

Surge protection device - PT 5-HF-24DC-ST - 2906002

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>)



PT protective plug with HF protective circuit for 4 signal wires. Nominal voltage: 24 V DC

The illustration shows variant PT 5-HF-12 DC-ST

RoHS

Key Commercial Data

Packing unit	1 STK
Custom tariff number	85363010
Country of origin	Germany

Technical data

Environmental Product Compliance

China RoHS	No hazardous substances above threshold values
------------	--

Dimensions

Height	45 mm
Width	17.7 mm
Depth	52 mm

Ambient conditions

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

General

Housing material	PA 6.6
Flammability rating according to UL 94	V-0
Color	black
Type	Male

Surge protection device - PT 5-HF-24DC-ST - 2906002

Technical data

General

Number of positions	5
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
VDE requirement class	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	28 V DC
Rated current	450 mA (45°C)
Operating effective current I_C at U_C	$\leq 5 \mu A$
Residual current I_{PE}	$\leq 5 \mu A$ (with PT 2x2-BE)
	$\leq 1 \mu A$ (with PT 2x2+F-BE)
Nominal discharge current I_n (8/20) μs (Core-Core)	10 kA
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA (with PT 2x2+F-BE)
	10 kA (with PT 2x2-BE)
Pulse discharge current I_{imp} (10/350) μs	2.5 kA (with PT 2x2-BE)
	2.5 kA (with PT 2x2+F-BE)
Total discharge current I_{Total} (8/20) μs	20 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	25 A
Voltage protection level U_p (core-core)	$\leq 150 V$ (C1 - 1 kV/500 A)
	$\leq 165 V$ (C2 - 10 kV / 5 kA)
	$\leq 450 V$ (C2 - 10 kA)
	$\leq 50 V$ (C3 - 25 A)
Voltage protection level U_p (core-ground)	$\leq 150 V$ (C1 - 1 kV/500 A)
	$\leq 700 V$ ()
	$\leq 165 V$ (C2 - 10 kV / 5 kA)
	$\leq 900 V$ ()
	$\leq 450 V$ (C2 - 10 kA)
	$\leq 1000 V$ ()
	$\leq 50 V$ (C3 - 25 A)
	$\leq 800 V$ ()

Surge protection device - PT 5-HF-24DC-ST - 2906002

Technical data

Protective circuit

Voltage protection level U_p (core-GND)	≤ 150 V (C1 - 1 kV/500 A)
	≤ 150 V ()
	≤ 165 V (C2 - 10 kV / 5 kA)
	≤ 165 V ()
	≤ 450 V (C2 - 10 kA)
	≤ 450 V ()
	≤ 50 V (C3 - 25 A)
	≤ 50 V ()
Response time t_A (Core-Core)	≤ 500 ns
Response time t_A (Core-Earth)	≤ 500 ns
Input attenuation a_E , sym.	typ. 0.3 dB (≤ 13 MHz/100 Ω)
Cut-off frequency f_g (3 dB), sym. in 100 Ohm system	typ. 70 MHz
Capacity (Core-Core)	typ. 23 pF
Resistance in series	2.2 $\Omega \pm 10$ %
Surge protection fault message	None
Max. required back-up fuse	500 mA (e.g. T in acc. with IEC 127-2/III)

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 flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12

Connection, equipotential bonding

Stripping length	8 mm
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12

Standards and Regulations

Standards/specifications	EN 61643-21/A2 2013
--------------------------	---------------------

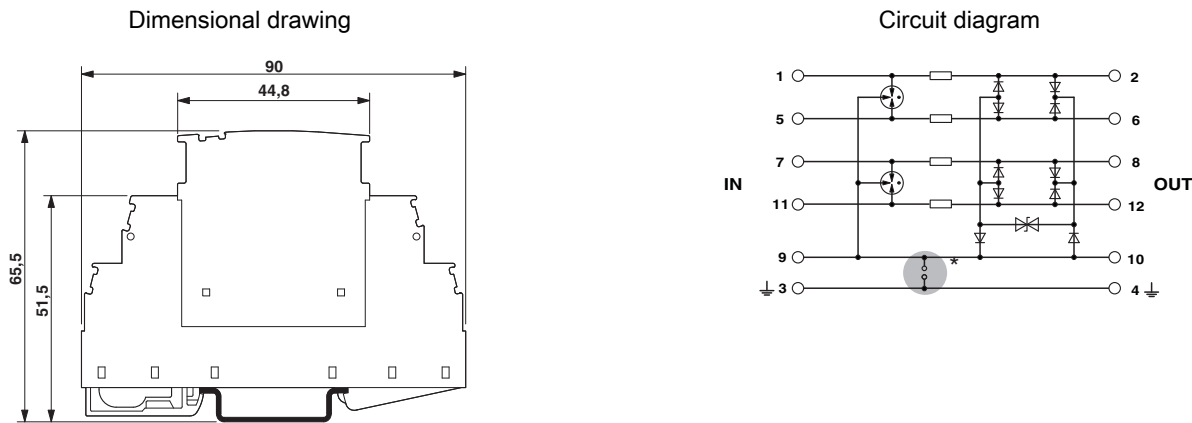
Surge protection device - PT 5-HF-24DC-ST - 2906002

Technical data

Standards and Regulations

	IEC 61643-21/A2 2012
--	----------------------

Drawings



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

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
eCl@ss 9.0	27130807

ETIM

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

UNSPSC

UNSPSC 6.01	30212010
-------------	----------

Surge protection device - PT 5-HF-24DC-ST - 2906002

Classifications

UNSPSC

UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

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

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

Surge protection device - PT 5-HF-24DC-ST - 2906002

Accessories

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

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

Surge protection device - PT 5-HF-24DC-ST - 2906002

Accessories

Necessary add-on products

Surge protection base element - PT 2X2-BE - 2839208



Base element for protective plug PT with protective circuit for two 2-wire floating signal circuit, bridge between the connections 3-4 (GND) and 9-10, 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

单击下面可查看定价，库存，交付和生命周期等信息

[>>Phoenix Contact\(菲尼克斯\)](#)