

Type 2 surge protection device - VAL-MS 230 - 2839127

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Surge voltage arrester consisting of base element and ground connector with high-capacity varistor, for mounting on NS 35/7.5, nominal voltage: 230 V AC, 1-channel.

Why buy this product

- Single-channel, DIN-rail mountable protective devices
- Mechanical keying of all slots
- Optical, mechanical status indication for the individual arresters
- Disconnect device on each individual plug
- Base element with/without floating remote indication contact
- Consists of base element and plug



Key commercial data

Packing unit	1
Minimum order quantity	1
Catalog page	Page 38 (TT-2011)
GTIN	 4 017918 182601
Custom tariff number	85363030
Country of origin	GERMANY

Technical data

Standards

Housing material	PBT / PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	DIN EN 60664-1
Degree of protection	IP20
Mounting type	DIN rail: 35 mm
Design	DIN rail module, two-section, divisible
Number of positions	1
Ambient temperature (operation)	-40 °C ... 80 °C
Message: Surge protection fault	Optical

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Technical data

Standards

Direction of action	1L-N/PE
Width	17.7 mm
Height	89.8 mm
Depth	65.5 mm
Pitch unit	1 Div.

Protective circuit

IEC category	II
IEC category	T2
EN type	T2
Nominal voltage UN	230 V AC
Arrester rated voltage UC	275 V AC
Arrester rated voltage UC (L-N)	275 V AC
Arrester rated voltage UC (L-PEN)	275 V AC
UT (TOV-proof)	335 V AC (5 s)
Nominal frequency fN	50 Hz (60 Hz)
Ground conductor current IPE	≤ 300 µA (at UN)
Operating effective current IC at UN	≤ 300 µA
Standby power consumption PC	≤ 110 mVA
Max. discharge surge current I _{max} (8/20) µs	40 kA
Max. discharge surge current I _{max} (8/20) µs maximum (L-N)	40 kA
Max. discharge surge current I _{max} (8/20) µs maximum (L-PEN)	40 kA
Nominal discharge surge current I _n (8/20) µs	20 kA
Nominal discharge surge current I _n (8/20) µs (L-N)	20 kA
Nominal discharge surge current I _n (8/20) µs (L-PEN)	20 kA
Lightning test current (10/350) µs, peak value limp	3 kA
Max. energy absorption (2 ms)	550 J
Protection level Up	≤ 1.35 kV
Protection level UP (L-N)	≤ 1.35 kV
Protection level UP (L-PEN)	≤ 1.35 kV
Residual voltage	≤ 1 kV (at 5 kA)
Response time	≤ 25 ns
Max. required backup fuse with branch wiring	125 A (gL)
Short-circuit resistance IP with max. backup fuse (effective)	25 kA

Connection, protective circuit

Connection method	Screw connection
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block
Screw thread	M5
Tightening torque	4.5 Nm
Tightening torque	30 lb in (UL)
Stripping length	14.5 mm
Conductor cross section stranded min.	0.5 mm ²

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Connection, protective circuit

Conductor cross section stranded max.	25 mm ²
Conductor cross section solid min.	0.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section AWG/kcmil min.	20
Conductor cross section AWG/kcmil max	2
AWG conductor cross section	10 ... 2 (UL)

Standards

Standards/regulations	IEC 61643-1 2005
Standards/regulations	EN 61643-11/A11 2007
Standards/regulations	NF C61-740 1995
Standards/regulations	UL 1449

Classifications

eclass

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

unspsc

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

Approvals

Approvals

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IECEE CB Scheme / UL Recognized / KEMA-KEUR / ÖVE / cUL Recognized / GOST / GL / CCA / cULus Recognized

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Approvals

Ex Approvals

Approvals submitted

Approval details

IECEE CB Scheme

UL Recognized

KEMA-KEUR

ÖVE

cUL Recognized

GOST

GL

CCA

cULus Recognized

Accessories

Accessories

Bridges

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Accessories

Wiring bridge - MPB 18/1- 2 - 2809209



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 2-pos.

Wiring bridge - MPB 18/1- 3 - 2809212



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.

Wiring bridge - MPB 18/1- 4 - 2809225



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.

Wiring bridge - MPB 18/1- 6 - 2748564



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.

Wiring bridge - MPB 18/1- 7 BU - 2856278



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 7-pos., color: Blue

Wiring bridge - MPB 18/1- 8 BU - 2858470



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos., color: Blue

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Accessories

Wiring bridge - MPB 18/1- 8 - 2748577



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

Wiring bridge - MPB 18/1- 9 - 2748580



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.

Wiring bridge - MPB 18/1-12 - 2748593



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 12-pos.

Wiring bridge - MPB 18/1-57 - 2809238



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 57-pos.

Wiring bridge - MPB 18/3- 6 - 2809241



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos.

