

Thermomagnetic device circuit breaker - CB TM1 12A M1 P - 2800855

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Thermomagnetic device circuit breaker, 1-pos., tripping characteristic M1 (medium-blow), 1 PDT contact, plug for base element.

The figure shows the CB TM1 0.5A M1 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
- ✓ Protect 240/277 V AC power supply systems with the M1 characteristic curve (based on the C characteristic)
- ✓ Supply/remote signaling can be bridged with CLIPLINE complete accessories



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 690065
GTIN	4046356690065
Weight per Piece (excluding packing)	40.700 g
Custom tariff number	85362010
Country of origin	Indonesia
Note	Made to Order (non-returnable)

Technical data

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

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Technical data

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)	30g (According to IEC 60068-2-27, Test Ea)
Degree of protection	IP30 (Actuation area)

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	1
Insulating material group	II
Degree of pollution	2
Design	Male

Electrical data

Fuse type	normal blow
Rated surge voltage	2.5 kV (Increased insulation in actuation area)
Rated voltage	240 V AC (U _e 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 _N	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 _i	277 V AC (UL 1077)
	250 V AC (IEC 60934)
Required backup fuse	48 A
Power dissipation	2.88 W (in nominal operation per channel)
Insulation resistance R _{iso}	> 100 MΩ (500 V DC)
Type of actuation	S type
Tripping method	TM (thermomagnetic)
Tripping level	Trip-free mechanism (positive)
Rated short-circuit switching capacity I _{cn}	300 A (240 V AC)
	600 A (50 V DC)
Short-circuit switching capacity I _k	1000 A AC 277 V AC
	1000 A DC 50 V DC

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Technical data

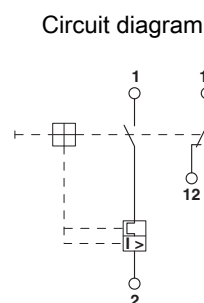
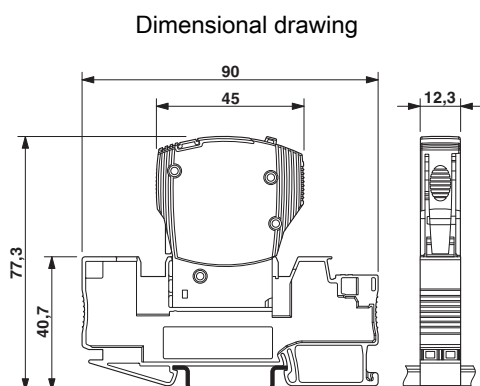
Electrical data

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 _n)
Switching cycles, max.	6000 (at 1 x I _n)
Contact type	1 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	± 0.61 mm (10 ... 57 Hz)
Vibration resistance, acceleration	80 m/s ²
Vibration resistance, test duration	0 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

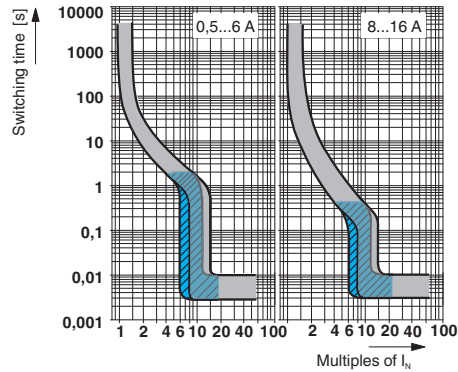
Drawings



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

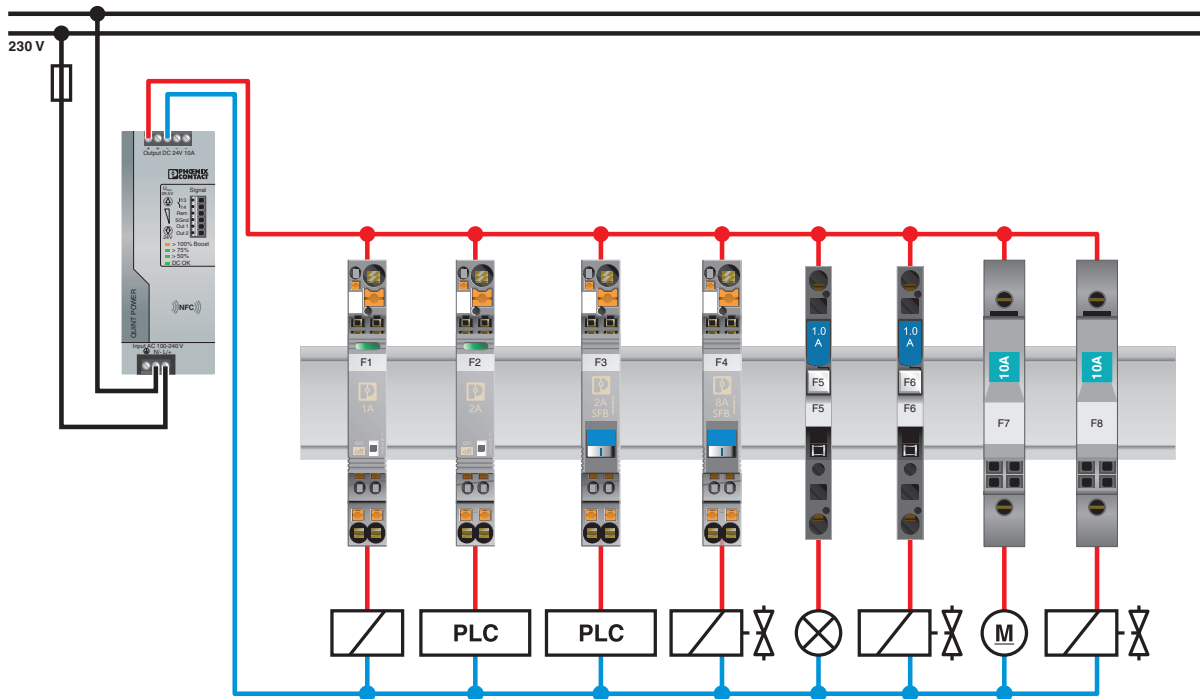
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Diagram



Trigger characteristic
Gray: DC range, blue: AC range

Application drawing



Approvals

Approvals

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Approvals

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


Ex Approvals


Approval details

VDE Zeichengenehmigung		http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx	40034683
UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140459
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 140459
GL		http://exchange.dnv.com/tari/	61419-13 HH
UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
EAC			RU C-DE.A*30.B01561
CSA		http://www.csagroup.org/services/testing-and-certification/certified-product-listing/	2786957

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Approvals

KC		http://eng.kcc.go.kr/user/ehpMain.do	SW05012-15001A
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm
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cULus Listed
