

TMC 83C 50A - Miniature Circuit Breaker



1010302

<https://www.phoenixcontact.com/us/products/1010302>

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Miniature Circuit Breaker, number of positions: 3, cross section: 1 mm²- 35 mm², AWG: 18 - 2, mounting type: DIN rail: 35 mm

Commercial data

Item number	1010302
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	CL08
Product key	CLA125
GTIN	4055626484105
Weight per piece (including packing)	222.222 g
Weight per piece (excluding packing)	222.222 g
Customs tariff number	85362010
Country of origin	CN

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Technical data

Product properties

Product type	Thermomagnetic device circuit breakers
Product family	TMC 8
Type	DIN rail module, one-piece
Number of positions	3
Mechanical service life	20000

Data management status

Article revision	04
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Electrical properties

Service life electrical	6000
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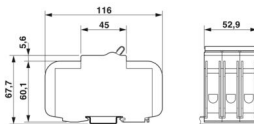
General

Operating voltage	240 V AC (Delta)
Rated current I_N	50 A
Tripping method	TM (thermomagnetic)
Rated short-circuit switching capacity I_{cn}	10 kA (IC)
Fuse	C

Connection data

Conductor cross section rigid	1 mm ² ... 35 mm ²
Cross section AWG	18 ... 2 (converted acc. to IEC)
Conductor cross section flexible	1 mm ² ... 35 mm ²
Connection method	Screw connection
Tightening torque, min	2 Nm
Stripping length	11 mm ... 12 mm
Conductor cross section flexible max.	35 mm ²
Conductor cross section, rigid max.	35 mm ²

Dimensions

Dimensional drawing	
Width	52.9 mm
Height	116 mm
Depth	76.6 mm (incl. DIN rail 7.5 mm)

Material specifications

Color	light gray (RAL 7035)
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Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-35 °C ... 70 °C
Humidity test	48 h, 95% RH, 40°C (IEC 60068-2-78)
Shock (operation)	30g (11 ms) (IEC 60068-2-11)
Vibration (operation)	±0.38 mm (10-57 Hz), 5g (57...500 Hz) (IEC 60068-2-6, Fc, sine)

