PHŒNIX CONTACT

Type 3 surge protection device - PT 2+1-S-48DC/FM - 2817958

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Rail-mountable surge arrester as device protection for terminal equipment, fault signal in the plug and signaling contact in the base element, 2-section, pluggable. Design: 48 V DC

Your advantages

☑ Plugs can be checked with CHECKMASTER

☑ Tool-free plug replacement

☑ With floating remote indication contact

☑ DIN rail module

☑ Consists of base element and plug

☑ Optical signaling of disconnection via LED

☑ For single and multi-phase power supply units

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	4 017918 574987
GTIN	4017918574987
Weight per Piece (excluding packing)	71.950 g
Custom tariff number	85363090
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	65.5 mm (incl. DIN rail 7.5 mm)

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Technical data

Dimensions

Horizontal pitch	1 Div.

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	$\leq$ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %

General

EN type	T3
Number of ports	One
Mode of protection	L-N
	L-PE
	N-PE
	(L+) - (L-)
	(L+/L-) - PE
Mounting type	DIN rail: 35 mm
Color	jet black RAL 9005
Housing material	PA 6.6
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Surge protection fault message	Optical, remote indicator contact

Protective circuit

Nominal voltage U_N	48 V DC
Maximum continuous voltage U_C	60 V DC
Rated load current I_L	26 A (30 °C)
Residual current I_{PE}	$\leq$ 10 µA
Nominal discharge current I_n (8/20) µs	500 A
Combination wave U_{OC}	1 kV (2 Ω)
	6 kV (12 Ω)
Voltage protection level U_p	$\leq$ 120 V
Response time t_A (L-N)	$\leq$ 1 ns
Response time t_A (L-PE)	$\leq$ 1 ns
Short-circuit current rating I_{SCCR}	200 A (without backup fuse for Uc)
Max. backup fuse with branch wiring	50 A (gG)

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Protective circuit

Maximum backup fuse for through wiring	25 A (gG)

Indicator/remote signaling

Switching function	N/C contact
Operating voltage	7 V DC ... 70 V DC (open collector)
Operating current	5 mA DC ... 15 mA (open collector)
Connection method	Screw connection
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section solid	0.2 mm² ... 4 mm²
Conductor cross section AWG	24 ... 12
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm

