

# Surge protection plug - PT 4-F-ST - 2858441

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://phoenixcontact.com/download>)




Surge protection plug for the base element, coarse protection for four signal lines grounded on one side.

## Why buy this product

- ✓ Plugs can be checked with CHECKMASTER
- ✓ For systems with high dielectric strength or fine protection installed
- ✓ Maximum ease of maintenance thanks to the two-piece design
- ✓ Installation location - directly where meas. and control cable enters building
- ✓ 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 892364
GTIN	4017918892364

## 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
Complete module depth	65.5 mm

### Ambient conditions

# Surge protection plug - PT 4-F-ST - 2858441

## Technical data

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Degree of protection	IP20

### 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
Direction of action	Line-Line & Line-Signal Ground/Shield & Signal Ground/Shield-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.10

### Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage $U_N$	110 V AC
Maximum continuous voltage $U_C$	60 V DC
	120 V AC
Rated current	2 A AC (80 °C)
	150 mA DC (80 °C)
Operating effective current $I_C$ at $U_C$	≤ 2 μA
Residual current $I_{PE}$	≤ 8 μA (with PT 4-BE)
	≤ 2 μA (with PT 4+F-BE)
Nominal discharge current $I_n$ (8/20) μs (line-line)	10 kA
Nominal discharge current $I_n$ (8/20) μs (line-earth)	10 kA
Pulse discharge current $I_{imp}$ (10/350) μs (line-earth)	2.5 kA
Total discharge current $I_{total}$ (8/20) μs	20 kA
Output voltage limitation at 1 kV/μs (line-earth) spike	≤ 450 V (with PT 4-BE)
	≤ 600 V (with PT 4+F-BE)
Output voltage limitation at 1 kV/μs (line-earth) static	≤ 25 V (with PT 4-BE)
	≤ 50 V (with PT 4+F-BE)
Voltage protection level $U_p$ (line-earth)	≤ 450 V (C2 - 10 kV / 5 kA with PT 4-BE)
	≤ 600 V (C2 - 10 kV / 5 kA with PT 4+F-BE)
Voltage protection level $U_p$ static (line-earth)	≤ 50 V (C2 - 10 kV / 5 kA with PT 4-BE)
	≤ 50 V (C2 - 10 kV / 5 kA with PT 4+F-BE)
Response time $t_A$ (line-line)	≤ 100 ns

# Surge protection plug - PT 4-F-ST - 2858441

## Technical data

### Protective circuit

Response time $t_A$ (line-earth)	$\leq 100$ ns
Input attenuation aE, asym.	typ. 0.1 dB ( $\leq 1$ MHz / 50 $\Omega$ )
Cut-off frequency $f_g$ (3 dB), asym. (GND) in 50 Ohm system	typ. 100 MHz
Capacity (line-earth)	typ. 2 pF (with PT 4-BE)
	typ. 2 pF (with PT 4+F-BE)
Resistance in series	0 $\Omega$
Surge protection fault message	none
Max. required back-up fuse	2 A AC (T)
	150 mA DC (T)
Impulse durability (line-earth)	C2 - 10 kV/5 kA
	C1 - 1 kV/500 A
	C3 - 100 A
	D1 - 2.5 kA

### Connection data

Connection method	Screw connection (in connection with the base element)
Screw thread	M3
Tightening torque	0.5 Nm
Stripping length	8 mm
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12

### Standards and Regulations

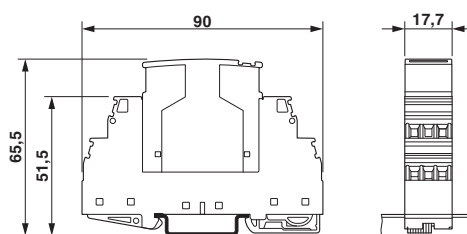
Standards/specifications	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012
	EN 61643-21 2001 + A1:2009 + A2:2013

## Drawings

### Pictogram



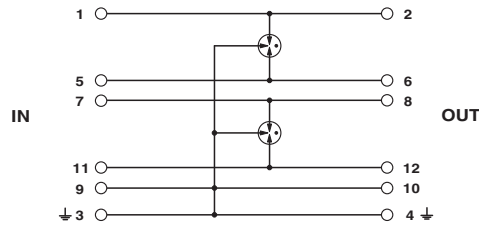
### Dimensional drawing



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

# Surge protection plug - PT 4-F-ST - 2858441

Circuit diagram



## Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

## Approval details

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

EAC		EAC-Zulassung
-----	--	---------------

Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>