

PT 2X1-VF-120AC - Surge protection device



2859327

<https://www.phoenixcontact.com/us/products/2859327>

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Rail-mountable surge arrester for higher signal voltages. Protective circuit free of leakage current for two floating signals.
Nominal voltage: 120 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

Commercial data

Item number	2859327
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CL21
Product key	CL2111
Catalog page	Page 138 (C-4-2019)
GTIN	4017918974565
Weight per piece (including packing)	69.91 g
Weight per piece (excluding packing)	62.14 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Product properties

IEC test classification	C1
	C2
	C3
Type	DIN rail module, two-section, divisible
Product type	Surge protection for MCR technology
Product family	PLUGTRAB PT
Number of positions	2
Arrester can be tested with CHECKMASTER from software version:	SW Version 2.13 or later

Insulation characteristics

Overvoltage category	III
Pollution degree	2

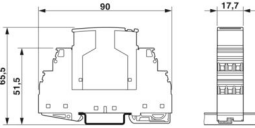
Electrical properties

Nominal voltage U_N	120 V AC
Indicator/remote signaling	
Switching function	N/C contact

Connection data

Connection method	Screw connection (in connection with the base element)
Screw thread	M3
Tightening torque	0.8 Nm
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 12

Dimensions

Dimensional drawing	
Width	17.7 mm
Height	90 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

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Material specifications

Color	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-Earth Ground
Maximum continuous voltage U_C	175 V AC
Rated current	6 A
Operating effective current I_C at U_C	$\leq 2 \mu\text{A}$
Residual current I_{PE}	$\leq 4 \mu\text{A}$
Nominal discharge current I_n (8/20) μs	3 kA
Pulse discharge current I_{imp} (10/350) μs	300 A
Total discharge current I_{total} (8/20) μs	8 kA
Max. discharge current I_{max} (8/20) μs	8 kA
Nominal pulse current I_{an} (10/1000) μs (line-earth)	40 A
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 800 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 800 \text{ V}$
Residual voltage at I_n (conductor-ground)	$\leq 600 \text{ V}$
Voltage protection level U_p	$\leq 1 \text{ kV}$ (C2 - 2 kA)
Voltage protection level U_p (line-earth)	$\leq 900 \text{ V}$ (C1 - 500 A) $\leq 950 \text{ V}$ (C2 - 1 kA) $\leq 1 \text{ kV}$ (C3 - 25 A) $\leq 1.1 \text{ kV}$ (I_{imp} -300 A)
Response time t_A	$\leq 100 \text{ ns}$
Capacity (Core-Earth)	typ. 3 pF
Resistance per path	0 Ω
Surge protection fault message	none
Max. required back-up fuse	6 A (gL/gG)
Impulse durability (line-earth)	C1 - 1 kV / 500 A C2 - 4 kV / 2 kA C3 - 25 A

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

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Altitude	≤ 2000 m (amsl)
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Standards and regulations

Air clearances and creepage distances

Standards/regulations	IEC 60664-1 / DIN VDE 0110-1
Standards/specifications	EN 61643-21
Note	2002
Standards/specifications	IEC 61643-21
Note	2002

Mounting

Mounting type	DIN rail: 35 mm
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Classifications

ECLASS

ECLASS-11.0	27130807
ECLASS-13.0	27171501

ETIM

ETIM 9.0	EC001625
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UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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