Surge protection device - PT 2X1-VF-120AC - 2859327

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Rail-mountable surge arrester for higher signal voltages. Protective circuit free of leakage current for two floating signals.
Nominal voltage: 120 V AC

Your advantages

- Plugs can be checked with CHECKMASTER
- Maximum ease of maintenance thanks to the two-piece design
- Base element remains an integral part of the installation
- Protective devices for use in telecommunications and signaling networks according to IEC 61643-21
- Consistent plug-in signal circuit protection
- Impedance-neutral disconnection of plug for test and maintenance purposes

Key Commercial Data

Packing unit	10 pc
GTIN	4 017918 974565
GTIN	4017918974565
Weight per Piece (excluding packing)	62.140 g
Custom tariff number	85363010
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Dimensions

Height	44.8 mm
Width	17.5 mm
Depth	51.7 mm
Horizontal pitch	1 Div.
Complete module height	90 mm

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Technical data

Dimensions

Complete module width	17.7 mm
Complete module depth	65.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Degree of protection	IP20

General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	black
Standards for cearances and creepage distances	IEC 60664-1
	DIN VDE 0110-1
Overvoltage category	III
Degree of pollution	2
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Number of positions	2
Direction of action	Line-Line & Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	SW Version 2.13 or later

Protective circuit

IEC test classification	C1
	C2
	C3
Nominal voltage U_N	120 V AC
Maximum continuous voltage U_C	175 V AC
Rated current	6 A
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
Nominal discharge current I_n (8/20) µs (line-earth)	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) static	≤ 800 V
Residual voltage at I_n (line-earth)	≤ 600 V
Residual voltage with Ian (10/1000) µs (line-earth)	≤ 360 V
Energy absorption	85 J
Voltage protection level U_p	≤ 1 kV (C2 - 2 kA)
Voltage protection level U_p (line-earth)	≤ 900 V (C1 - 500 A)

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Technical data

Protective circuit

	≤ 950 V (C2 - 1 kA)
	≤ 1 kV (C3 - 25 A)
	≤ 1.1 kV (I_{imp}-300 A)
Response time t_A	≤ 100 ns
Capacity	typ. 3 pF
Resistance per path	0 Ω
Surge protection fault message	none
Max. required back-up fuse	6 A (e.g. D01 gL/gG)
Impulse durability (line-earth)	C1 - 1 kV / 500 A
	C2 - 4 kV / 2 kA
	C3 - 25 A

Connection data

Connection method	Screw connection
Connection method IN	Screw terminal blocks
Connection method OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section solid	0.2 mm² ... 4 mm²
Conductor cross section AWG	24 ... 12

Connection, equipotential bonding

Connection method	Screw connection
Tightening torque, min	0.8 Nm

Remote indication contact

Switching function	N/C contact
Maximum operating voltage $U_{max.}$ AC	120 V AC
Max. operating current I_{max}	3 A

Standards and Regulations

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

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

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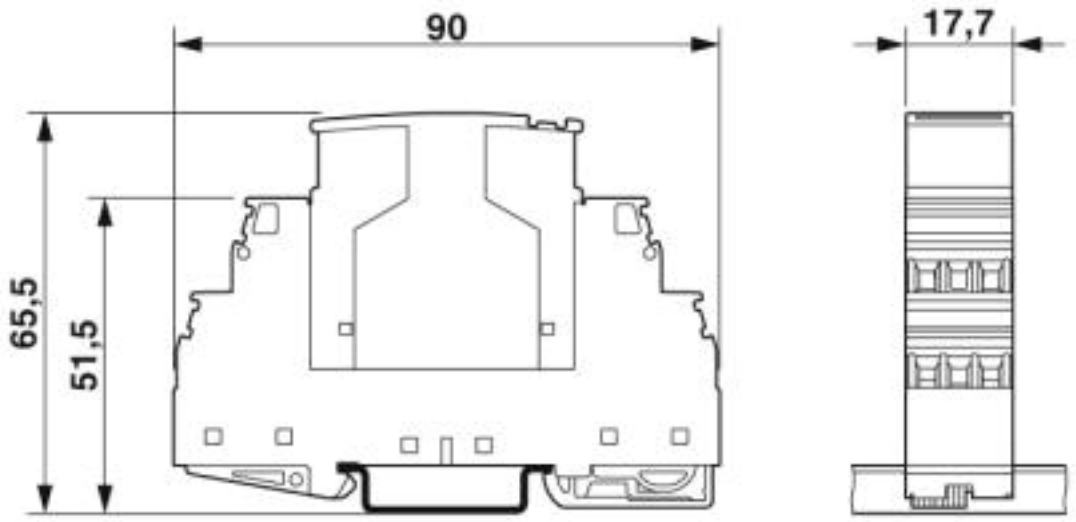
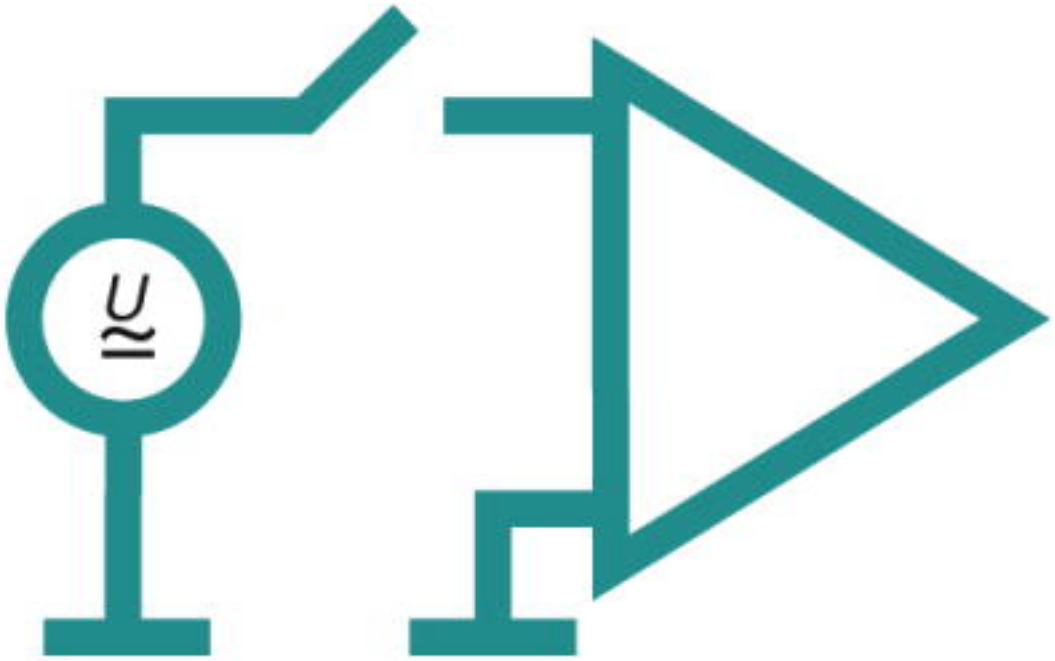
Dimensional drawing



