

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

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://phoenixcontact.com/download>)




Thermomagnetic device circuit breaker, 2-pos., tripping characteristic SFB, 2 PDT contacts, plug for base element.

## Product Description

Thermomagnetic device circuit breaker



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 690331
GTIN	4046356690331

## 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)	30g (IEC 60068-2-27, Test Ea)
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 overdimensioned accordingly.
Flammability rating according to UL 94	V-0
Mounting type	on base element

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## Technical data

### General

Color	gray
Number of positions	2
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	80 V DC (IEC 60934)
	80 V DC (UL 1077)
	80 V DC (UL 508 - with plug-in base)
Rated current $I_N$	16 A (IEC 60934)
	inductive load according to UL 1077
	16 A DC (low-induction load according to UL 1077)
	16 A DC (low-induction load according to UL 508 - with plug-in base)
	16 A DC
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)
	600 A (80 V DC)
Required backup fuse	$\geq 64 A (I > I_{cn})$
Short-circuit switching capacity	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 $1 \times I_n$ )
Switching cycles, max.	6000 (240 V AC/1 $\times I_n$ )
	3000 (80 V DC/1 $\times I_n$ )
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

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## Technical data

### Electrical data

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
--------------------------	----------

### Conformance/approvals

Designation	UL approval
Identification	UL Listed UL 508
	UL/C-UL Recognized UL 1077
Designation	CSA
Identification	CSA CAN/CSA-C22.2 No. 235-04
Designation	Shipbuilding approval
Identification	DNV GL

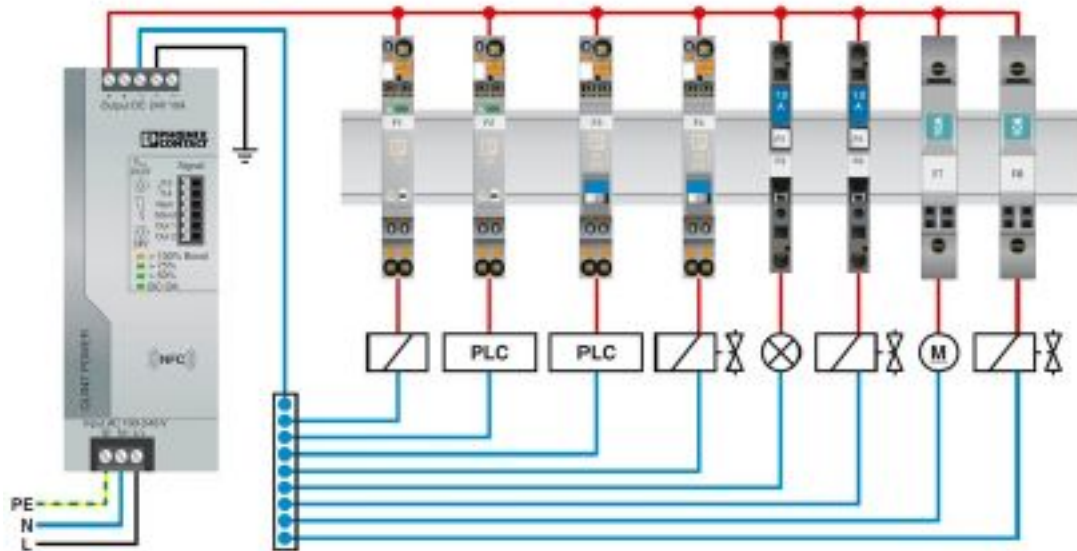
### Environmental Product Compliance

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

## Drawings

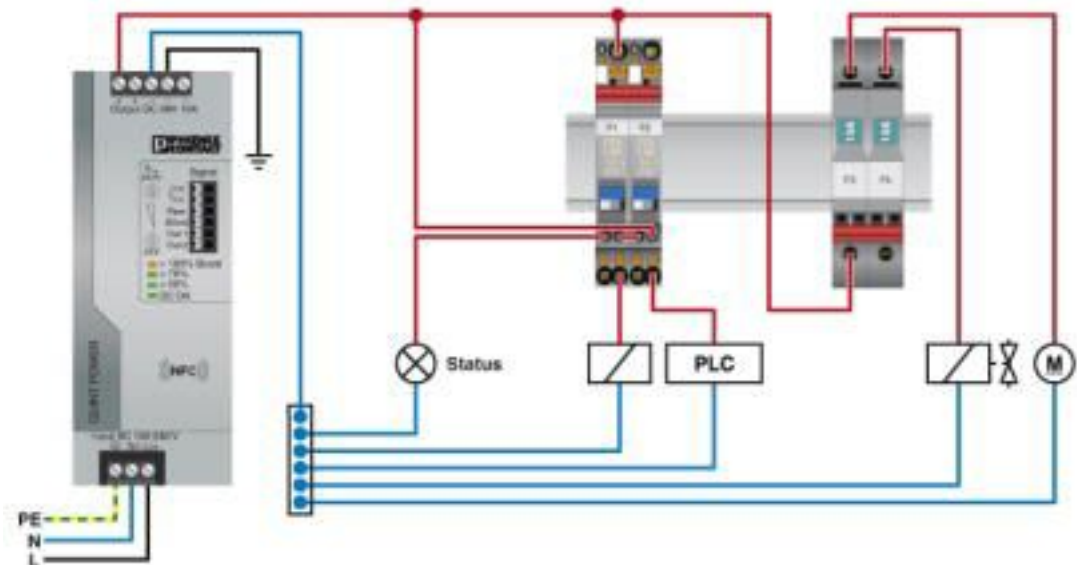
# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

