

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



2805460

<https://www.phoenixcontact.com/ca/products/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	1 pc
Minimum order quantity	1 pc
Sales key	CL32
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

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

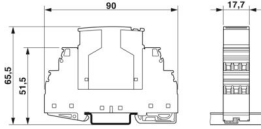
Electrical properties

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 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

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) μs	3 kA
Nominal discharge current I_n (8/20) μs (line-ground)	3 kA
Pulse discharge current I_{imp} (10/350) μs	500 A
Total discharge current I_{total} (8/20) μs	8 kA
Total discharge current I_{total} (10/350) μs	1 kA
Max. discharge current I_{max} (8/20) μs	8 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	8 kA
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A
Output voltage limitation at 1 kV/ μs (line-earth) static	≤ 1.4 kV
Residual voltage at I_n (conductor-conductor)	≤ 2 kV
Residual voltage at I_n (conductor-ground)	≤ 1 kV
Residual voltage with I_{an} (10/1000) μs (line-line)	≤ 1.4 kV
Residual voltage with I_{an} (10/1000) μs (line-earth)	≤ 700 V
Max. energy absorption (2 ms)	150 J
Voltage protection level U_p (line-line)	≤ 2.5 kV (C2 - 4 kV / 2 kA)
	≤ 1.8 kV (C3 - 100 A)
	≤ 2.6 kV (D1 - 500 A)
Voltage protection level U_p (line-earth)	≤ 1.1 kV (C1 - 500 A)
	≤ 1.5 kV (C2 - 4 kV / 2 kA)
	≤ 1.6 kV (C3 - 100 A)
	≤ 1.8 kV (D1 - 500 A)
Response time t_A	≤ 100 ns
Capacity (Core-Core)	typ. 4.5 pF
Capacity (Core-Earth)	typ. 9 pF
Resistance per path	0 Ω
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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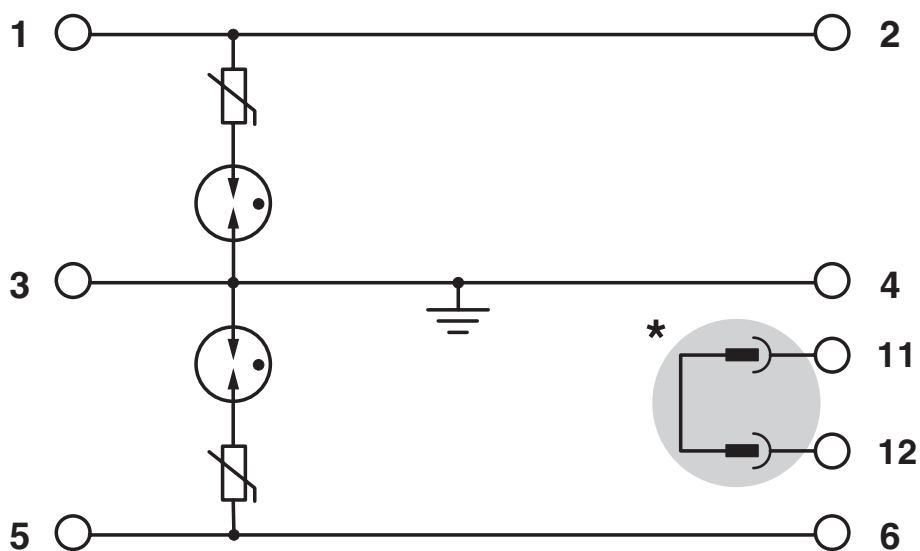
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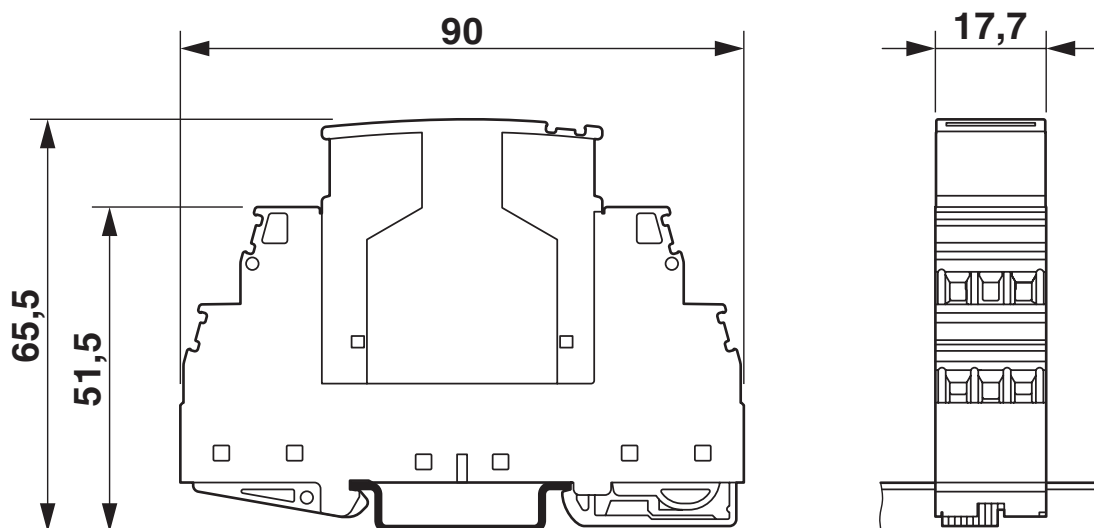
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Drawings

Circuit diagram



Dimensional drawing



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Approvals

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EAC

Approval ID: EAC-Zulassung



EAC

Approval ID: RU C-DE.*09.B.00169

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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

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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Accessories

ZBF 5:UNBEDRUCKT - Zack Marker strip, flat

0808642

<https://www.phoenixcontact.com/ca/products/0808642>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm, Number of individual labels: 10

ZBF 5/WH-100:UNBEDRUCKT - Zack Marker strip, flat

0808668

<https://www.phoenixcontact.com/ca/products/0808668>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 1000

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ZBF 5,LGS:FORTL.ZAHLEN - Zack Marker strip, flat

0808671

<https://www.phoenixcontact.com/ca/products/0808671>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

ZBF 5,LGS:GERADE ZAHLEN - Zack Marker strip, flat

0810821

<https://www.phoenixcontact.com/ca/products/0810821>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive even numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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ZBF 5,LGS:UNGERADE ZAHLEN - Zack Marker strip, flat

0810863

<https://www.phoenixcontact.com/ca/products/0810863>



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

ZBF 5,QR:FORTL.ZAHLEN - Zack Marker strip, flat

0808697

<https://www.phoenixcontact.com/ca/products/0808697>



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

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ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

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Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

SSA 3-6 - Shield connection

2839295

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Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

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SSA 5-10 - Shield connection

2839512

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Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable:
200 mm, 1 mm², color: black

X-PEN 0,35 - Marker pen

0811228

<https://www.phoenixcontact.com/ca/products/0811228>



Marker pen without ink cartridge, for manual labeling of markers, labeling
extremely wipe-proof, line thickness 0.35 mm

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SZS 0,6X3,5 VDE - Screwdriver

1212602

<https://www.phoenixcontact.com/ca/products/1212602>



Screwdriver, slot-headed, VDE insulated, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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