

Thermomagnetic device circuit breaker - CB TM1 0.5A M1 P - 2800846

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

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 689977 |
| GTIN | 4046356689977 |
| Weight per Piece (excluding packing) | 42.000 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

| | |
|---------------------------------|------------------|
| Ambient temperature (operation) | -30 °C ... 60 °C |
|---------------------------------|------------------|

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Ambient conditions

| | |
|---|--|
| 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 overdimensioned 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 | 0.5 A (IEC 60934) |
| | 0.5 A AC (inductive load according to UL 1077) |
| | 0.5 A DC (low-induction load according to UL 1077) |
| | 0.5 A AC (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) |
| Required backup fuse | 15 A |
| Power dissipation | 1.25 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

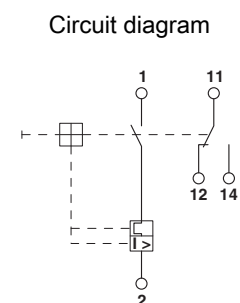
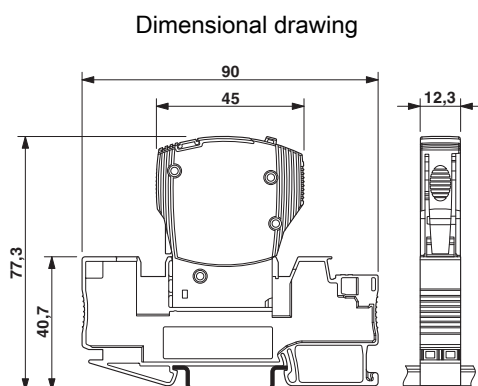
Electrical data

| | |
|---|--|
| 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 | 2.5 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 |

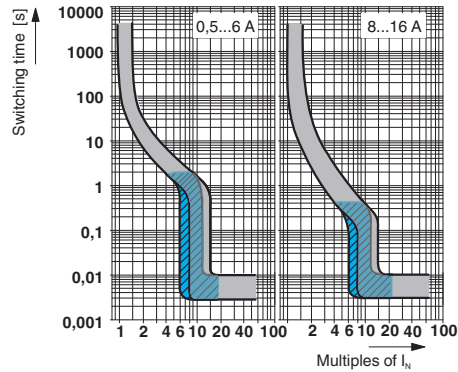
Drawings



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

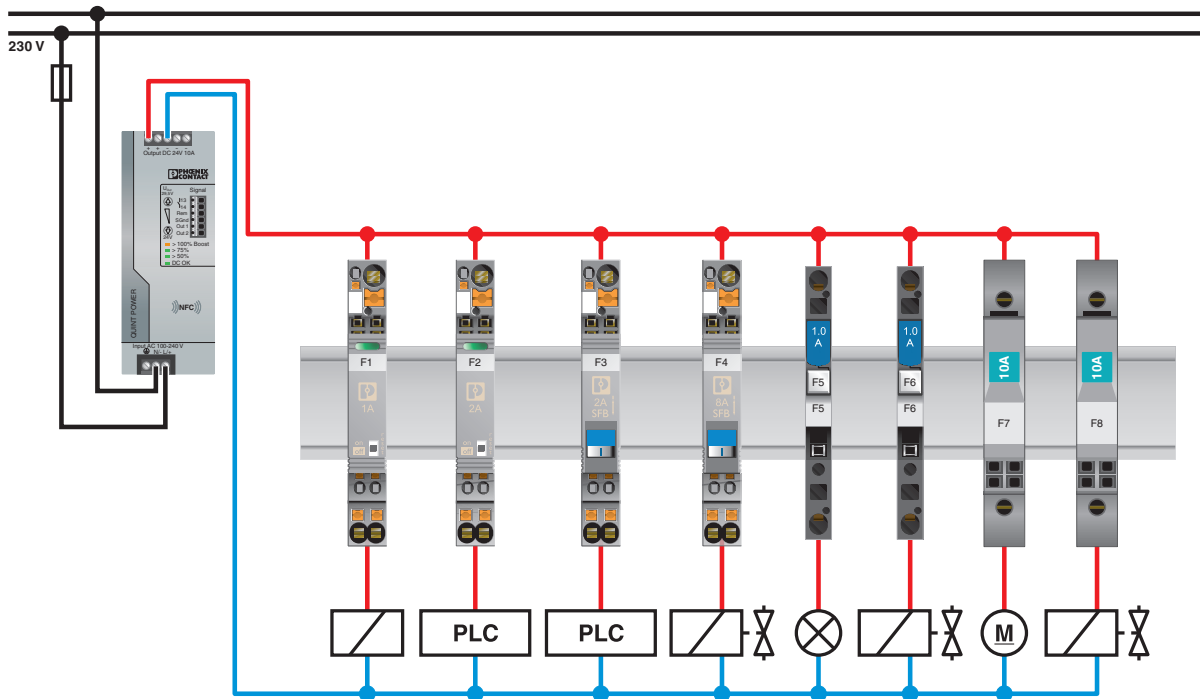
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Diagram



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

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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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