

# Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



Thermomagnetic device circuit breaker, 1-pos., tripping characteristic F1 (fast-blow), 1 PDT contact, plug for base element.

The figure shows the CB TM1  
0.5A F1 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
- ✓ Supply/remote signaling can be bridged with CLIPLINE complete accessories



## Key commercial data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 0                                                                                                       |
| Minimum order quantity | 1                                                                                                       |
| GTIN                   | <br>4 046356 690256 |
| Custom tariff number   | 85363010                                                                                                |
| Country of origin      | GERMANY                                                                                                 |

## Technical data

### General

|                                         |                                                                                                                     |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Installation instructions               | When mounted in rows, the nominal device current can be limited to just 80% or must be overdimensioned accordingly. |
| Height                                  | 45 mm                                                                                                               |
| Width                                   | 12.3 mm                                                                                                             |
| Depth                                   | 52 mm                                                                                                               |
| Höhe Komplettnodul                      | 90 mm                                                                                                               |
| Breite Komplettnodul                    | 12.3 mm                                                                                                             |
| Tiefe Komplettnodul                     | 77.3 mm                                                                                                             |
| Ambient temperature (operation)         | -30 °C ... 60 °C                                                                                                    |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C                                                                                                    |

# Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

## Technical data

### General

|                                         |                       |
|-----------------------------------------|-----------------------|
| Inflammability class according to UL 94 | V0                    |
| Degree of protection                    | IP30 (Actuation area) |
| Mounting type                           | On base element       |
| Color                                   | gray                  |
| Number of positions                     | 1                     |
| Insulating material group               | II                    |
| Pollution degree                        | 2                     |
| Design                                  | Male                  |

### Technical data

|                                                 |                                                                      |
|-------------------------------------------------|----------------------------------------------------------------------|
| Fuse type                                       | fast blow                                                            |
| Rated surge voltage                             | 2.5 kV (Increased insulation in actuation area)                      |
| Rated voltage                                   | 240 V AC (Ue according to IEC 60934)                                 |
| Rated voltage                                   | 277 V AC (UL 1077)                                                   |
| Rated voltage                                   | 277 V AC (UL 508 - with plug-in base)                                |
| Rated voltage                                   | 50 V DC (IEC 60934)                                                  |
| Rated voltage                                   | 50 V DC (UL 1077)                                                    |
| Rated voltage                                   | 50 V DC (UL 508 - with plug-in base)                                 |
| Rated current $I_n$                             | 12 A (IEC 60934)                                                     |
| Rated current $I_n$                             | 12 A AC (inductive load according to UL 1077)                        |
| Rated current $I_n$                             | 12 A DC (low-induction load according to UL 1077)                    |
| Rated current $I_n$                             | 12 A DC (low-induction load according to UL 508 - with plug-in base) |
| Rated insulation voltage $U_i$                  | 277 V AC (UL 1077)                                                   |
| Rated insulation voltage $U_i$                  | 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)                                     |
| Auxiliary circuit                               | 277 V AC / 1 A (Low-induction, maximum of 2000 cycles)               |
| Auxiliary circuit                               | 50 V DC / 1 A (Low-induction)                                        |
| Type of actuation                               | S type                                                               |
| Tripping method                                 | TM (thermomagnetic)                                                  |
| Tripping level                                  | Trip-free mechanism (positive)                                       |
| Required backup fuse                            | 48 A                                                                 |
| Rated short-circuit switching capacity $I_{cn}$ | 300 A (240 V AC)                                                     |
| Rated short-circuit switching capacity $I_{cn}$ | 600 A (50 V DC)                                                      |
| Dielectric strength                             | 3000 V AC (Actuation area)                                           |
| Dielectric strength                             | 1500 V AC (Main to auxiliary circuit)                                |
| Dielectric strength                             | 1500 V AC (Open main circuit)                                        |
| Dielectric strength                             | 1000 V AC (Open auxiliary circuit)                                   |
| Voltage drop                                    | 0.13 V (at $1 \times I_n$ )                                          |
| Cycles, max.                                    | 6000 (at $1 \times I_n$ )                                            |
| Contact type                                    | 1 PDT                                                                |

# Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

## Technical data

### Standards

|                              |                      |
|------------------------------|----------------------|
| Standard - Electrical safety | EN 60934             |
| Standard - Electrical safety | UL 1077              |
| Standard - Electrical safety | UL 508               |
| Standard - Electrical safety | CSA 22.2 No. 235-041 |

## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC000899 |
| ETIM 4.0 | EC000899 |
| ETIM 5.0 | EC000899 |

### UNSPSC

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

### 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 |

## Approvals

### Approvals

#### Approvals

VDE Zeichengenehmigung / UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals

#### Approvals submitted

### Approval details

# Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

## Approvals

VDE Zeichengenehmigung 

UL Recognized 

cUL Recognized 

cULus Recognized 

## Accessories

### Accessories

#### Bridges

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Number of positions: 2, Color: red

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, Number of positions: 3, Color: red

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, Number of positions: 4, Color: red

# Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

## Accessories

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Number of positions: 5, Color: red