Connection data

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Standards and Regulations

Standards/specifications	EN 61643-11 2012
	IEC 61643-11 2011

Environmental Product Compliance

| REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

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Connection diagram
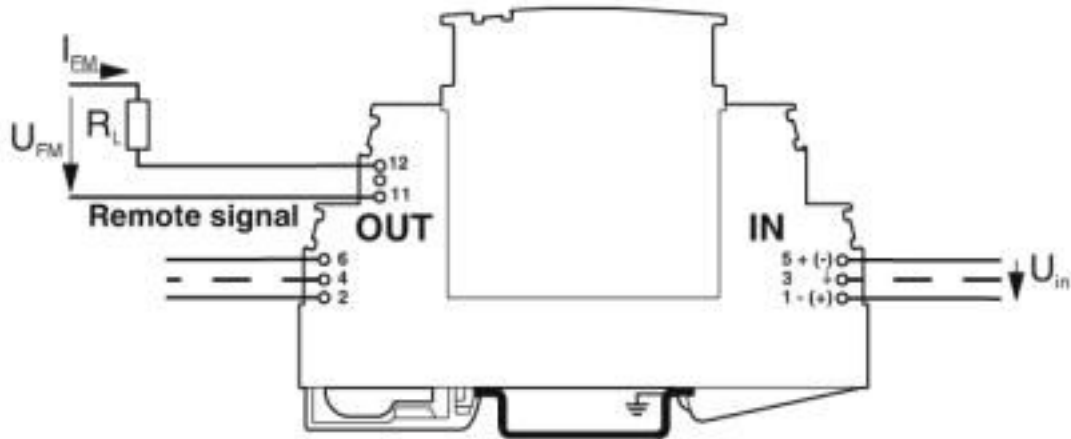
The voltage of the cable to be protected (U_{in}) determines the current driven by the transistor output (I_{FM}).
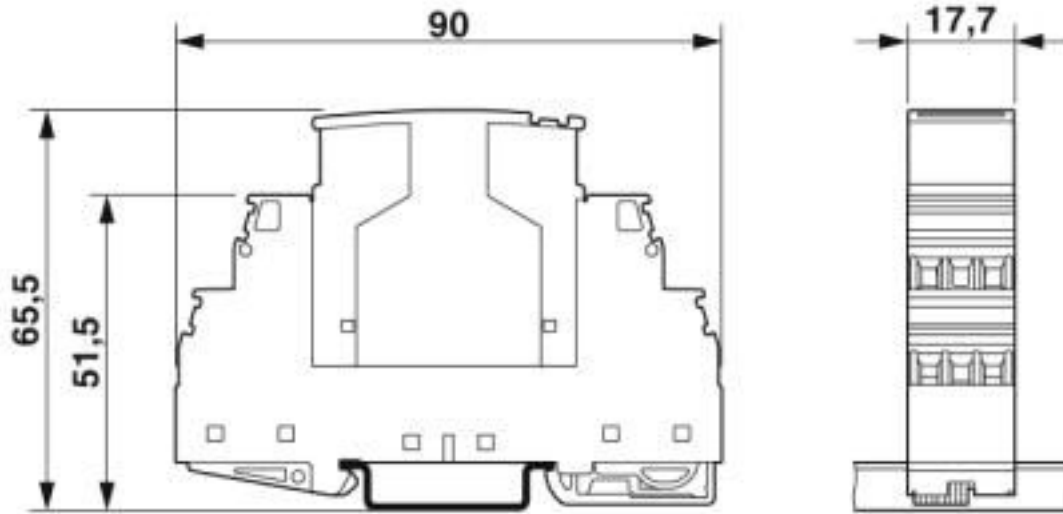
Diagram