Standards and regulations

Standards/specifications	UL 489
Standards/specifications	IEC 60947-2

Mounting

Mounting type	DIN rail: 35 mm
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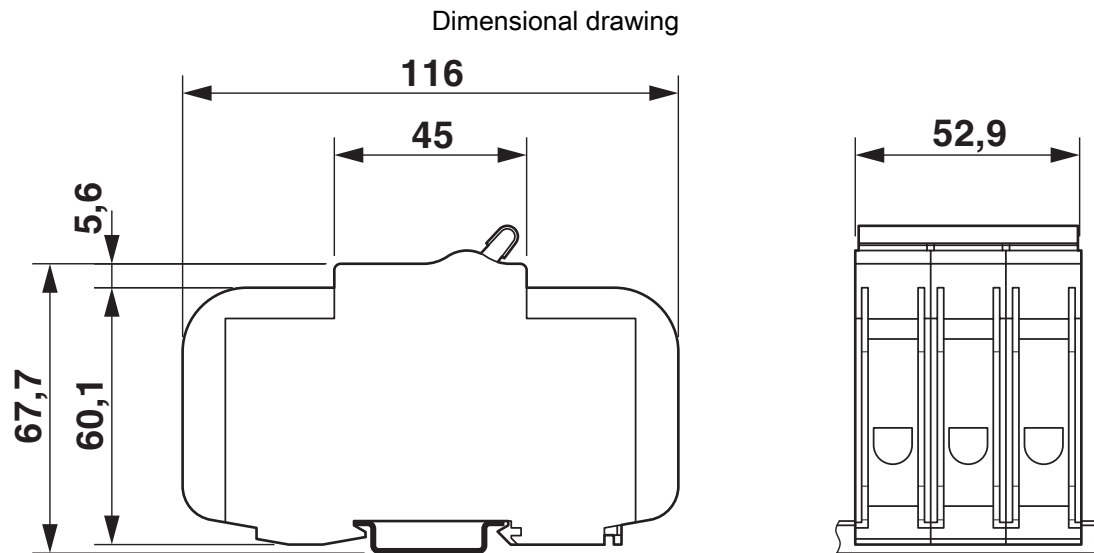
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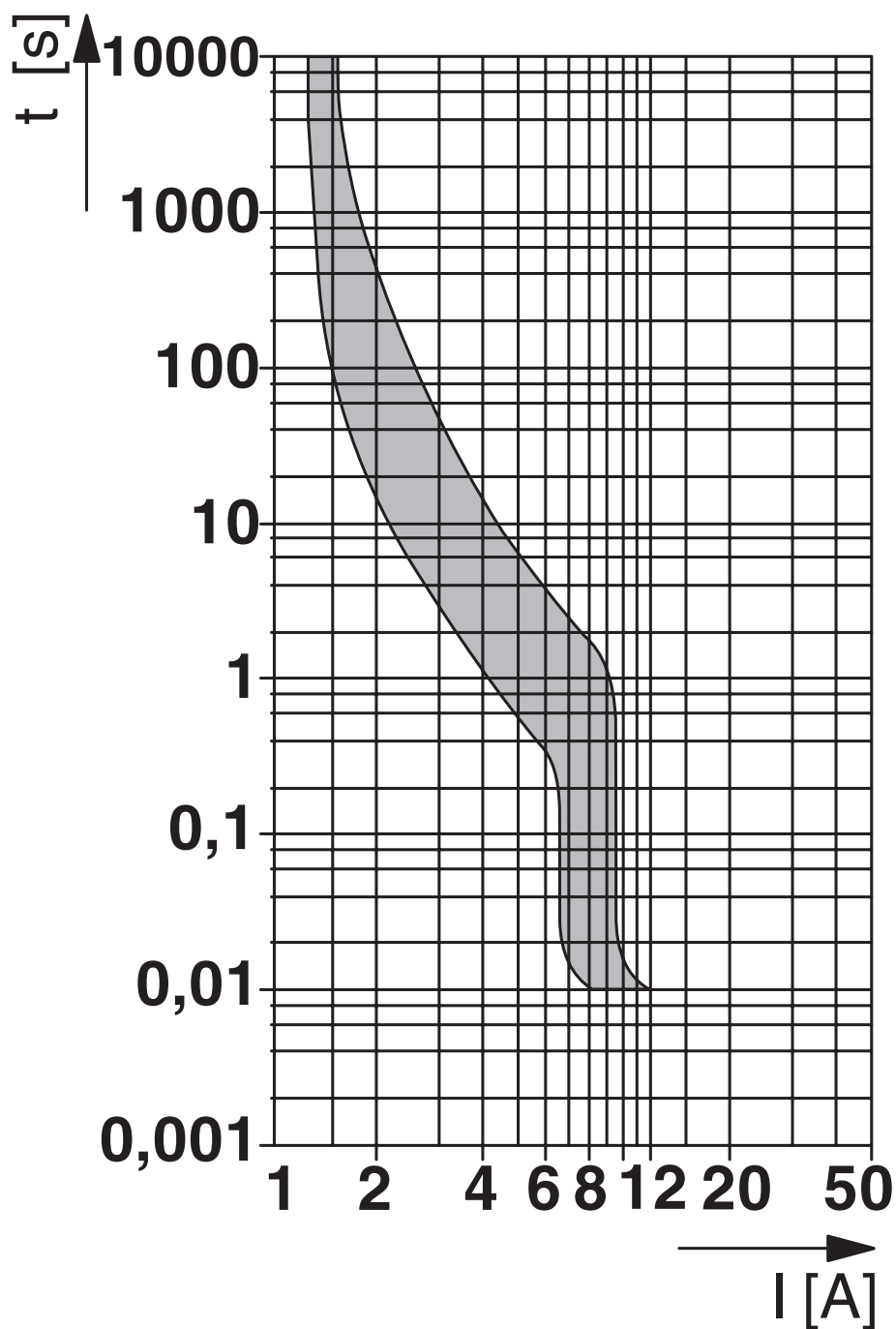
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Drawings