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Accessories

Wiring bridge - MPB 18/3- 9 - 2809254



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 9-pos.

Wiring bridge - MPB 18/4- 8 - 2809283



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.

Wiring bridge - MPB 18/4-12 - 2809296



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.

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

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Accessories

Wiring bridge - MPB F600X16/ 1GS - 2818355



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

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 18/1-20/1.2.5 - 2830168



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 20 pitches with contact sequence 1-2-0-0-5

Wiring bridge - MPB 18/4-12 - 2809296



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 12-pos.

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Accessories

Wiring bridge - MPB 18/4- 8 - 2809283



Wiring bridge for modules with connecting pitch 17.5 mm, 4-phase, 8-pos.

Wiring bridge - MPB 18/3- 6 - 2809241



Wiring bridge for modules with connecting pitch 17.5 mm, 3-phase, 6-pos.

Wiring bridge - MPB 18/1-57 - 2809238



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 57-pos.

Wiring bridge - MPB 18/1-12 - 2748593



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 12-pos.

Wiring bridge - MPB 18/1- 9 - 2748580



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 9-pos.

Wiring bridge - MPB 18/1- 8 - 2748577



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 8-pos.

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Accessories

Wiring bridge - MPB 18/1- 6 - 2748564



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 6-pos.

Wiring bridge - MPB 18/1- 4 - 2809225



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 4-pos.

Wiring bridge - MPB 18/1- 3 - 2809212



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 3-pos.

Wiring bridge - MPB 18/1- 2 - 2809209



Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 2-pos.

Marking

Zack marker strip - ZBN 18,LGS:ERDE - 2749589



Zack marker strip, 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

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Accessories

Zack marker strip - ZBN 18,LGS:L1-N,ERDE - 2749576



Zack marker strip, Strip, white, Labeled, Horizontal: L1, L2, L3, N, GND, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

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

Marker pen - B-STIFT - 1051993



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

Feed-through terminal block - DK-BIC-35 - 2749880



Feed-through terminal block for VAL and FLT applications

Wiring bridge - MPB 18/1-10/1.0.0 - 2830443

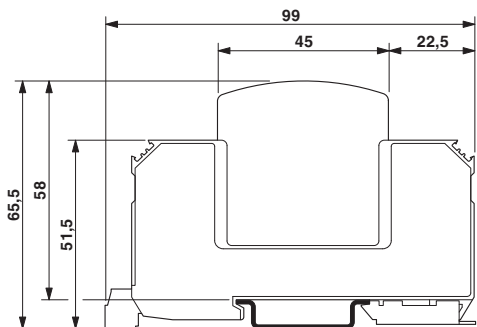


Wiring bridge for modules with connecting pitch 17.5 mm, 1-phase, 10 pitches with contact sequence 1-0-0

Drawings

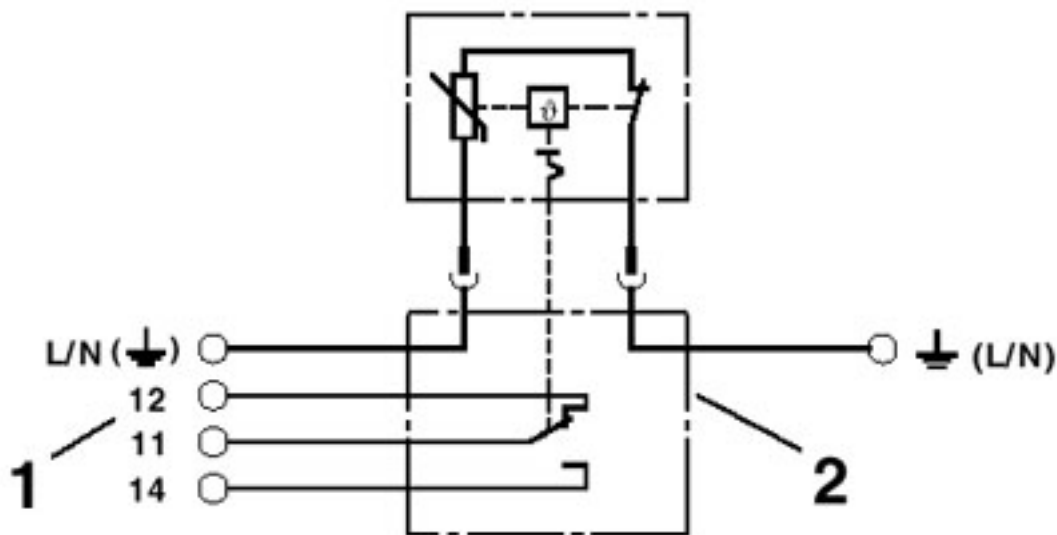
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Dimensioned drawing



The illustration shows the dimensional drawing for a version with remote indicator contact

Circuit diagram



1 = Remote indicator contact
2 = base element