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## 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.

### Why buy this product

- 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	10 STK
GTIN	 4 017918 819323
GTIN	4017918819323

### 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
Complete module depth	65.5 mm

#### Ambient conditions

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

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

### Technical data

#### 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 $U_C$	$\leq 1.5$ mA
Residual current $I_{PE}$	$\leq 5$ $\mu$ A
Nominal discharge current $I_n$ (8/20) $\mu$ s	700 A
Max. discharge current $I_{max}$ (8/20) $\mu$ s	2 kA
Combination wave $U_{oc}$	2 kV
Voltage protection level $U_p$ (L-N)	$\leq 0.18$ kV
Voltage protection level $U_p$ (L-PE)	$\leq 0.55$ kV
Response time (L-N)	$\leq 25$ ns
Response time (L-PE)	$\leq 100$ 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
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) $\mu$ s (line-line)	10 kA
Nominal discharge current $I_n$ (8/20) $\mu$ s (line-earth)	10 kA

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

## Technical data

### Protective circuit, information technology

Max. discharge current $I_{max}$ (8/20) $\mu$ s maximum (line-line)	10 kA
Max. discharge current $I_{max}$ (8/20) $\mu$ s 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 in series	2.2 $\Omega$ $\pm 10$ %
Surge protection fault message	Optical, remote indicator contact
Output voltage limitation at 1 kV/ $\mu$ s (wire-wire)	$\leq 55$ V
Output voltage limitation at 1 kV/ $\mu$ s (wire-earth)	$\leq 25$ V
Residual voltage at $I_n$ (line-line)	$\leq 55$ V
Residual voltage with $I_{an}$ (10/1000) $\mu$ s (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
Stripping length	8 mm

### Standards (protective circuit, information technology)

IEC test classification	C1
	C2
	C3
	D1

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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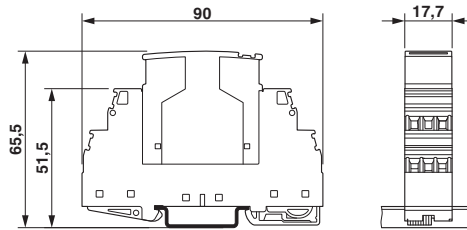
## Drawings

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

Pictogram

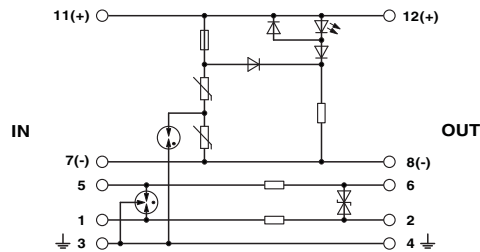


Dimensional drawing



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

Circuit diagram



## Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approval details

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