

TCP 8A - Thermal device circuit breaker



0712291

<https://www.phoenixcontact.com/us/products/0712291>

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1-channel thermal device circuit breaker for protecting loads at 250 V AC / 72 V DC in the event of an overload. For installation on fuse terminal blocks and interfaces for flat plug-in fuse of type C according to standard ISO 8820-3. With fixed nominal current: 8 A

Your advantages

- Fast, replacement part-free recommissioning after an event with the reconnection options
- Easy to retrofit in existing systems with vehicle flat-type fuses with identical pin connector pattern
- System disconnection for maintenance actions via the integrated device switch

Commercial data

Item number	0712291
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL15
Product key	CLA111
GTIN	4017918848408
Weight per piece (including packing)	10.975 g
Weight per piece (excluding packing)	10.63 g
Customs tariff number	85362010
Country of origin	ID

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Technical data

Product properties

Product type	Thermal device circuit breakers
Type	Male
Number of positions	1
No. of channels	1

Insulation characteristics

Overvoltage category	II
Degree of pollution	2

Electrical properties

Fuse type	Automatic device
Fuse	Slow-blow

General

Rated voltage	250 V AC
	65 V DC
	250 V AC (AC according to UL 1077)
	72 V DC (DC according to UL 1077)
Rated current I_N	8 A
Rated surge voltage	2.5 kV
Insulation resistance R_{iso}	> 100 M Ω (500 V DC)
Tripping method	T (thermal)
Device resistance	0.05 Ω
Rated short-circuit switching capacity I_{cn}	64 A (250 V AC / 65 V DC)
	160 A (30 V DC)
Short-circuit switching capacity	2000 A (250 V AC / UL 1077)
	2000 A (72 V DC / UL 1077)
Dielectric strength	3000 V AC (Actuation area)
	1500 V AC (Installation area)
Switching cycles, max.	6000 (At 1 x I_n , low-induction)
	3000 (At 1 x I_n , inductive)
	500 (At 2 x I_n , inductive)
Contact switching type	Type C in accordance with ISO 8820-3

Connection data

Nominal current	8 A
Nominal voltage	250 V AC
	65 V DC
Connection method	pluggable

Dimensions

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Dimensional drawing	
Width	8.2 mm
Height	24.4 mm
Height NS 35/7,5	55 mm
Depth	44.5 mm

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V-0
Insulating material group	IIIb
Insulating material	PPS

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)
Ambient temperature (operation)	-20 °C ... 60 °C
Altitude	4000 m
Humidity test	240 h, 95 % RH, 40 °C

Standards and regulations

Standards/specifications	EN 60934
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Mounting

Mounting type	on base element
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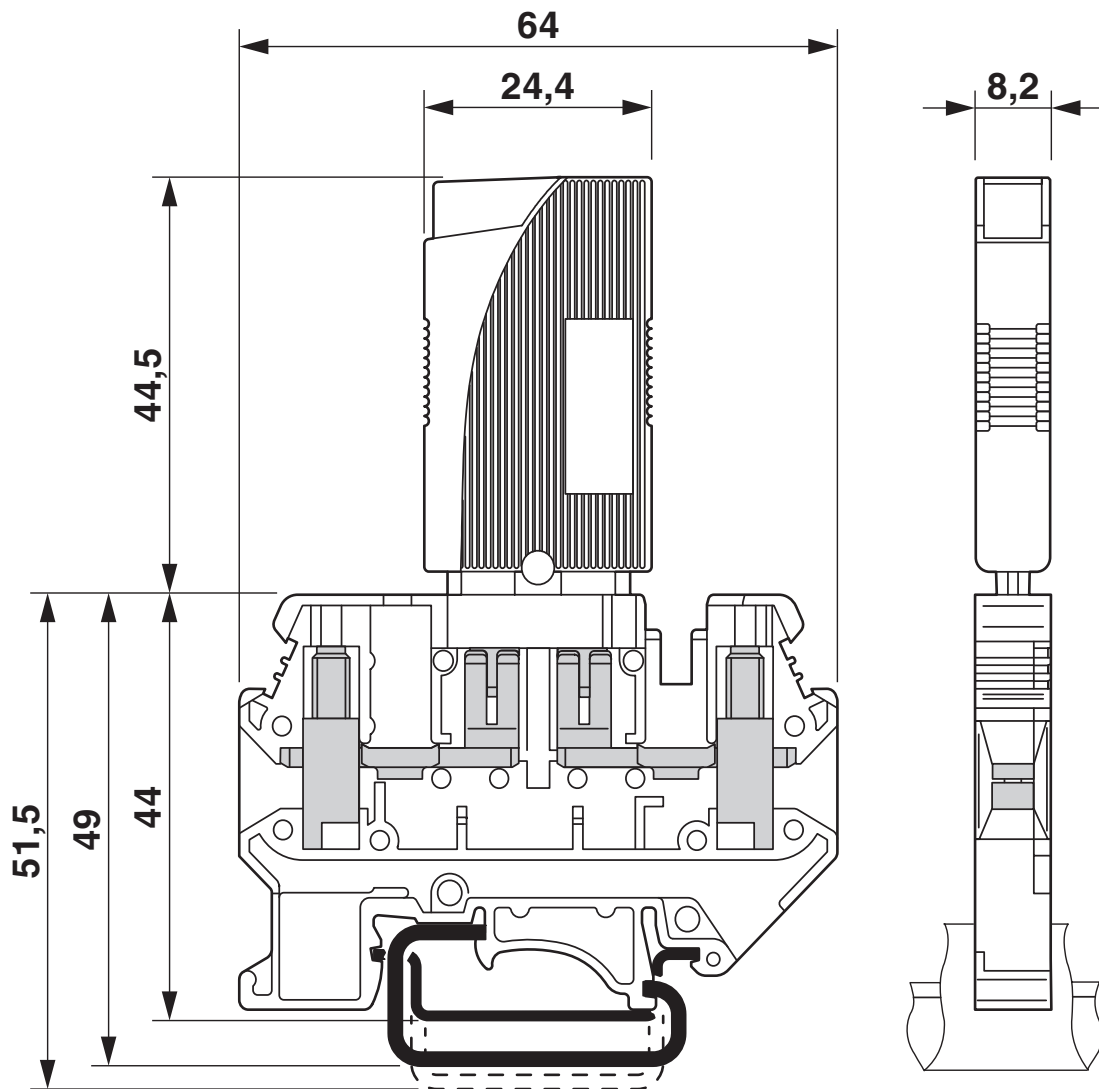
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Drawings

