

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

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>)




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

Your advantages

- ✓ Directly coordinated combination of type 1 spark gap without line follow current and type 2 varistor arrester
- ✓ Particularly suitable for maximum protection of sensitive devices in harsh environments
- ✓ 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
- ✓ With floating remote indication contact
- ✓ Plugs can be checked with CHECKMASTER 2



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 950169
GTIN	4046356950169
Weight per Piece (excluding packing)	631.500 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Dimensions

Height	95.2 mm
Width	71.2 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Technical data

Dimensions

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

General

IEC test classification	I + II
	T1 + T2
	T1
	I
EN type	T1 + T2
	T1
IEC power supply system	TN-S
	TT
Mode of protection	L-N
	L-PE
	N-PE
Mounting type	DIN rail: 35 mm
Color	light grey RAL 7035
	traffic grey A RAL 7042
Housing material	PA 6.6-FR 20% GF
	PBT-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	2
Surge protection fault message	Optical, remote indicator contact

Protective circuit

Nominal voltage U_N	240 V AC (TN-S)
	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)
Residual current I_{PE}	≤ 0.01 mA

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Technical data

Protective circuit

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 interrupt rating 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)	≤ 1.5 kV
Voltage protection level U_p (L-PE)	≤ 2.2 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
Residual voltage U_{res} (L-N)	≤ 1.5 kV (at I_n)
	≤ 1.2 kV (at 10 kA)
	≤ 1 kV (at 5 kA)
	≤ 0.9 kV (at 3 kA)
Residual voltage U_{res} (L-PE)	≤ 2.2 kV (at I_n)
	≤ 2 kV (at 10 kA)
	≤ 1.8 kV (at 5 kA)
	≤ 1.6 kV (at 3 kA)
Residual voltage U_{res} (N-PE)	≤ 1.5 kV (at I_n)
	≤ 1 kV (at 10 kA)
	≤ 0.9 kV (at 5 kA)
	≤ 0.8 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)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Technical data

Protective circuit

Max. backup fuse with V-type through wiring	125 A (gG)
Max. backup fuse with branch wiring	315 A (gG)

Additional technical data

Maximum discharge current I_{max} (8/20) μ s	100 kA
--	--------

Indicator/remote signaling

Switching function	PDT 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 method	Plug-in/screw connection via COMBICON
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
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

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 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

UL specifications

SPD Type	2CA
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
Nom. voltage	240 V AC
Rated load current I_L	50 A
Mode of protection	L-N
	L-G
	N-G

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Technical data

UL specifications

Power distribution system	Single phase
Nominal frequency	50/60 Hz
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
Short-circuit current rating (SCCR)	50 kA

UL indicator/remote signaling

Operating voltage	125 V AC
Operating current	1 A AC
Tightening torque	4 lb _r -in.
Conductor cross section AWG	30 ... 14

UL connection data

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

Standards and Regulations

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

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Classifications

eCl@ss

eCl@ss 5.1	27140200
eCl@ss 6.0	27130800
eCl@ss 7.0	27130808
eCl@ss 8.0	27130808
eCl@ss 9.0	27130808

ETIM

ETIM 5.0	EC001457
ETIM 6.0	EC001457
ETIM 7.0	EC001457

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Classifications

UNSPSC

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

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

GL		https://approvalfinder.dnvgl.com/	13946-15 HH
----	--	---	-------------

CCA			NTR-NL 7736
-----	--	--	-------------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
---------------	--	---	---------------

KEMA-KEUR		http://www.dekra-certification.com	71-106983
-----------	--	---	-----------

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
----------------	--	---	---------------

IECCEB Scheme		http://www.iecee.org/	NL-58252
---------------	--	---	----------

EAC			RU C- DE.A*30.B01561
-----	--	--	-------------------------

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Approvals

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
---------------	--	---	---------------

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
----------------	--	---	---------------

Accessories

Accessories

Device marking

Label - EML (20XE)R - 0803452



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: continuous x 20 mm

Label - EML (20XE)R YE - 0803453



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK ROLL X1, THERMOMARK ROLL 2.0, THERMOMARK ROLL, mounting type: adhesive, lettering field size: continuous x 20 mm

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Accessories

End block

End clamp - CLIPFIX 35 - 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

Labeled device marker

Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, Horizontal: L1, L2, L3, N, GND, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, Horizontal: Grounding symbol, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm

Marker pen

Marker pen - X-PEN 0,35 - 0811228



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

Terminal marking

Type 1+2 protective device combination - FLT-SEC-T1+T2-1S-350/25-FM - 2905466

Accessories

Flat zack marker sheet - ZBFM 5/WH:UNBEDRUCKT - 0803595



Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 5 x 4.5 mm

Spare parts

Type 1/2 surge protection plug - FLT-SEC-T1-350/25-P - 2905471



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

Type 2 surge protection plug - VAL-SEC-T2-350-P - 2905346



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

Type 1 surge protection plug - FLT-SEC-P-T1-N/PE-350/100-P - 2905473



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