

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

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.



Plug-in lightning and surge arrester combination, in accordance with Type 1+2/Class I+II, for 3-phase power supply networks, with separate N and PE (L1, L2, L3, PE, N).

Your advantages

- Surge protection family for universal use with optimum energy coordination from the lightning current arrester to the device protection
- Easy to maintain due to consistently pluggable protection modules
- Excellent level of information provided by mechanical/visual status indicator and remote indication contact
- Optimum protective effect in the event of high-energy lightning currents, thanks to spark gap technology with low residual voltage characteristic
- Maximum protection against dynamic overvoltages for sensitive devices, thanks to direct coordination with varistor arresters connected in parallel

Commercial data

Item number	2905470
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL01
Product key	CL1241
Catalog page	Page 42 (C-4-2019)
GTIN	4046356950664
Weight per piece (including packing)	1,290 g
Weight per piece (excluding packing)	1,186.5 g
Customs tariff number	85363030
Country of origin	DE

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Technical data

Product properties

Product type	Arrester combination
Product family	SEC Family
IEC test classification	I + II
	T1 + T2
EN type	T1 + T2
IEC power supply system	TN-S
	TT
Type	DIN rail module, two-section, divisible
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	12 V AC ... 250 V AC
	125 V DC (200 mA DC)
Operating current	10 mA AC ... 1 A AC
	1 A DC (30 V DC)

Connection data

Connection method	Screw connection
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	18 mm
Conductor cross section flexible	2.5 mm ² ... 35 mm ²
Conductor cross section rigid	2.5 mm ² ... 35 mm ²
Conductor cross section AWG	13 ... 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

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Tightening torque	0.25 Nm
Stripping length	7 mm
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	142.4 mm
Height	95.2 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	8 Div.

Material specifications

Color (Male connector)	light grey (RAL 7035)
Color (Base element)	gray (RAL 7042)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PA6.6-FR 20% GF PBT-FR
Material group	I
Housing material	PA 6.6-FR 20 % GF PBT-FR

Mechanical properties

Mechanical data

Open side panel	No
-----------------	----

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 voltage U_C	350 V AC
Rated load current I_L	125 A (< 55 °C)

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Residual current I_{PE}	$\leq 0.01 \text{ mA}$
Nominal discharge current I_n (8/20) μs (L-N)	25 kA
Nominal discharge current I_n (8/20) μs (L-PE)	25 kA
Nominal discharge current I_n (8/20) μs (N-PE)	100 kA
Impulse discharge current (10/350) μs (L-N), charge	12.5 As
Impulse discharge current (10/350) μs (L-N), specific energy	160 kJ/ Ω
Impulse discharge current (10/350) μs (L-N), peak current value I_{imp}	25 kA
Impulse discharge current (10/350) μs (L-PE), charge	12.5 As
Impulse discharge current (10/350) μs (L-PE), specific energy	160 kJ/ Ω
Impulse discharge current (10/350) μs (L-PE), peak current value I_{imp}	25 kA
Impulse discharge current (10/350) μs (N-PE), charge	50 As
Impulse discharge current (10/350) μs (N-PE), specific energy	2500 kJ/ Ω
Impulse discharge current (10/350) μs (N-PE), peak current value I_{imp}	100 kA
Follow current quenching capacity I_{fi} (L-N)	25 kA (264 V AC)
	3 kA (350 V AC)
Follow current interrupt rating I_{fi} (N-PE)	100 A (350 V AC)
Short-circuit current rating I_{SCCR}	25 kA (264 V AC)
	3 kA (350 V AC)
Voltage protection level U_p (L-N)	$\leq 1.5 \text{ kV}$
Voltage protection level U_p (L-PE)	$\leq 2.2 \text{ kV}$
Voltage protection level U_p (N-PE)	$\leq 1.5 \text{ kV}$
Residual voltage U_{res} (L-N)	$\leq 1.5 \text{ kV}$ (at I_n)
	$\leq 1.2 \text{ kV}$ (at 10 kA)
	$\leq 1 \text{ kV}$ (at 5 kA)
	$\leq 0.9 \text{ kV}$ (at 3 kA)
Residual voltage U_{res} (L-PE)	$\leq 2.2 \text{ kV}$ (at I_n)
	$\leq 2 \text{ kV}$ (at 10 kA)
	$\leq 1.8 \text{ kV}$ (at 5 kA)
	$\leq 1.6 \text{ kV}$ (at 3 kA)
Residual voltage U_{res} (N-PE)	$\leq 1.5 \text{ kV}$ (at I_n)
	$\leq 1 \text{ kV}$ (at 10 kA)
	$\leq 0.9 \text{ kV}$ (at 5 kA)
	$\leq 0.8 \text{ kV}$ (at 3 kA)
TOV behavior at U_T (L-N)	415 V AC (5 s / withstand mode)
	457 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)	$\leq 25 \text{ ns}$
Response time t_A (L-PE)	$\leq 100 \text{ ns}$
Response time t_A (N-PE)	$\leq 100 \text{ ns}$
Max. backup fuse with V-type through wiring	125 A (gG)

