


VAL-MS 320/40/3+1 GY1 - 2801321

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 765985
GTIN	4046356765985
Weight per Piece (excluding packing)	412.800 g
Weight per piece (including packing)	412.800 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	89.8 mm
Width	71 mm
Depth	65.7 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	4 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 (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

General

VAL-MS 320/40/3+1 GY1 - 2801321

Technical data

General

IEC test classification	II
	T2
EN type	T2
Mode of protection	L-N
	L-PE
	N-PE
Mounting type	DIN rail: 35 mm
Color	traffic grey A RAL 7042
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
Number of positions	4
Surge protection fault message	optical

Protective circuit

Nominal voltage U_N	240/415 V AC (TN-S)
	240/415 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C (L-N)	335 V AC
Maximum continuous voltage U_C (N-PE)	260 V AC
Rated load current I_L	80 A
Residual current I_{PE}	$\leq 5 \mu\text{A}$
Standby power consumption P_C	$\leq 450 \text{ mVA}$
Nominal discharge current I_n (8/20) μs	20 kA
Maximum discharge current I_{max} (8/20) μs	40 kA
Follow current interrupt rating I_{fi} (N-PE)	100 A
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p (L-N)	$\leq 1.6 \text{ kV}$
Voltage protection level U_p (L-PE)	$\leq 1.9 \text{ kV}$
Voltage protection level U_p (N-PE)	$\leq 1.5 \text{ kV}$
Residual voltage U_{res} (L-N)	$\leq 1.6 \text{ kV}$ (at I_n)
	$\leq 1.5 \text{ kV}$ (at 10 kA)
	$\leq 1.3 \text{ kV}$ (at 5 kA)
	$\leq 1.1 \text{ kV}$ (at 3 kA)
Residual voltage U_{res} (L-PE)	$\leq 1.9 \text{ kV}$ (at I_n)
	$\leq 1.5 \text{ kV}$ (at 10 kA)
	$\leq 1.3 \text{ kV}$ (at 5 kA)
	$\leq 1.2 \text{ kV}$ (at 3 kA)

VAL-MS 320/40/3+1 GY1 - 2801321

Technical data

Protective circuit

Residual voltage U_{res} (N-PE)	≤ 0.4 kV (at I_n)
	≤ 0.25 kV (at 10 kA)
	≤ 0.15 kV (at 5 kA)
	≤ 0.1 kV (at 3 kA)
TOV behavior at U_T (L-N)	335 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / withstand mode)
Response time t_A (L-N)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Max. backup fuse with V-type through wiring	80 A (gG)
Max. backup fuse with branch wiring	125 A (gG)

Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	3 Nm (1.5 mm ² ... 16 mm ²)
	4.5 Nm (25 mm ² ... 35 mm ²)
Stripping length	16 mm
Conductor cross section flexible	1.5 mm ² ... 25 mm ²
Conductor cross section solid	1.5 mm ² ... 35 mm ²
Conductor cross section AWG	15 ... 2
Connection method	Fork-type cable lug
Conductor cross section flexible	1.5 mm ² ... 16 mm ²

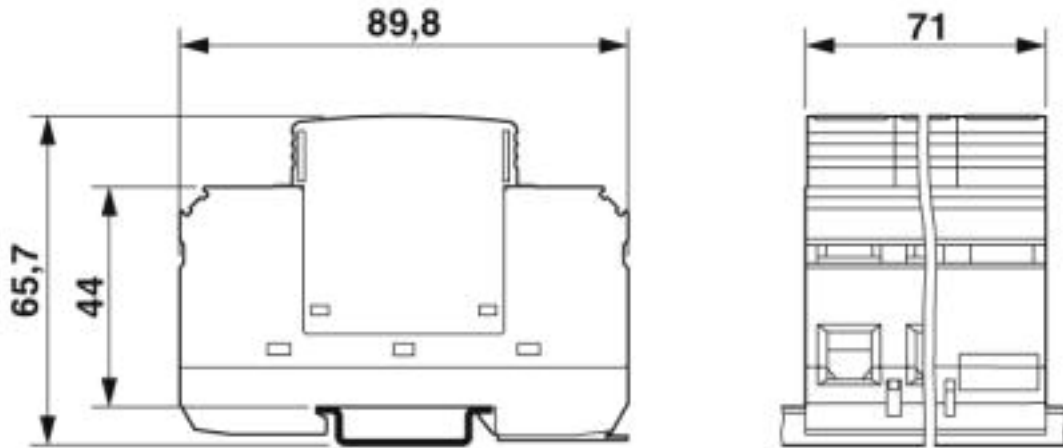
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

