

Thermomagnetic device circuit breaker - CB TM2 0.5A F1 P - 2800890

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Thermomagnetic device circuit breaker, 2-pos., tripping characteristic F1 (fast-blow), 2 PDT contacts, plug for base element.

Product Description

Thermomagnetic device circuit breaker

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 690515
GTIN	4046356690515
Weight per Piece (excluding packing)	71.000 g
Custom tariff number	85362010
Country of origin	Germany

Technical data

Dimensions

Height	45 mm
Width	24.6 mm
Depth	52 mm

Ambient conditions

Ambient temperature (operation)	-30 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Humidity test	240 h, 95% RH, 40°C
Shock (operation)	15g (IEC 60068-2-27, Test Ea)
Degree of protection	IP30 (Actuation area)

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Technical data

General

Installation instructions	When mounted in rows, the nominal device current can be limited to just 80% or must be oversized accordingly.
Flammability rating according to UL 94	V0
Mounting type	on base element
Color	gray
Number of positions	2
Insulating material group	II
Degree of pollution	2

Electrical data

Fuse type	fast blow
Rated surge voltage	2.5 kV (Increased insulation in actuation area)
	80 V DC (IEC 60934)
	80 V DC (UL 1077)
	80 V DC (UL 508 - with plug-in base)
Rated current I_N	0.5 A (IEC 60934)
	inductive load according to UL 1077
	0.5 A DC (low-induction load according to UL 1077)
	0.5 A DC (inductive load according to UL 508 - with plug-in base)
	0.5 A DC (low-induction load according to UL 508 - with plug-in base)
Rated insulation voltage U_i	277 V AC (UL 1077)
	250 V AC (IEC 60934)
Power dissipation	1.25 W (in nominal operation per channel)
Insulation resistance R_{iso}	> 100 M Ω (500 V DC)
Type of actuation	S type
Tripping method	TM (thermomagnetic)
Tripping level	Trip-free mechanism (positive)
	600 A (80 V DC)
Required backup fuse	≥ 15 A ($I > I_{cn}$)
Short-circuit switching capacity I_k	1000 A AC (277 V AC)
	1000 A DC (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)
	1500 V AC (Position to position)
Voltage drop	2.5 V (at $1 \times I_n$)
Switching cycles, max.	6000 (240 V AC/ $1 \times I_n$)

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Technical data

Electrical data

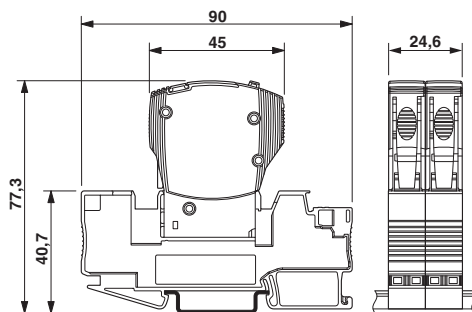
	3000 (80 V DC/1 x I _n)
Contact type	2 PDT
Auxiliary circuit	277 V AC / 0.5 A (Low-induction)
	277 V AC / 1 A (Low-induction, maximum of 2000 cycles)
	50 V DC / 1 A (Low-induction)
Minimum auxiliary contact operating voltage	10 V
Maximum auxiliary contact operating voltage	240 V
	240 V
Minimum auxiliary contact operating current	10 mA
Maximum auxiliary contact operating current	1 A
Vibration resistance, frequency	57 Hz ... 500 Hz
Vibration resistance, amplitude	± 0.38 mm (10 ... 57 Hz)
Vibration resistance, acceleration	49 m/s ²
Vibration resistance, test duration	120 min. (Frequency cycles/axis)

