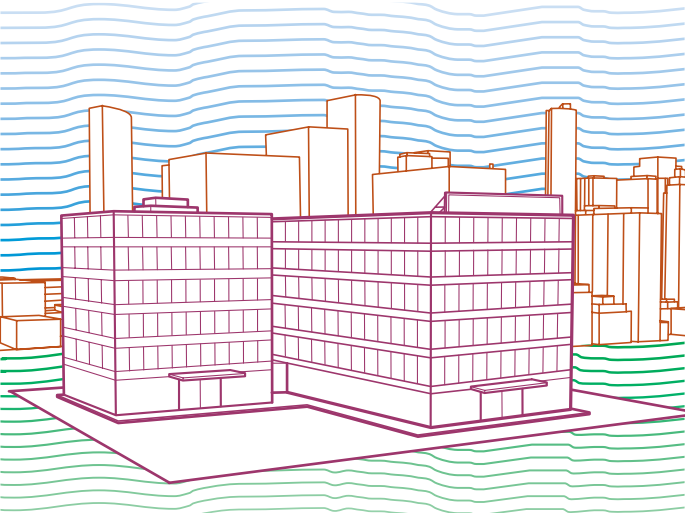
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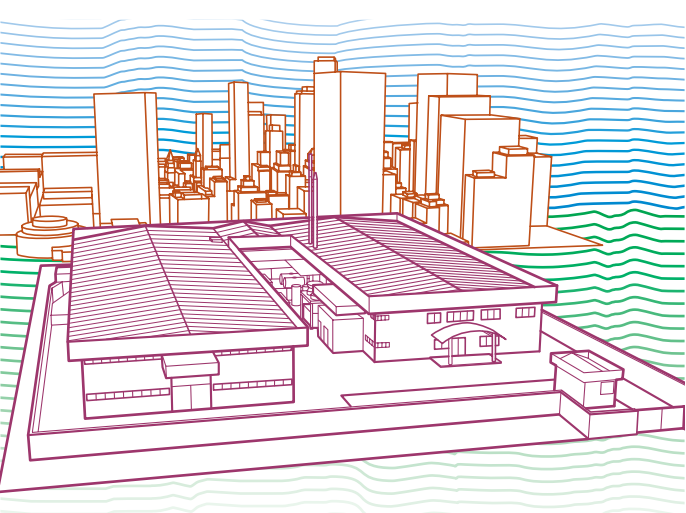
A single family of moulded-case circuit-breakers up to 3200 A

