

Type 2 surge protection device - VAL-MS 1000DC/2+F - 2800177

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Surge arrester for 2-pos. isolated DC voltage systems 1000 V DC, for DIN rail mounting, 3-pos. base element, three pluggable temperature-monitored protective elements, for PE free of leakage current, status message on each connector.

Product Features

- With or without floating remote indication contact
- Plugs can be checked with CHECKMASTER
- Optical, mechanical status indication for the individual arresters
- Type 2 consistent plug-in surge arresters
- Mechanical coding of all slots



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	340.0 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	90 mm
Width	53.4 mm
Depth	65.5 mm
Horizontal pitch	3 Div.

Ambient conditions

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

General

Housing material	PBT / PA
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Technical data

General

Flammability rating according to UL 94	V0
Color	black
Standards for clearances and creepage distances	DIN EN 60664-1
	DIN EN 61643-11
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Number of positions	3
Surge protection fault message	optical
Direction of action	(L+)-PE & (L-)-PE & (L+)-(L-)

Protective circuit

IEC test classification	II
	T2
EN type	T2
Maximum continuous operating voltage U_C	1000 V DC
Rated load current I_L	≤ 80 A DC
Residual current I_{PE}	≤ 1 μ A
Standby power consumption P_C	≤ 1 mVA
Max. discharge current I_{max} (8/20) μ s	30 kA
Nominal discharge current I_n (8/20) μ s	15 kA
Voltage protection level U_p (L+) - (L-)	≤ 5 kV
Voltage protection level U_p (L+/L-) - PE	≤ 3 kV
Residual voltage (L+) - (L-)	≤ 5 kV
	≤ 4.5 kV (at 10 kA)
	≤ 4 kV (at 5 kA)
Residual voltage (L+/L-) - PE	≤ 3 kV
	≤ 2.5 kV (at 10 kA)
	≤ 2 kV (at 5 kA)

PV protective circuit DC side

Short-circuit current rating I_{SCPV}	80 A
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Connection, protective circuit

Connection method	Screw connection
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block
Connection method	Biconnect terminal block
Screw thread	M5

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Connection, protective circuit

Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section flexible min.	1.5 mm ²
Conductor cross section flexible max.	25 mm ²
Conductor cross section solid min.	1.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section AWG min.	15
Conductor cross section AWG max.	2

Standards and Regulations

Standards/regulations	DIN EN 61643-11 2002
	IEC 61643-1 2005
	IEC 60364-7-712 2002

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	27130805
eCl@ss 7.0	27130805

ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 5.0	EC000941

UNSPSC

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

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Accessories

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Bridge

Wiring bridge - MPB F200X16/ 1GS - 2818339



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 200 mm

Wiring bridge - MPB F400X16/ 1GS - 2818342



Wiring bridge flexible, diameter 16 mm², with a fork-type cable lug on one side, length: 400 mm

Wiring bridge - MPB F600X16/ 1GS - 2818355



Wiring bridge flexible, diameter: 16 mm², with a fork-type cable lug on one side, length: 600 mm

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Labeled device marker

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Accessories

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, Horizontal: Grounding symbol, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Marker pen

Marker pen - B-STIFT - 1051993



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

Spare parts

Type 2 surge protection plug - VAL-MS 1000PV ST - 2805185



Replacement plug for PV arrester combinations of the VAL-MS 1000 DC... product range

Type 2 surge protection plug - F-MS 1100/30 ST - 2800178

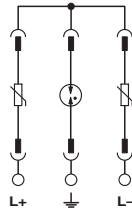


Surge protection plug type 2, spark gap with high insulation voltage strength, used only as replacement plug for the corresponding complete item.

Drawings

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Circuit diagram



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