

UT 6-TMC M 8A - Thermomagnetic device circuit breaker

0916609

<https://www.phoenixcontact.com/us/products/0916609>

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Thermomagnetic circuit breaker, 1-pos., for DIN rail mounting



Your advantages

- Simple feed-in due to bridging capability using CLIPLINE complete accessories
- High system availability, thanks to easy resetting
- Quick and easy identification with large-area marking options
- The right device for every application, thanks to a nominal current range of 0.5 to 16 A
- Space savings of 30 % compared to miniature circuit breakers owing to the compact width of 12.3 mm

Commercial Data

Item number	0916609
Packing unit	1 pc
Minimum order quantity	6 pc
Sales Key	CL16
Product Key	CLA122
Catalog Page	Page 394 (C-4-2019)
GTIN	4046356449052
Weight per Piece (including packing)	63.16 g
Weight per Piece (excluding packing)	63 g
Customs tariff number	85362010
Country of origin	CZ

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Technical Data

Product properties

Type	DIN rail module, one-piece
Product type	Thermomagnetic device circuit breakers
Product family	UT 6-TMC
Number of positions	1
Number of connections	2
Number of rows	1
No. of channels	1
Potentials	1

Insulation characteristics

Overvoltage category	II
Degree of pollution	2

Electrical properties

No. of channels	1
Fuse type	Automatic device
Maximum power dissipation for nominal condition	$\leq 1.43 \text{ VA}$

General

Operating voltage	50 V AC ... 264 V AC (48 - 62 Hz)
	5 V DC ... 30.8 V DC
Rated voltage	240 V AC (50/60 Hz)
	28 V DC
	240 V AC (50/60 Hz)
	28 V DC
Rated insulation voltage U_i	440 V AC
Rated current I_N	8 A
Rated surge voltage	2.8 kV
Insulation resistance R_{iso}	$> 100 \text{ M}\Omega$ (main contact)
Type of actuation	S type
Tripping method	TM (thermomagnetic)
Tripping level	Trip-free mechanism (positive)
Device resistance	22.2 m Ω
Required backup fuse	25 A
Rated short-circuit switching capacity I_{cn}	200 A (240 V AC)
	400 A (28 V DC)
Dielectric strength	2000 V
Switching cycles, max.	6000 (at $1 \times I_N$)
	50 (at $1.5 \times I_N$)
	40 (at $6 \times I_N$)
Fuse	M1 (normal blow)

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Power dissipation	≤ 1.43 VA
Temperature derating	5.6 A DC (at -30 °C)
	5.84 A DC (at -20 °C)
	6.24 A DC (at -10 °C)
	6.72 A DC (at 0 °C)
	7.2 A DC (at 10 °C)
	8 A DC (at 23 °C)
	8.24 A DC (at 30 °C)
	8.48 A DC (at 40 °C)
	9.04 A DC (at 50 °C)
	9.68 A DC (at 60 °C)

Indicator/remote signaling

Connection name	Auxiliary contact
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Connection data

Nominal cross section	6.00 mm ²
Rated cross section AWG	8

Level 1 above 1 below 1

Screw thread	M4
Tightening torque	1.5 ... 1.8 Nm
Stripping length	12 mm
Conductor cross section rigid	0.2 mm ² ... 10 mm ²
Cross section AWG	24 ... 8 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 10 mm ²
Conductor cross section, flexible [AWG]	24 ... 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm ² ... 6 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.25 mm ² ... 6 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 2.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 2.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 4 mm ²
Nominal current	8 A
Nominal voltage	240 V AC
	28 V DC
Nominal cross section	6 mm ²

Main contact

Connection method	Screw connection
Screw thread	M4
Tightening torque	1.5 Nm ... 18 Nm
Stripping length	12 mm
Conductor cross section flexible	0.2 mm ² ... 10 mm ²

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Conductor cross section rigid	0.2 mm ² ... 10 mm ²
Conductor cross section AWG	24 ... 8
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 6 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 6 mm ²

Dimensions

Width	12.3 mm
Height	85.5 mm
Depth	89.5 mm

Material specifications

Color	gray
Flammability rating according to UL 94	V0
Insulating material	PA66

Mechanical properties

Mechanical data

Open side panel	No
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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP40 (Actuation area) IP20 (Connection area)
Ambient temperature (operation)	-30 °C ... 60 °C
Altitude	2000 m (acc. to EN 60934)

Standards and regulations

Standards/specifications	EN 60934
Standards/specifications	UL 1077
Standards/specifications	CSA 22.2
Standards/specifications	EAC

