

Surge protection plug - PT PE/S+1X2-24-ST - 2819008

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Protective plug PT with surge voltage equipment protection for power supply units, visual error display, nominal voltage: 24 V and a 2-core floating signal circuit, nominal voltage: 24 V.

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
- ✓ Consistent plug-in signal circuit protection
- ✓ Impedance-neutral disconnection of plug for test and maintenance purposes



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 819323
GTIN	4017918819323
Weight per Piece (excluding packing)	29.650 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Horizontal pitch	1 Div.
Complete module height	90 mm
Complete module width	17.7 mm
Complete module depth	65.5 mm

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Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	jet black RAL 9005
Mounting type	on base element
Type	Male
Current supply arrester can be tested with CHECKMASTER starting with software version:	From SW rev. 1.00
Direction of action	L-N-PE & Signal Line-Signal Line-Earth Ground

Protective circuit, power supply

EN type	T3
Arrester rated voltage U_C	34 V AC
	44 V DC
Nominal frequency f_N	50 Hz (60 Hz)
Rated load current I_L	6 A (30 °C)
Operating effective current I_C at U_C	≤ 1.5 mA
Residual current I_{PE}	≤ 5 μ A
Nominal discharge current I_n (8/20) μ s	700 A
Max. discharge current I_{max} (8/20) μ s	2 kA
Combination wave U_{OC}	2 kV
Voltage protection level U_p (L-N)	≤ 0.18 kV
Voltage protection level U_p (L-PE)	≤ 0.55 kV
Response time (L-N)	≤ 25 ns
Response time (L-PE)	≤ 100 ns
Surge protection fault message	optical

Connection (protective circuit, power supply)

Connection method	Screw connection (in connection with the base element)
Connection method IN	PLUGTRAB plug-in system
Connection method OUT	PLUGTRAB plug-in system
Screw thread	M3
Stripping length	8 mm

Protective circuit, information technology

Nominal voltage U_N	24 V AC
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Technical data

Protective circuit, information technology

Arrester rated voltage U_C	40 V DC
	28 V AC
Rated current	450 mA (45 °C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 2 \mu A$
Nominal discharge current I_n (8/20) μs (line-line)	10 kA
Nominal discharge current I_n (8/20) μs (line-earth)	10 kA
Max. discharge current I_{max} (8/20) μs maximum (line-line)	10 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	20 kA (in total)
Voltage protection level U_p (line-line)	$\leq 80 V$ (C2 - 10 kV / 5 kA)
Voltage protection level U_p (line-earth)	$\leq 450 V$ (C2 - 10 kV / 5 kA)
Response time t_A (line-line)	$\leq 1 ns$
Response time t_A (line-earth)	$\leq 100 ns$
Input attenuation aE, sym.	typ. 0.5 dB ($\leq 1.5 MHz / 50 \Omega$)
	typ. 0.2 dB ($\leq 500 kHz / 150 \Omega$)
	typ. 0.1 dB ($\leq 100 kHz / 600 \Omega$)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	typ. 8 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 3 MHz
Cut-off frequency f_g (3 dB), sym. in 600 Ohm system	typ. 800 kHz
Capacity (line-line)	typ. 1.1 nF
Capacity (line-earth)	typ. 4 pF
Resistance per path	2.2 $\Omega \pm 10 \%$
Surge protection fault message	Optical, remote indicator contact
Output voltage limitation at 1 kV/ μs (wire-wire)	$\leq 55 V$
Output voltage limitation at 1 kV/ μs (wire-earth)	$\leq 25 V$
Residual voltage at I_n (line-line)	$\leq 55 V$
Residual voltage with I_{an} (10/1000) μs (line-line)	$\leq 65 V$
Impulse durability (line-line)	C2 - 10 kV / 5 kA
	C3 - 23 A
Impulse durability (line-earth)	C2 - 10 kV / 5 kA
	D1 - 2.5 kA

Power supply, general

Connection method	Screw connection (in connection with the base element)
Connection method IN	PLUGTRAB plug-in system
Connection method OUT	PLUGTRAB plug-in system
Screw thread	M3

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Technical data

Power supply, general

Stripping length	8 mm
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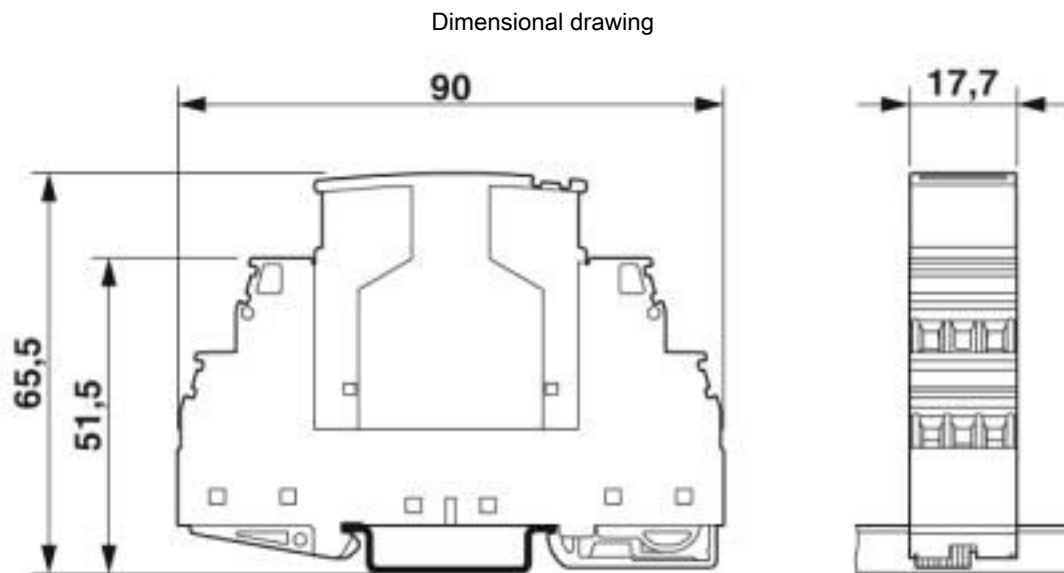
Standards (protective circuit, information technology)