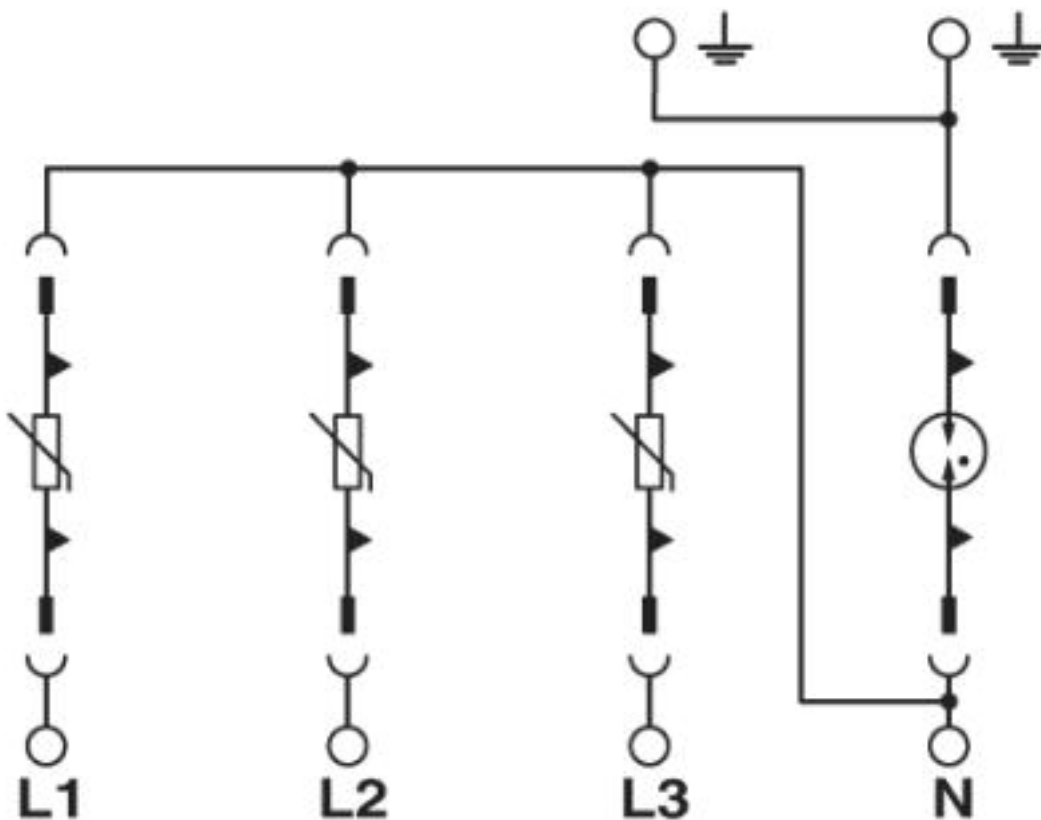
Drawings

VAL-MS 320/40/3+1 GY1 - 2801321

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371392
eCl@ss 4.0	27140201

VAL-MS 320/40/3+1 GY1 - 2801321

Classifications

eCl@ss

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
eCl@ss 8.0	27379201
eCl@ss 9.0	27379201

ETIM

ETIM 3.0	EC000941
ETIM 4.0	EC002498
ETIM 5.0	EC002498
ETIM 6.0	EC002498

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121421
UNSPSC 18.0	39121421
UNSPSC 19.0	39121421
UNSPSC 20.0	39121421
UNSPSC 21.0	39121421