

# PT 2+1-S-48DC-ST - Type 3 surge protection plug



2839648

<https://www.phoenixcontact.com/us/products/2839648>

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Protective plug PT with device surge protection for power supply units, visual error display.  
Nominal voltage: 48 V AC

## Your advantages

- Easy testing and documentation with CHECKMASTER 2 with pluggable protective modules
- Maximum ease of maintenance, thanks to the 2-piece design
- Easy selection for all possible demands in MCR applications with a complete product portfolio
- The signal is not influenced during maintenance work, thanks to the impedance-neutral insertion and removal of protective plugs

## Commercial data

Item number	2839648
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CL01
Product key	CL1411
Catalog page	Page 84 (C-4-2019)
GTIN	4017918193713
Weight per piece (including packing)	22.68 g
Weight per piece (excluding packing)	20.213 g
Customs tariff number	85363030
Country of origin	DE

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## Technical data

### Product properties

IEC power supply system	DC
Type	Male
Product type	Device protection
Number of positions	2
Surge protection fault message	optical

### Insulation characteristics

Overvoltage category	III
Pollution degree	2
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.00
IEC test classification	III
	T3
EN type	T3
Number of ports	One

### Dimensions

Dimensional drawing	
Width	17.5 mm
Height	44.8 mm
Depth	51.7 mm
Horizontal pitch	1 Div.
Complete module width	17.7 mm
Complete module height	90 mm
Complete module depth	65.5 mm

### Material specifications

Color	black (RAL 9005)
	Copper
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6
Housing material	PA 6.6

### Protective circuit

Mode of protection	L-N
	L-PE

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	N-PE
	(L+) - (L-)
	(L+/L-) - PE
Direction of action	1L-N & N-PE
Nominal voltage $U_N$	48 V DC
Maximum continuous voltage $U_C$	60 V DC
Rated load current $I_L$	26 A (30 °C)
Residual current $I_{PE}$	$\leq 10 \mu A$
Nominal discharge current $I_n$ (8/20) $\mu s$	500 A
Combination wave $U_{OC}$	1 kV (2 $\Omega$ )
	1 kV (2 $\Omega$ )
Voltage protection level $U_p$	$\leq 120 V$
Response time $t_A$ (L-N)	$\leq 1 ns$
Response time $t_A$ (L-PE)	$\leq 1 ns$
Short-circuit current rating $I_{SCCR}$	200 A (without backup fuse for $U_C$ )
Max. backup fuse with branch wiring	50 A (gG)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	$\leq 2000 m$ (amsl)
Permissible humidity (operation)	5 % ... 95 %

## Standards and regulations

Standards/specifications	EN 61643-11
Note	2012
Standards/specifications	IEC 61643-11
Note	2011

## Mounting

Mounting type	on base element
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## Classifications

### ECLASS

ECLASS-11.0	27130806
ECLASS-13.0	27171203

### ETIM

ETIM 9.0	EC000942
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### UNSPSC

UNSPSC 21.0	39121600
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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