

# PT 1X2-BE - Surge protection base-element

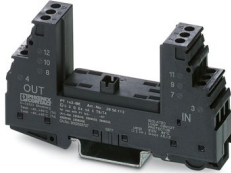


2856113

<https://www.phoenixcontact.com/us/products/2856113>

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Base element for protective plug PT with protective circuit for a 2-core floating signal circuit.  
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	2856113
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CL21
Product key	CL2111
GTIN	4017918599287
Weight per piece (including packing)	53.3 g
Weight per piece (excluding packing)	49.03 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### Notes

Notes on operation	When the <b>PT...-BE</b> base elements are used, the connections 9/10 (GND) are directly connected to the DIN rail via the metal mounting foot.
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### Product properties

Product type	Base element
Product family	PLUGTRAB PT
Type	Base element, DIN rail mounting
Number of positions	2
Surge protection fault message	none
Wire pairs per module	1

### Insulation characteristics

Overvoltage category	III
Pollution degree	2

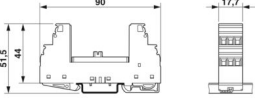
### Electrical properties

Nominal voltage $U_N$	48 V DC
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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 <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
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

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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 $U_N$	48 V DC
Maximum continuous operating voltage $U_C$	53 V DC
	37 V AC
Rated current	450 mA (45 °C)
Resistance per path	2.2 $\Omega$ $\pm$ 10 %
Surge protection fault message	none
Max. required back-up fuse	500 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
Standards/specifications	GB/T 3836.1
Note	2021
Standards/specifications	GB/T 3836.3
Note	2021

## Mounting

Mounting type	DIN rail: 35 mm
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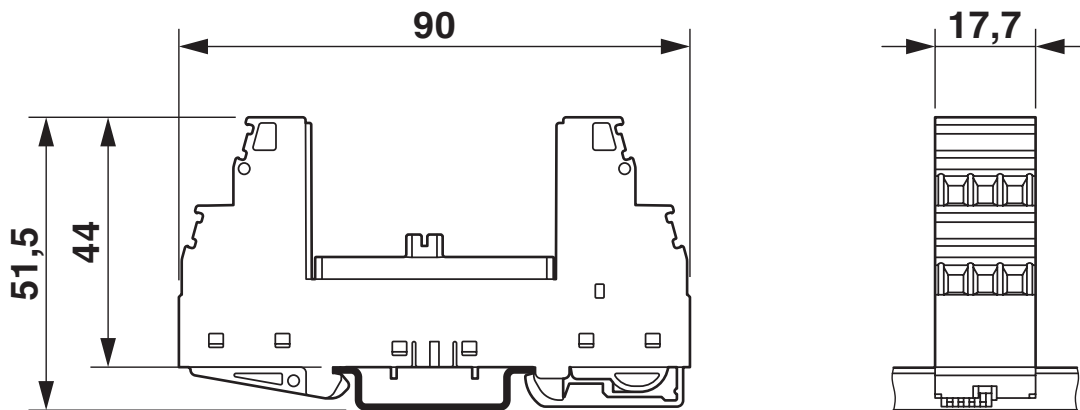
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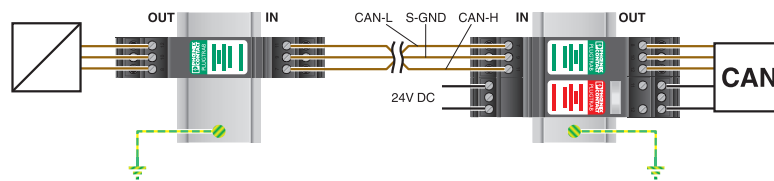
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## Drawings