Construction characteristics

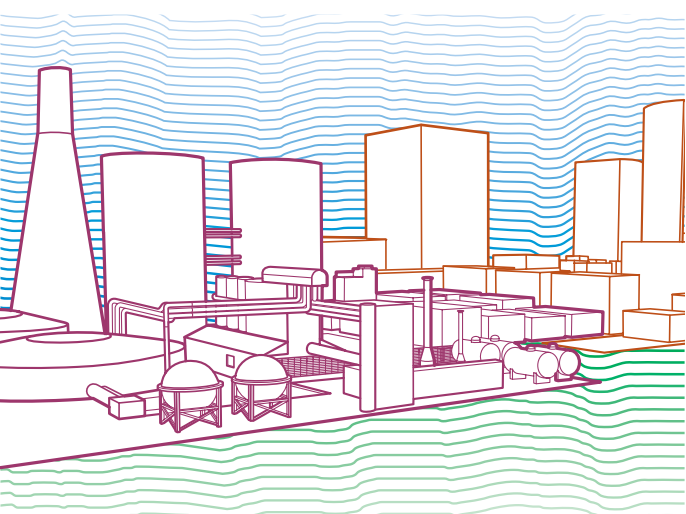
Up to 250 A



Up to 1000 A



Up to 3200 A



SACE Tmax		XT1					XT2					XT3		XT4				
Size	[A]	160					160					250		160/250				
Rated service voltage, Ue	(AC) 50-60Hz [V]	690					690					690		690				
	DC [V]	500					500					500		500 ⁽⁴⁾				
Versions		Fixed, Plug-in ⁽¹⁾					Fixed, Plug-in, Withdrawable					Fixed, Plug-in		Fixed, Plug-in, Withdrawable				
Breaking capacity according to IEC 60947-2		B C N S H					N S H L V					N S		N S L H V				
Rated ultimate short-circuit breaking capacity, Icu																		
Icu @ 220-230-240V 50-60Hz (AC)	[kA]	25	40	65	85	100	65	85	100	150	200	50	85	65	85	100	150	200
Icu @ 415V 50-60Hz (AC)	[kA]	18	25	36	50	70	36	50	70	120	150	36	50	36	50	70	120	150
Icu @ 690V 50-60Hz (AC)	[kA]	3	4	6	8	10	10	12	15	18	20	5	6	10	12	15	20	25/100 ⁽²⁾
(DC) 500V - 2 poles in series	[kA]	-	-	-	-	-	-	-	-	-	-	-	-	36	50	70	85	100
(DC) 500V - 3 poles in series	[kA]	18 ⁽³⁾	25 ⁽³⁾	36 ⁽³⁾	50 ⁽³⁾	70 ⁽³⁾	36	50	70	85	100	36	50	36	50	70	85	100
(DC) 750V - 3 poles in series	[kA]	-	-	-	-	-	-	-	-	-	-	-	-	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾	⁽⁴⁾
Rated service short-circuit breaking capacity, Ics																		
Ics @ 220-230-240V 50-60Hz (AC)	[kA]	100%	100%	75%(50)	75%	75%	100%	100%	100%	100%	100%	75%	50%	100%	100%	100%	100%	100%
Ics @ 415V 50-60Hz (AC)	[kA]	100%	100%	100%	75%	50% (37.5)	100%	100%	100%	100%	100%	75%	50% (27)	100%	100%	100%	100%	100%
Ics @ 690V 50-60Hz (AC)	[kA]	100%	100%	100%	75%	50%	100%	100%	100%	75% (15)	75% (15)	75%	50%	100%	100%	100%	100%	75% (20)
Mechanical life	[N° Operations]	25000					25000					25000		25000				
	[N° Hourly operations]	240					240					240		240				
Electrical life @ 415V (AC)	[N° Operations]	8000					8000					8000		8000				
	[N° Hourly operations]	120					120					120		120				
Dimensions (Width/Depth/Height)	3 poles [mm]	76,2x70x130					90x82,5x130					105x70x150		105x82,5x160				
	4 poles [mm]	101,6x70x130					120x82,5x130					140x70x150		140x82,5x160				

