

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

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.



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

## Product description

Thermal-magnetic device circuit breaker

## Commercial data

Item number	2800900
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL04
Product key	CLA124
GTIN	4046356690614
Weight per piece (including packing)	67.9 g
Weight per piece (excluding packing)	67.9 g
Customs tariff number	85362010
Country of origin	ID

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

## Technical data

### Product properties

Product type	Thermomagnetic device circuit breakers
Product family	CB TM
Type	Male
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 $I_N$	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
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 (thermal-magnetic)
Tripping level	Trip-free mechanism (positive)
Device resistance	8 m $\Omega$
Required backup fuse	$\geq 64$ 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)
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)

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

	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	5.12 W (in nominal operation per channel)
Voltage drop	0.13 V (at 1 x I <sub>n</sub> )
Contact switching type	2 changeover contacts

## 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

Degree of protection	IP30 (Actuation area)
Ambient temperature (operation)	-30 °C ... 60 °C

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

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

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker

2800900

<https://www.phoenixcontact.com/us/products/2800900>

## 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 16A F1 P - Thermal-magnetic device circuit breaker

2800900

<https://www.phoenixcontact.com/us/products/2800900>

Application drawing



Diagram



Trigger characteristic in the DC range

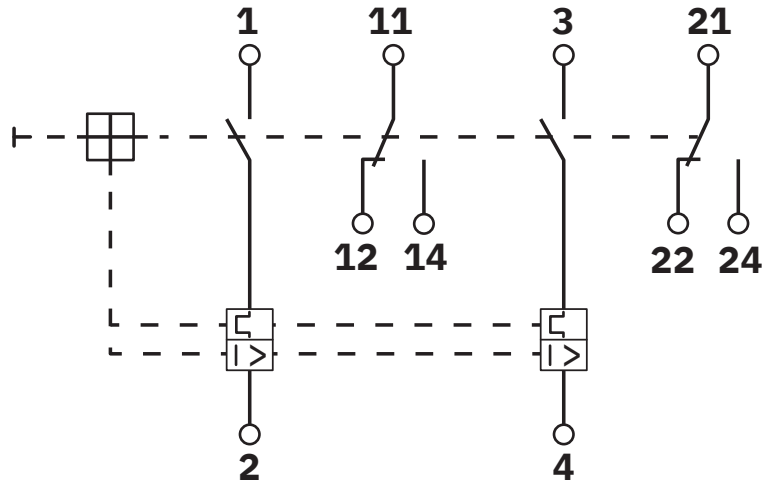
# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

Circuit diagram



# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2800900>



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



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



**DNV GL**  
Approval ID: TAE00003C7



**VDE Zeichengenehmigung**  
Approval ID: 40034683



**CCC**  
Approval ID: 2025010307749779



**CSA**  
Approval ID: 2786957



**KC**  
Approval ID: SW05012-15006

**UAE-RoHS**

Approval ID: 22-09-50938

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

## Classifications

### ECLASS

ECLASS-13.0	27140401
ECLASS-15.0	27140401

### ETIM

ETIM 10.0	EC003538
-----------	----------

### UNSPSC

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

# CB TM2 16A F1 P - Thermal-magnetic device circuit breaker



2800900

<https://www.phoenixcontact.com/us/products/2800900>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	9.064 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)