

CB TM1 2A F1 P - Thermomagnetic device circuit breaker



2800859

<https://www.phoenixcontact.com/us/products/2800859>

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, 1-pos., tripping characteristic F1 (fast-blow), 1 changeover contact, plug for base element.

Your advantages

- Individually adjustable with protective plugs
- Fast tripping in the event of an error with the aid of the F1 characteristic curve
- Protective plug with fixed nominal current value as protection against unintentional changes
- Increased safety with electrical isolation in the event of errors

Commercial data

Item number	2800859
Packing unit	1 pc
Sales key	CL04
Product key	CLA124
Catalog page	Page 393 (C-4-2019)
GTIN	4046356690287
Weight per piece (including packing)	44.5 g
Weight per piece (excluding packing)	41.766 g
Customs tariff number	85362010
Country of origin	ID

CB TM1 2A F1 P - Thermomagnetic device circuit breaker



2800859

<https://www.phoenixcontact.com/us/products/2800859>

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	1
No. of channels	1

Insulation characteristics

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

Electrical properties

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

General

Rated voltage	50 V DC (IEC 60934)
	50 V DC (UL 1077)
	50 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	2 A (IEC 60934)
	inductive load according to UL 1077
	2 A DC (low-induction load according to UL 1077)
	2 A DC (inductive load according to UL 508 - with plug-in base)
Rated surge voltage	2.5 kV (Increased insulation in actuation area)
	2.5 kV (Increased insulation in actuation area)
	2.5 kV (Increased insulation in actuation area)
Insulation resistance R_{iso}	> 100 M Ω (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	300 m Ω
Switch-on delay	typ. 2 ms
Required backup fuse	15 A ($I > I_{cn}$)
Rated short-circuit switching capacity I_{cn}	600 A (50 V DC)
Short-circuit switching capacity	1000 A AC (277 V AC)
	1000 A DC (50 V DC)

CB TM1 2A F1 P - Thermomagnetic device circuit breaker

2800859

<https://www.phoenixcontact.com/us/products/2800859>

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)
Switching cycles, max.	6000 (at 1 x I _n)
Fuse	F1 (fast blow)
Power dissipation	1.2 W (in nominal operation per channel)
Voltage drop	0.64 V (at 1 x I _n)

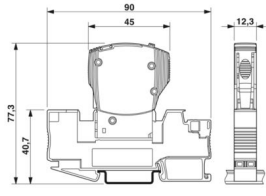
Auxiliary contact

Minimum operating voltage U _{min} DC	10 V
Maximum operating voltage U _{max} DC	240 V
Maximum operating voltage U _{max} AC	240 V
Minimum operating current I _{min}	10 mA
Max. operating current I _{max}	1 A

Connection data

Connection method	pluggable
Connection method	pluggable

Dimensions

Dimensional drawing	
Width	12.3 mm
Height	45 mm
Depth	52 mm
Complete module width	12.3 mm
Complete module height	90 mm
Complete module depth	77.3 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
-----------------	----

CB TM1 2A F1 P - Thermomagnetic device circuit breaker



2800859

<https://www.phoenixcontact.com/us/products/2800859>

Environmental and real-life conditions

Ambient conditions

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 (According to IEC 60068-2-27, Test Ea)
Vibration (operation)	5g (in accordance with 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 TM1 2A F1 P - Thermomagnetic device circuit breaker



2800859

<https://www.phoenixcontact.com/us/products/2800859>

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 TM1 2A F1 P - Thermomagnetic device circuit breaker



2800859

<https://www.phoenixcontact.com/us/products/2800859>

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 USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com