

# Thermomagnetic device circuit breaker - CB TM1 12A SFB P - 2800844

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Thermomagnetic device circuit breaker, 1-pos., tripping characteristic SFB, 1 PDT contact, plug for base element.

The figure shows the CB TM1 0.5A SFB P version

## Why buy this product

- Compact design with precise nominal current levels
- Modular expansion possible thanks to the uniform, plug-in housing concept
- Sophisticated remote signaling concept enables monitoring from any location
- Maximum overcurrent protection across long cable paths via SFB trigger characteristic
- Supply/remote signaling can be bridged with CLIPLINE complete accessories



## Key commercial data

Packing unit	0
Minimum order quantity	1
GTIN	 4 046356 689953
Custom tariff number	85363010
Country of origin	GERMANY

## Technical data

### General

Installation instructions	When mounted in rows, the nominal device current can be limited to just 80% or must be overdimensioned accordingly.
Height	45 mm
Width	12.3 mm
Depth	52 mm
Höhe Kompletmodul	90 mm
Breite Kompletmodul	12.3 mm
Tiefe Kompletmodul	77.3 mm
Ambient temperature (operation)	-30 °C ... 60 °C

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## Technical data

### General

Ambient temperature (storage/transport)	-40 °C ... 80 °C
Inflammability class according to UL 94	V0
Degree of protection	IP30 (Actuation area)
Mounting type	On base element
Color	gray
Number of positions	1
Insulating material group	II
Pollution degree	2
Design	Male

### Technical data

Fuse type	SFB
Rated surge voltage	2.5 kV (Increased insulation in actuation area)
Rated voltage	240 V AC (U <sub>e</sub> according to IEC 60934)
Rated voltage	277 V AC (UL 1077)
Rated voltage	277 V AC (UL 508 - with plug-in base)
Rated voltage	50 V DC (IEC 60934)
Rated voltage	50 V DC (UL 1077)
Rated voltage	50 V DC (UL 508 - with plug-in base)
Rated current I <sub>n</sub>	12 A (IEC 60934)
Rated current I <sub>n</sub>	12 A AC (inductive load according to UL 1077)
Rated current I <sub>n</sub>	12 A DC (low-induction load according to UL 1077)
Rated current I <sub>n</sub>	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)
Rated insulation voltage U <sub>i</sub>	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)
Auxiliary circuit	277 V AC / 1 A (Low-induction, maximum of 2000 cycles)
Auxiliary circuit	50 V DC / 1 A (Low-induction)
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)
Rated short-circuit switching capacity I <sub>cn</sub>	600 A (50 V DC)
Dielectric strength	3000 V AC (Actuation area)
Dielectric strength	1500 V AC (Main to auxiliary circuit)
Dielectric strength	1500 V AC (Open main circuit)
Dielectric strength	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> )

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## Technical data

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Contact type	1 PDT
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### Standards

Standard - Electrical safety	EN 60934
Standard - Electrical safety	UL 1077
Standard - Electrical safety	UL 508
Standard - Electrical safety	CSA 22.2 No. 235-041

## Classifications

### ETIM

ETIM 3.0	EC000899
ETIM 4.0	EC000899
ETIM 5.0	EC000899

### UNSPSC

UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121411
UNSPSC 6.01	30211812
UNSPSC 7.0901	39121411

### eCl@ss

eCl@ss 4.0	27141116
eCl@ss 4.1	27141116
eCl@ss 5.0	27141116
eCl@ss 5.1	27141116
eCl@ss 6.0	27141116
eCl@ss 7.0	27141116

## Approvals

### Approvals

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#### Approvals

VDE Zeichengenehmigung / UL Recognized / cUL Recognized / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted


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## Approvals


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### Approval details

VDE Zeichengenehmigung 

UL Recognized 

cUL Recognized 

cULus Recognized 

## Accessories

### Accessories

#### Bridges

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Number of positions: 2, Color: red

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, Number of positions: 3, Color: red

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## Accessories

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, Number of positions: 4, Color: red

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Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Number of positions: 5, Color: red

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Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Number of positions: 10, Color: red

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Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Number of positions: 20, Color: red

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Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Number of positions: 50, Color: red

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## Marking

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## Accessories

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



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

Zack Marker strip, flat - ZBF 12 CUS - 0825018



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

## Tools

Cable-cutting tool - CUTFOX-FBS - 1212124



Cutting tool, for separating individual jumper bars from FBS ... plug-in bridges and EB ... insertion bridges