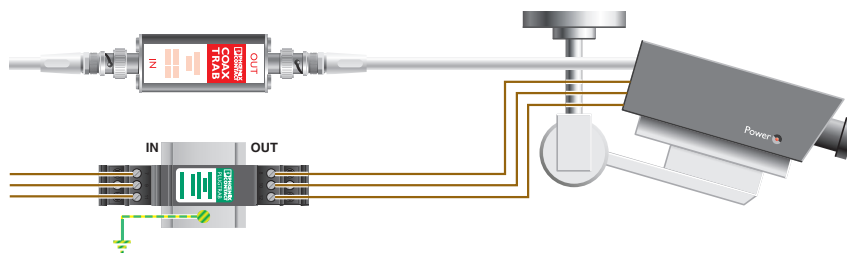
Dimensional drawing



Application drawing



Application drawing



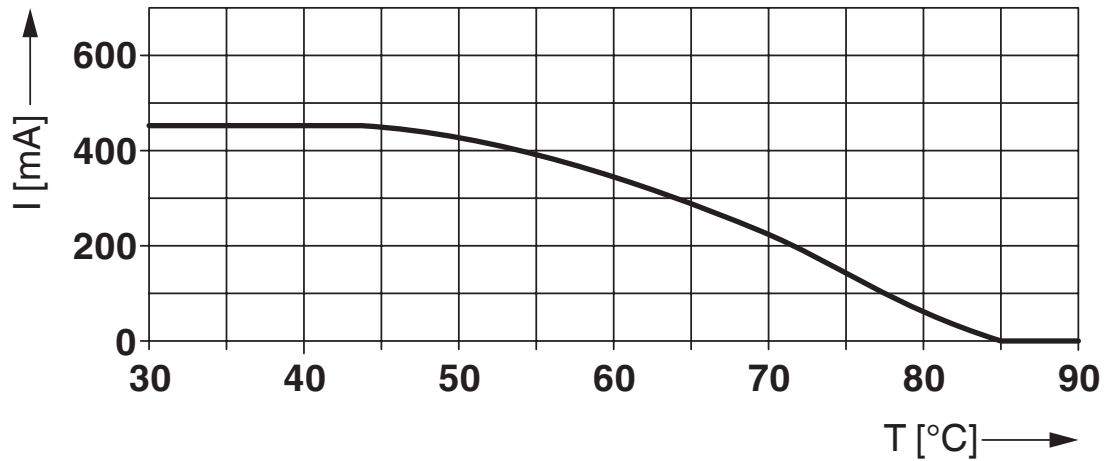
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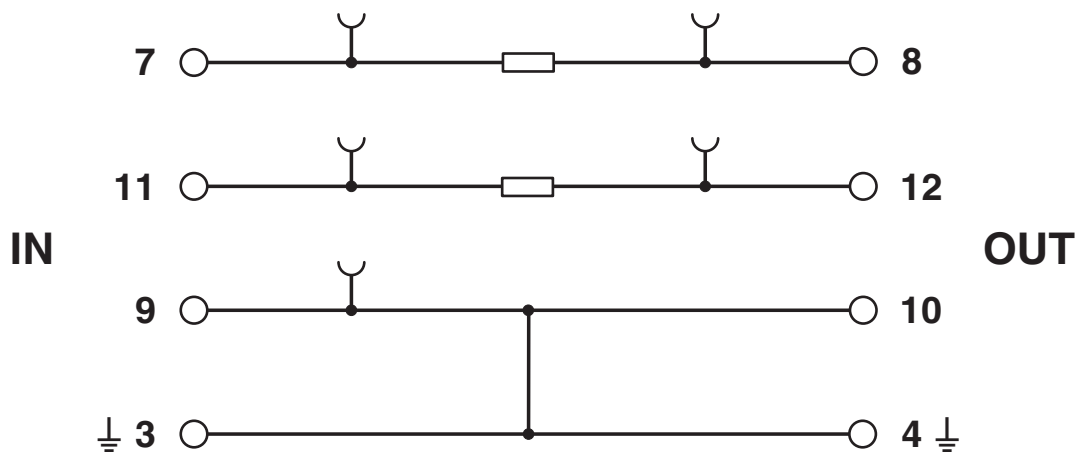
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Diagram



Circuit diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2856113>



**DNV GL**

Approval ID: TAE00001N6



**UL Listed**

Approval ID: FILE E 138168



**CCC**

Approval ID: 2020322316003150



**cUL Listed**

Approval ID: FILE E 333250



**UL Listed**

Approval ID: FILE E 333250



**ATEX**

Approval ID: DEKRA 22ATEX0044 X



**IECEx**

Approval ID: IECEx DEK 22.0031X



**UKCA-EX**

Approval ID: DEKRA 22UKEX6005X



**NEPSI-EX**

Approval ID: GYJ20.1180X

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## Classifications

### ECLASS

ECLASS-13.0	27171592
ECLASS-15.0	27171592

### ETIM

ETIM 10.0	EC002497
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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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