

# CB TM1 6A M1 P

Order No.: 2800852

The figure shows the CB TM1 0.5A M1 P version



<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=2800852>

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

## Commercial data

|                          |                     |
|--------------------------|---------------------|
| EAN                      | 4 046356 690034     |
| sales group              | J712                |
| Pack                     | 1 Pcs.              |
| Customs tariff           | 85362010            |
| Gross weight in pieces   | 0.0425 KG           |
| Net weight per piece     | 0.0425 KG           |
| Catalog page information | Page 260 (C-6-2013) |

## Product notes

WEEE/RoHS-compliant since:  
06/22/2011



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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. |
| Inflammability class according to UL 94 | V0                                                                                                                  |
| Mounting type                           | On base element                                                                                                     |
| Color                                   | gray                                                                                                                |
| Number of positions                     | 1                                                                                                                   |

|                                                 |                                                                     |
|-------------------------------------------------|---------------------------------------------------------------------|
| Insulating material group                       | II                                                                  |
| Pollution degree                                | 2                                                                   |
| Type                                            | Male                                                                |
| <b>Electrical data</b>                          |                                                                     |
| Fuse type                                       | normal blow                                                         |
| Rated surge voltage                             | 2.5 kV (Increased insulation in actuation area)                     |
| Rated voltage                                   | 240 V AC (Ue 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 $I_n$                             | 6 A (IEC 60934)                                                     |
|                                                 | 6 A AC (inductive load according to UL 1077)                        |
|                                                 | 6 A DC (low-induction load according to UL 1077)                    |
|                                                 | 6 A AC (inductive load according to UL 508 - with plug-in base)     |
|                                                 | 6 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)                                                |
| Insulation resistance $R_{iso}$                 | > 100 M $\Omega$ (500 V DC)                                         |
| 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                                                                 |
| Type of actuation                               | S type                                                              |
| Tripping method                                 | TM (thermomagnetic)                                                 |
| Tripping level                                  | Trip-free mechanism (positive)                                      |
| Required backup fuse                            | 24 A                                                                |
| Rated short-circuit switching capacity $I_{cn}$ | 300 A (240 V AC)                                                    |
|                                                 | 600 A (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        | 0.29 V (at 1 x I <sub>n</sub> )       |
| Cycles, max.        | 6000 (at 1 x I <sub>n</sub> )         |
| Contact type        | 1 PDT                                 |

#### 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      |
| Degree of protection                    | IP30 (Actuation area) |

#### Standards and Regulations

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

#### Certificates / Approvals



Certification

cULus Recognized, VDE Zeichengenehmigung, GL

Certifications applied for:

Certification Ex:

## Accessories

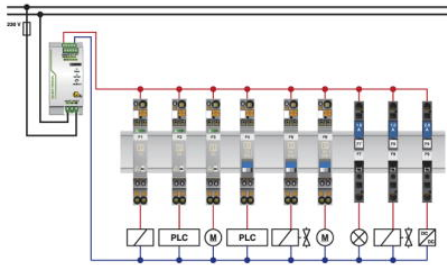
| Item           | Designation       | Description                                                                                                                                                                                                         |
|----------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bridges</b> |                   |                                                                                                                                                                                                                     |
| 2801014        | CB PT BRIDGE      | Bridge plug for bridging contacts 1 to 2 for CB base elements                                                                                                                                                       |
| 2801616        | CB RC BRIDGE      | Bridge plug for bridging contacts 11 to 14 for CB base elements                                                                                                                                                     |
| 3030336        | FBS 2-6           | Plug-in bridge, Number of positions: 2, Color: red                                                                                                                                                                  |
| 3030242        | FBS 3-6           | Plug-in bridge, Number of positions: 3, Color: red                                                                                                                                                                  |
| 3030255        | FBS 4-6           | Plug-in bridge, Number of positions: 4, Color: red                                                                                                                                                                  |
| 3030349        | FBS 5-6           | Plug-in bridge, Number of positions: 5, Color: red                                                                                                                                                                  |
| 3030271        | FBS 10-6          | Plug-in bridge, Number of positions: 10, Color: red                                                                                                                                                                 |
| 3030365        | FBS 20-6          | Plug-in bridge, Number of positions: 20, Color: red                                                                                                                                                                 |
| 3032224        | FBS 50-6          | Plug-in bridge, Number of positions: 50, Color: red                                                                                                                                                                 |
| <b>Marking</b> |                   |                                                                                                                                                                                                                     |
| 0825018        | ZBF 12 CUS        | 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 |
| 0809735        | ZBF 12:UNBEDRUCKT | 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                      |
| <b>Tools</b>   |                   |                                                                                                                                                                                                                     |
| 1212124        | CUTFOX-FBS        | <b>Cutting tool</b> , for separating individual jumper bars from FBS ... plug-in bridges and EB ... insertion bridges                                                                                               |

## Additional products

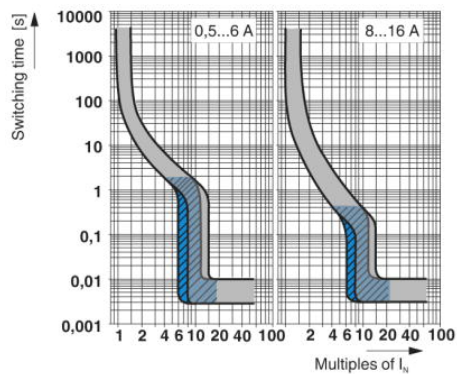
| Item                | Designation        | Description                                                                        |
|---------------------|--------------------|------------------------------------------------------------------------------------|
| <b>Base element</b> |                    |                                                                                    |
| 2801305             | CB 1/10-1/10 UT-BE | Base element with screw connection technology for CB... device circuit breakers    |
| 2800929             | CB 1/6-2/4 PT-BE   | Base element with push-in connection technology for CB ... device circuit breakers |

## Drawings

### Application drawing

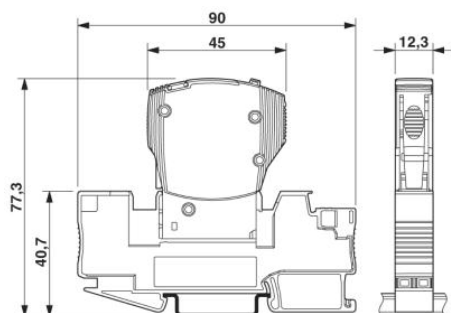


### Diagram



Trigger characteristic  
 Gray: DC range, blue: AC range

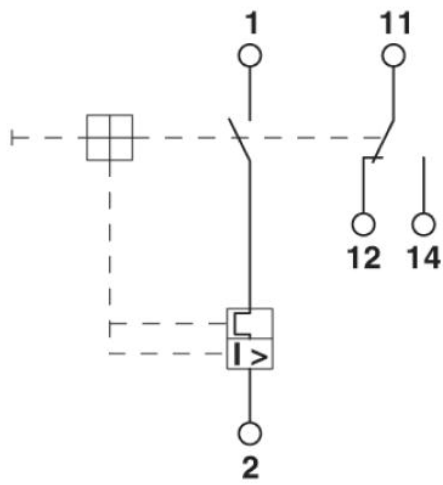
### Dimensioned drawing



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

Circuit diagram

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