① U_{in} = 24 V ③ U_{in} = 48 V
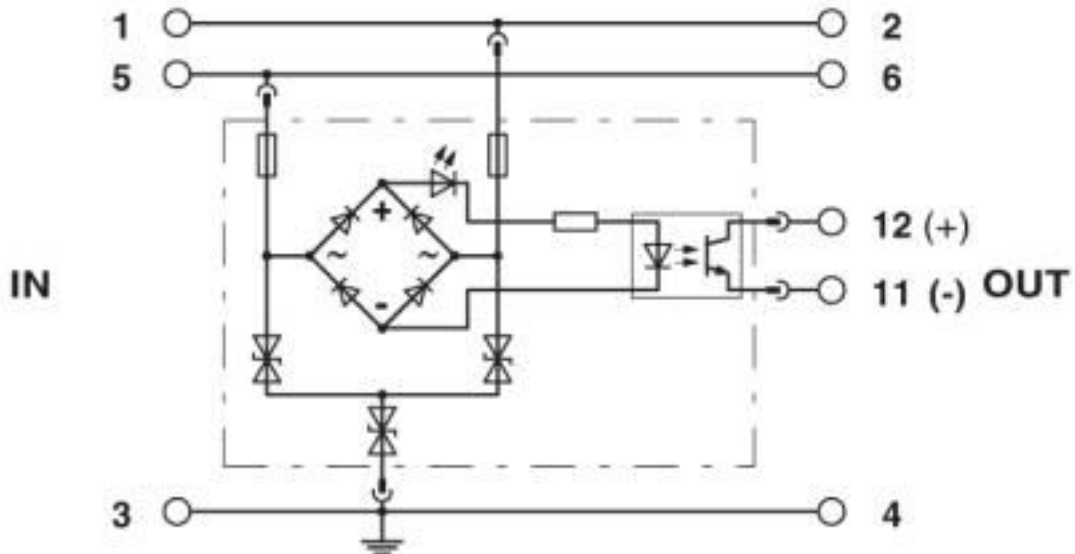② U_{in} = 36 V ④ U_{in} = 60 V
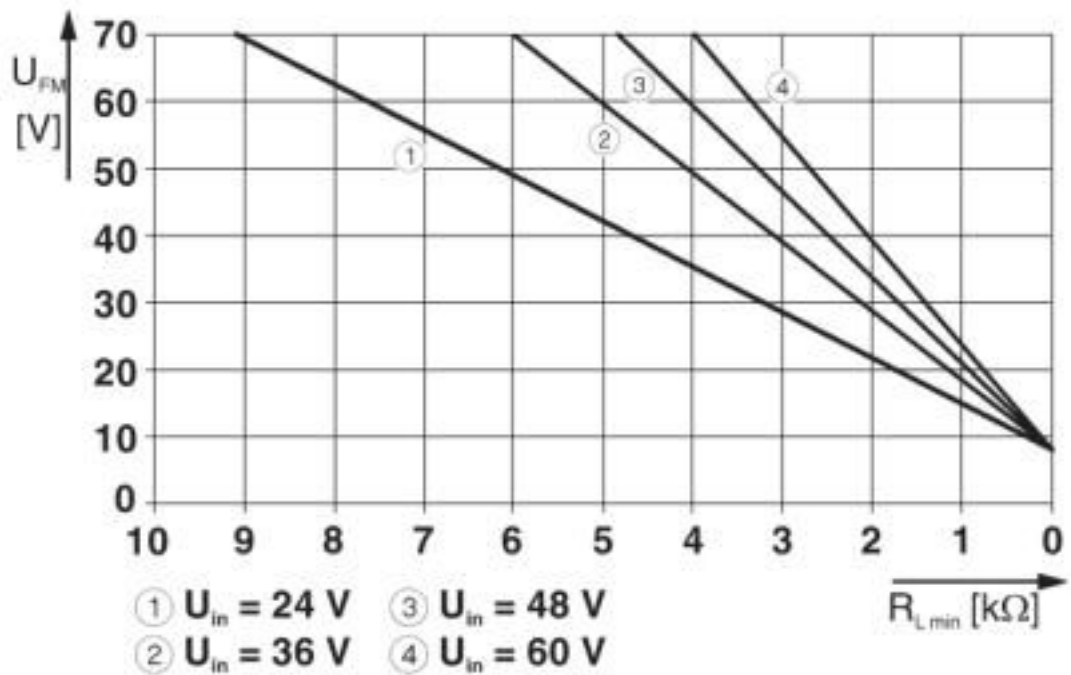
The figure shows the minimum load resistance (R_L) at the transistor output of the remote indication contact depending on the specified input voltage (U_{in}).

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Dimensional drawing

Circuit diagram

Classifications

eCl@ss

eCl@ss 10.0.1	27130806
eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800

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Classifications

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eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130806
eCl@ss 8.0	27130806
eCl@ss 9.0	27130806

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000942
ETIM 6.0	EC000942
ETIM 7.0	EC000942

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approval details

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Approvals

EAC	EAC	EAC-Zulassung

EAC	EAC	RU C-DE.A*30.B01561

Accessories

Accessories

Labeled terminal marker

Zack marker strip - ZB 5,LGS:FORTL.ZAHLEN - 1050017

Zack marker strip, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 5,LGS:L1-N,PE - 1050415

Zack marker strip, Strip, white, labeled, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

Marker pen

Marker pen - X-PEN 0,35 - 0811228

Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

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Marker pen - B-STIFT - 1051993

Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.1 x 10.5 mm, Number of individual labels: 10

Zack marker strip - ZB 5,8:UNBEDRUCKT - 2715209

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 5.8 mm, lettering field size: 5.75 x 10.5 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm, Number of individual labels: 10

Additional products

Shield connection - SSA 3-6 - 2839295

Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

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Accessories

Shield connection - SSA 5-10 - 2839512

Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

Spare parts

Type 3 surge protection plug - PT 2+1-S-48DC-ST - 2839648

Protective plug PT with device surge protection for power supply units, visual error display. Nominal voltage: 48 V AC