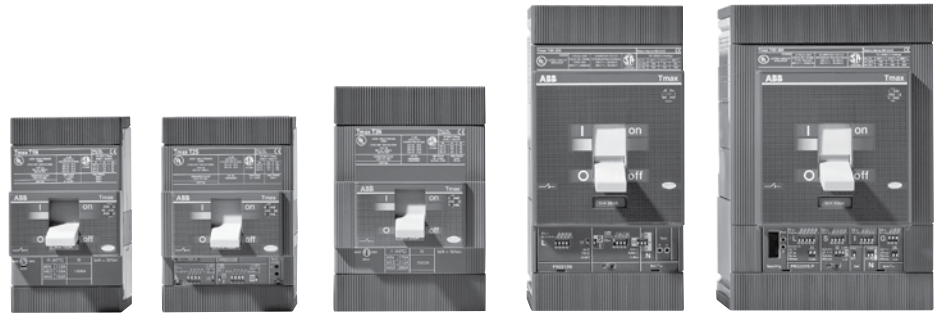


Tmax Molded case circuit breakers



Tmax Molded case circuit breakers



Introduction

ABB is once again demonstrating its commitment to new product development and its superiority in product technology. Never before has the industry seen such high performance, versatility and standardization in a range of molded case circuit breakers.

The ABB Tmax line of circuit breakers, with a range up to 3000A, has several key features that go along with its very small size:

- Double insulation – this construction characteristic allows for the UL Listed field installation of internal accessories without exposure to energized parts.
- Complete range of electrical and mechanical accessories
- Positive operation – breakers from ABB ensure that the toggle indicates the precise position of the moving contacts. This guarantees safe and reliable signaling by the device.
- Installation – Tmax molded case circuit breakers can be installed in panels and switchboards in either the horizontal or vertical planes while being fed from either end without any derating of their performance characteristics.
- Interrupting ratings at 480VAC up to 150kAIC.
- Compact size
- All Tmax molded case circuit breakers are UL Listed and IEC rated for global application and acceptance.
- All versions of the Tmax family are suitable for reverse feed applications.

The ABB Tmax product line has the performance and accessories to satisfy all industry requirements in the 600VAC to 600VDC ranges.

Frame sizes – Nine basic sizes

The ABB Tmax series includes nine basic frame sizes as well as the T1 single pole with the range rated from 15A to 3000A at 480VAC. The various versions carry the following interrupting capacities:

- **B** Basic breaking capacity
- **N** Normal breaking capacity
- **S** Standard breaking capacity
- **H** High breaking capacity
- **L** Extra high breaking capacity
- **V** Very high breaking capacity

Derived versions

- Thermal magnetic
- Electronic
- Molded case switches
- Motor circuit protectors (MCPs)
- Direct current (DC) rated

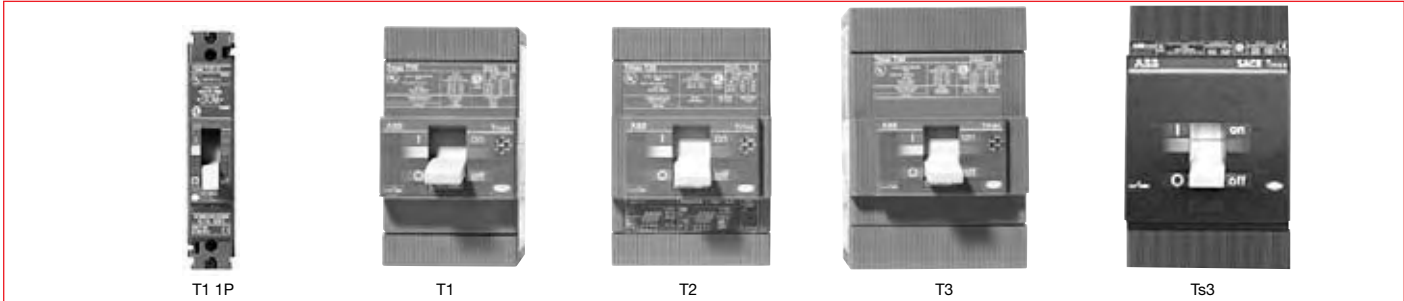
ABB Tmax versions

- Fixed: all models
- Drawout or plug-in: T2, T3, Ts3, T4, T5, T6, T7 & T7M
- UL File #E93565 (breakers and MCPs)
#E116596 (Accessories)
#E116595 (Molded case switches)

