

Type 3 surge protection device - PT 2+1-S-48DC/FM - 2817958

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Rail-mountable surge arrester as device protection for terminal equipment, fault signal in the plug and signaling contact in the base element, 2-section, pluggable. Design: 48 V DC

The illustration shows the version PT 2-PE/S-230 AC

Product Features

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Tool-free plug replacement
- ✓ With floating remote indication contact
- ✓ DIN rail module
- ✓ Consists of base element and plug
- ✓ Optical signaling of disconnection via LED
- ✓ For single and multi-phase power supply units



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	71.95 GRM
Custom tariff number	85363090
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	17.7 mm
Depth	65.5 mm
Pitch unit	1 Div.

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Technical data

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C

General

Housing material	PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	DIN VDE 0110-1
	IEC 60664-1
	DIN VDE 0675-6
	IEC 61643-1
Design	DIN rail module, two-section, divisible
Mounting type	DIN rail: 35 mm
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 1.00
Direction of action	1L-N & N-PE

Protective circuit

IEC test classification	III
	T3
EN type	T3
Nominal voltage U_N	48 V DC
Arrester rated voltage U_C	60 V DC
Arrester rated voltage U_C (L-PE)	60 V DC
Nominal current I_N	26 A (30 °C)
Operating effective current I_C at U_C	$\leq 10 \mu A$
Residual current I_{PE}	$\leq 10 mA$
Nominal discharge current I_n (8/20) μs	500 A
Nominal discharge current I_n (8/20) μs (L-N)	500 A
Nominal discharge current I_n (8/20) μs (L-PE)	500 A
Max. discharge current I_{max} (8/20) μs	500 A
Max. discharge current I_{max} (8/20) μs maximum (L-N)	500 A
Max. discharge current I_{max} (8/20) μs maximum (L-PE)	500 A
Combined surge U_{OC}	6 kV (for 12 Ω)
Voltage protection level U_P (L-N)	$\leq 120 V$
Voltage protection level U_P (L-PE)	$\leq 120 V$
Voltage protection level U_P (N-PE)	$\leq 120 V$
Response time t_A (L-N)	$\leq 1 ns$

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Protective circuit

Response time t_A (L-PE)	≤ 1 ns
Max. required back-up fuse	25 A (gL)
Surge protection fault message	Optical, remote indicator contact

Non-heating apparatus connection, power supply

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

Remote indicator contact

Connection name	Remote fault indicator contact
Switching function	N/C contact
Connection method	Screw connection
Screw thread	M3
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
Maximum operating voltage U_{max} AC	250 V
Max. operating current I_{max}	3 A AC

Standards and Regulations

Standards/specifications	IEC 61643-1 2005
	EN 61643-11/A11 2007
	BS 6651
	ANSI/IEEE C62.41

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Standards and Regulations

	EN 50082-2
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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	EC001473

UNSPSC

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

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals

Approvals submitted

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Approvals

Approval details

UL Recognized 

cUL Recognized 

GOST 

cULus Recognized 

Accessories

Accessories

Labeled terminal marker

Zack marker strip - ZB 5,LGS:FORTL.ZAHLEN - 1050017



Zack marker strip, Strip, white, labeled, Printed horizontally: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, For terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Zack marker strip - ZB 5,LGS:L1-N,PE - 1050415



Zack marker strip, Strip, white, labeled, Horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, Mounting type: Snap into tall marker groove, For terminal block width: 5.2 mm, Lettering field: 5.15 x 10.5 mm

Marker pen

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Accessories

Marker pen - X-PEN 0,35 - 0811228



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

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 5.2 mm, Lettering field: 5.1 x 10.5 mm

Zack marker strip - ZB 5,8:UNBEDRUCKT - 2715209



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 5.8 mm, Lettering field: 5.75 x 10.5 mm

Zack Marker strip, flat - ZBF 5:UNBEDRUCKT - 0808642



Zack Marker strip, flat, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, For terminal block width: 5 mm, Lettering field: 5.1 x 5.2 mm

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Accessories

Additional products

Shield connection - SSA 3-6 - 2839295



shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black

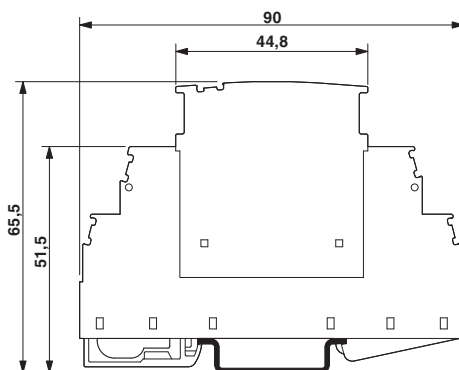
Shield connection - SSA 5-10 - 2839512



Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

Drawings

Dimensioned drawing



Circuit diagram

