

Thermomagnetic device circuit breaker - CB TM2 10A F1 P - 2800898

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

The figure shows the CB TM2 0.5A F1 P version

Product Description

Thermomagnetic device circuit breaker

Key Commercial Data

| | |
|--------------------------------------|----------|
| Packing unit | 1 STK |
| Weight per Piece (excluding packing) | 50.000 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) |

General

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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 overdimensioned 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 | 10 A (IEC 60934) |
| | inductive load according to UL 1077 |
| | 10 A DC (low-induction load according to UL 1077) |
| | 10 A DC (inductive load according to UL 508 - with plug-in base) |
| | 10 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 | ≥ 40 A |
| Contact type | 2 PDT |
| Power dissipation | 2 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) |
| 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 | 0.13 V (at $1 \times I_N$) |

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Technical data

Electrical data

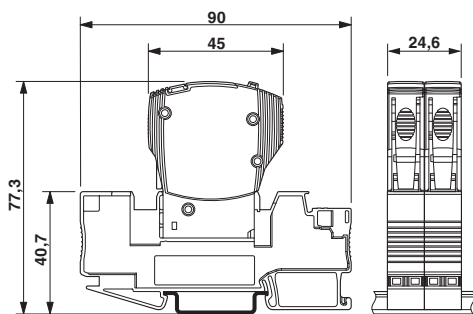
| | |
|---|--|
| Switching cycles, max. | 6000 (240 V AC/1 x I _n) |
| | 3000 (80 V DC/1 x I _n) |
| Contact type | 2 PDT |
| Auxiliary circuit | 277 V AC / 0.5 A (Low-induction) |
| | 277 V AC / 1 A (Low-induction, maximum of 2000 cycles) |
| | 50 V DC / 1 A (Low-induction) |
| Minimum auxiliary contact 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 | 50 m/s ² |
| Vibration resistance, test duration | 0 min. (Frequency cycles/axis) |

Standards and Regulations

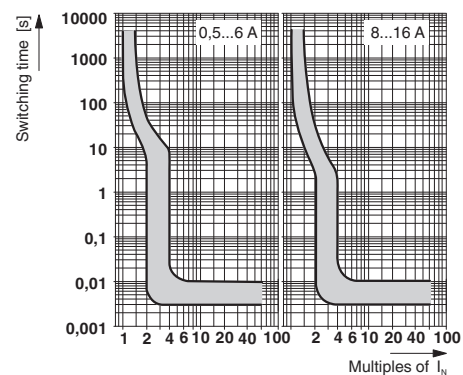
| | |
|--------------------------|----------------------------|
| Standards/specifications | EN 60934 |
| | UL 1077 UL/C-UL recognized |
| | UL 508 UL/C - UL listed |
| | CSA 22.2 No. 235-041 |

Drawings

Dimensional drawing



Diagram

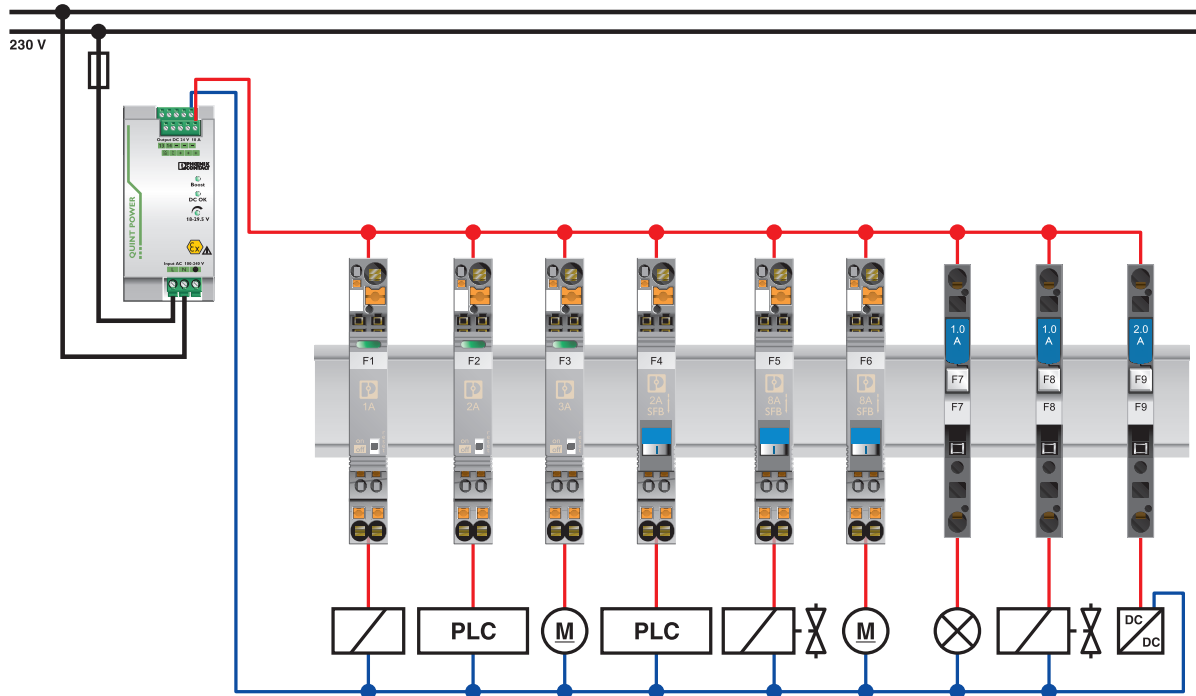


The figure shows the complete module consisting of a base element and connector

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 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211812 |
| UNSPSC 7.0901 | 39121411 |
| UNSPSC 11 | 39121411 |
| UNSPSC 12.01 | 39121411 |
| UNSPSC 13.2 | 39121411 |

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

VDE Zeichengenehmigung  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://www.gl-group.com/newbuilding/approvals/index.html> 61419-13 HH


EAC 7500651.22.01.00243

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Approvals

CSA 2786957

KC <http://rra.go.kr/eng2/index.jsp> SW05012-15006

cULus Recognized  <http://database.ul.com/cgi-bin/XYV/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

Front cutter - CUTFOX-FBS - 1212124



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

Jumper

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Accessories

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Pitch: 6.2 mm, Length: 23 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, Length: 23 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, Length: 23 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, Length: 23 mm, Width: 29.3 mm, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Pitch: 6.2 mm, Length: 23 mm, Width: 60.3 mm, Number of positions: 10, Color: red

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Accessories

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Pitch: 6.2 mm, Length: 23 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, 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: 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: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

Necessary add-on products

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Accessories

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
