

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

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 documentation. Our general terms of use for downloads are valid.



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

## Product description

Thermomagnetic device circuit breaker

## Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 2800896             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Product key                          | CLA124              |
| Catalog page                         | Page 393 (C-4-2019) |
| GTIN                                 | 4046356690577       |
| Weight per piece (including packing) | 71.7 g              |
| Weight per piece (excluding packing) | 69.3 g              |
| Customs tariff number                | 85362010            |
| Country of origin                    | ID                  |

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

## Technical data

### Notes

|         |   |
|---------|---|
| General | When mounted in rows, the nominal device current can be limited to just 80% or must be overdimensioned accordingly. |
|---------|---|

### Product properties

|                     |  |
|---------------------|--|
| Type                | Male                                   |
| Product type        | Thermomagnetic device circuit breakers |
| Product family      | CB TM                                  |
| Number of positions | 2                                      |
| No. of channels     | 1                                      |

### Insulation characteristics

|                     |   |
|---------------------|---|
| Degree of pollution | 2 |
|---------------------|---|

### Electrical properties

|           |                  |
|-----------|------------------|
| Fuse type | Automatic device |
|-----------|------------------|

#### General

|   |   |
|---|---|
| Rated voltage                                   | 80 V DC (IEC 60934)   |
|   | 80 V DC (UL 1077)   |
|   | 80 V DC (UL 508 - with plug-in base)                                |
| Rated insulation voltage $U_i$                  | 277 V AC (UL 1077)  |
|   | 250 V AC (IEC 60934)  |
| Rated current $I_N$                             | 6 A (IEC 60934)   |
|   | inductive load according to UL 1077                                 |
|   | 6 A DC (low-induction load according to UL 1077)                    |
|   | 6 A DC (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 surge voltage                             | 2.5 kV (Increased insulation in actuation area)                     |
| 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)                                       |
| Type of actuation                               | S type  |
| Tripping method                                 | TM (thermomagnetic)   |
| Tripping level                                  | Trip-free mechanism (positive)                                      |
| Device resistance                               | 50 m $\Omega$   |
| Required backup fuse                            | $\geq 24$ A ( $I > I_{cn}$ )  |
| Rated short-circuit switching capacity $I_{cn}$ | 600 A (80 V DC)   |
| Short-circuit switching capacity                | 1000 A AC (277 V AC)  |
|   | 1000 A DC (50 V DC)   |
|   | 3000 V AC (Actuation area)  |

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

|                        |  |
|------------------------|--|
| Dielectric strength    | 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)         |
| Switching cycles, max. | 6000 (240 V AC / 1 x I <sub>n</sub> )    |
|                        | 3000 (80 V DC/1 x I <sub>n</sub> )       |
| Fuse                   | F1 (fast blow)                           |
| Power dissipation      | 1.8 W (in nominal operation per channel) |
| Voltage drop           | 0.29 V (at 1 x I <sub>n</sub> )          |

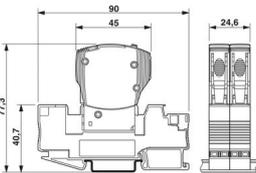
## Auxiliary contact

|   |       |
|---|-------|
| Minimum operating voltage U <sub>min</sub> DC | 10 V  |
| Maximum operating voltage U <sub>max</sub> DC | 240 V |
| Maximum operating voltage U <sub>max</sub> AC | 240 V |
| Minimum operating current I <sub>min</sub>    | 10 mA |
| Max. operating current I <sub>max</sub>       | 1 A   |

## Connection data

|                   |           |
|-------------------|-----------|
| Connection method | pluggable |
| Connection method | pluggable |

## Dimensions

|                     |  |
|---------------------|--|
| Dimensional drawing |  |
| Width               | 24.6 mm  |
| Height              | 45 mm  |
| Depth               | 52 mm  |

## Material specifications

|  |                  |
|--|------------------|
| Color                                  | gray (RAL 7042)  |
|  | black (RAL 9005) |
| Flammability rating according to UL 94 | V-0              |
| Insulating material group              | II               |

## Mechanical properties

### Mechanical data

|                 |    |
|-----------------|----|
| Open side panel | No |
|-----------------|----|

## Environmental and real-life conditions

### Ambient conditions

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

|   |                               |
|---|-------------------------------|
| Degree of protection                    | IP30 (Actuation area)         |
| 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) |
| Vibration (operation)                   | 5g (IEC 60068-2-6, Test Fc)   |

## Approvals

### UL approval

|                |                            |
|----------------|----------------------------|
| Identification | UL Listed UL 508           |
|                | UL/C-UL Recognized UL 1077 |

### CSA

|                |                              |
|----------------|------------------------------|
| Identification | CSA CAN/CSA-C22.2 No. 235-04 |
|----------------|------------------------------|

### Shipbuilding approval

|                |        |
|----------------|--------|
| Identification | DNV GL |
|----------------|--------|