Jumper - CB PT BRIDGE - 2801014



Bridge plugs for the CB 1/6-2/4 PT-BE base element

## Additional products

Base element - CB 1/6-2/4 PT-BE - 2800929

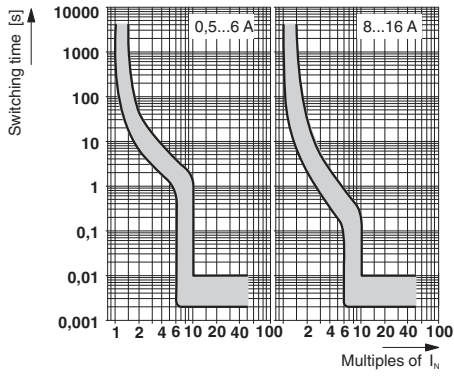


Base element with push-in connection technology for CB ... device circuit breakers

## Drawings

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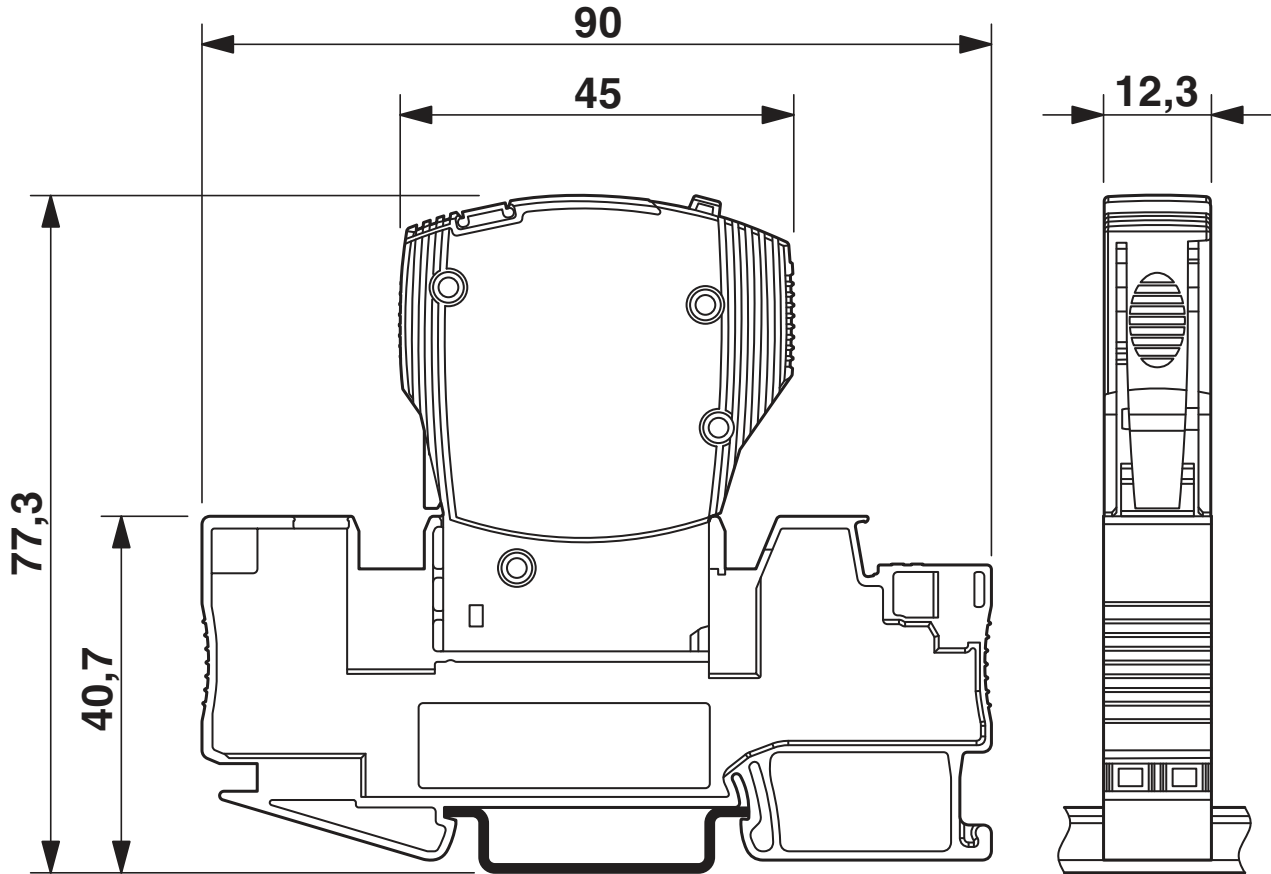
Diagram



Trigger characteristic in the DC range

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Dimensioned drawing



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



