

# CB TM1 12A F1 P


Order No.: 2800866

The figure shows the CB TM1 0.5A F1 P version



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Thermomagnetic device circuit breaker, 1-pos., tripping characteristic F1 (fast-blow), 1 PDT contact, plug for base element.

Commercial data	
EAN	4 046356 690256 
Note	Made-to-order
sales group	J712
Pack	1 Pcs.
Customs tariff	85362010
Gross weight in pieces	0.042 KG
Net weight per piece	0.042 KG
Catalog page information	Page 261 (C-6-2013)

### Product notes

WEEE/RoHS-compliant since: 06/22/2011



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Technical data	
<b>General</b>	
Installation instructions	When mounted in rows, the nominal device current can be limited to just 80% or must be oversized accordingly.
Inflammability class according to UL 94	V0
Mounting type	On base element
Color	gray
Number of positions	1
Insulating material group	II

Pollution degree	2
Type	Male
<b>Electrical data</b>	
Fuse type	fast blow
Rated surge voltage	2.5 kV (Increased insulation in actuation area)
Rated voltage	240 V AC (U <sub>e</sub> according to IEC 60934)
	277 V AC (UL 1077)
	277 V AC (UL 508 - with plug-in base)
	50 V DC (IEC 60934)
	50 V DC (UL 1077)
	50 V DC (UL 508 - with plug-in base)
Rated current I <sub>n</sub>	12 A (IEC 60934)
	12 A AC (inductive load according to UL 1077)
	12 A DC (low-induction load according to UL 1077)
	12 A DC (low-induction load according to UL 508 - with plug-in base)
Rated insulation voltage U <sub>i</sub>	277 V AC (UL 1077)
	250 V AC (IEC 60934)
Insulation resistance R <sub>iso</sub>	> 100 MΩ (500 V DC)
Auxiliary circuit	277 V AC / 0.5 A (Low-induction)
	277 V AC / 1 A (Low-induction, maximum of 2000 cycles)
	50 V DC / 1 A (Low-induction)
Minimum auxiliary contact operating voltage	10 V
Maximum auxiliary contact operating voltage	240 V
	240 V
Minimum auxiliary contact operating current	10 mA
Maximum auxiliary contact operating current	1 A
Type of actuation	S type
Tripping method	TM (thermomagnetic)
Tripping level	Trip-free mechanism (positive)
Required backup fuse	48 A
Rated short-circuit switching capacity I <sub>cn</sub>	300 A (240 V AC)
	600 A (50 V DC)

Dielectric strength	3000 V AC (Actuation area)
	1500 V AC (Main to auxiliary circuit)
	1500 V AC (Open main circuit)
	1000 V AC (Open auxiliary circuit)
Voltage drop	0.13 V (at 1 x I <sub>n</sub> )
Cycles, max.	6000 (at 1 x I <sub>n</sub> )
Contact type	1 PDT

#### Dimensions

Height	45 mm
Width	12.3 mm
Depth	52 mm
Complete module height	90 mm
Complete module width	12.3 mm
Complete module depth	77.3 mm

#### Ambient conditions

Ambient temperature (operation)	-30 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Degree of protection	IP30 (Actuation area)

#### Standards and Regulations

Standards/specifications	EN 60934
	UL 1077
	UL 508
	CSA 22.2 No. 235-041

#### Certificates / Approvals



Certification

cULus Recognized, VDE Zeichengenehmigung, GL

Certifications applied for:

Certification Ex:

**Accessories**

Item	Designation	Description
<b>Bridges</b>		
2801014	CB PT BRIDGE	Bridge plug for bridging contacts 1 to 2 for CB base elements
2801616	CB RC BRIDGE	Bridge plug for bridging contacts 11 to 14 for CB base elements
3030336	FBS 2-6	Plug-in bridge, Number of positions: 2, Color: red
3030242	FBS 3-6	Plug-in bridge, Number of positions: 3, Color: red
3030255	FBS 4-6	Plug-in bridge, Number of positions: 4, Color: red
3030349	FBS 5-6	Plug-in bridge, Number of positions: 5, Color: red
3030271	FBS 10-6	Plug-in bridge, Number of positions: 10, Color: red
3030365	FBS 20-6	Plug-in bridge, Number of positions: 20, Color: red
3032224	FBS 50-6	Plug-in bridge, Number of positions: 50, Color: red

<b>Marking</b>		
0825018	ZBF 12 CUS	Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm
0809735	ZBF 12:UNBEDRUCKT	Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

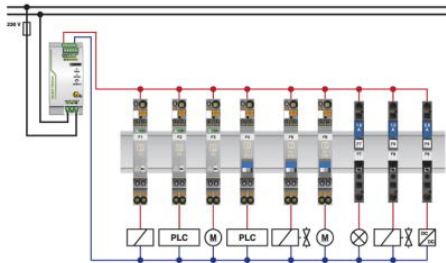
<b>Tools</b>		
1212124	CUTFOX-FBS	<b>Cutting tool</b> , for separating individual jumper bars from FBS ... plug-in bridges and EB ... insertion bridges

**Additional products**

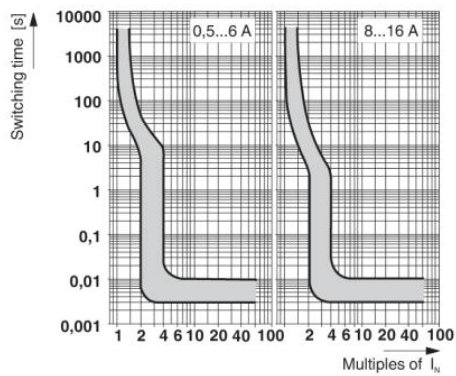
Item	Designation	Description
<b>Base element</b>		
2801305	CB 1/10-1/10 UT-BE	Base element with screw connection technology for CB... device circuit breakers
2800929	CB 1/6-2/4 PT-BE	Base element with push-in connection technology for CB ... device circuit breakers

## Drawings

### Application drawing

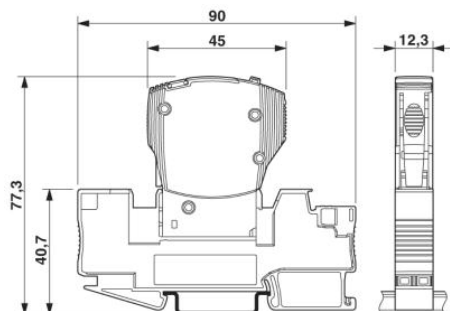


### Diagram



Trigger characteristic in the DC range

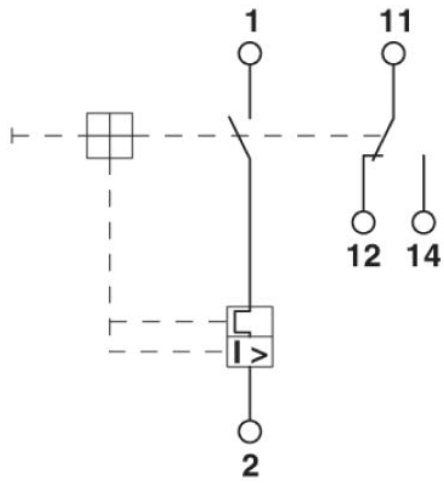
### Dimensioned drawing



The figure shows the complete module consisting of a base element and connector

Circuit diagram

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