

Thermomagnetic device circuit breaker - CB TM1 4A M1 P - 2800850

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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	
GTIN	4046356690010
Weight per Piece (excluding packing)	42.300 g
Custom tariff number	85362010
Country of origin	Indonesia

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

Ambient conditions

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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	4 A (IEC 60934)
	4 A AC (inductive load according to UL 1077)
	4 A DC (low-induction load according to UL 1077)
	4 A AC (inductive load according to UL 508 - with plug-in base)
	4 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	16 A
Power dissipation	1.44 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

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Technical data

Electrical data

	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)
Voltage drop	0.34 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

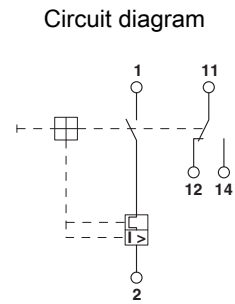
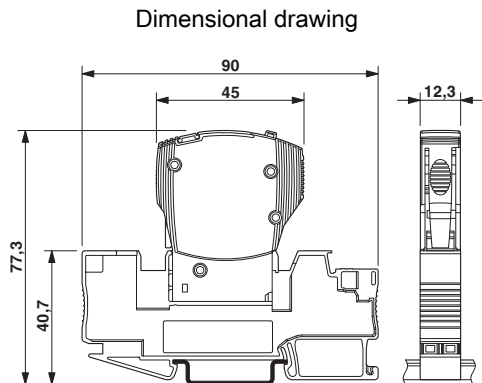
Standards/specifications	EN 60934
	UL 1077 UL/C-UL recognized
	UL 508 UL/C - UL listed
	CSA 22.2 No. 235-041

Environmental Product Compliance

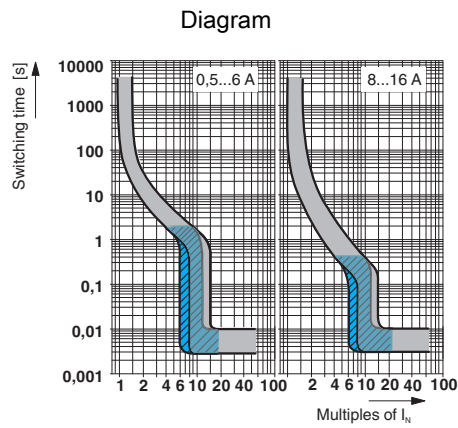
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

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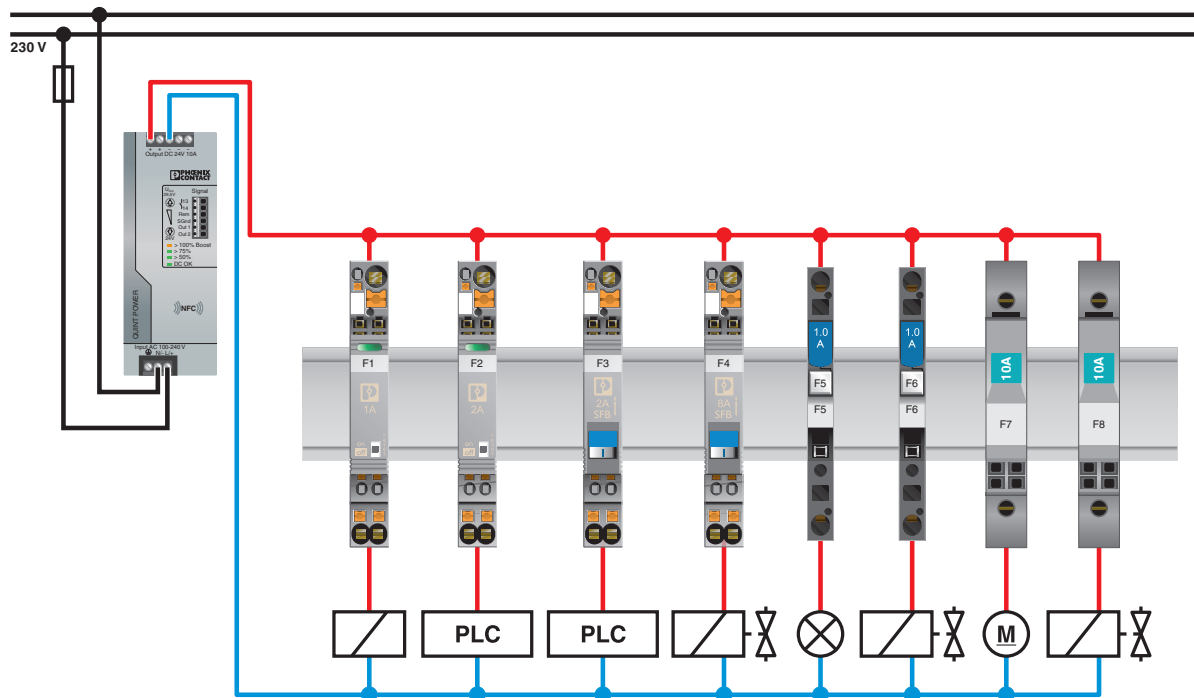
The figure shows the complete module consisting of a base element and connector



Trigger characteristic
Gray: DC range, blue: AC range

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Application drawing



Approvals

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
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Approvals

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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UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
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EAC			RU C- DE.A*30.B01561
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CSA		http://www.csagroup.org/services/testing-and-certification/certified-product-listing/	2786957
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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			
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