

# PT 2X1-VF-230AC - Surge protection device



2805460

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Rail-mountable surge arrester for higher signal voltages. Protective circuit free of leakage current for two floating signals.  
Nominal voltage: 230 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	2805460
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CL21
Product key	CL2111
Catalog page	Page 138 (C-4-2019)
GTIN	4046356460989
Weight per piece (including packing)	71.78 g
Weight per piece (excluding packing)	71.78 g
Customs tariff number	85363010
Country of origin	DE

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## Technical data

### Product properties

IEC test classification	C1
	C2
	C3
	D1
Type	DIN rail module, two-section, divisible
Product type	Surge protection for MCR technology
Product family	PLUGTRAB PT
Number of positions	2

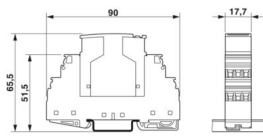
### Electrical properties

Nominal voltage $U_N$	230 V AC
Indicator/remote signaling	
Switching function	N/C contact
Maximum operating voltage $U_{max. AC}$	250 V AC
Max. operating current $I_{max}$	1 A

### Connection data

Connection method	Screw connection
Screw thread	M3
Tightening torque	0.8 Nm
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
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

### Material specifications

Color	black (RAL 9005)
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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 $U_C$	250 V AC
Rated current	6 A
Operating effective current $I_C$ at $U_C$	$\leq 2 \mu A$
Residual current $I_{PE}$	$\leq 2 \mu A$ (at $U_N$ )
Nominal discharge current $I_n$ (8/20) $\mu s$	3 kA
Nominal discharge current $I_n$ (8/20) $\mu s$ (line-ground)	3 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu s$	500 A
Total discharge current $I_{total}$ (8/20) $\mu s$	8 kA
Total discharge current $I_{total}$ (10/350) $\mu s$	1 kA
Max. discharge current $I_{max}$ (8/20) $\mu s$	8 kA
Max. discharge current $I_{max}$ (8/20) $\mu s$ maximum (line-earth)	8 kA
Nominal pulse current $I_{an}$ (10/1000) $\mu s$ (line-earth)	100 A
Output voltage limitation at 1 kV/ $\mu s$ (line-earth) static	$\leq 1.4$ kV
Residual voltage at $I_n$ (conductor-conductor)	$\leq 2$ kV
Residual voltage at $I_n$ (conductor-ground)	$\leq 1$ kV
Residual voltage with $I_{an}$ (10/1000) $\mu s$ (line-line)	$\leq 1.4$ kV
Residual voltage with $I_{an}$ (10/1000) $\mu s$ (line-earth)	$\leq 700$ V
Max. energy absorption (2 ms)	150 J
Voltage protection level $U_p$ (line-line)	$\leq 2.5$ kV (C2 - 4 kV / 2 kA)
	$\leq 1.8$ kV (C3 - 100 A)
	$\leq 2.6$ kV (D1 - 500 A)
Voltage protection level $U_p$ (line-earth)	$\leq 1.1$ kV (C1 - 500 A)
	$\leq 1.5$ kV (C2 - 4 kV / 2 kA)
	$\leq 1.6$ kV (C3 - 100 A)
	$\leq 1.8$ kV (D1 - 500 A)
Response time $t_A$	$\leq 100$ ns
Capacity (Core-Core)	typ. 4.5 pF
Capacity (Core-Earth)	typ. 9 pF
Resistance per path	0 $\Omega$
Surge protection fault message	none
Max. required back-up fuse	6 A (gL/gG)
Impulse durability (line-earth)	C2 - 4 kV / 2 kA
	C3 - 100 A
	D1 - 500 A

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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Permissible humidity (operation)	5 % ... 95 %

## Standards and regulations

### Standards Information technology specification

Standards/regulations	DIN EN 61643-21
	DIN EN 61643-21
Standards/specifications	DIN EN 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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