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Max. backup fuse with branch wiring	315 A (gG)
Additional technical data	
Maximum discharge current $I_{\max}$ (8/20) μs	100 kA

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)
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x $\pm X$, $\pm Y$, $\pm Z$)
Vibration (operation)	5g (5 - 500 Hz/2.5 h/X, Y, Z)

Approvals

UL specifications

Maximum continuous operating voltage MCOV (L-L)	528 V AC
Maximum continuous operating voltage MCOV (L-N)	264 V AC
Maximum continuous operating voltage MCOV (L-G)	264 V AC
Maximum continuous operating voltage MCOV (N-G)	350 V AC
Short-circuit current rating (SCCR)	50 kA
Voltage protection rating VPR (L-L)	2000 V
Voltage protection rating VPR (L-N)	1200 V
Voltage protection rating VPR (L-G)	1500 V
Voltage protection rating VPR (N-G)	1200 V
Nominal discharge current I_n	20 kA
Mode of protection	L-L
	L-N
	L-G
	N-G
Nominal voltage	240/415 V AC
Rated load current I_L	50 A
Power distribution system	Wye
Nominal frequency	50/60 Hz
SPD Type	2CA

UL indicator/remote signaling

Operating voltage	125 V AC
AC operating current	1 A AC

UL connection data

Tightening torque	40 lb _F ·in.
-------------------	-------------------------

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Conductor cross section AWG	3 ... 2
-----------------------------	---------

