

Surge protection device - PT 2X1-VF-230AC - 2805460

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Rail-mountable surge arrester for higher signal voltages. Protective circuit free of leakage current for two floating signals.
Nominal voltage: 230 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 046356 460989
GTIN	4046356460989
Weight per Piece (excluding packing)	71.780 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

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

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Technical data

Dimensions

Complete module depth	65.5 mm
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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
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

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	230 V AC
Maximum continuous voltage U_C	250 V AC
Rated current	6 A
Operating effective current I_C at U_C	$\leq 2 \mu\text{A}$
Residual current I_{PE}	$\leq 2 \mu\text{A}$ (at U_N)
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	500 A
Total discharge current I_{total} (8/20) μs	8 kA
Total discharge current I_{total} (10/350) μs	1 kA
Max. discharge current I_{max} (8/20) μs	8 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	8 kA
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 1.4 \text{ kV}$
Residual voltage at I_n (line-line)	$\leq 2 \text{ kV}$
Residual voltage at I_n (line-earth)	$\leq 1 \text{ kV}$
Residual voltage with I_{an} (10/1000) μs (line-line)	$\leq 1.4 \text{ kV}$
Residual voltage with I_{an} (10/1000) μs (line-earth)	$\leq 700 \text{ V}$
Energy absorption	150 J
Voltage protection level U_p (line-line)	$\leq 2.5 \text{ kV}$ (C2 - 4 kV / 2 kA)
	$\leq 1.8 \text{ kV}$ (C3 - 100 A)
	$\leq 2.6 \text{ kV}$ (D1 - 500 A)

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Technical data

Protective circuit

Voltage protection level U_p (line-earth)	≤ 1.1 kV (C1 - 500 A)
	≤ 1.5 kV (C2 - 4 kV / 2 kA)
	≤ 1.6 kV (C3 - 100 A)
	≤ 1.8 kV (D1 - 500 A)
Response time t_A	≤ 100 ns
Capacity (line-line)	typ. 4.5 pF
Capacity (line-earth)	typ. 9 pF
Resistance per path	0 Ω
Surge protection fault message	optical
Max. required back-up fuse	6 A (gL / gG)
Impulse durability (line-earth)	C2 - 4 kV / 2 kA
	C3 - 100 A
	D1 - 500 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 mm ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 4 mm ²
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	250 V AC
Max. operating current I_{max}	1 A

Standards and Regulations

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

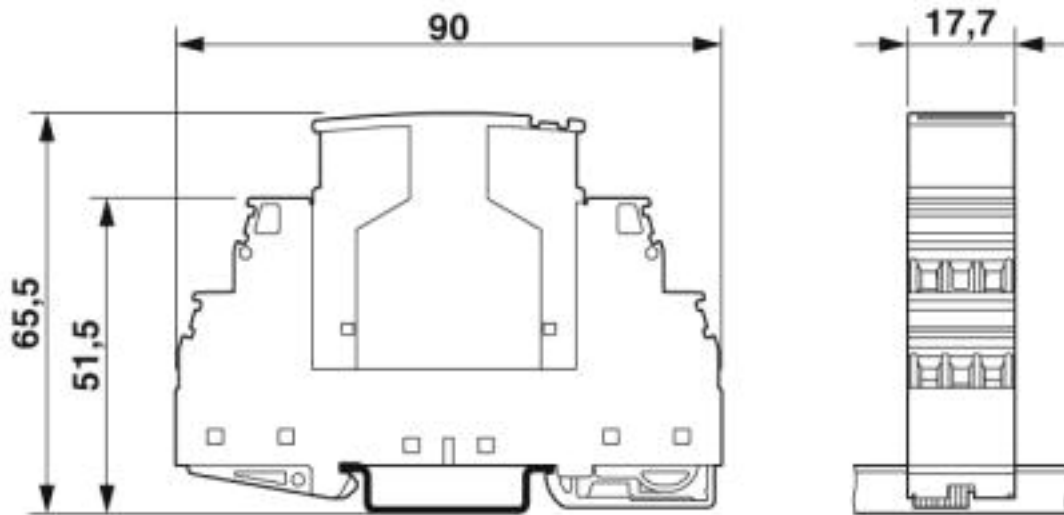
Environmental Product Compliance

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"