Standards and Regulations

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

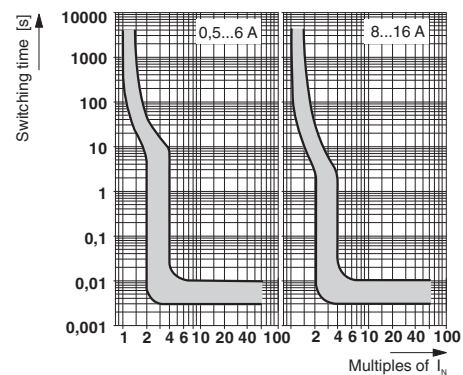
Drawings

Dimensional drawing



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

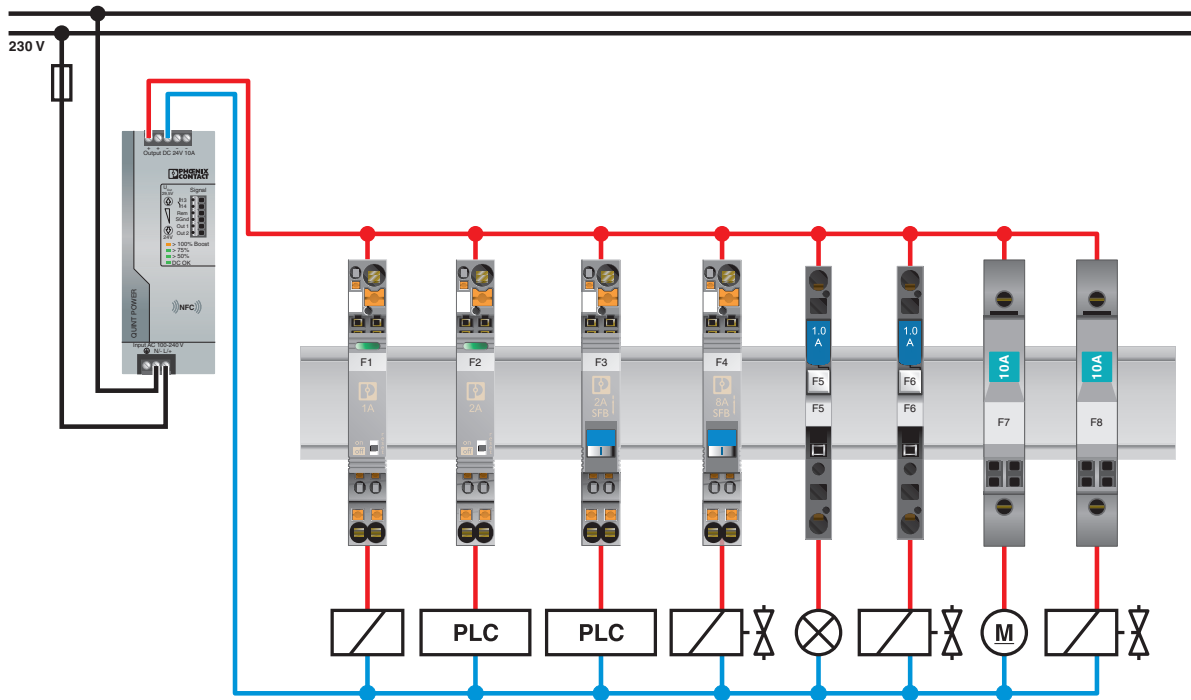
Diagram



Trigger characteristic in the DC range

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Application drawing



The figure shows the single-position versions

Classifications

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
eCl@ss 8.0	27141116
eCl@ss 9.0	27141116

ETIM

ETIM 3.0	EC000899
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Classifications

ETIM

ETIM 4.0	EC000899
ETIM 5.0	EC000899
ETIM 6.0	EC000899

UNSPSC

UNSPSC 6.01	30211812
UNSPSC 7.0901	39121411
UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121410

Approvals


Approvals

Approvals

VDE Zeichengenehmigung / UL Recognized / cUL Recognized / GL / EAC / CSA / KC / cULus Recognized

Ex Approvals

Approval details

VDE Zeichengenehmigung		http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx	40034683
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140459
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140459
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GL		http://exchange.dnv.com/tari/	61419-13 HH
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Approvals

EAC			RU C-DE.A*30.B01561
CSA		http://www.csagroup.org/services-industries/product-listing/	2786957
KC		http://eng.kcc.go.kr/user/ehpMain.do	SW05012-15006
cULus Recognized		http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm	

Accessories

Accessories

Bridge

Jumper - CB PT BRIDGE - 2801014



Bridge plug for bridging contacts 1 to 2 for CB base elements

Jumper - CB RC BRIDGE - 2801616



Bridge plug for bridging contacts 11 to 14 for CB base elements

Cutting tools

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Accessories

Front cutter - CUTFOX-FBS - 1212124



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

Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: red

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, pitch: 6.2 mm, width: 16.9 mm, number of positions: 3, color: red

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, pitch: 6.2 mm, width: 23.1 mm, number of positions: 4, color: red

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, pitch: 6.2 mm, width: 29.3 mm, number of positions: 5, color: red

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Accessories

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, pitch: 6.2 mm, width: 60.3 mm, number of positions: 10, color: red

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, pitch: 6.2 mm, width: 122.3 mm, number of positions: 20, color: red

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, pitch: 6.2 mm, width: 308.3 mm, number of positions: 50, color: red

Labeled terminal marker

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 size: 5.15 x 12.15 mm

Terminal marking

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



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 12 mm, lettering field size: 5.15 x 12.15 mm

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Accessories

Necessary add-on products

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



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

Base element - CB 1/10-1/10 UT-BE - 2801305



Base element with screw connection technology for CB... device circuit breakers
