

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester



2910574

<https://www.phoenixcontact.com/in/products/2910574>

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 documentation. Our General Terms of Use for Downloads are valid.



Surge protective device combination, 4-channel, for installation on NS 35/7,5, with remote indication contact (FM) as changeover contact, voltage 230 V AC

Commercial Data

Item number	2910574
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	CL1
Product Key	CL1327
GTIN	4055626462677
Weight per Piece (including packing)	421.3 g
Weight per Piece (excluding packing)	402.6 g
Country of origin	IN

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester



2910574

<https://www.phoenixcontact.com/in/products/2910574>

Technical Data

Product properties

IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-S
	TT
Type	DIN rail module, two-section, divisible
Product type	Surge arrester
Product family	VALVETRAB MS
Number of positions	4
Surge protection fault message	Optical, remote indicator contact

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
-------------------------	---------------

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact
Operating voltage	5 V AC ... 250 V AC
	30 V DC
Operating current	5 mA AC ... 750 mA AC
	1 A DC

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 rigid	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

Remote fault indicator contact

Connection method	Plug-in/screw connection via COMBICON
Screw thread	M2
Tightening torque	0.25 Nm

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester

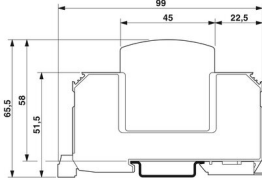


2910574

<https://www.phoenixcontact.com/in/products/2910574>

Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG	28 ... 16

Dimensions

Dimensional drawing	
Width	71 mm
Height	99 mm
Depth	64.7 mm
Horizontal pitch	4 Div.

Material specifications

Color	traffic grey B RAL 7043
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA 6.6/PBT
Material group	I
Housing material	PA 6.6 PBT

Protective circuit

Mode of protection	L-N L-PE N-PE
Direction of action	3L-N & N-PE
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 operating voltage U_C (L-PE)	335 V AC
Maximum continuous operating 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

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester



2910574

<https://www.phoenixcontact.com/in/products/2910574>

Voltage protection level U_p (L-N)	≤ 1.6 kV
Voltage protection level U_p (L-PE)	≤ 1.9 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
Residual voltage U_{res} (L-N)	≤ 1.6 kV (at I_n)
	≤ 1.5 kV (at 10 kA)
	≤ 1.3 kV (at 5 kA)
	≤ 1.1 kV (at 3 kA)
Residual voltage U_{res} (L-PE)	≤ 1.9 kV (at I_n)
	≤ 1.5 kV (at 10 kA)
	≤ 1.3 kV (at 5 kA)
	≤ 1.2 kV (at 3 kA)
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)	415 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)

Environmental and real-life conditions

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 $\pm X$, $\pm Y$, $\pm Z$)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