Dimensional drawing



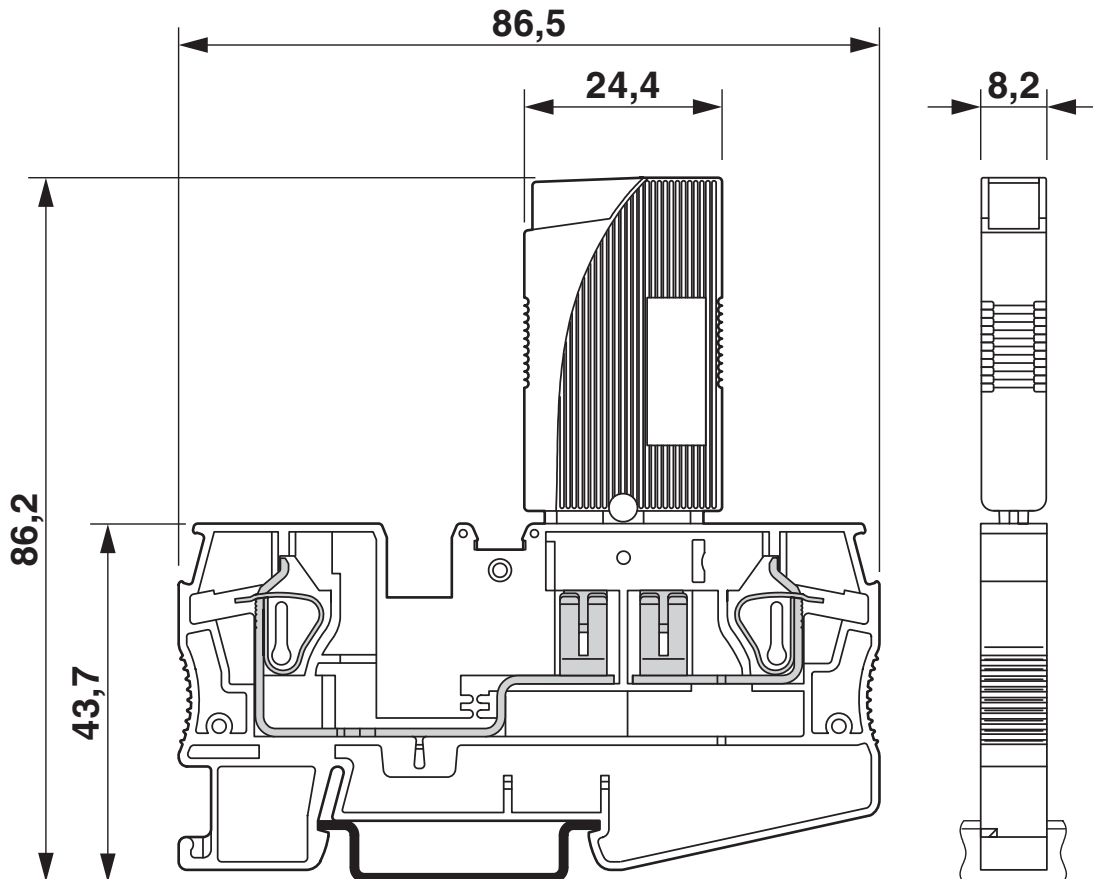
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Dimensional drawing



