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

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

- Easy testing and documentation with CHECKMASTER 2 with pluggable protective modules
- Maximum ease of maintenance, thanks to the 2-piece design
- Easy selection for all possible demands in MCR applications with a complete product portfolio
- The signal is not influenced during maintenance work, thanks to the impedance-neutral insertion and removal of protective plugs
- Permanent protective device monitoring with optical signaling via LED

ELEKTROGERÄTE RÜCKNAHME

Commercial data

Item number	2817958
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CL01
Product key	CL1411
GTIN	4017918574987
Weight per piece (including packing)	67.93 g
Weight per piece (excluding packing)	63.465 g
Customs tariff number	85363090
Country of origin	DE

Technical data

Product properties

Product type	Device protection
Product family	PLUGTRAB PT
IEC power supply system	DC
Type	DIN rail module, two-section, divisible
Surge protection fault message	Optical, remote indicator contact

Insulation characteristics

Overvoltage category	III
Pollution degree	2
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.00
IEC test classification	III
	T3
EN type	T3
Number of ports	One

Electrical properties

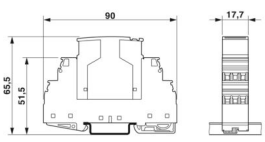
Indicator/remote signaling

Connection name	Remote fault indicator contact
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 data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.8 Nm
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section rigid	0.2 mm² ... 4 mm²
Conductor cross-section AWG	24 ... 12

Dimensions

Dimensional drawing	
Width	17.7 mm
Height	90 mm
Depth	65.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 HP

Material specifications

Color	black (RAL 9005)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6
Housing material	PA 6.6

Protective circuit

Mode of protection	L-N
	L-PE
	N-PE
	(L+) - (L-)
	(L+/L-) - PE
Direction of action	1L-N & N-PE
Nominal voltage U_N	48 V DC
Maximum continuous operating voltage U_C	60 V DC
Rated load current I_L	26 A (30 °C)
Protective conductor current I_{PE}	≤ 10 µA
Nominal discharge current I_n (8/20) µs	500 A
Combination wave U_{OC}	1 kV (2 Ω)
	1 kV (2 Ω)
Voltage protection level U_p	≤ 120 V
Response time t_A (L-N)	≤ 1 ns
Response time t_A (L-PE)	≤ 1 ns
Short-circuit current rating I_{SCCR}	200 A (without backup fuse for U_C)
Maximum backup fuse for through wiring	25 A (gG)
Max. backup fuse with branch wiring	50 A (gG)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl)
Permissible humidity (operation)	5 % ... 95 %

Standards and regulations

Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1 / DIN VDE 0675-6 / IEC 61643-1
Standards/specifications	EN 61643-11
Note	2012
Standards/specifications	IEC 61643-11

