

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

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 current arrester, in accordance with Type 1/Class I, for 1-phase power supply networks with combined PE and N installed in one conductor (L1, PEN).

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
- Low voltage protection level for direct protection of end devices in the main distribution area

Commercial Data

Item number	2905414
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	CL1171
Catalog Page	Page 39 (C-4-2019)
GTIN	4046356949460
Weight per Piece (including packing)	404.9 g
Weight per Piece (excluding packing)	404.9 g
Customs tariff number	85363010
Country of origin	DE

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Technical Data

Notes

General

Note	Max. single impulse: 100 kA (8/20 μ s)
	SPD according to AS/NZS 1768 Cat. C3

Product properties

IEC test classification	I / II
	I
	T1 / T2
	T1
EN type	T1 / T2
	T1
IEC power supply system	TN-C
	TT
Type	DIN rail module, two-section, divisible
Product type	Combination type
Product family	SEC Family
Number of positions	1
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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Conductor cross section flexible	2.5 mm ² ... 35 mm ²
Conductor cross section solid	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
Tightening torque	0.25 Nm
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG	28 ... 16

Dimensions

Dimensional drawing	
Width	35.6 mm
Height	95.2 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	2 Div.

Material specifications

Color	light grey RAL 7035
	traffic grey A 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-PEN
Direction of action	1L-PEN

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Nominal voltage U_N	240 V AC (TN-C) 240 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)
Nominal discharge current I_n (8/20) μ s	25 kA
Maximum discharge current I_{max} (8/20) μ s	50 kA
Impulse discharge current (10/350) μ s, charge	12.5 As
Impulse discharge current (10/350) μ s, specific energy	160 kJ/ Ω
Impulse discharge current (10/350) μ s, peak value I_{imp}	25 kA
Follow current interrupt rating I_{fi}	50 kA
Short-circuit current rating I_{SCCR}	50 kA
Voltage protection level U_p	≤ 1.5 kV
Residual voltage U_{res}	≤ 1.5 kV (at I_n)
Front of wave sparkover voltage at 6 kV (1.2/50) μ s	≤ 1.5 kV
TOV behavior at U_T	415 V AC (5 s / withstand mode) 457 V AC (120 min / withstand mode)
Response time t_A	≤ 100 ns
Max. backup fuse with V-type through wiring	125 A (gG)
Max. backup fuse with branch wiring	315 A (gG)

Additional technical data

Short-circuit current rating I_{SCCR}	100 kA (264 V AC)
Follow current interrupt rating I_{fi}	100 kA (264 V AC)

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)	30g (Half-sine / 11 ms / 3x \pm X, \pm Y, \pm Z)
Vibration (operation)	5g (5 - 500 Hz/2.5 h/X, Y, Z)

Approval data

UL specifications

Maximum continuous operating voltage MCOV	350 V AC
Short-circuit current rating (SCCR)	50 kA
Voltage protection rating VPR	1500 V
Nominal discharge current I_n	20 kA
Mode of protection	L-G

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Nominal voltage	240 V AC
Rated load current I_L	50 A
Power distribution system	Single phase
Nominal frequency	50/60 Hz
SPD Type	2CA

UL indicator/remote signaling

AC operating voltage	125 V AC
AC operating current	1 A AC

UL connection data

Tightening torque	40 lb _f -in.
Conductor cross section AWG	3 ... 2

Standards and regulations

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

EN 61643-11

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

Mounting

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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester

