

Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

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://download.phoenixcontact.com>)



Plug-in surge arrester, in accordance with Type 2/Class II, for 3-phase power supply networks with combined PE and N installed in one conductor (4-conductor system: L1, L2, L3, PEN).

The illustration shows version
VAL-SEC-T2-3C-350-FM

Your advantages

- ✓ Varistor arrester with a low leakage current
- ✓ Extremely narrow design, just 12 mm per position
- ✓ High continuous voltage of 350 V AC for 230/400 V AC networks with high voltage fluctuations
- ✓ Pluggable
- ✓ Low voltage protection level of 1.5 kV
- ✓ Optical, mechanical status indicator
- ✓ Plugs can be checked with CHECKMASTER 2

Key commercial data

package_quantity	1
GTIN	4046356947978

Technical data

Dimensions

Height	89.9 mm
Width	37.3 mm
Depth	74.5 mm
Horizontal pitch	2 Div.

Ambient conditions

Degree of protection	IP20
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)	30g (half sinus / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

General

IEC test classification	II
-------------------------	----

Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

Technical data

General

IEC test classification	T2
EN type	T2
IEC power supply system	TN-C
Mode of protection	L-PEN
Mounting type	DIN rail: 35 mm
Color	light grey RAL 7035
Color	traffic grey A RAL 7042
Housing material	PA 6.6-FR 20% GF
Housing material	PBT-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Design	DIN rail module, two-section, divisible
Number of positions	3
Surge protection fault message	optical

Protective circuit

Nominal voltage U_N	240/415 V AC (TN-C)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous voltage U_C	350 V AC
Rated load current I_L	40 A (Biconnect M4 fork-type cable lug 6 mm ²)
Rated load current I_L	63 A (TWIN ferrule 2 x 10 mm ²)
Nominal discharge current I_n (8/20) μ s	20 kA
Maximum discharge current I_{max} (8/20) μ s	40 kA
Short-circuit current rating I_{SCCR}	25 kA (in case of 315 A gG backup fuse)
Short-circuit current rating I_{SCCR}	50 kA (in case of 200 A gG backup fuse)
Voltage protection level U_p	≤ 1.5 kV
Residual voltage U_{res}	≤ 1.5 kV (at I_n)
Residual voltage U_{res}	≤ 1.3 kV (at 10 kA)
Residual voltage U_{res}	≤ 1.2 kV (at 5 kA)
Residual voltage U_{res}	≤ 1.1 kV (at 4 kA)
Residual voltage U_{res}	≤ 1 kV (at 2 kA)
TOV behavior at U_T	415 V AC (5 s / withstand mode)
TOV behavior at U_T	457 V AC (120 min / safe failure mode)
Response time t_A	≤ 25 ns
Max. backup fuse with branch wiring	315 A (gG)
Max. backup fuse with V-type through wiring	40 A (gG / Biconnect M4 fork-type cable lug, 6 mm ²)
Max. backup fuse with V-type through wiring	63 A (gG / TWIN ferrule 2x 10mm ²)

Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	4.5 Nm

Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

Technical data

Connection data

Stripping length	16 mm
Conductor cross section flexible	2.5 mm² ... 16 mm²
Conductor cross section solid	2.5 mm² ... 25 mm²
Conductor cross section AWG	12 ... 4

UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (L-L)	700 V AC
Maximum continuous operating voltage MCOV (L-N)	350 V AC
Nom. voltage	277/480 V AC
Mode of protection	L-L
Mode of protection	L-N
Power distribution system	3Y
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-L)	3280 V
Measured limiting voltage MLV (L-N)	2000 V
Nominal discharge current I_n (L-L)	20 kA
Nominal discharge current I_n (L-N)	20 kA

UL connection data

Conductor cross section AWG	14 ... 2 (solid)
Conductor cross section AWG	14 ... 4 (stranded)
Tightening torque	40 lb _f -in. ... 50 lb _f -in.

Standards and Regulations

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

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
China RoHS	No hazardous substances above threshold values

Classifications

eCl@ss

eCl@ss 5.1	27130801
eCl@ss 6.0	27130805
eCl@ss 8.0	27130805
eCl@ss 9.0	27130805

ETIM

ETIM 5.0	EC000941
ETIM 6.0	EC000941

UNSPSC

Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

Classifications

UNSPSC

UNSPSC 13.2	39121620
-------------	----------

Approvals

UL Recognized / KEMA-KEUR / cUL Recognized / CCA / IECCEB Scheme / GL / EAC / cULus Recognized /

Approval details

UL Recognized 

KEMA-KEUR 

cUL Recognized 
--

CCA

IECCEB Scheme 

GL 
--

EAC 

cULus Recognized 
--

Accessories

End block

CLIPFIX 35 - 3022218



Marker pen

Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

Accessories

X-PEN 0,35 - 0811228



Device marking

EML (20XE)R - 0803452



EML (20XE)R YE - 0803453



ZBN 18:UNBEDRUCKT - 2809128



ZBN 18:UNBEDRUCKT - 2809128



Labeled device marker

Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

Accessories

ZBN 18,LGS:L1-N,ERDE - 2749576



ZBN 18,LGS:ERDE - 2749589



Terminal marking

ZBFM 5/WH:UNBEDRUCKT - 0803595



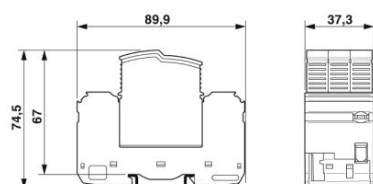
Accessories

ZBN 18:SO/CMS - 0800763



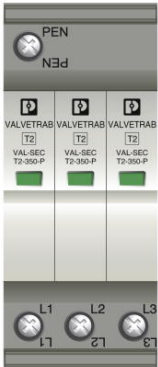
Drawings

Dimensional drawing

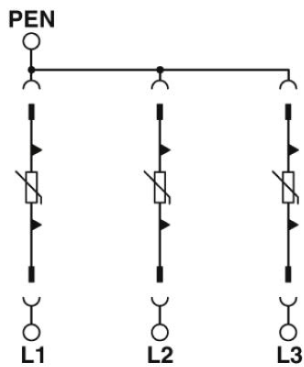


Type 2 surge arrester - VAL-SEC-T2-3C-350 - 2905344

Product drawing



Circuit diagram



Phoenix Contact 2016 © - all rights reserved
<http://www.phoenixcontact.com>