Diagram



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Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1010302>



UL Listed

Approval ID: FILE E 320373



cUL Listed

Approval ID: FILE E 320373



TÜV Rheinland

Approval ID: R 50531587



CCC

Approval ID: 2024010307673885

cULus Listed

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Classifications

ECLASS

ECLASS-11.0	27141116
ECLASS-12.0	27141116
ECLASS-13.0	27140401

ETIM

ETIM 9.0	EC003538
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UNSPSC

UNSPSC 21.0	39121410
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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%

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Accessories

TMC 8 B3 80 57 C - Wiring bridge

2907996

<https://www.phoenixcontact.com/us/products/2907996>



Bus bar for TMC 83... circuit breakers (three phase) 17.8 mm pitch, up to 57 positions. Rated for 80 A (end feed) 600 V AC/DC. UL 508 Listed for connection of UL 489 rated circuit breakers.

TMC 8 B3 80 48 CA - Wiring bridge

2907997

<https://www.phoenixcontact.com/us/products/2907997>



Bus bar for TMC 83... circuit breakers (three phase) with auxilliary switch. 17.8 mm pitch, up to 48 positions. Rated for 80 A (end feed) 600 V AC/DC. UL 508 Listed for connection of UL 489 rated circuit breakers.

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TMC 8 B TERM PIN - Terminal adapter

2907998

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Feeder terminal adapter for TMC 8..... circuit breaker bus bars. Rated for 1000 V AC/DC, 115 A. Wire range 14...2 AWG. UL Listed for connection to UL 489 rated circuit breakers.



TMC 8 B END CAP - Wiring bridge end cover

2907999

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Protective end covers for TMC 8 bus bars



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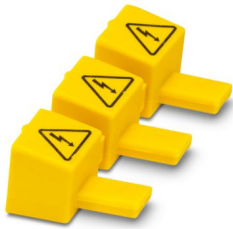
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TMC 8 B BUS CAP - Protective cover

2908000

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Protective covers for TMC 8 bus bars. Cuttable, three positions, yellow.

TMC 7/8 AUX - Auxiliary Contact

2908219

<https://www.phoenixcontact.com/us/products/2908219>



Auxiliary Contact, number of positions: 1, connection method: Screw, cross section: 1 mm²- 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

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TMC 7/8 ALARM - Alarm Switch

2908220

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Alarm Switch, number of positions: 1, connection method: Screw, cross section: 1 mm²- 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

TMC 7/8 12VDC SHNT - Shunt trip

2908221

<https://www.phoenixcontact.com/us/products/2908221>



Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm²- 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

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TMC 7/8 24VDC SHNT - Shunt trip

2908222

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Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm² - 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

TMC 7/8 48VDC SHNT - Shunt trip

2908224

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Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm² - 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

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TMC 7/8 125VDC SHNT - Shunt trip

2908225

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Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm² - 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

TMC 7/8 120VAC SHNT - Shunt trip

2908226

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Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm² - 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

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TMC 7/8 240VAC SHNT - Shunt trip

2908227

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Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm² - 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

TMC 7/8 277VAC SHNT - Shunt trip

2908228

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Shunt trip, number of positions: 1, connection method: Screw, cross section: 1 mm² - 35 mm², AWG: 18 - 2, mounting type: Snaps on to side of circuit breaker

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EML (10X4)R - Label

0815583

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Label, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: 10 x 4 mm, Number of individual labels: 10000

TML (104X3,8)R - Marker strip

0801833

<https://www.phoenixcontact.com/us/products/0801833>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

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SZK PZ2 VDE - Screwdriver

1206463

<https://www.phoenixcontact.com/us/products/1206463>



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

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