

Thermomagnetic device circuit breaker - CB TM1 16A SFB P - 2800845

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Thermomagnetic device circuit breaker, 1-pos., tripping characteristic SFB, 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
- ✓ 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 | 1 STK |
| GTIN |  4 046356 689960 |
| GTIN | 4046356689960 |

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 |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C |
| Humidity test | 240 h, 95 % RH, 40 °C |
| Shock (operation) | 30g (IEC 60068-2-27, Test Ea) |

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Ambient conditions

| | |
|-----------------------|-----------------------------|
| Vibration (operation) | 8g (IEC 60068-2-6, Test Fc) |
| 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 |
| Type | Male |

Electrical data

| | |
|---|--|
| Fuse type | SFB |
| Rated surge voltage | 2.5 kV (Increased insulation in actuation area) |
| Rated voltage | 50 V DC (IEC 60934) |
| | 50 V DC (UL 1077) |
| | 50 V DC (UL 508 - with plug-in base) |
| Rated current I_N | 16 A (IEC 60934) |
| | 16 A DC (low-induction load according to UL 1077) |
| | 16 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 | 5.12 W (in nominal operation per channel) |
| Device resistance | 8 mΩ |
| 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} | 600 A (50 V DC) |
| Required backup fuse | 64 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) |
| Voltage drop | 0.13 V (at $1 \times I_n$) |
| Switching cycles, max. | 6000 (at $1 \times I_n$) |
| Contact type | 1 PDT |

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| | |
|---|--|
| 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 |

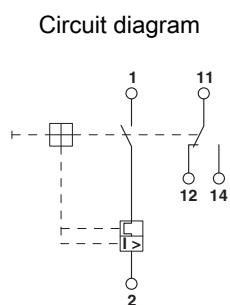
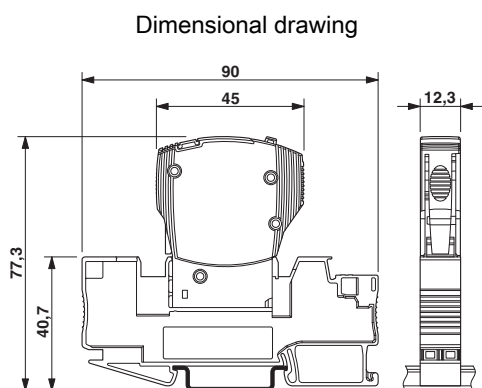
Standards and Regulations

| | |
|--------------------------|----------------------------|
| Standards/specifications | EN 60934 |
| | UL 1077 UL/C-UL recognized |
| | UL 508 UL/C - UL listed |
| | CSA 22.2 No. 235-04 |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

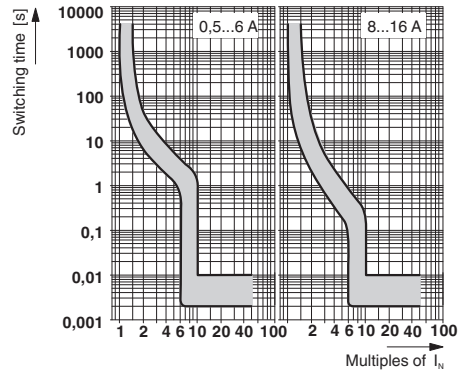
Drawings



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

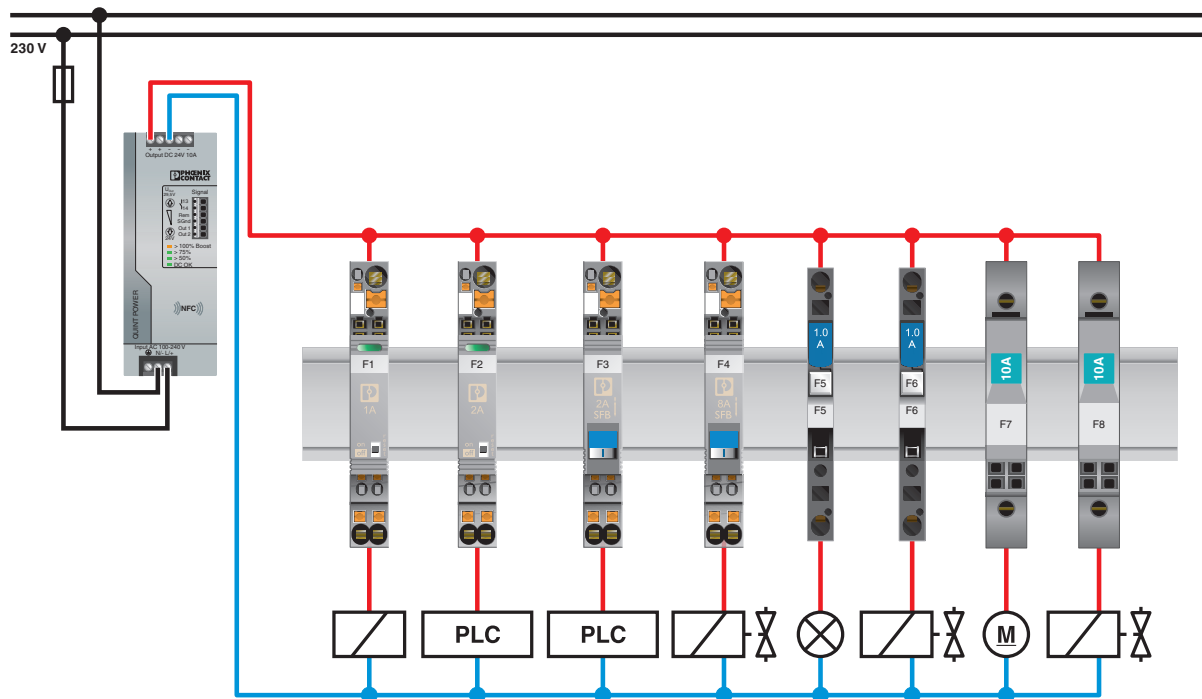
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Diagram



Trigger characteristic in the DC range

Application drawing



Approvals

Approvals

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Approvals

Approvals

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


Ex Approvals

Approval details


| | | | |
|------------------------|--|---|---------------------|
| VDE Zeichengenehmigung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.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-industries/product-listing/ | 2786957 |

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Approvals

| | | |
|-----|---|---------------|
| EAC |  | EAC-Zulassung |
|-----|---|---------------|

| | | | |
|----|---|---|---------------|
| KC |  | http://eng.kcc.go.kr/user/ehpMain.do | SW05012-15002 |
|----|---|---|---------------|

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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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