Mounting

Mounting type	DIN rail: 35 mm
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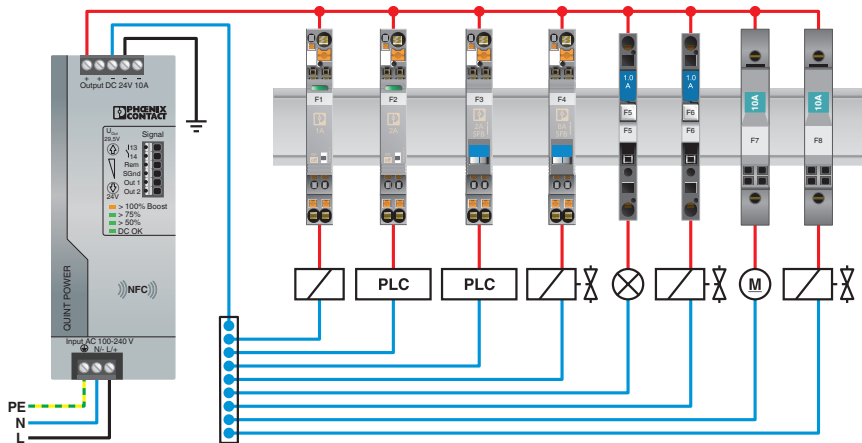
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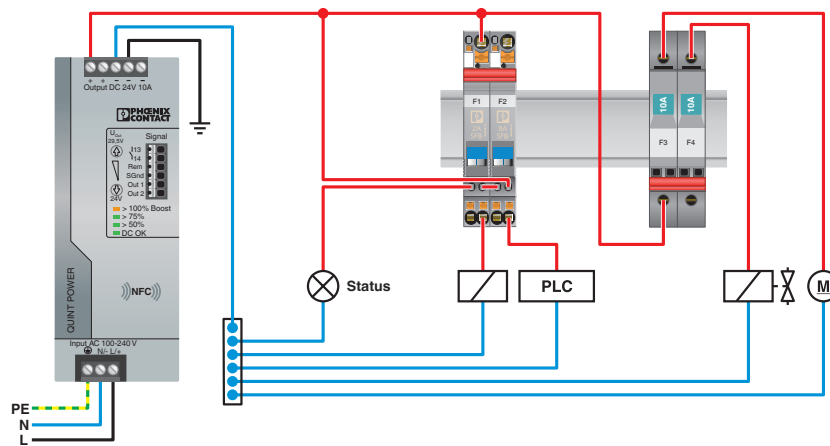
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Drawings