IEC test classification	C1
	C2
	C3
	D1

Environmental Product Compliance

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

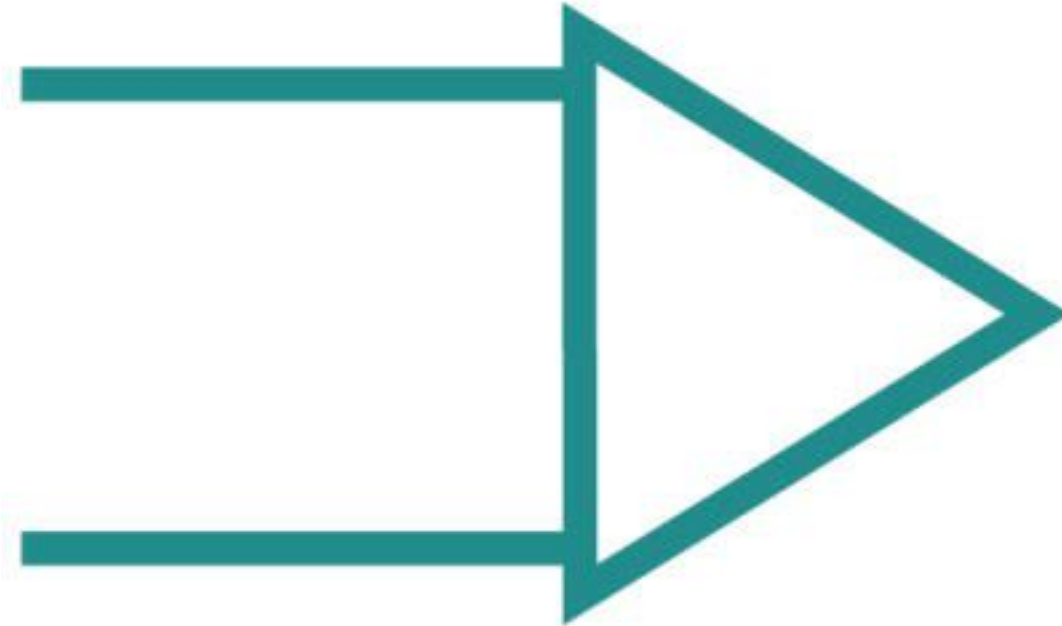
Drawings



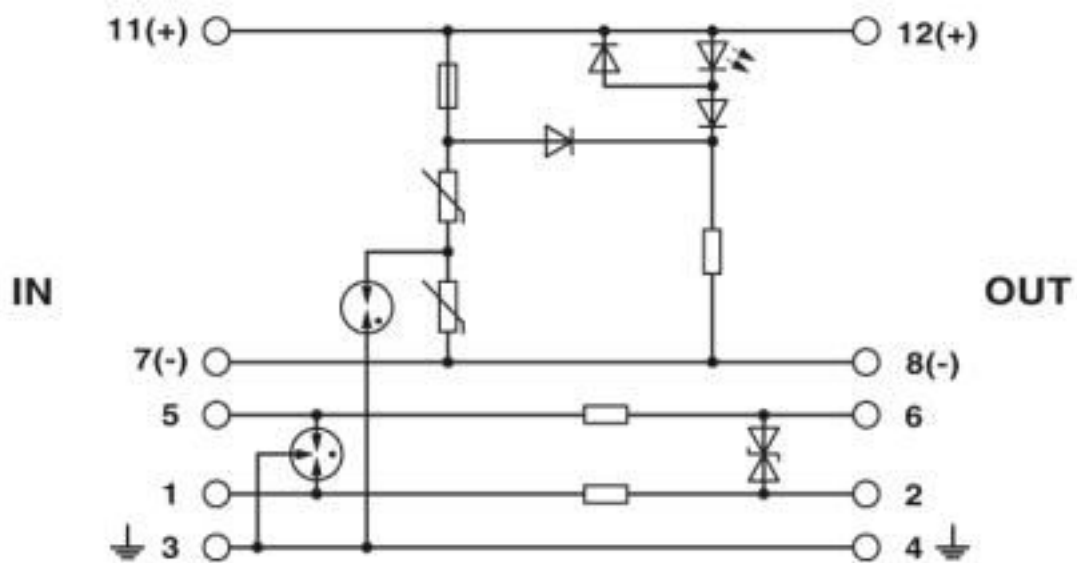
The figure shows the complete module consisting of a base element and connector

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Pictogram



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27130810
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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	27130805
eCl@ss 8.0	27130810
eCl@ss 9.0	27130810

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000899
ETIM 5.0	EC001473
ETIM 6.0	EC001473
ETIM 7.0	EC001473

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
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

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EAC / EAC


Ex Approvals

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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

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

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Accessories

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

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

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Accessories

Necessary add-on products

Surge protection base element - PT PE/S+1X2-BE - 2856265



Base element for protective plug PT with surge voltage device protection for the power supply unit and one 2-wire floating signal circuit, mounting on NS 35/7.5 and NS 35/15, housing width: 17.5 mm