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Product drawing



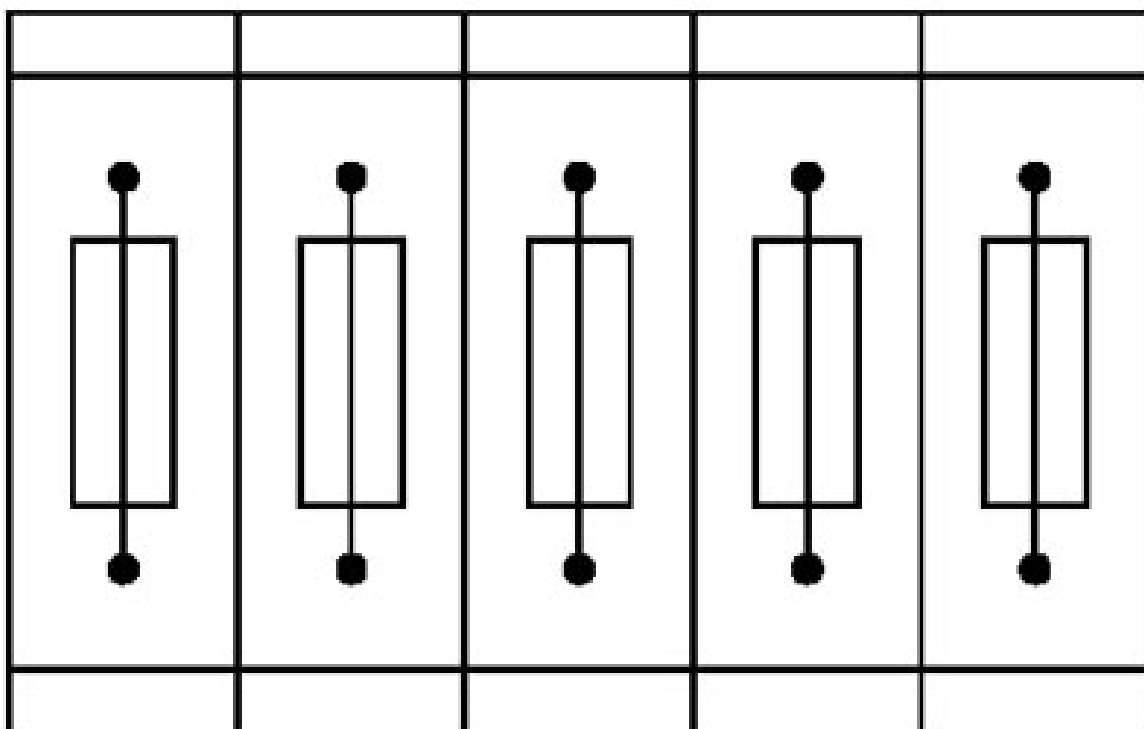
The figure shows the product with the base element PT 6-FSI/C-LED 24 (Item No.: 3212172).

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Application drawing



Fuse terminal blocks in interconnected arrangement,
block consisting of 5 fuse terminal blocks

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Application drawing



Fuse terminal block in single arrangement,
block consisting of one fuse terminal block and 4 feed-through terminal blocks

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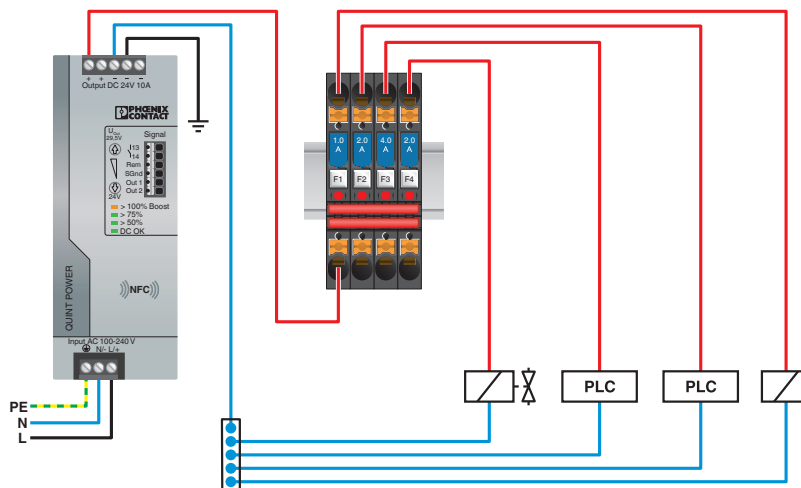
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Application drawing



Application drawing



Diagram



Trigger characteristic

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/0712291>

 CSA Approval ID: 074317				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	250 V	8 A	-	-

 cUL Recognized Approval ID: FILE E 140459				
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 UL Recognized Approval ID: FILE E 140459				
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 VDE Zeichengenehmigung Approval ID: 40034332				
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 CCC Approval ID: 2025010307749780				
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UAE-RoHS Approval ID: 23-10-88896				
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Classifications

ECLASS

ECLASS-13.0	27140401
ECLASS-15.0	27140401

ETIM

ETIM 10.0	EC003538
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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EF3.1 Climate Change

CO2e kg	1.342 kg CO2e
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