Standards and regulations

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

Mounting

Mounting type	DIN rail: 35 mm
---------------	-----------------

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester

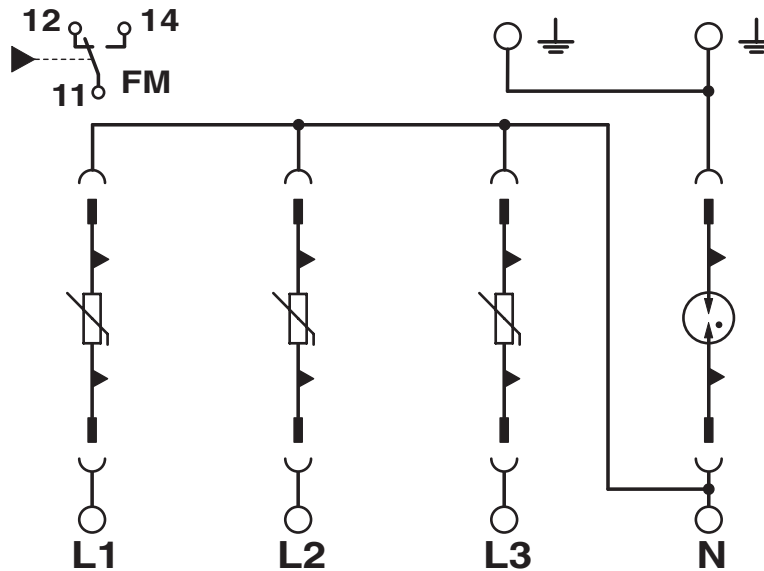


2910574

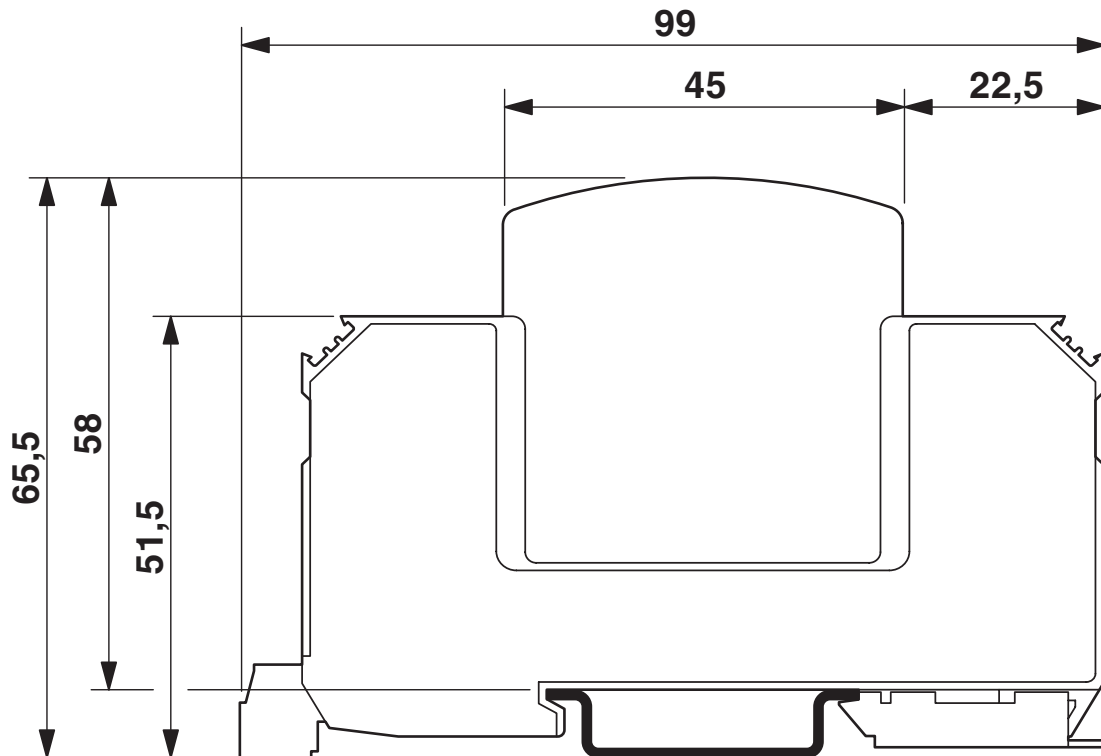
<https://www.phoenixcontact.com/in/products/2910574>

Drawings

Circuit diagram



Dimensional drawing



VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester



2910574

<https://www.phoenixcontact.com/in/products/2910574>

Classifications

ECLASS

ECLASS-11.0

27130805

ETIM

ETIM 8.0

EC000941

UNSPSC

UNSPSC 21.0

39121600

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester

2910574

<https://www.phoenixcontact.com/in/products/2910574>

Accessories

ZBN 18,LGS:ERDE - Marker for terminal blocks

2749589

<https://www.phoenixcontact.com/in/products/2749589>

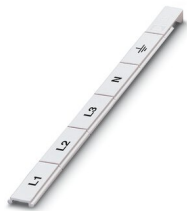


Marker for terminal blocks, Strip, white, labeled, horizontal: Grounding symbol, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

ZBN 18,LGS:L1-N,ERDE - Marker for terminal blocks

2749576

<https://www.phoenixcontact.com/in/products/2749576>



Marker for terminal blocks, Strip, white, labeled, horizontal: L1, L2, L3, N, GND, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester



2910574

<https://www.phoenixcontact.com/in/products/2910574>

ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

<https://www.phoenixcontact.com/in/products/2809128>



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/in/products/1051993>



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

VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester

2910574

<https://www.phoenixcontact.com/in/products/2910574>



DK-BIC-35 - Feed-through terminal block

2749880

<https://www.phoenixcontact.com/in/products/2749880>

Feed-through terminal block for VAL and FLT applications



MPB 18/4- 8 - Wiring bridge

2809283

<https://www.phoenixcontact.com/in/products/2809283>

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



VAL-MS-EE-T2-3+1-320-FM - Type 2 surge arrester



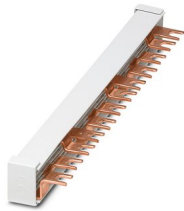
2910574

<https://www.phoenixcontact.com/in/products/2910574>

MPB 18/4-12 - Wiring bridge

2809296

<https://www.phoenixcontact.com/in/products/2809296>



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

VAL-MS-EE-T2-320-P - Type 2 surge protection plug

2910579

<https://www.phoenixcontact.com/in/products/2910579>



Surge protection connector type 2 with high-capacity varistor for VAL-MS base element, thermal monitoring, visual fault warning. Design: 320 V AC

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in