

## Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://download.phoenixcontact.com>)



Protective plug PT with protective circuit for higher signal voltages, 2-channel, visual fault warning. Nominal voltage: 60 V AC


Illustration shows variant PT 2x1VA-230AC-ST

### 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
- ✓ Protective devices for use in telecommunications and signaling networks according to IEC 61643-21
- ✓ Impedance-neutral disconnection of plug for test and maintenance purposes



### Key commercial data

Packing unit	10 pc
GTIN	 4 017918 182830
Weight per Piece (excluding packing)	23.19 g
Custom tariff number	85363010
Country of origin	Germany

### Technical data

#### Dimensions

Height	45 mm
Width	17.7 mm
Depth	52 mm
Horizontal pitch	1 Div.
Complete module height	90 mm
Complete module width	17.7 mm

# Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

## Technical data

### Dimensions

Complete module depth	65.5 mm
-----------------------	---------

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Degree of protection	IP20

### General

Housing material	PA 6.6
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	IEC 60664-1
Mounting type	On base element
Type	DIN rail module, two-section, divisible
Direction of action	Line-Line & Line-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.00

### Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage $U_N$	60 V AC
Maximum continuous voltage $U_C$ (wire-ground)	100 V DC
	75 V AC (50/60 Hz)
Nominal current $I_N$	26 A AC (30 °C)
	3 A DC
Operating effective current $I_C$ at $U_C$	$\leq 1.5$ mA (per path)
Residual current $I_{PE}$	$\leq 3$ mA
Impulse discharge current (10/350) $\mu$ s, peak value $I_{imp}$	500 A (per path)
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) spike	$\leq 200$ V
Energy absorption, asymmetrical	40 J
Voltage protection level $U_P$ (Core-Earth)	$\leq 300$ V (C2 - 4 kV/2 kA)
	$\leq 220$ V (C3 - 100 A)
	$\leq 250$ V (C1 - 1.4 kV / 0.7 kA)
Response time $t_A$ (Core-Earth)	$\leq 25$ ns
Input attenuation $a_E$ , asym.	typ. 0.3 dB ( $\leq 150$ kHz / 150 $\Omega$ )
Cut-off frequency $f_g$ (3 dB), asym. (GND) in 150 Ohm system	typ. 600 kHz
Capacity (Core-GND)	typ. 4 nF
Surge protection fault message	Optical, remote indicator contact
Max. required back-up fuse	25 A (gL/gG)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (1,4 kV / 0,7 kA)
	C2 (4 kV / 2 kA)

# Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

## Technical data

### Protective circuit

	C3 (100 A)
	D1 (500 A)

### Connection data

Connection method	Screw connection (in connection with the base element)
Connection type IN	PLUGTRAB plug-in system
Connection type OUT	PLUGTRAB plug-in system
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max.	12

## Classifications

### eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807

### ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

# Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

## Approvals

### Approvals

---

#### Approvals

GOST / UL Recognized / cUL Recognized / cULus Recognized

---

#### Ex Approvals

---

#### Approvals submitted

---

### Approval details

GOST

UL Recognized

cUL Recognized

cULus Recognized

## Accessories

### Accessories

#### Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

---

#### Labeled terminal marker

## Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

### 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: 5.15 x 5.15 mm

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: 5.15 x 5.15 mm

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: 5.15 x 5.15 mm

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: 5.15 x 5.15 mm

### 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

## Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

### Accessories

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



Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

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



Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.15 x 5.15 mm

### Necessary add-on products

Type 3 surge protection base element - PT-BE/FM - 2839282



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

### Additional products

Shield connection - SSA 3-6 - 2839295



shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black

Shield connection - SSA 5-10 - 2839512

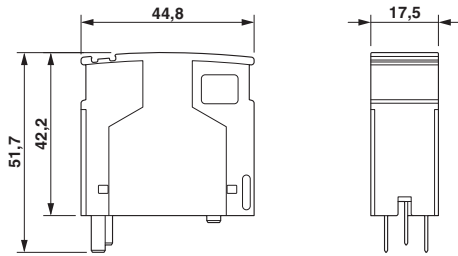


Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

### Drawings

# Surge protection plug - PT 2X1VA- 60AC-ST - 2839172

Dimensioned drawing



Circuit diagram