Application drawing



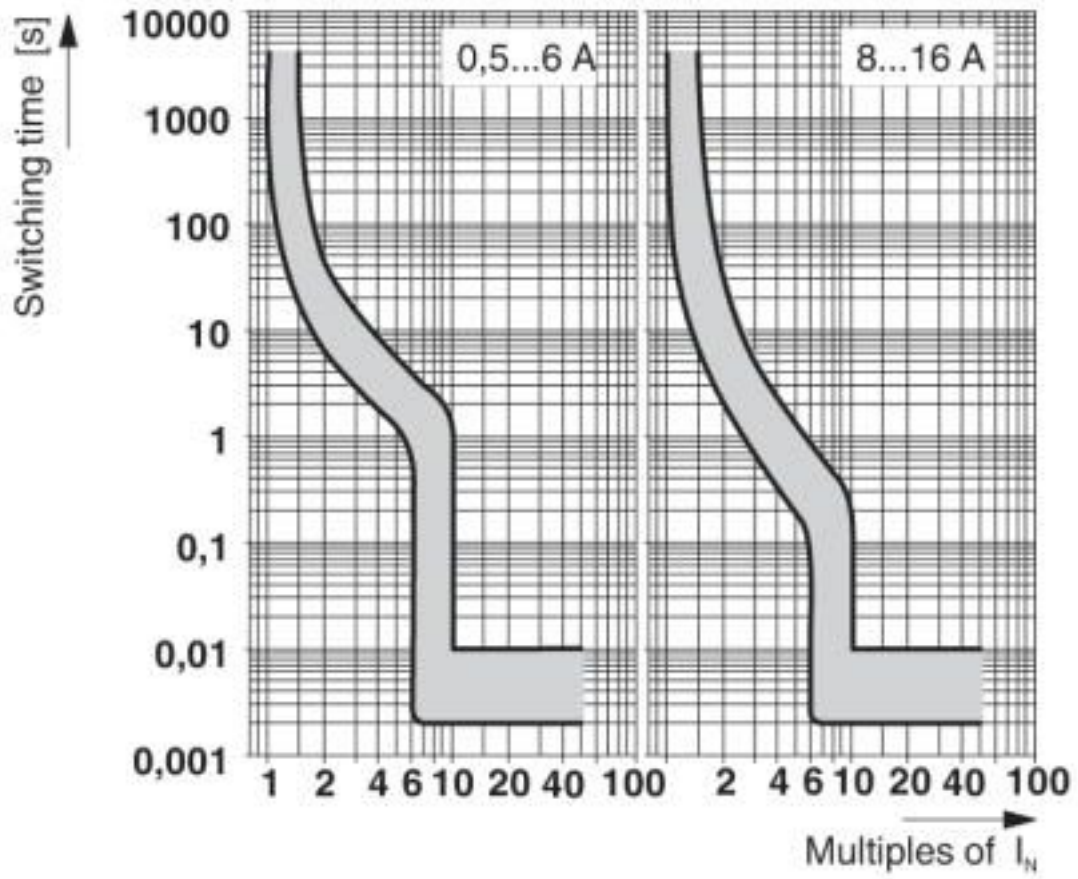
The figure shows the single-position versions