---

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Number of positions: 10, Color: red

---

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Number of positions: 20, Color: red

---

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Number of positions: 50, Color: red

---

## 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

# Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

## Accessories

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

---

## Tools

Cable-cutting tool - CUTFOX-FBS - 1212124



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

---

Jumper - CB PT BRIDGE - 2801014



Bridge plugs for the CB 1/6-2/4 PT-BE base element

---

## Additional products

Base element - CB 1/6-2/4 PT-BE - 2800929



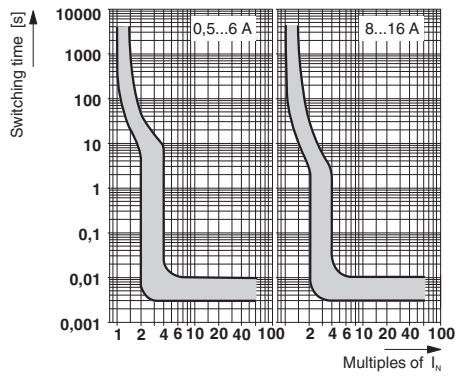
Base element with push-in connection technology for CB ... device circuit breakers

---

## Drawings

## Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

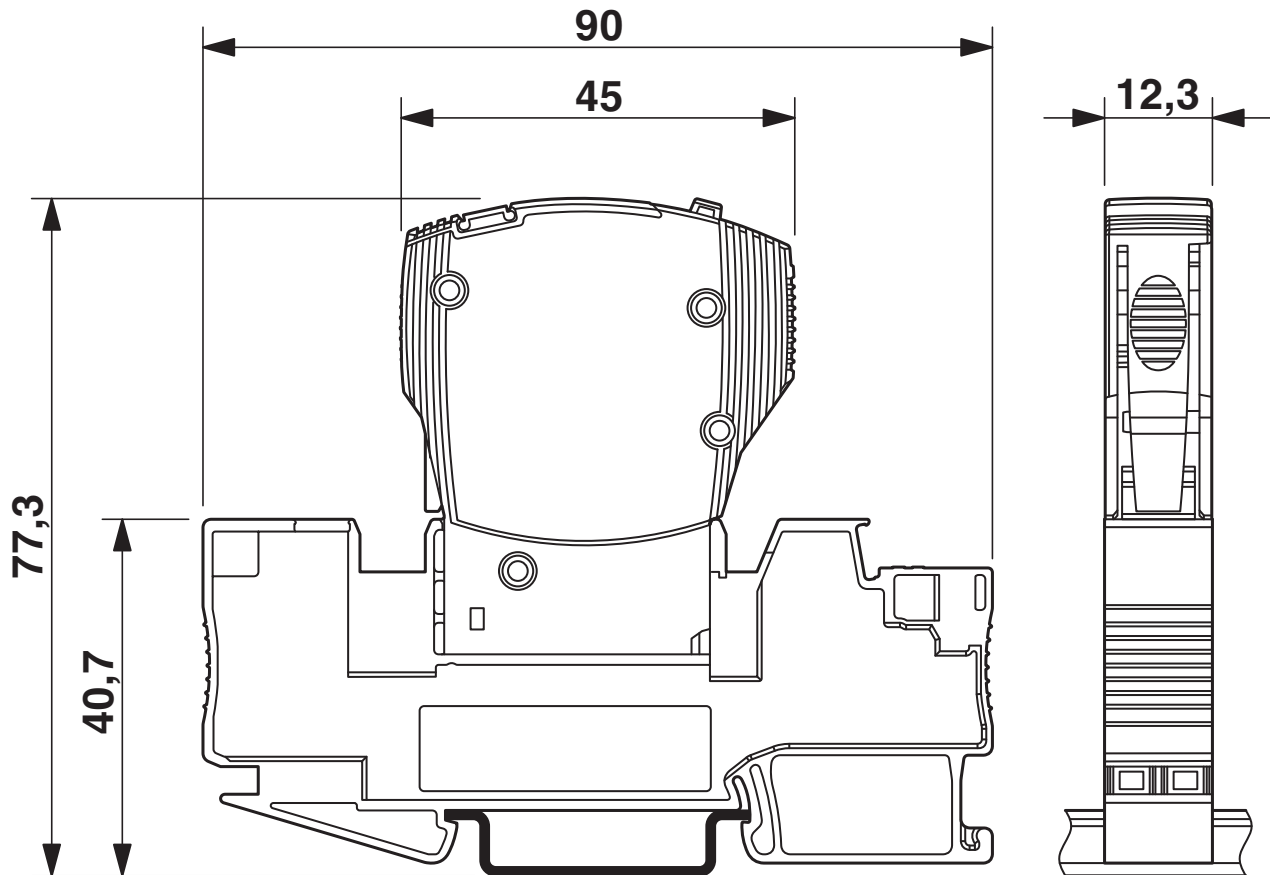
Diagram



Trigger characteristic in the DC range

## Thermomagnetic device circuit breaker - CB TM1 12A F1 P - 2800866

Dimensioned drawing



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



Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)