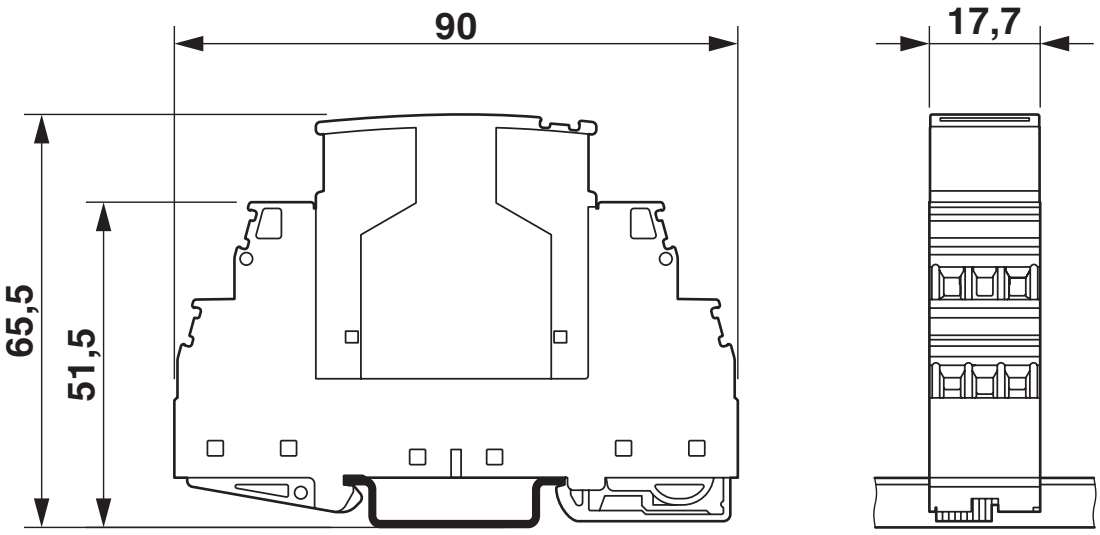
Note	2011

Mounting

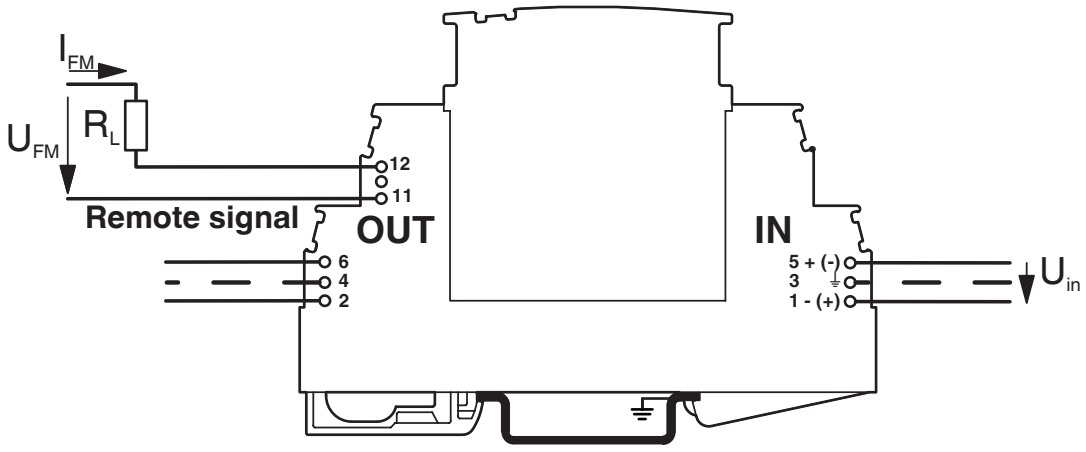
Mounting type	DIN rail: 35 mm

Drawings

Dimensional drawing

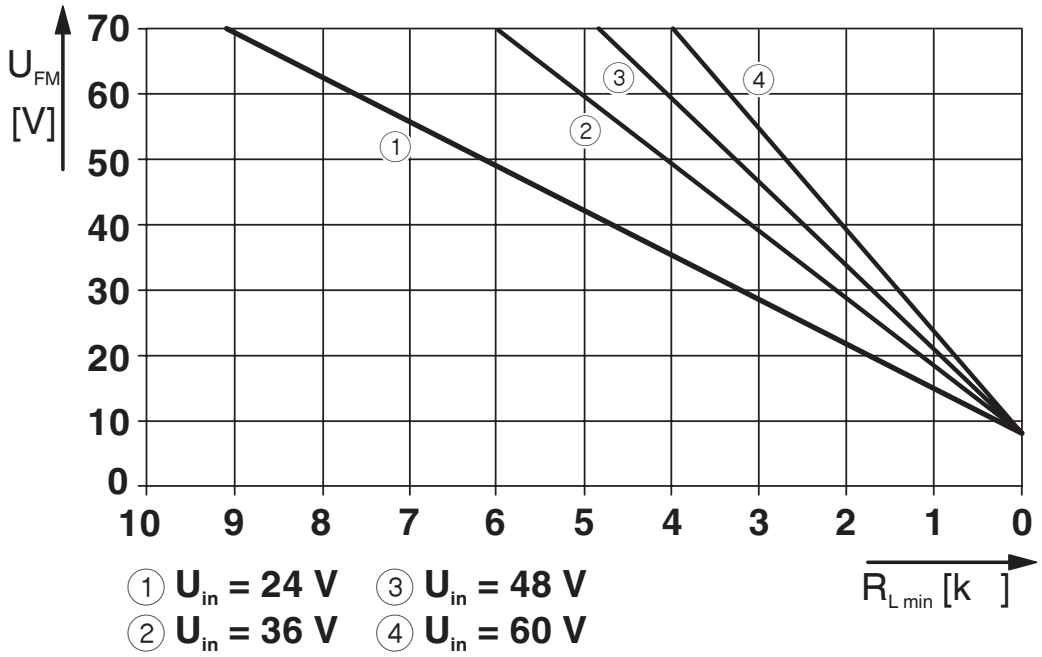


Connection diagram



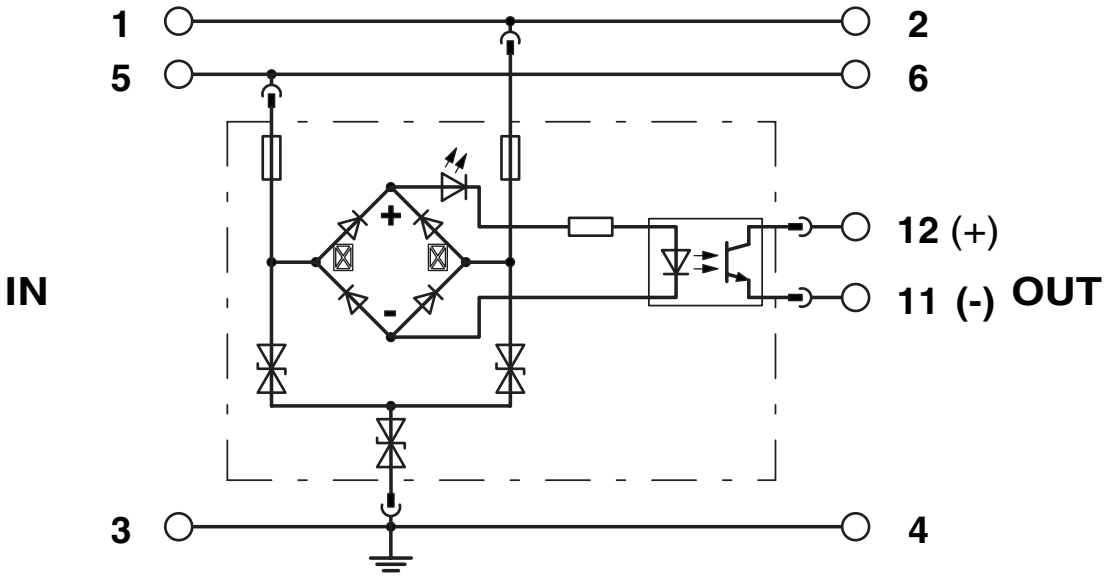
The voltage of the cable to be protected (U_{in}) determines the current driven by the transistor output (I_{FM}).

Diagram



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}).

Circuit diagram



Classifications

ECLASS

ECLASS-13.0	27171203
ECLASS-15.0	27171203

ETIM

ETIM 10.0	EC000942

UNSPSC

UNSPSC 21.0	39121600

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	bba789db-0658-4177-889f-1efe413733db

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