Selection Guide

Circuit breakers for power distribution

T1 – Ts3



Type		Tmax T1 1p	Tmax T1	Tmax T2		Tmax T3		Tmax Ts3			Tmax Ts3				
Frame size	[A]	100	100	100		225		150			225				
Number of poles	[Nr]	1	3-4	3-4		3-4		2-3-4			2-3-4				
Rated voltage	AC (50-60Hz)	[V]	347	600Y/347		480		600Y/347		600			480		
	DC	[V]		500				500		600			500		
Interrupting ratings			B	N		S H		N S		N H L			N H L		
	240V AC	[kA rms]		50 ②		65 150		50 65		65 100 150			65 100 150		
	277V AC	[kA rms]	18 ①												
	347V AC	[kA rms]	14 ①												
	480V AC	[kA rms]		22 ②		35 65		25 35		25 50 85 ⑤			25 50 65		
	600Y/347V AC	[kA rms]		10				10 10							
	600V AC	[kA rms]								14 14 25					
	250V DC (2 poles in series)	[kA rms]		25				25 35							
	500V DC (3 poles in series)	[kA rms]		25				25 35							
	500V DC (2 poles in series)	[kA rms]								35 50 65			20 35 50		
	600V DC (3 poles in series)	[kA rms]								20 35 50					
Trip units	TMF		■	■		■		■		■			■		
	TMD/TMA														
	ELT					■									
	MA					■		■		■			■		
	Electronic					■									
Dimensions	H	[in/mm]	5.12/130	5.12/130		5.12/130		5.9/150		6.7/170			6.7/170		
	W 3p	[in/mm]	1/25.4	3/76		3.54/90		4.13/105		4.13/105			4.13/105		
	D	[in/mm]	2.76/70	2.76/70		2.76/70		2.76/70		4.07/103.5			4.07/103.5		
Mechanical life	[No. operations]	25000	25000		25000		25000		25000			25000			

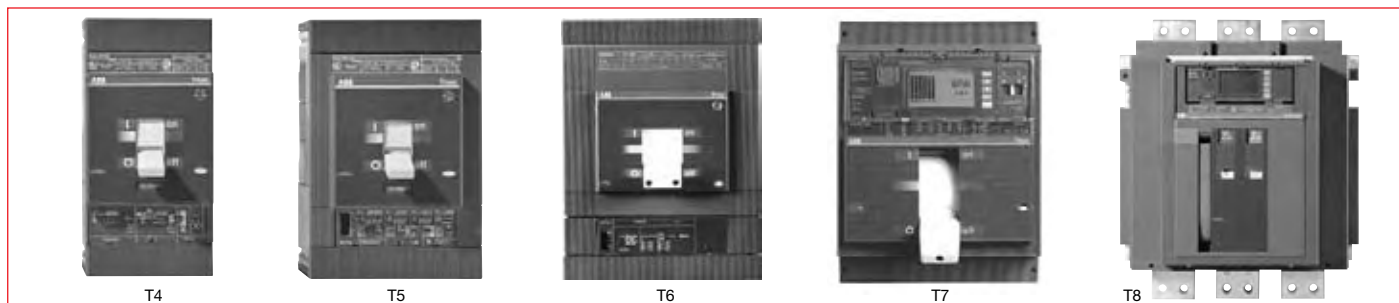
① In15A = 10kA@277VAC 10kA@347VAC
 ② In15A = 35kA@240VAC 14kA@480Y/277 VAC
 ③ T5 600 with electronic trip units only and in three pole version
 ④ 2p breakers: available only in N interrupting rating
 ⑤ In from 15A up to 30A=65kA@480V AC

Selection Guide

Circuit breakers for power distribution

T4 – T8

Tmax
MCCBs



Type		Tmax T4	Tmax T5	Tmax T6	Tmax T7/T7M	Tmax T8	
Frame size	[A]	250	400-600 ③	800	1000-1200	1600, 2000, 2500 & 3000	
Number of poles	[Nr]	2-3-4 ④	2-3-4 ④	3-4	3-4	3-4	
Rated voltage	AC (50-60Hz)	[V]	600	600	600	600	
	DC	[V]	600	600	600	600	
Interrupting ratings		N S H L V	N S H L V	N S H L	S H L	V	
	240V AC	[kA rms]	65 100 150 200 200	65 100 150 200 200	65 100 200 200	65 100 150	125
	277V AC	[kA rms]					
	347V AC	[kA rms]					
	480V AC	[kA rms]	25 35 65 100 150	25 35 65 100 150	35 50 65 100	50 65 100	125
	600Y/347V AC	[kA rms]					
	600V AC	[kA rms]	18 25 35 65 100	18 25 35 65 100	20 25 35 42	25 50 65	100
	250V DC (2 poles in series)	[kA rms]					
500V DC (3 poles in series)	[kA rms]						
500V DC (2 poles in series)	[kA rms]	25 35 50 65 100	25 35 50 65 100	35 35 50 65			
600V DC (3 poles in series)	[kA rms]	16 25 35 50 65	16 25 35 50 65	20 20 35 50			
Trip units	TMF	■					
	TMD/TMA	■	■	■			
	ELT						
	MA						
	Electronic	■	■	■	■		
Dimensions	H	[in/mm]	8.07/205	8.07/205	10.55/268	10.55/268	15 / 382
	W 3p	[in/mm]	4.13/105	5.51/140	8.26/210	8.26/210	16.8 / 427
	D	[in/mm]	4.07/103.5	4.07/103.5	4.07/103.5	6.06/154 (toggle) 7/178 (motor)	11.2 / 282
Mechanical life	[No. operations]	20,000	20,000	20,000	10,000	15,000	

① In15A = 10kA@277 VAC 10kA@347 VAC
 ② In15A = 35kA@240 VAC 14kA@480Y/277 VAC
 ③ T5 600 with electronic trip units only and in three pole version-
 ④ 2p T4N250 and T5N400 available only in N interrupting capacity.
 ⑤ In from 15A up to 30A=65kA@480 VAC
 ⑥ Applies to MCS only.