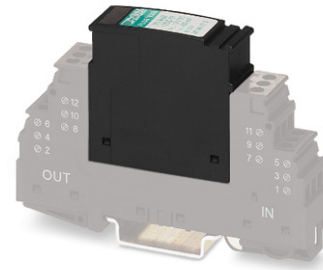


# PT 5-HF-12 DC-ST

Order No.: 2838775



Protective plug PT with HF protective circuit for 4 signal wires. Nominal voltage: 12 V DC



Commercial data	
EAN	4017918480646
Pack	10 pcs.
Customs tariff	85363010
Weight/Piece	0.0255 KG
Catalog page information	Page 76 (TT-2007)

### Product notes

WEEE/RoHS-compliant since:  
05/22/2006



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Technical data	
<b>General</b>	
Housing material	PA
Inflammability class acc. to UL 94	V0
Color	black
Standards for air and creepage distances	DIN VDE 0110-1
	IEC 60664-1: 1992-10

Surge voltage category	III
Pollution degree	2
Total surge current (8/20) $\mu$ s	20 kA
Ambient temperature (operation)	-40 °C ... 85 °C
Mounting type	On base element
Design	DIN rail module, two-section, divisible
Number of positions	5
Degree of protection	IP20
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/ Shield-Earth Ground
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.00
Width	17.70 mm
Height	52.00 mm
Length	45.00 mm
Pitch unit	1 Div.

**Protective circuit**

IEC category	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage $U_N$	12 V DC
Max. operating voltage $U_{max}$	14 V DC
Arrester rated voltage $U_C$	14 V DC
	9.8 V AC
Arrester rated voltage $U_C$ (Core-Core)	14 V DC
	9.8 V AC
Arrester rated voltage $U_C$ (Core-Earth)	14 V DC (with PT 2x2-BE)
Nominal current $I_N$	450 mA (45°C)
Operating effective current $I_C$ at $U_C$	$\leq 5 \mu$ A
Discharge current to PE at $U_C$	$\leq 5 \mu$ A (with PT 2x2-BE)
	$\leq 1 \mu$ A (with PT 2x2+F-BE)

Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (Core-Core)	10 kA
Nominal discharge surge current $I_n$ (8/20) $\mu\text{s}$ (Core-Earth)	10 kA
Total surge current (8/20) $\mu\text{s}$	20 kA
Max. discharge surge current $I_{\text{max}}$ (8/20) $\mu\text{s}$ maximum (Core-Core)	10 kA
Max. discharge surge current $I_{\text{max}}$ (8/20) $\mu\text{s}$ maximum (Core-Earth)	10 kA
Nominal pulse current $I_{\text{an}}$ (10/1000) $\mu\text{s}$ (Core-Core)	67 A
Lightning test current (10/350) $\mu\text{s}$ , peak value $I_{\text{imp}}$	2.5 kA
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Core) spike	$\leq 25$ V
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Earth) spike	$\leq 25$ V
	$\leq 700$ V (with PT 2x2+F-BE)
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Core) static	$\leq 25$ V
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-Earth) static	$\leq 25$ V
Output voltage limitation at 1 kV/ $\mu\text{s}$ (Core-GND) static	$\leq 40$ V (with PT 2x2+F-BE)
Residual voltage at $I_n$ , (conductor-conductor)	$\leq 25$ V
Residual voltage at $I_n$ , (conductor-ground)	$\leq 40$ V
Residual voltage at $I_n$ , (conductor-GND)	$\leq 25$ V (with PT 2x2-BE)
Residual voltage with $I_{\text{an}}$ (10/1000) $\mu\text{s}$ (conductor-conductor)	$\leq 25$ V
Residual voltage with $I_{\text{an}}$ (10/1000) $\mu\text{s}$ (conductor-GND)	$\leq 25$ V
Response time $t_A$ (Core-Core)	$\leq 500$ ns
Response time $t_A$ (Core-Earth)	$\leq 500$ ns
Input attenuation $a_E$ , sym.	0.2 dB ( $\leq 5$ MHz)
Cut-off frequency $f_g$ (3 dB), sym. in 100 Ohm system	Typ. 70 MHz
Capacity (Core-Core)	Typ. 30 pF
Resistance in series	2.2 $\Omega$
Max. required back-up fuse	500 mA (e.g. T in acc. with IEC 127-2/III)

**Connection data**

Type of connection	Screw connection (in connection with the base element)
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Connection type IN	PLUGTRAB plug-in system
Connection type OUT	PLUGTRAB plug-in system
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

**Connection, protective circuit**

Standards/regulations	IEC 61643-21
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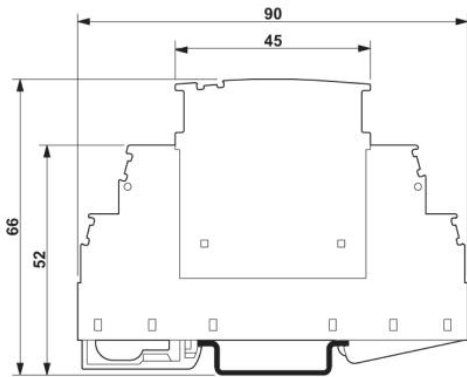
**Certificates / Approvals**

Certification	GOST, UL Listed
Certification Ex:	CUL-EX LIS, UL-EX LIS

**Accessories**

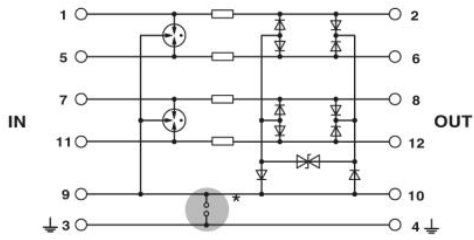
Item	Designation	Description
<b>Marking</b>		
0811228	X-PEN 0,35	Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm
0811228	X-PEN 0,35	Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm
0811228	X-PEN 0,35	Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm
0814717	ZBF 15:SO/CMS	Zack strip, flat, 10-section, divisible, special printing, marking according to customer requirements
0808671	ZBF 5,LGS:FORTL.ZAHLEN	Zack strip, flat, printed horizontally: 10-section, with the numbers, 1-10, 11-20 etc. up to 991-1000, color: White
0810821	ZBF 5,LGS:GERADE ZAHLEN	Zack marker strip, flat, printed horizontally: 10-section, with even numbers, printed with the numbers: 2-20, 22-40, etc. up to 82-100
0810863	ZBF 5,LGS:UNGERADE ZAHLEN	Zack strip, flat, printed horizontally: 10-section, with odd numbers, printed with the numbers: 1-19, 21-39 etc. up to 81-99

Dimensioned drawing



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

Circuit diagram



Approval logo (Ex area)

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