

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

Illustration shows variant PT 2X1-VF-120AC

Product Features

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Maximum ease of maintenance thanks to the two-piece design
- ✓ Base element remains an integral part of the installation
- ✓ Protective devices for use in telecommunications and signaling networks according to IEC 61643-21
- ✓ Consistent plug-in signal circuit protection
- ✓ Impedance-neutral disconnection of plug for test and maintenance purposes



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	72.0 GRM
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	65.5 mm
Horizontal pitch	1 Div.
Complete module height	90 mm

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Dimensions

Complete module width	17.7 mm
Complete module depth	65.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Degree of protection	IP20

General

Housing material	PA 6.6
Inflammability class according to UL 94	V0
Color	black
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Number of positions	2
Direction of action	Line-Line & Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	230 V AC
	250 V AC
Maximum continuous voltage U_C (wire-ground)	250 V AC
Nominal current I_N	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 (Core-Earth)	3 kA
Total surge current (8/20) μs	8 kA
Total surge current (10/350) μs	1 kA
Max. discharge current I_{max} (8/20) μs	8 kA
Max. discharge current I_{max} (8/20) μs maximum (Core-Earth)	8 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Earth)	100 A
Impulse discharge current (10/350) μs , peak value I_{imp}	500 A
Output voltage limitation at 1 kV/ μs (Core-Earth) static	≤ 1.4 kV
Residual voltage at I_n , (conductor-conductor)	≤ 2 kV
Residual voltage at I_n , (conductor-ground)	≤ 1 kV

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Protective circuit

Residual voltage with I _{an} (10/1000)μs (conductor-conductor)	≤ 1.4 kV
Residual voltage with I _{an} (10/1000)μs (conductor-ground)	≤ 700 V
Energy absorption	150 J
Voltage protection level U _p (Core-Core)	≤ 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 (Core-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 in series	0 Ω
Surge protection fault message	None
Max. required back-up fuse	6 A (gL / gG)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (4 kV / 2 kA)
	C3 (100 A)
	D1 (500 A)

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Tightening torque	0.8 Nm
Stripping length	8 mm
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded 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/kcmil min.	24
Conductor cross section AWG/kcmil max	12

Connection, equipotential bonding

Connection method	Screw connection
Tightening torque, min	0.8 Nm

Standards and Regulations

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Technical data

Standards and Regulations

Standards/regulations	DIN EN 61643-21
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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

ETIM

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

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals

Approvals

GOST

Ex Approvals

Approvals submitted

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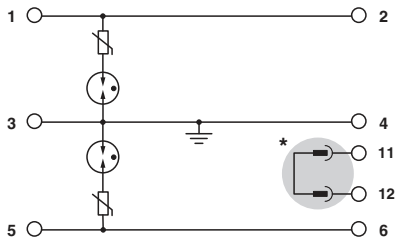
Approvals

Approval details



Drawings

Circuit diagram



* Circuit only closed when plug is inserted.

Dimensioned drawing