Pictogram



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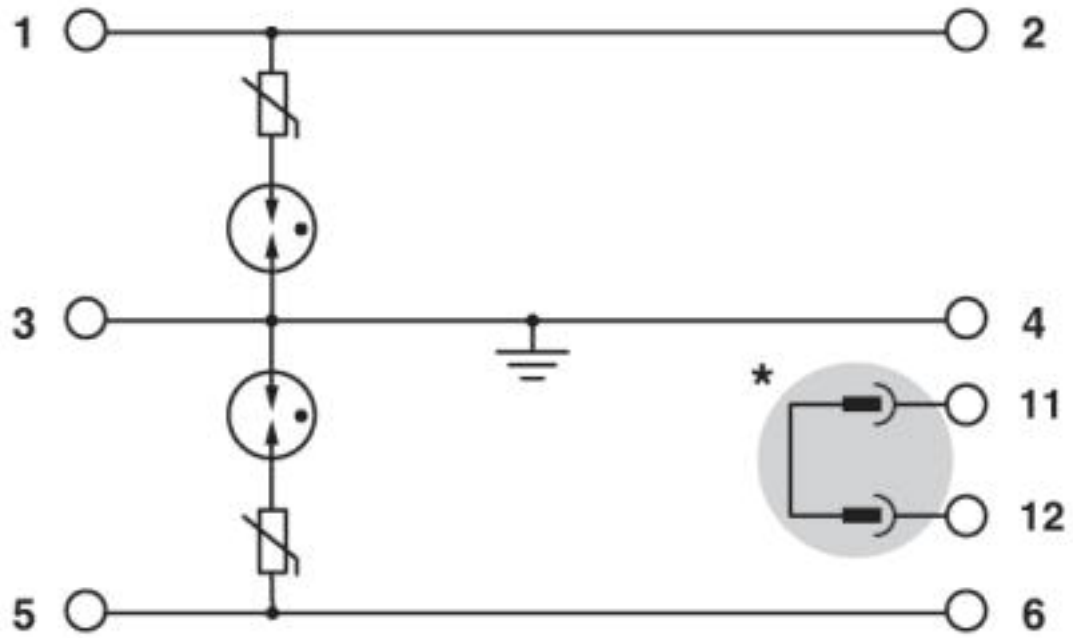
Circuit diagram



* Circuit only closed when plug is inserted.

Classifications

eCl@ss

eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943
ETIM 6.0	EC000943
ETIM 7.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610

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Classifications

UNSPSC

UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC	EAC	RU C-DE.A*30.B01561

Accessories

Accessories

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128

Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, 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

Labeled terminal marker

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Accessories

Zack Marker strip, flat - ZBF 5,LGS:FORTL.ZAHLEN - 0808671

Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,LGS:GERADE ZAHLEN - 0810821

Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,LGS:UNGERADE ZAHLEN - 0810863

Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 5,QR:FORTL.ZAHLEN - 0808697

Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Marker pen

Marker pen - X-PEN 0,35 - 0811228

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

Terminal marking

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Accessories

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642

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

Zack Marker strip, flat - ZBF 5/WH-100:UNBEDRUCKT - 0808668

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

Additional products

Shield connection - SSA 3-6 - 2839295

Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

Shield connection - SSA 5-10 - 2839512

Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black