## Standards and regulations

|                          |          |
|--------------------------|----------|
| Standards/specifications | EN 60934 |
|--------------------------|----------|

## Mounting

|                   |                 |
|-------------------|-----------------|
| Mounting type     | on base element |
| Connection method | pluggable       |

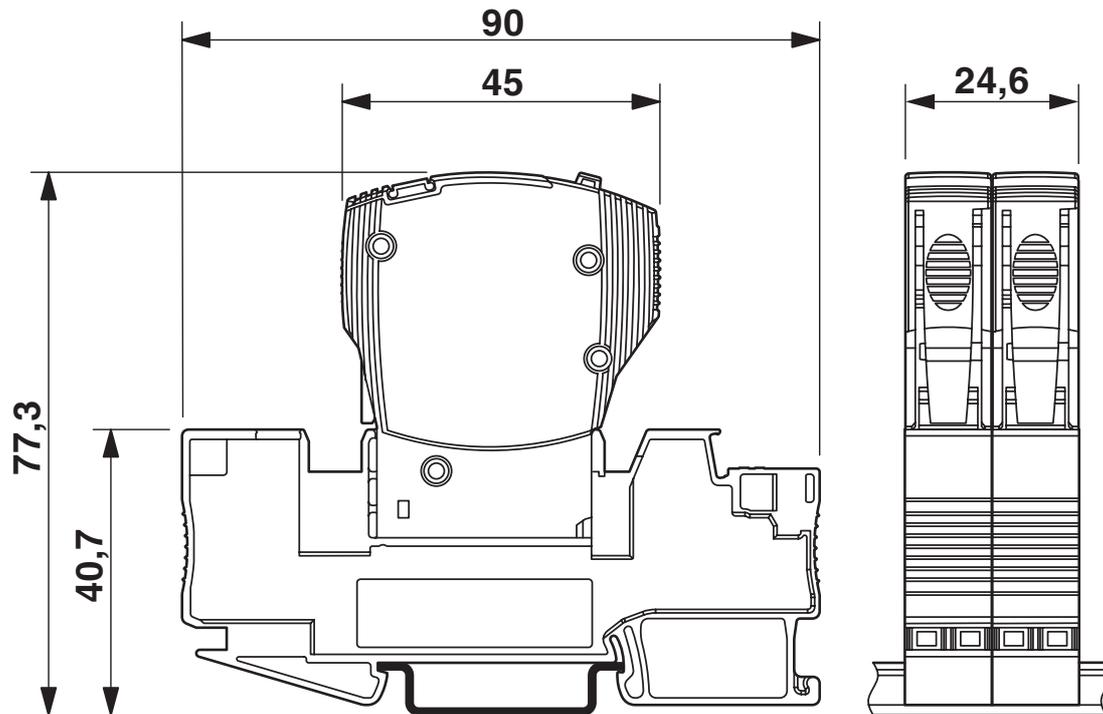
# CB TM2 6A F1 P - Thermomagnetic device circuit breaker

