

# Thermomagnetic device circuit breaker - CB TM2 6A F1 P - 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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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
GTIN	 4 046356 690577
GTIN	4046356690577
Custom tariff number	85362010
Note	Made to Order (non-returnable)

## 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

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

# Thermomagnetic device circuit breaker - CB TM2 6A F1 P - 2800896

## Technical data

### General

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 $I_N$	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 insulation voltage $U_i$	277 V AC (UL 1077)
	250 V AC (IEC 60934)
Required backup fuse	$\geq 24$ A
Power dissipation	1.8 W (in nominal operation per channel)
Insulation resistance $R_{iso}$	$> 100$ M $\Omega$ (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	0.29 V (at $1 \times I_N$ )
Switching cycles, max.	6000 (240 V AC/ $1 \times I_N$ )
	3000 (80 V DC/ $1 \times I_N$ )
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)

# Thermomagnetic device circuit breaker - CB TM2 6A F1 P - 2800896

## Technical data

### Electrical data

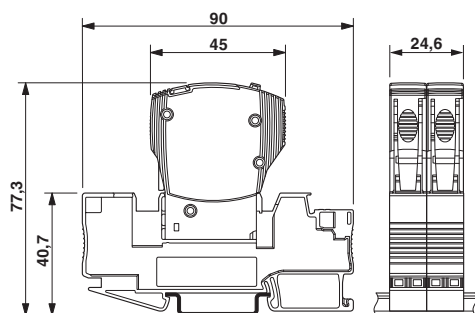
Minimum auxiliary contact operating voltage	10 V
Maximum auxiliary contact operating voltage	240 V
	240 V
Minimum auxiliary contact operating current	10 mA
Maximum auxiliary contact operating current	1 A
Vibration resistance, frequency	57 Hz ... 500 Hz
Vibration resistance, amplitude	0.38 mm (10 ... 57 Hz)
Vibration resistance, acceleration	50 m/s <sup>2</sup>
Vibration resistance, test duration	0 min. (Frequency cycles/axis)

### Standards and Regulations

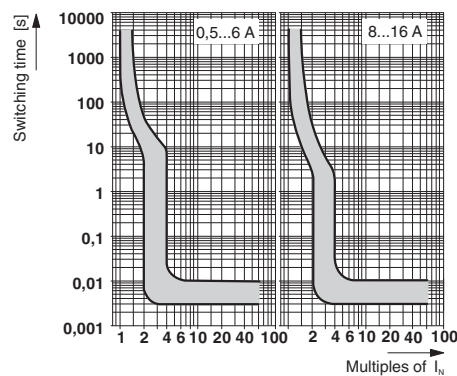
Standards/specifications	EN 60934
	UL 1077 UL/C-UL recognized
	UL 508 UL/C - UL listed
	CSA 22.2 No. 235-041

## Drawings

Dimensional drawing



Diagram

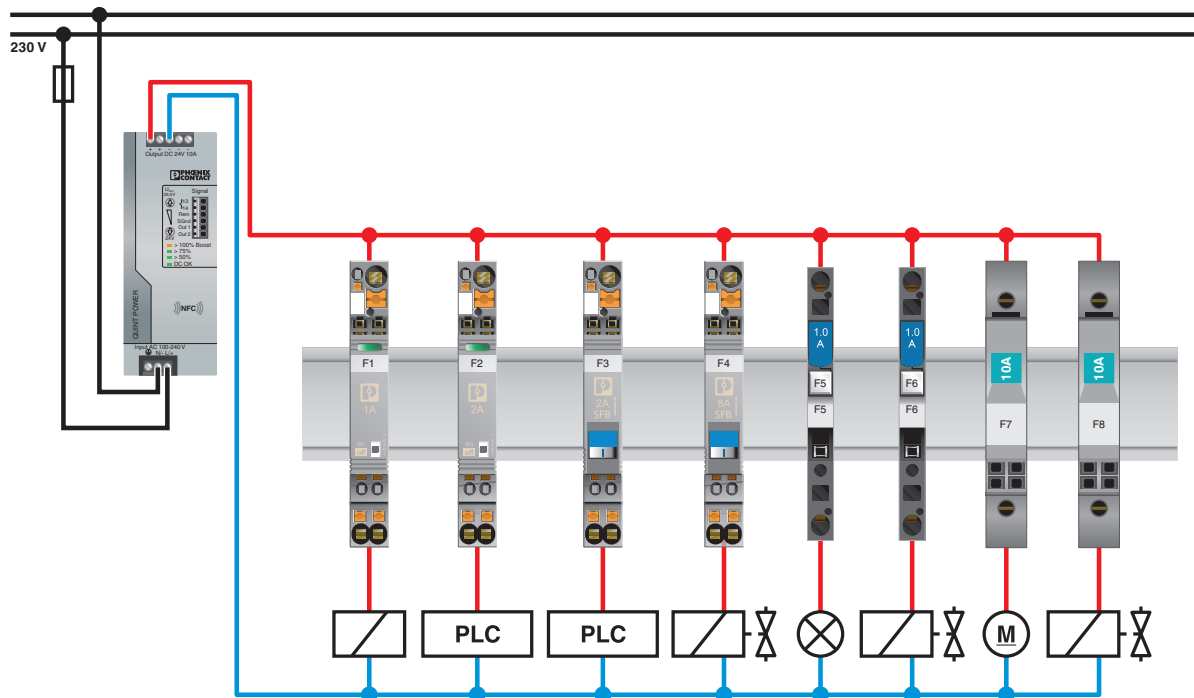


The figure shows the complete module consisting of a base element and connector

Trigger characteristic in the DC range

# Thermomagnetic device circuit breaker - CB TM2 6A F1 P - 2800896

Application drawing



The figure shows the single-position versions

## Approvals

Approvals

Approvals

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

Ex Approvals

## Approval details

VDE Zeichengenehmigung		<a href="http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx">http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx</a>	40034683
------------------------	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------

# Thermomagnetic device circuit breaker - CB TM2 6A F1 P - 2800896

## Approvals

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
GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	61419-13 HH
EAC			RU C- DE.A*30.B01561
CSA		<a href="http://www.csagroup.org/services/testing-and-certification/certified-product-listing/">http://www.csagroup.org/services/testing-and-certification/certified-product-listing/</a>	2786957
KC		<a href="http://eng.kcc.go.kr/user/ehpMain.do">http://eng.kcc.go.kr/user/ehpMain.do</a>	SW05012-15006
cULus 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>	