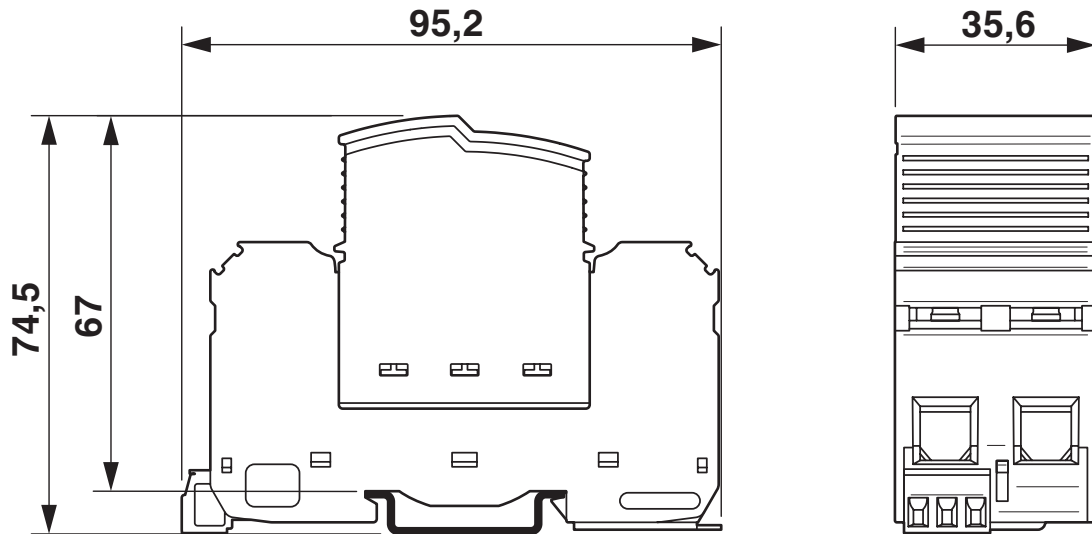


2905414

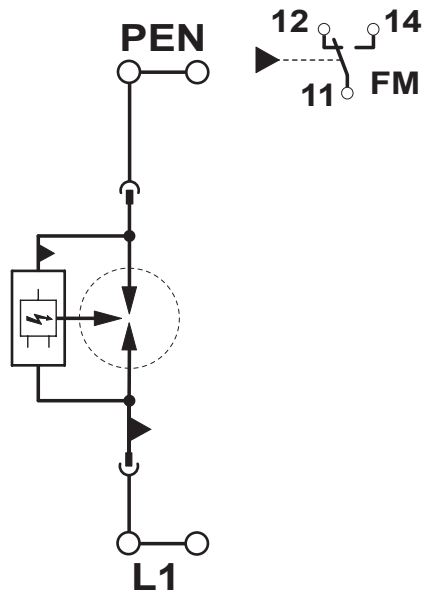
<https://www.phoenixcontact.com/pc/products/2905414>

Drawings

Dimensional drawing



Circuit diagram



FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Approvals



cUL Recognized
Approval ID: FILE E 330181



UL Recognized
Approval ID: FILE E 330181



IECEE CB Scheme
Approval ID: NL-56588



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

CCA

Approval ID: NTR-NL 7726

Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
-----------------------	-----------------------	-------------------	-----------------------------

-

-



KEMA-KEUR
Approval ID: 71-106982



DNV GL
Approval ID: TAE000040S

Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
-----------------------	-----------------------	-------------------	-----------------------------

-

-

cULus Recognized

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Classifications

ECLASS

ECLASS-9.0	27130802
ECLASS-10.0.1	27130802
ECLASS-11.0	27130802

ETIM

ETIM 8.0	EC000381
----------	----------

UNSPSC

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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Environmental Product Compliance

China RoHS

Environmentally Friendly Use Period = 50 years

For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

Accessories

CLIPFIX 35 - End clamp

3022218

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

X-PEN 0,35 - Marker pen

0811228

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



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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

EML (20XE)R - Label

0803452

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

EML (20XE)R YE - Label

0803453

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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

ZBN 18:UNBEDRUCKT - Zack marker strip

2809128

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

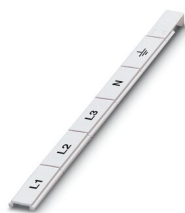


Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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

2749576

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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

ZBN 18,LGS:ERDE - Marker for terminal blocks

2749589

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

ZBFM 5/WH:UNBEDRUCKT - Flat zack marker sheet

0803595

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

FLT-SEC-P-T1-1C-350/25-FM - Type 1+2 combined lightning current and surge arrester



2905414

<https://www.phoenixcontact.com/pc/products/2905414>

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

2905422

<https://www.phoenixcontact.com/pc/products/2905422>



Replacement plug for lightning current arresters from the FLASHTRAB SEC PLUS 350 product range, for L-N and L-PEN paths.

Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com