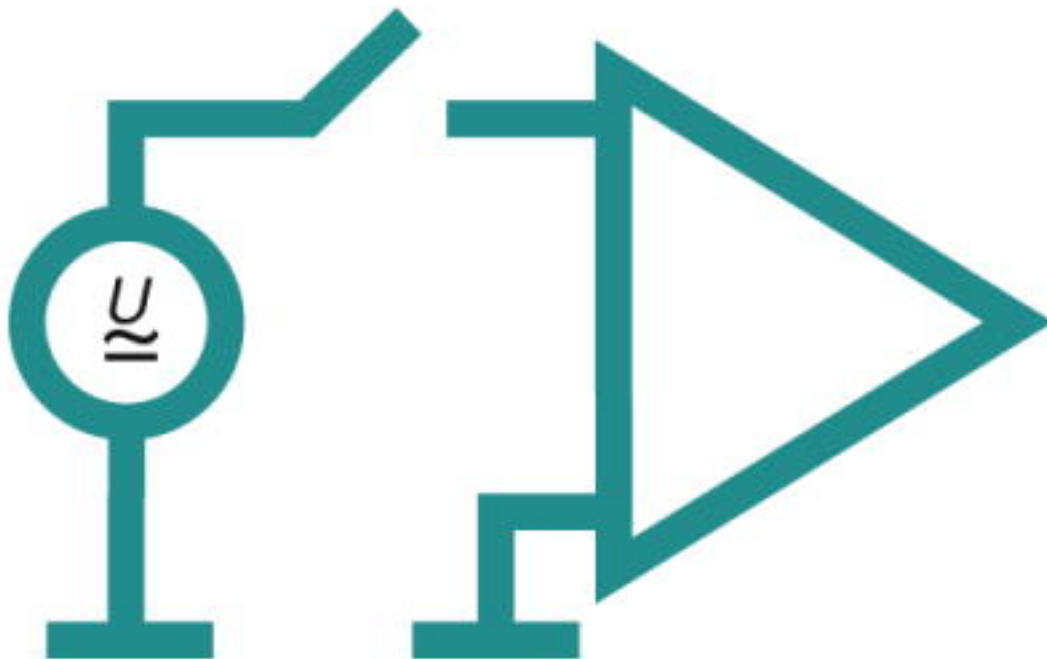
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Drawings

Dimensional drawing

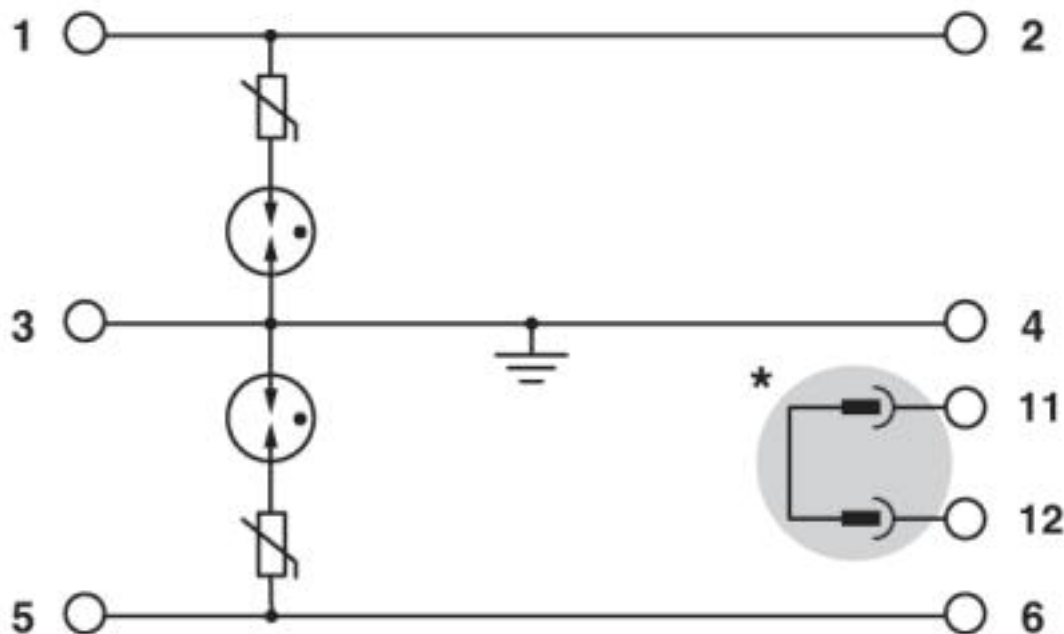


Pictogram



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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 / EAC

Ex Approvals

Approval details

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