Application drawing



# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

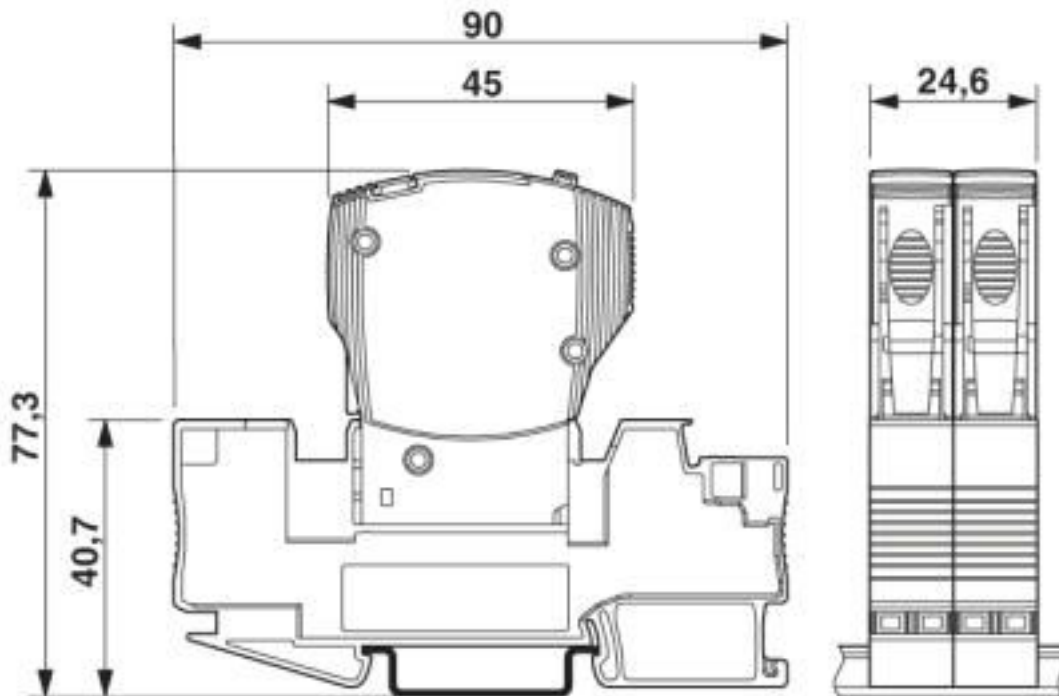
Diagram



Trigger characteristic in the DC range

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

Dimensional drawing



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

## Classifications

### eCl@ss

eCl@ss 10.0.1	27141116
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141116
eCl@ss 8.0	27141116
eCl@ss 9.0	27141116

### ETIM

ETIM 3.0	EC000899
ETIM 4.0	EC000899
ETIM 5.0	EC000899
ETIM 6.0	EC000899
ETIM 7.0	EC000899

### UNSPSC

UNSPSC 6.01	30211812
-------------	----------

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## Classifications

### UNSPSC

UNSPSC 7.0901	39121411
UNSPSC 11	39121411
UNSPSC 12.01	39121411
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Approvals

### Approvals

#### Approvals

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

#### Ex Approvals

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	2786957
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140459
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140459
VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40034683
EAC			EAC-Zulassung

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## Approvals

KC		<a href="http://eng.kcc.go.kr/user/ehpMain.do">http://eng.kcc.go.kr/user/ehpMain.do</a>	SW05012-15004
----	--	---	---------------

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE00003C7
--------	--	---	------------

CCC			2019010307158887
-----	--	--	------------------

EAC			RU C- DE.*09.B.00169
-----	--	--	-------------------------

cULus Recognized			
------------------	--	--	--

## 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



# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## Accessories

Front cutter - CUTFOX-FBS - 1212124



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

---

## Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, pitch: 6.2 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, width: 16.9 mm, number of positions: 3, color: red

---

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, pitch: 6.2 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, width: 29.3 mm, number of positions: 5, color: red

---

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## Accessories

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, pitch: 6.2 mm, width: 60.3 mm, number of positions: 10, color: red

---

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, pitch: 6.2 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, width: 308.3 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 size: 5.15 x 12.15 mm, Number of individual labels: 5

---

## Terminal marking

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 12 mm, lettering field size: 5.15 x 12.15 mm, Number of individual labels: 5

---

## Necessary add-on products

# Thermomagnetic device circuit breaker - CB TM2 16A SFB P - 2800878

## 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

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Circuit Breakers](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[LUGZX66-1-61-20.0-44](#) [M39019/01-201S](#) [M39019/01-221](#) [M39019/01-323](#) [M39019/01-333](#) [M39019/01-336](#) [M39019/02-248](#) [M39019/02-311](#) [M39019/02-316](#) [M39019/04-249S](#) [M39019/05-246S](#) [M39019/06-254S](#) [M55629/1-016](#) [M55629/1-018](#) [M55629/1-021](#) [M55629/1-033](#) [M55629/1-036](#) [M55629/1-046](#) [M55629/1-048](#) [M55629/1-058](#) [M55629/1-067](#) [M55629/1-070](#) [M55629/1-079](#) [M55629/1-084](#) [M55629/1-085](#) [M55629/1-101](#) [M55629/1-109](#) [M55629/11-102](#) [M55629/1-120](#) [M55629/12-045](#) [M55629/12-046](#) [M55629/1-330](#) [M55629/1-366](#) [M55629/1-387](#) [M55629/1-401](#) [M55629/1-450](#) [M55629/2-022](#) [M55629/2-030](#) [M55629/2-072](#) [M55629/2-082](#) [M55629/2-099](#) [M55629/2-101](#) [M55629/2-102](#) [M55629/21-BM-BM](#) [M55629/21-HM-HM](#) [M55629/21-NS-NS](#) [M55629/22-NR-NR-NR](#) [M55629/22-RS-RS-RS](#) [M55629/2-347](#) [M55629/2-401](#)