Standards and regulations

Standards/specifications	IEC 61643-11
Note	2011

EN 61643-11

Standards/specifications	EN 61643-11
Note	2012

Mounting

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

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester

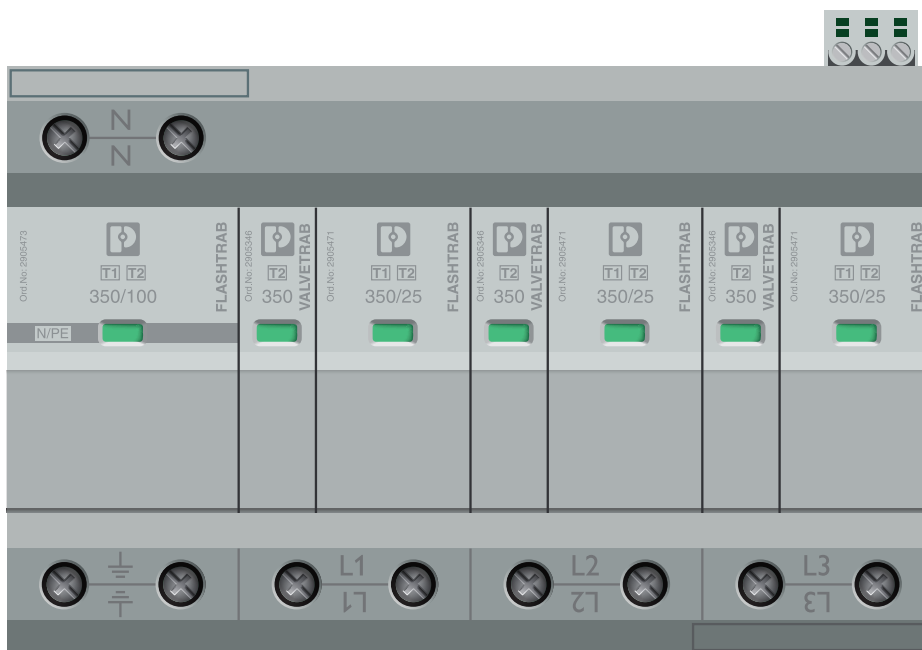


2905470

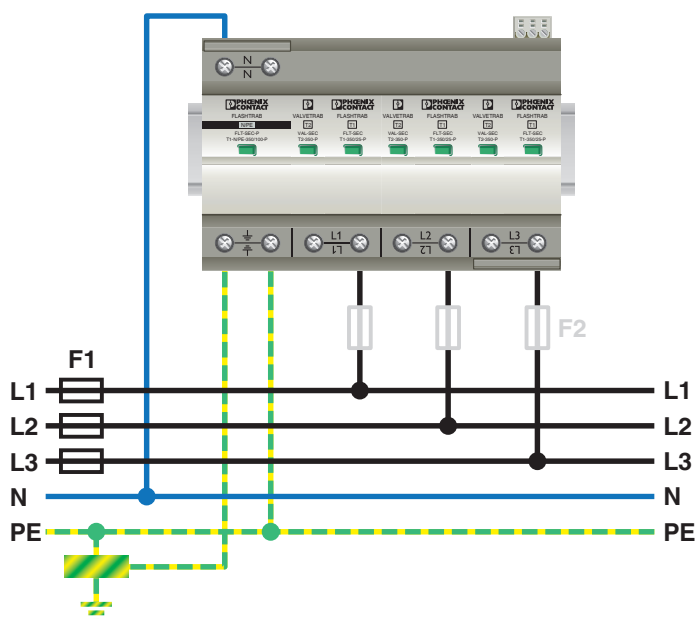
<https://www.phoenixcontact.com/us/products/2905470>