Application drawing



Application drawing



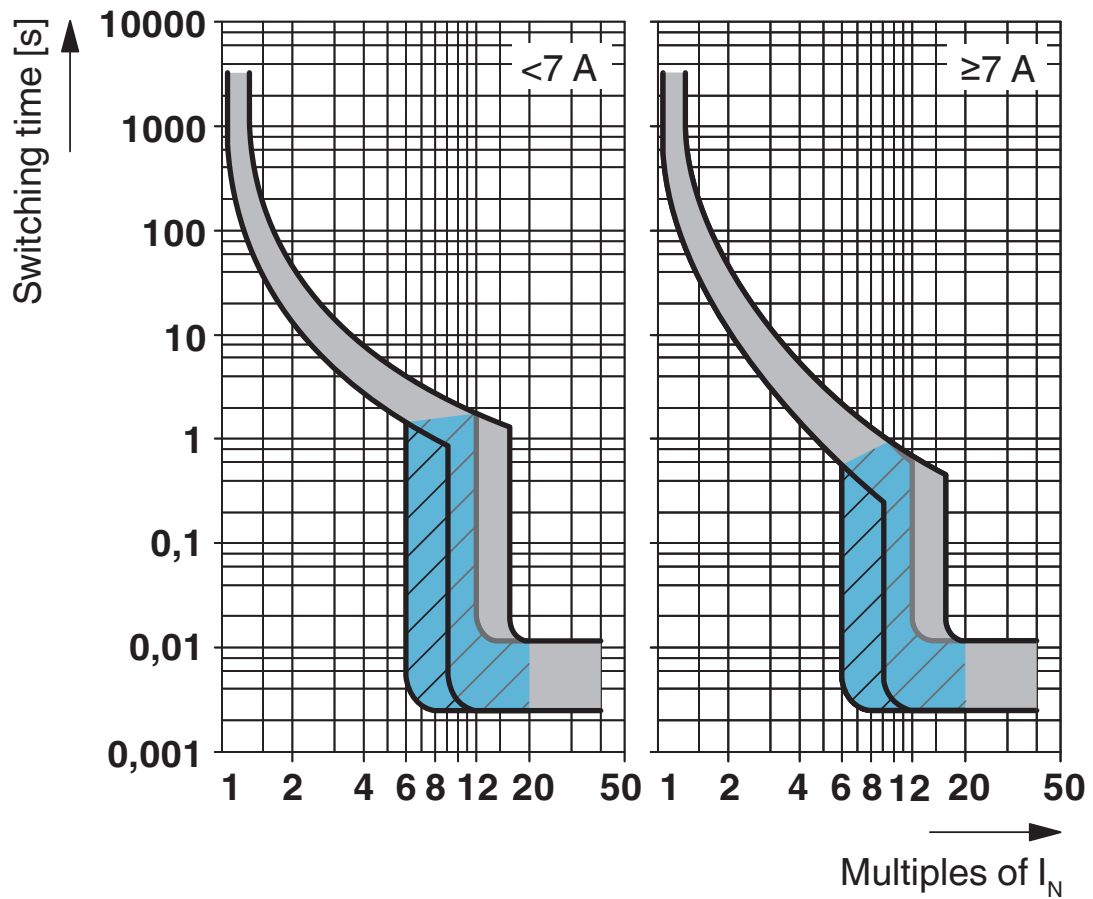
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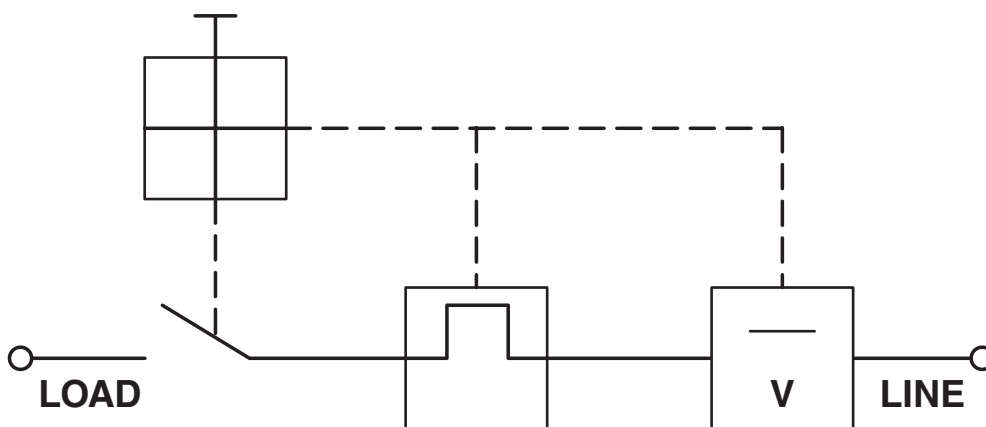
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Diagram



Trigger characteristic

Block diagram



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Approvals



cUL Recognized
Approval ID: FILE E 140459



UL Recognized
Approval ID: FILE E 140459



EAC
Approval ID: EAC-Zulassung



EAC
Approval ID: RU C-DE.A*30.B01546



VDE Zeichengenehmigung
Approval ID: 40028127



CSA
Approval ID: 250505



KC
Approval ID: SW05013-15001

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Classifications

ECLASS

ECLASS-11.0	27141116
ECLASS-12.0	27141116
ECLASS-13.0	27250113

ETIM

ETIM 8.0	EC000899
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

FBS 2-6 - Plug-in bridge

3030336

<https://www.phoenixcontact.com/us/products/3030336>



Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: red

FBS 3-6 - Plug-in bridge

3030242

<https://www.phoenixcontact.com/us/products/3030242>



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

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FBS 4-6 - Plug-in bridge

3030255

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Plug-in bridge, pitch: 6.2 mm, number of positions: 4, color: red

FBS 5-6 - Plug-in bridge

3030349

<https://www.phoenixcontact.com/us/products/3030349>



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

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FBS 10-6 - Plug-in bridge

3030271

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

FBS 20-6 - Plug-in bridge

3030365

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Plug-in bridge, pitch: 6.2 mm, number of positions: 20, color: red

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SZS 1,0X4,0 VDE - Screwdriver

1205066

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Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

UC-TM 12 - Marker for terminal blocks

0819194

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Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 12 mm, lettering field size: 11.45 x 10.5 mm, Number of individual labels: 40

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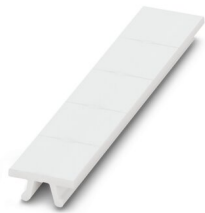
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ZB 12:UNPRINTED - Zack marker strip

0812120

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Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 12.2 mm, lettering field size: 12 x 10.5 mm, Number of individual labels: 5

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