2800896

<https://www.phoenixcontact.com/pc/products/2800896>

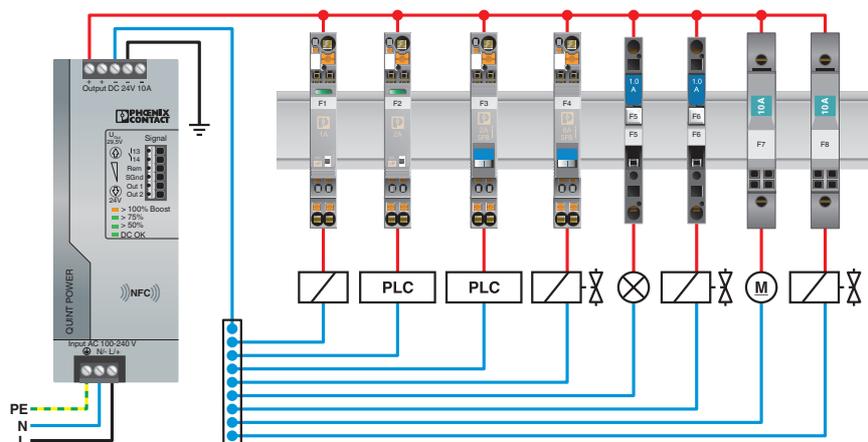
## Drawings

Dimensional drawing



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

Application drawing

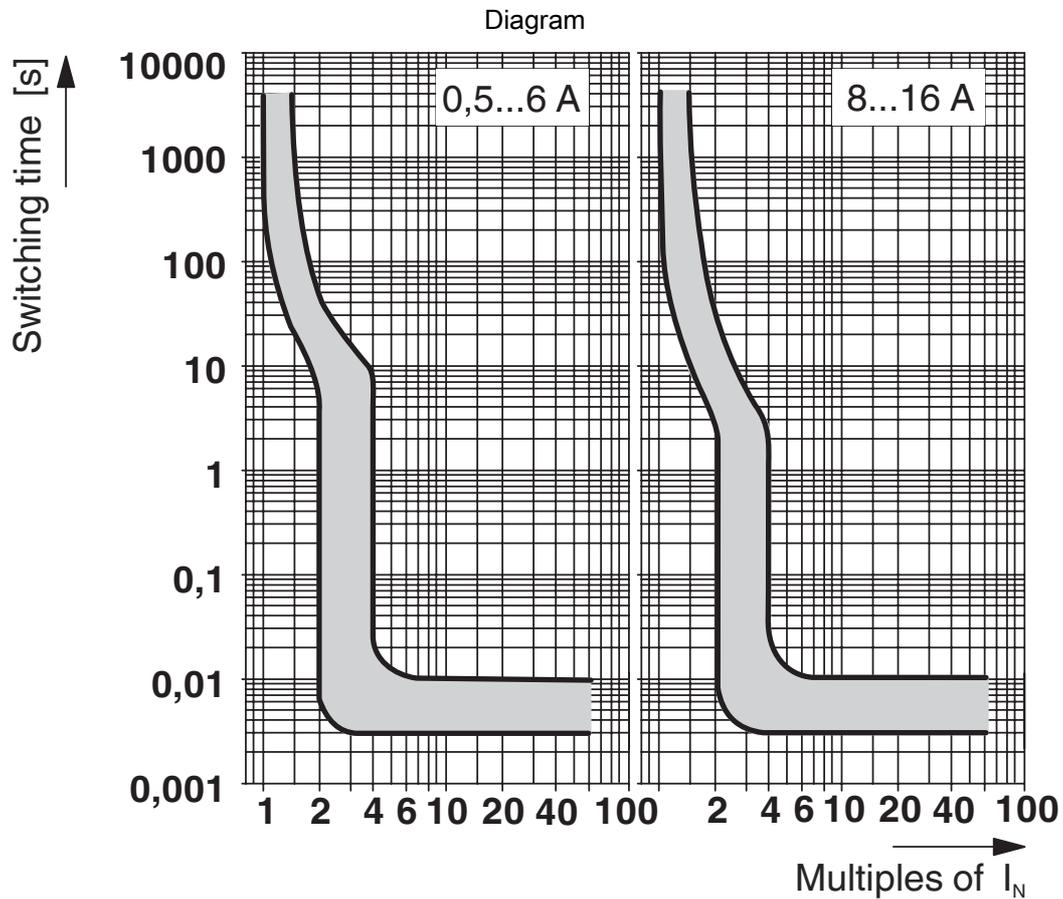


The figure shows the single-position versions

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker

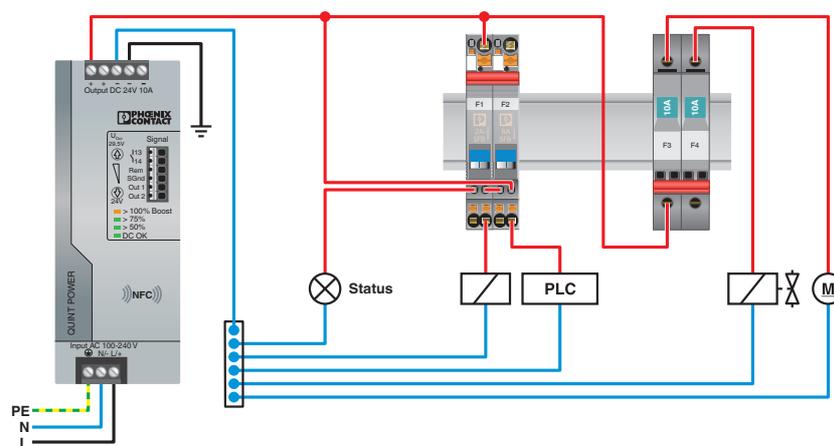
2800896

<https://www.phoenixcontact.com/pc/products/2800896>



Trigger characteristic in the DC range

## Application drawing



# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/2800896>



**cUL Recognized**  
Approval ID: FILE E 140459



**UL Recognized**  
Approval ID: FILE E 140459



**EAC**  
Approval ID: RU C-DE.\*09.B.00169



**DNV GL**  
Approval ID: TAE00003C7



**VDE Zeichengenehmigung**  
Approval ID: 40034683



**CCC**  
Approval ID: 2019010307158887



**CSA**  
Approval ID: 2786957



**KC**  
Approval ID: SW05012-15006

**UAE-RoHS**

Approval ID: 22-09-50938

**cULus Recognized**

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27140401 |
| ECLASS-12.0 | 27140401 |
| ECLASS-13.0 | 27140401 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC003538 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# CB TM2 6A F1 P - Thermomagnetic device circuit breaker



2800896

<https://www.phoenixcontact.com/pc/products/2800896>

## Environmental product compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstraße 8  
D-32825 Blomberg  
+49 (0) 5235-3 00  
[info@phoenixcontact.com](mailto:info@phoenixcontact.com)