

Circuit breakers for power distribution

Electrical characteristics

				Tmax T1 1P		Tmax T1	
UL 489 CSA C22.2							
Continuous current rating		[A]		100		100	
Number of poles		[Nr]		1		3,4	
Rated voltage		AC (50-60Hz)	[V]	277		480	
		DC	[V]			500	
Interrupting ratings				B		N	
		AC	240 V	[kA]		50**	
			277 V	[kA]	18*		
			480 V	[kA]		22**	
			600 V	[kA]			
		DC	250 V - 2 poles in series	[kA]		25	
			500 V - 3 poles in series	[kA]		25	
			500 V - 2 poles in series	[kA]			
			600 V - 3 poles in series	[kA]			
Trip units		TMF		■		■	
		TMD/TMA					
		ELT					
		MA					
Versions		MCCB		■		■	
		MCS				■	
		MCP					
				Tmax T1 1P		Tmax T1	
IEC 60947-2							
Rated uninterrupted current, Iu		[A]		160		160	
Number of poles		[Nr]		1		3,4	
Rated service voltage, Ue		AC (50-60Hz)	[V]	240		690	
		DC	[V]	125		500	
Rated ultimate short circuit breaking capacity, Icu				B		B	C N
		AC (50-60 Hz)	220/230 V	[kA]	25	25	40 50
			380/415 V	[kA]		16	25 36
			440 V	[kA]		10	15 22
			500 V	[kA]		8	10 15
			690 V	[kA]		3	4 6
		DC	250V - 2 poles in series	[kA]		16	25 36
			250V - 3 poles in series	[kA]		20	30 40
			500V - 2 poles in series	[kA]			
			500V - 3 poles in series	[kA]		16	25 36
			750V - 3 poles in series	[kA]			
Trip units		TMF		■			
		TMD/TMA				■	
		ELT					
		MF					
		MA					
UL 489 CSA C22.2 and IEC 60947-2							
Dimensions		H	[in/mm]	5.12/130		5.12/130	
		W 1p or 3p	[in/mm]	1/25.4		3/76	
		W 4p	[in/mm]			4/102	
		D	[in/mm]	2.76/70		2.76/70	
Mechanical life			[No.operations]	25000		25000	
			[No. Hourly operations]	240		240	
Electrical life @ 415 V AC			[No.operations]	8000		8000	
			[No. Hourly operations]	120		120	

* In15A = 10kA @ 277 V AC

** In15A = 35 kA @ 240 V AC, 14 kA @ 480 V AC

*** Please ask ABB for 600A availability

TMF = Thermomagnetic trip unit with fixed thermal and magnetic threshold

TMD = Thermomagnetic trip unit with adjustable thermal threshold and fixed magnetic threshold

TMA = Thermomagnetic trip unit with adjustable thermal and magnetic threshold

MF = Magnetic fixed trip unit

MA = Magnetic adjustable trip unit

ELT = Electronic trip unit

Tmax T2				Tmax T3		Tmax T4					Tmax T5				
100				225		250					400 - 600***				
3,4				3,4		3,4					3,4				
480				480		600					600				
				500		600					600				
S	H			N	S	N	S	H	L	V	N	S	H	L	V
65	100			50	65	65	100	150	200	200	65	100	150	200	200
35	65			25	35	25	35	65	100	150	25	35	65	100	150
						18	25	35	65	85	18	25	35	65	85
				25	35										
				25	35										
						25	35	50	65	100	25	35	50	65	100
						16	25	35	50	65	16	25	35	50	65
■				■		■									
						■					■				
■						■									
■				■							■				
■				■		■					■				
■				■		■					■				
■				■		■					■				
Tmax T2				Tmax T3		Tmax T4					Tmax T5				
160				250		250 - 320					400 - 630				
3,4				3,4		3,4					3,4				
690				690		690					690				
500				500		750					750				
N	S	H	L	N	S	N	S	H	L	V	N	S	H	L	V
65	85	100	120	50	85	70	85	100	200	300	70	85	100	200	300
36	50	70	85	36	50	36	50	70	120	200	36	50	70	120	200
30	45	55	75	25	40	30	40	65	100	180	30	40	65	100	180
25	30	36	50	20	30	25	30	50	85	150	25	30	50	85	150
6	7	8	10	5	8	20	25	40	70	80	20	25	40	70	80
36	50	70	85	36	50	36	50	70	120	200	36	50	70	120	200
40	55	85	100	40	55										
						25	36	50	70	100	25	36	50	70	100
						16	25	36	50	70	16	25	36	50	70
■				■		■					■				
■						■					■				
■															
■				■		■									
5.12/130				5.9/150		8.07/205					8.07/205				
3.54/90				4.13/105		4.13/105					5.51/140				
4.72/120				5.51/140		5.51/140					7.24/184				
2.76/70				2.76/70		4.07/103.5					4.07/103.5				
25000				25000		20000					20000				
240				240		240					120				
8000				8000		8000 (250 A) - 6000 (320 A)					7000 (400 A) - 5000 (630 A)				
120				120		120					60				