

## Type 2 surge protection device - VAL-MS 320/40/1+0 GY1 - 2801275


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Surge arresters consisting of base element and protective connector with high-capacity varistor, for mounting on NS 35/7.5, 1-channel



### Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 750851
Weight per Piece (excluding packing)	119.63 g
Custom tariff number	85363090
Country of origin	Germany

### Technical data

#### Dimensions

Height	90 mm
Width	17.6 mm
Depth	58 mm
Horizontal pitch	1 Div.

#### Ambient conditions

Degree of protection	IP20 (only when all terminal points are used)
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	25g
Vibration (operation)	5g

#### General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012

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## Technical data

### General

IEC test classification	II
	T2
EN type	T2
Number of ports	One
SPD design	Voltage-limiting type
Mode of protection	L-PEN
	L-N
Mounting type	DIN rail: 35 mm
Color	gray
Housing material	PA 6.6
	PBT
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Surge protection fault message	optical

### Protective circuit

Nominal voltage $U_N$	240/415 V AC (TN)
	240/415 V AC (TT)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	335 V AC
Rated load current $I_L$	80 A
Residual current $I_{PE}$	$\leq 0.45$ mA
Standby power consumption $P_C$	$\leq 150$ mVA
Nominal discharge current $I_n$ (8/20) $\mu$ s	20 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s	40 kA
Short-circuit current rating $I_{SCCR}$	25 kA
Voltage protection level $U_p$	$\leq 1.5$ kV
Residual voltage $U_{res}$	$\leq 1.5$ kV (at $I_n$ )
	$\leq 1.3$ kV (at 10 kA)
	$\leq 1.2$ kV (at 5 kA)
	$\leq 1.1$ kV (at 3 kA)
TOV behavior at $U_T$	415 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)
Response time $t_A$	$\leq 25$ ns
Max. backup fuse with branch wiring	125 A AC (gG)
Max. backup fuse with V-type through wiring	80 A AC (gG)

### Connection data

Connection method	Screw connection
Conductor cross section flexible min.	1.5 mm <sup>2</sup>

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### Connection data

Conductor cross section flexible max.	25 mm <sup>2</sup>
Conductor cross section solid min.	1.5 mm <sup>2</sup>
Conductor cross section solid max.	35 mm <sup>2</sup>
Conductor cross section AWG	15 ... 2
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm

## 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	27130802
eCl@ss 7.0	27130802

### ETIM

ETIM 3.0	EC000941
ETIM 4.0	EC002498
ETIM 5.0	EC002498

### UNSPSC

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

## Accessories

### Spare parts

Type 2 surge protection plug - VAL-MS 320/40 ST GY1 - 2801279

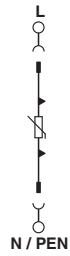


Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning.

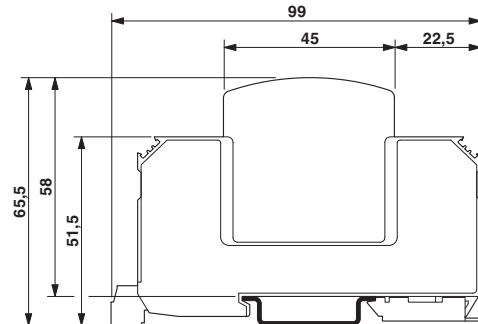
## Drawings

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Circuit diagram



Dimensional drawing



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