Drawings

Product drawing



Application drawing

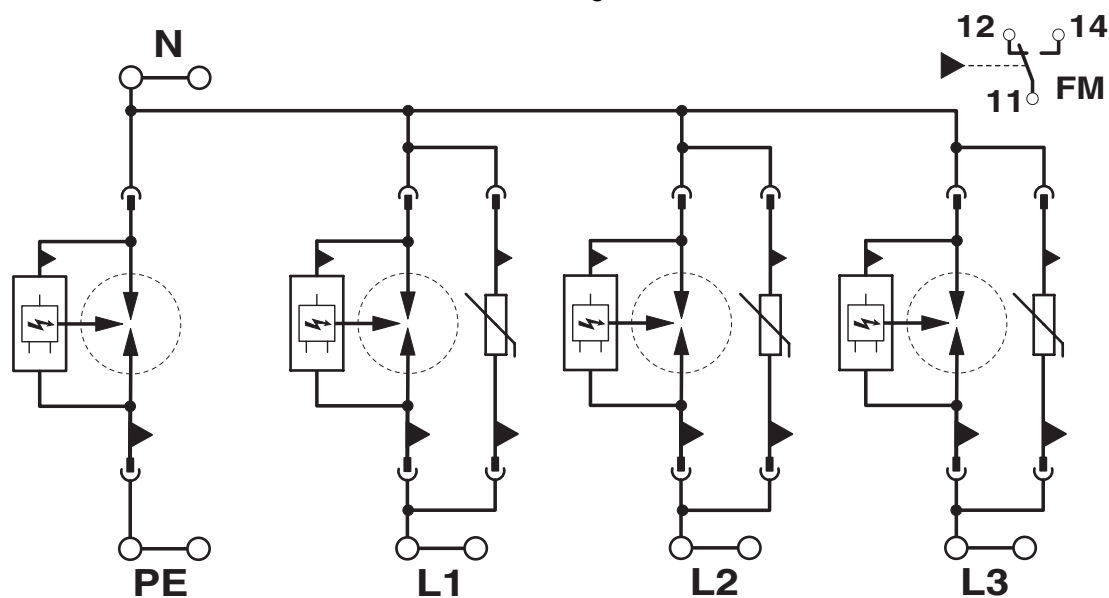


FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester

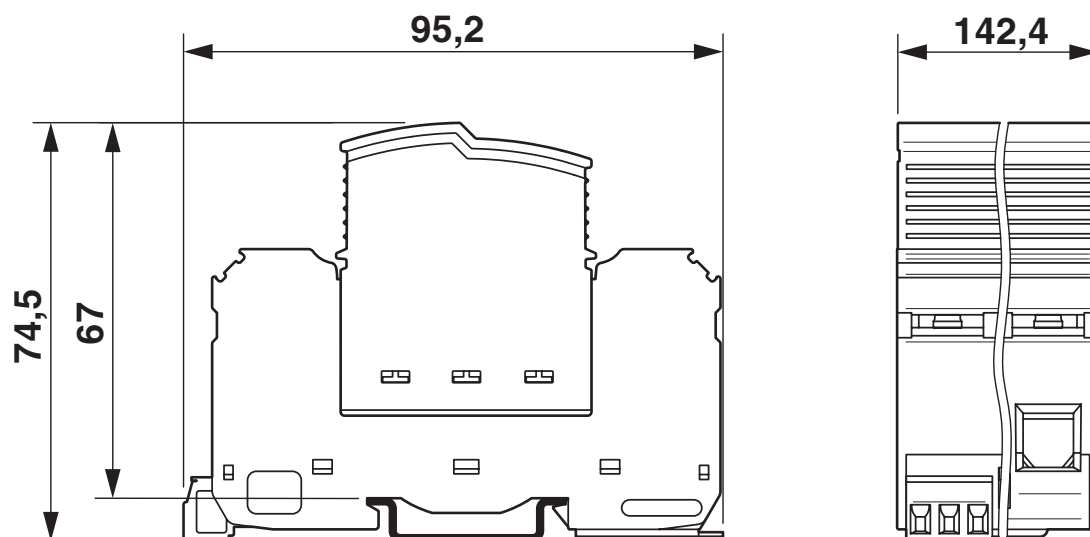
2905470

<https://www.phoenixcontact.com/us/products/2905470>

Circuit diagram



Dimensional drawing



FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2905470>



cUL Recognized
Approval ID: FILE E 330181



UL Recognized
Approval ID: FILE E 330181



IECEE CB Scheme
Approval ID: NL-58252



EAC
Approval ID: RU C-DE: *09.B.00169

CCA

Approval ID: NTR-NL 7736



KEMA-KEUR
Approval ID: 71-106983



DNV GL
Approval ID: TAE000040S

UAE-RoHS

Approval ID: 23-10-88887

cULus Recognized

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470
<https://www.phoenixcontact.com/us/products/2905470>

Classifications

ECLASS

ECLASS-11.0	27130808
ECLASS-13.0	27171204

ETIM

ETIM 9.0	EC001457
----------	----------

UNSPSC

UNSPSC 21.0	39121600
-------------	----------

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470
<https://www.phoenixcontact.com/us/products/2905470>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	65267553-3f5b-4f99-8b47-f474596b3aff

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

Accessories

CLIPFIX 35 - End bracket

3022218

<https://www.phoenixcontact.com/us/products/3022218>



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

EML (20XE)R - Label

0803452

<https://www.phoenixcontact.com/us/products/0803452>



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 20 mm, Number of individual labels: 1

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

EML (20XE)R YE - Label

0803453

<https://www.phoenixcontact.com/us/products/0803453>



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 20 mm, Number of individual labels: 1

ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

<https://www.phoenixcontact.com/us/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

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

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

2749576

<https://www.phoenixcontact.com/us/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

ZBN 18,LGS:ERDE - Marker for terminal blocks

2749589

<https://www.phoenixcontact.com/us/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

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

ZBFM 5/WH:UNBEDRUCKT - Flat zack marker sheet

0803595

<https://www.phoenixcontact.com/us/products/0803595>



Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5 x 4.5 mm, Number of individual labels: 120

ZBN 18 CUS - Zack marker strip

0825059

<https://www.phoenixcontact.com/us/products/0825059>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

X-PEN 0,35 - Marker pen

0811228

<https://www.phoenixcontact.com/us/products/0811228>



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

SZK PZ2 VDE - Screwdriver

1206463

<https://www.phoenixcontact.com/us/products/1206463>



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

SZS 0,4X2,5 VDE - Screwdriver

1205037

<https://www.phoenixcontact.com/us/products/1205037>



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

FLT-SEC-T1-350/25-P - Type 1/2 surge protection plug

2905471

<https://www.phoenixcontact.com/us/products/2905471>



Replacement plug for lightning and surge arresters from the FLASHTRAB SEC product range, for L-N and L-PEN paths.

FLT-SEC-T1+T2-3S-350/25-FM - Type 1+2 special combined lightning current and surge arrester



2905470

<https://www.phoenixcontact.com/us/products/2905470>

VAL-SEC-T2-350-P - Type 2 surge protection plug

2905346

<https://www.phoenixcontact.com/us/products/2905346>



Replacement plug for surge arresters from the VALVETRAB SEC product range for L-N and L-PEN paths.

FLT-SEC-P-T1-N/PE-350/100-P - Type 1 surge protection plug

2905473

<https://www.phoenixcontact.com/us/products/2905473>



Replacement plug for lightning current arresters from the FLASHTRAB SEC product range, for the N-PE path.

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com