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PT 2X1-VF-120AC-ST - Surge protection plug

2856799

https://www.phoenixcontact.com/gb/products/2856799

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Protective connector with protective circuit free of leakage current for two floating signals. Connection in series, consisting of varistor and gas-filled surge arrester between signal wires and ground.

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

Commercial data

Item number	2856799
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CL2111
Product key	CL2111
Catalog page	Page 138 (C-4-2019)
GTIN	4017918974558
Weight per piece (including packing)	25.6 g
Weight per piece (excluding packing)	25.6 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Product properties

Product type	Surge protection for MCR technology
Product family	PLUGTRAB PT
IEC test classification	C1
	C2
	C3
Type	Male
Number of positions	2
Arrester can be tested with CHECKMASTER from software version:	SW Version 2.13 or later

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal voltage U_N	120 V AC

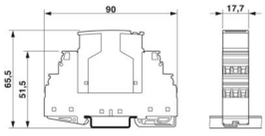
Indicator/remote signaling

Switching function	N/C contact

Connection data

Connection method	Screw connection (in connection with the base element)

Dimensions

Dimensional drawing	
Width	17.5 mm
Height	44.8 mm
Depth	51.7 mm
Horizontal pitch	1 Div.
Complete module width	17.7 mm
Complete module height	90 mm
Complete module depth	65.5 mm

Material specifications

Color	black (RAL 9005)
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

Protective circuit

Direction of action	Line-Line & Line-Earth Ground
Maximum continuous voltage U_C	175 V AC
Rated current	6 A (with PT BE/FM)
Operating effective current I_C at U_C	≤ 2 µA
Residual current I_{PE}	≤ 4 µA
Nominal discharge current I_n (8/20) µs	3 kA
Pulse discharge current I_{imp} (10/350) µs	300 A
Total discharge current I_{total} (8/20) µs	8 kA
Max. discharge current I_{max} (8/20) µs	8 kA
Nominal pulse current Ian (10/1000) µs (line-earth)	40 A
Output voltage limitation at 1 kV/µs (line-earth) spike	≤ 800 V
Output voltage limitation at 1 kV/µs (line-earth) static	≤ 800 V
Residual voltage at I_n (conductor-ground)	≤ 600 V
Voltage protection level U_p	≤ 1 kV (C2 - 2 kA)
Voltage protection level U_p (line-earth)	≤ 900 V (C1 - 500 A)
	≤ 950 V (C2 - 1 kA)
	≤ 1 kV (C3 - 25 A)
	≤ 1.1 kV (I_{imp}-300 A)
Response time t_A	≤ 100 ns
Capacity (Core-Earth)	typ. 3 pF
Resistance per path	0 Ω
Surge protection fault message	none
Max. required back-up fuse	6 A (gL/gG)
Impulse durability (line-earth)	C1 - 1 kV / 500 A
	C2 - 4 kV / 2 kA
	C3 - 25 A

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)

Standards and regulations

Air clearances and creepage distances

Standards/regulations	IEC 60664-1 / DIN VDE 0110-1

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Standards/specifications	EN 61643-21
Note	2002
Standards/specifications	IEC 61643-21
Note	2002

Mounting

Mounting type	on base element

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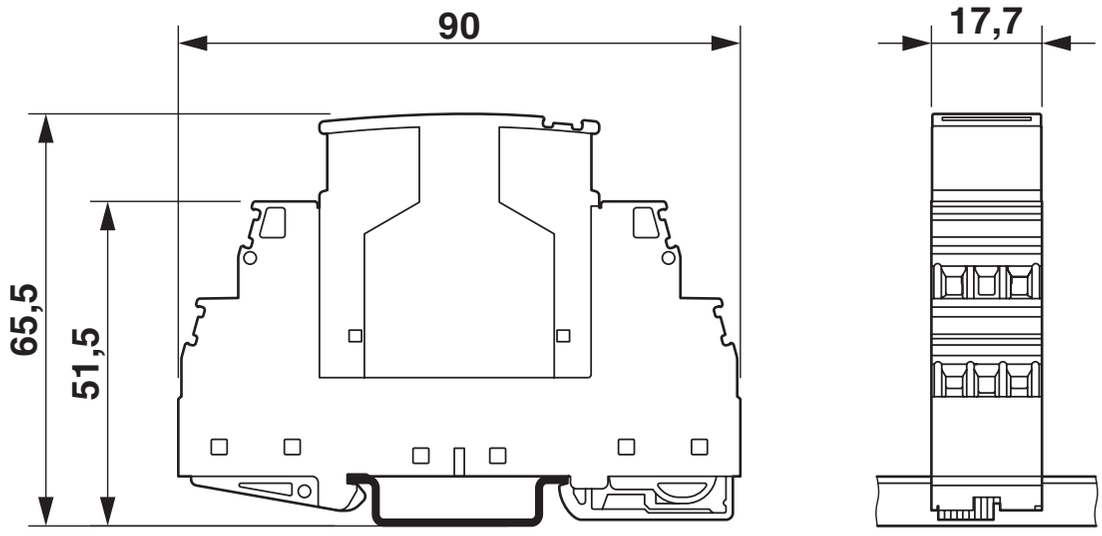
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Drawings

Dimensional drawing



The figure shows the complete module consisting of a base element and connector

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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/2856799

EAC
Approval ID: RU C-DE.*09.B.00169

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Classifications

ECLASS

ECLASS-11.0	27130807
ECLASS-13.0	27171501

ETIM

ETIM 9.0	EC001625

UNSPSC

UNSPSC 21.0	39121600

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

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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Mandatory accessories

PT-BE/FM - Type 3 surge protection base element

2839282

https://www.phoenixcontact.com/gb/products/2839282



Base element for protective plug PT, for mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm

Accessories

ZBF 5:UNBEDRUCKT - Zack Marker strip, flat

0808642

https://www.phoenixcontact.com/gb/products/0808642



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

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ZBF 5/WH-100:UNBEDRUCKT - Zack Marker strip, flat

0808668

https://www.phoenixcontact.com/gb/products/0808668



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 1000

ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

https://www.phoenixcontact.com/gb/products/2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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ZBN 18 CUS - Zack marker strip

0825059

https://www.phoenixcontact.com/gb/products/0825059



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

SSA 3-6 - Shield connection

2839295

https://www.phoenixcontact.com/gb/products/2839295



Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm^2, color: black

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SSA 5-10 - Shield connection

2839512

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Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm^2, color: black

X-PEN 0,35 - Marker pen

0811228

https://www.phoenixcontact.com/gb/products/0811228



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

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