

PT-IQ-5-HF+F-12DC-UT - Surge protection device



2800801

<https://www.phoenixcontact.com/us/products/2800801>

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Surge protection, consisting of protective plug and base element, with integrated multi-stage status indicator on the module for five signal wires. For HF applications and telecommunications interfaces without supply voltage (up to 90 Mbps).

Your advantages

- Predictive monitoring with 3-stage LED display
- Integration of the status message into the system controller via group remote signaling
- Install quickly and error-free with DIN rail connectors
- Maximum ease of maintenance, thanks to the 2-piece design
- Maximum protection for MCR applications with high discharge capacity

Commercial data

Item number	2800801
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL22
Product key	CL2151
Catalog page	Page 173 (C-4-2019)
GTIN	4046356665247
Weight per piece (including packing)	126 g
Weight per piece (excluding packing)	121 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Notes

General

Note	Remote signaling as well as the power supply of the DIN rail connector are established by snapping the module into place on the DIN rail connector.
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Product properties

Product type	Surge protection for information technology
Product family	PLUGTRAB IQ
IEC test classification	C1
	C2
	C3
	D1
Type	DIN rail module, two-section, divisible
Surge protection fault message	Optical, multi-stage

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal voltage U_N	12 V DC
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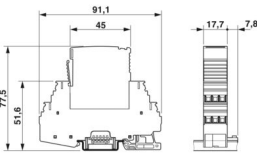
Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 Nm
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section rigid	0.2 mm² ... 4 mm²
Conductor cross section AWG	24 ... 12

Interfaces

Transmission speed	90 Mbps
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Dimensions

Dimensional drawing	
Width	17.7 mm
Height	91 mm

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Depth	77.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	1 Div.

Material specifications

Color	black (RAL 9005)
	black (RAL 9005)
Flammability rating according to UL 94	V-0
Housing material	PA 6.6

Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground
Maximum continuous voltage U_C	15 V DC
	10 V AC
Rated current	600 mA (40 °C)
Operating effective current I_C at U_C	$\leq 100 \mu A$ (per path)
Residual current I_{PE}	$\leq 10 \mu A$ (per path)
Nominal discharge current I_n (8/20) μs (line-line)	10 kA
Nominal discharge current I_n (8/20) μs (line-ground)	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
Voltage protection level U_p (line-line)	$\leq 100 V$ (C1 - 1 kV / 500 A)
	$\leq 145 V$ (C2 - 10 kV / 5 kA)
	$\leq 40 V$ (C3 - 25 A)
	$\leq 40 V$ (C3 - 50 A)
Voltage protection level U_p (line-earth)	$\leq 730 V$ (C1 - 1 kV / 500 A)
	$\leq 900 V$ (C2 - 10 kV / 5 kA)
	$\leq 900 V$ (C3 - 25 A)
	$\leq 900 V$ (C3 - 50 A)
Voltage protection level U_p (line-signalground)	$\leq 100 V$ (C1 - 1 kV / 500 A)
	$\leq 145 V$ (C2 - 10 kV / 5 kA)
	$\leq 40 V$ (C3 - 25 A)
	$\leq 40 V$ (C3 - 50 A)
Voltage protection level U_p static (line-line)	$\leq 55 V$ (C1 - 1 kV / 500 A)
Voltage protection level U_p static (line-signalground)	$\leq 55 V$ (C1 - 1 kV / 500 A)
Response time t_A (line-line)	$\leq 1 ns$
Response time t_A (line-earth)	$\leq 100 ns$
Response time t_A (line-signalground)	$\leq 1 ns$
Input attenuation aE, sym.	typ. 0.3 dB ($\leq 10 MHz/150 \Omega$)
Input attenuation aE, asym.	typ. 0.3 dB ($\leq 10 MHz/150 \Omega$)

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Cut-off frequency f_g (3 dB), sym. in 150 Ω system	typ. 60 MHz
Cut-off frequency f_g (3 dB), asym. (signal ground) in 150 Ω system	typ. 60 MHz
Capacity (Core-Core)	typ. 30 pF
Capacity (line-signalground)	typ. 30 pF
Resistance per path	1.2 Ω $\pm$ 5 %
Surge protection fault message	Optical, multi-stage
Max. required back-up fuse	600 mA (FF)
Impulse durability (line-line)	C1 - 1 kV / 500 A
	C2 - 10 kV / 5 kA
	C2 - 10 kA
	C3 - 50 A
Impulse durability (line-earth)	C1 - 1 kV / 500 A
	C2 - 10 kV / 5 kA
	C2 - 10 kA
	C3 - 50 A
	D1 - 2.5 kA
Impulse durability (line-signalground)	C1 - 1 kV / 500 A
	C2 - 10 kV / 5 kA
	C2 - 10 kA
	C3 - 50 A
Pulse reset time (line-line)	$\leq$ 15 ms
Pulse reset time (line-earth)	$\leq$ 15 ms
Pulse reset time (line-signalground)	$\leq$ 15 ms

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	$\leq$ 4000 m (amsl)
Permissible humidity (operation)	5 % ... 95 %

Standards and regulations

Air clearances and creepage distances

Standards/regulations	IEC 60664-1
Standards/specifications	IEC 61643-21
Note	2000 + A1:2008 + A2:2012
Standards/specifications	EN 61643-21
Note	2001 + A1:2009 + A2:2013
Standards/specifications	EN 61000-6-2
Note	2005
Standards/specifications	EN 61000-6-3

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Note	2007 + A1:2011
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Mounting

Mounting type	DIN rail: 35 mm
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