

PT 2X1+F-BE - Surge protection base-element



2856142

<https://www.phoenixcontact.com/us/products/2856142>

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Base element for protective plug PT with protective circuit for 2 conductors of signal circuits grounded on one side. Integrated gas arrester as coarse protection between GND and PE. Mounting on NS 35/7.5 und NS 35/15, housing width: 17.5 mm.



Your advantages

- 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

Commercial data

Item number	2856142
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CL21
Product key	CL2111
GTIN	4017918599256
Weight per piece (including packing)	52 g
Weight per piece (excluding packing)	45.299 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes

Notes on operation	In the base elements PT...+F-BE , the connections 9/10 (GND) are linked to the mounting foot via a gas-filled surge arrester.
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Product properties

Product type	Base element
Product family	PLUGTRAB PT
Type	DIN rail module, two-section, divisible
Number of positions	2
Surge protection fault message	none

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal voltage U_N	24 V AC
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Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 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	51.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

Material specifications

Color	black (RAL 9005) copper color
Flammability rating according to UL 94	V-0
Housing material	PA 6.6

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Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Direction of action	Signal Ground/Shield-Earth Ground
Nominal voltage U_N	24 V AC
Maximum continuous operating voltage U_C	40 V DC
	28 V AC
Rated current	300 mA (45 °C)
Resistance per path	4.7 Ω \pm 10 %
Surge protection fault message	none
Max. required back-up fuse	315 mA (T)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	\leq 2000 m (amsl)

Standards and regulations

Standards/specifications	IEC 61643-21
Note	2000 + corrigendum 2001 + A1:2008, modified + A2:2012
Standards/specifications	EN 61643-21
Note	2001 + A1:2009 + A2:2013

Mounting

Mounting type	DIN rail: 35 mm
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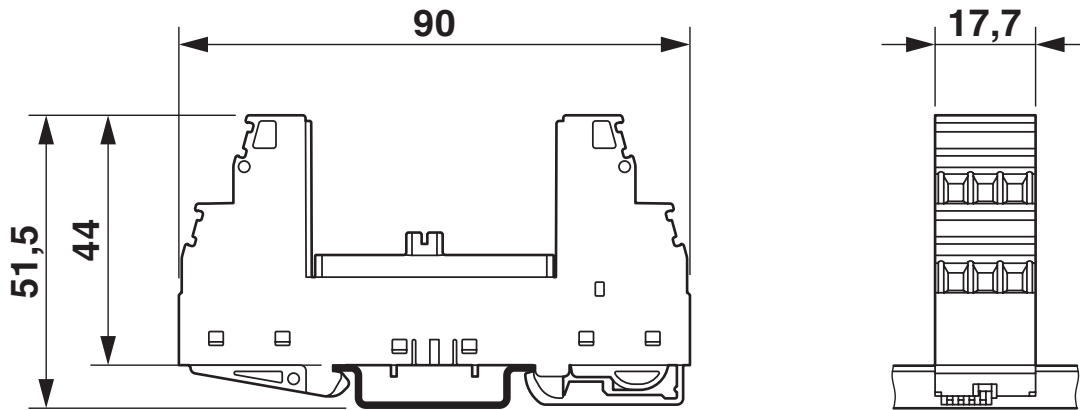


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Drawings

Dimensional drawing



Diagram



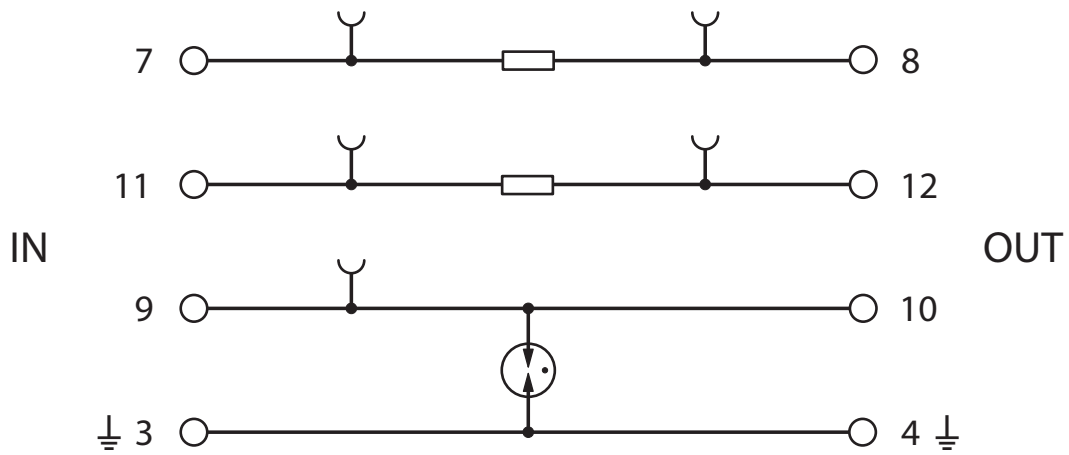
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Circuit diagram



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Approvals

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DNV GL

Approval ID: TAE00001N6



UL Listed

Approval ID: FILE E 138168



cUL Listed

Approval ID: FILE E 333250



UL Listed

Approval ID: FILE E 333250

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Classifications

ECLASS

ECLASS-13.0	27171501
ECLASS-15.0	27171501

ETIM

ETIM 10.0	EC001466
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UNSPSC

UNSPSC 21.0	39121600
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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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