SACE Tmax		T4					T5					T6				
Size	[A]	320					400/630					630/800/1000				
Rated service voltage, Ue	(AC) 50-60Hz [V]	690					690					690				
	(DC) [V]	750					750					750				
Versions		Fixed, Plug-in, Withdrawable					Fixed, Plug-in, Withdrawable					Fixed, Withdrawable ⁽⁵⁾				
Breaking capacity according to IEC 60947-2		N S H L V					N S H L V					N S H L V ⁽⁶⁾				
Rated ultimate short-circuit breaking capacity, Icu																
Icu @ 220-230-240V 50-60Hz (AC)	[kA]	70	85	100	200	200	70	85	100	200	200	70	85	100	200	200
Icu @ 415V 50-60Hz (AC)	[kA]	36	50	70	120	200	36	50	70	120	200	36	50	70	100	150
Icu @ 690V 50-60Hz (AC)	[kA]	20	25	40	70	80	20	25	40	70	80	20	22	25	30	40
(DC) 500V - 2 poles in series	[kA]	25	36	50	70	100	25	36	50	70	100	20	35	50	65	70
(DC) 500V - 3 poles in series	[kA]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(DC) 750V - 3 poles in series	[kA]	16	25	36	50	70	16	25	36	50	70	16	20	36	50	50
Rated service short-circuit breaking capacity, Ics																
Ics @ 220-230-240V 50-60Hz (AC)	[kA]	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	100%
Ics @ 415V 50-60Hz (AC)	[kA]	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	75%
Ics @ 690V 50-60Hz (AC)	[kA]	100%	100%	100%	100%	100%	100%	100%	100% ⁽⁷⁾	100% ⁽⁸⁾	100% ⁽⁸⁾	75%	75%	75%	75%	75%
Mechanical life	[N° Operations]	20000					20000					20000				
	[N° Hourly operations]	240					120					120				
Electrical life @ 415V (AC)	[N° Operations]	6000					7000 (400 A) - 5000 (630 A)					7000 (630A) - 5000 (800A) - 4000 (1000A)				
	[N° Hourly operations]	120					60					60				
Dimensions (Width/Depth/Height)	3 poles [mm]	105 x 103.5 x 205					140 x 103.5 x 205					210 x 103.5 x 268				
	4 poles [mm]	140 x 103.5 x 205					186 x 103.5 x 205					280 x 103.5 x 268				

SACE Tmax		T7					T8	
Size	[A]	800/1000/1250/1600					2000/2500/3200	
Rated service voltage, Ue	(AC) 50-60Hz [V]	690					690	
	(DC) [V]	-					-	
Versions		Fixed, Withdrawable					Fixed	
Breaking capacity according to IEC 60947-2		S H L V ⁽⁹⁾ X ⁽¹⁰⁾					L V	
Rated ultimate short-circuit breaking capacity, Icu								
Icu @ 220-230-240V 50-60Hz (AC)	[kA]	85	100	200	200	170	85	130
Icu @ 415V 50-60Hz (AC)	[kA]	50	70	120	150	170	85	130
Icu @ 690V 50-60Hz (AC)	[kA]	30	42	50	60	75	50	80
(DC) 500V - 2 poles in series	[kA]	-	-	-	-	-	-	-
(DC) 500V - 3 poles in series	[kA]	-	-	-	-	-	-	-
(DC) 750V - 3 poles in series	[kA]	-	-	-	-	-	-	-
Rated service short-circuit breaking capacity, Ics								
Ics @ 220-230-240V 50-60Hz (AC)	[kA]	100%	100%	100%	100%	100%	100%	75%
Ics @ 415V 50-60Hz (AC)	[kA]	100%	100%	100%	100%	100%	100%	75%
Ics @ 690V 50-60Hz (AC)	[kA]	100%	75%	75%	75%	100%	100%	75%
Mechanical life	[N° Operations]	10000					15000	
	[N° Hourly operations]	60					60	
Electrical life @ 415V (AC)	[N° Operations]	2000 (versioni S, H, L) / 3000 (versioni V)					4500(2000A);4000 (2500A);3000 (3200A)	
	[N° Hourly operations]	60					20	
Dimensions (Width/Depth/Height)	3 poles [mm]	210 x 154 (leva) / 178 (motorizzabile) x 268					427 x 282 x 382	
	4 poles [mm]	280 x 154 (leva) / 178 (motorizzabile) x 268					553 x 282 x 382	

⁽¹⁾ XT1 plug-in In max=125A

⁽²⁾ 25kA@690V available for XT4 250; 100kA@690V available for XT4 160

⁽³⁾ XT1 500V DC 4 poles in series

⁽⁴⁾ XT4 750V DC ask ABB SACE whether available

⁽⁵⁾ Withdrawable not available for T6 1000A

⁽⁶⁾ V version only available for frame 630A/800A

⁽⁷⁾ 75% for T5 630

⁽⁸⁾ 50% for T5 630

⁽⁹⁾ Only for T7 800/1000/1250

⁽¹⁰⁾ Only for T7 800