

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



2817958

<https://www.phoenixcontact.com/us/products/2817958>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

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

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



2817958

<https://www.phoenixcontact.com/us/products/2817958>

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

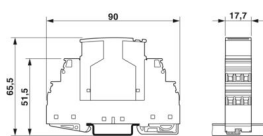
Indicator/remote signaling

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 mm ² ... 2.5 mm ²
Conductor cross-section rigid	0.2 mm ² ... 4 mm ²
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 Div.

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



2817958

<https://www.phoenixcontact.com/us/products/2817958>

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}	$\leq 10 \mu\text{A}$
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	$\leq 120 \text{ V}$
Response time t_A (L-N)	$\leq 1 \text{ ns}$
Response time t_A (L-PE)	$\leq 1 \text{ ns}$
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	$\leq 2000 \text{ m (amsl)}$
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

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



2817958

<https://www.phoenixcontact.com/us/products/2817958>

Note	2011
------	------

Mounting

Mounting type	DIN rail: 35 mm
---------------	-----------------

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

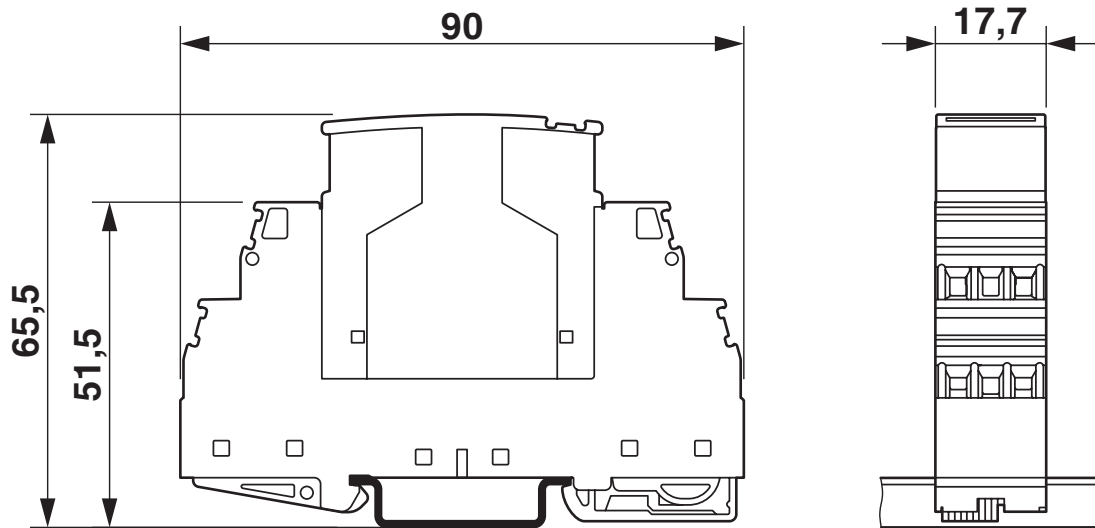


2817958

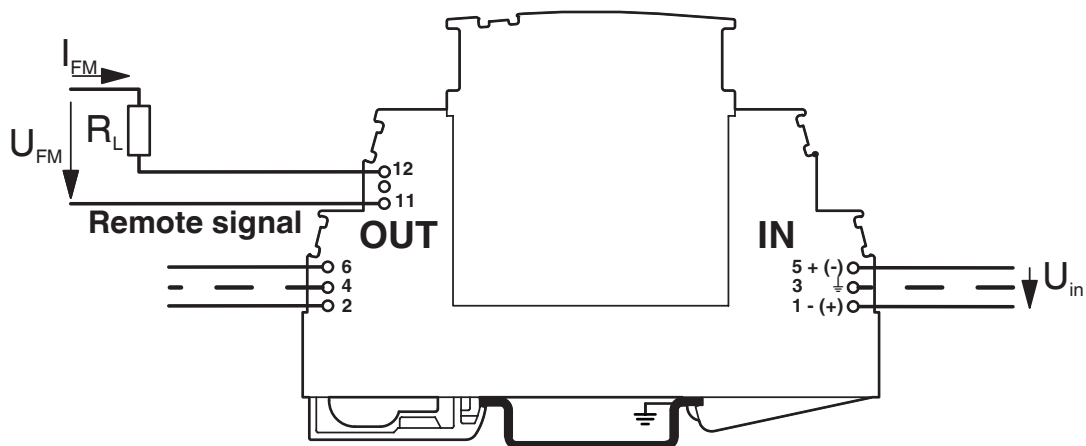
<https://www.phoenixcontact.com/us/products/2817958>

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}).

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



2817958

<https://www.phoenixcontact.com/us/products/2817958>

Classifications

ECLASS

ECLASS-13.0	27171203
ECLASS-15.0	27171203

ETIM

ETIM 10.0	EC000942
-----------	----------

UNSPSC

UNSPSC 21.0	39121600
-------------	----------

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



2817958

<https://www.phoenixcontact.com/us/products/2817958>

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

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com