

Lightning arrester type 1 - FLT-SEC-P-T1-2S-350/25-FM - 2905418

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

Why buy this product

- Spark gap has no line follow current
- Free of leakage current, suitable for use in the pre-meter area
- 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 STK
GTIN	 4 046356 950084

Technical data

Dimensions

Height	95.2 mm
Width	106.8 mm
Depth	74.5 mm
Horizontal pitch	6 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

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Technical data

Ambient conditions

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 (5 - 500 Hz/2.5 h/X, Y, Z)

General

Standards/specifications	IEC 61643-11 2011
	EN 61643-11 2012
IEC test classification	I / II
	T1 / T2
	T1
	I
EN type	T1 / T2
	T1
IEC power supply system	TN-S
	TT
Number of ports	One
SPD design	Voltage-switching type
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	3
Surge protection fault message	Optical, remote indicator contact

Protective circuit

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)	350 V AC
Maximum continuous voltage U_C (N-PE)	350 V AC
Rated load current I_L	125 A (< 55 °C)
Residual current I_{PE}	≤ 0.01 mA
Nominal discharge current I_n (8/20) μs (L-N)	25 kA

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Protective circuit

Nominal discharge current I_n (8/20) μ s (L-PE)	25 kA
Nominal discharge current I_n (8/20) μ s (N-PE)	100 kA
Maximum discharge current I_{max} (8/20) μ s (L-N)	50 kA
Maximum discharge current I_{max} (8/20) μ s (L-PE)	50 kA
Impulse discharge current (10/350) μ s (L-N), charge	12.5 As
Impulse discharge current (10/350) μ s (L-N), specific energy	160 kJ/ Ω
Impulse discharge current (10/350) μ s (L-N), peak current value I_{imp}	25 kA
Impulse discharge current (10/350) μ s (L-PE), charge	12.5 As
Impulse discharge current (10/350) μ s (L-PE), specific energy	160 kJ/ Ω
Impulse discharge current (10/350) μ s (L-PE), peak current value I_{imp}	25 kA
Impulse discharge current (10/350) μ s (N-PE), charge	50 As
Impulse discharge current (10/350) μ s (N-PE), specific energy	2500 kJ/ Ω
Impulse discharge current (10/350) μ s (N-PE), peak current value I_{imp}	100 kA
Total discharge current I_{Total} (10/350) μ s	75 kA
Follow current interrupt rating I_{fi} (L-N)	50 kA
Follow current interrupt rating I_{fi} (N-PE)	100 A
Short-circuit current rating I_{SCCR}	50 kA
Voltage protection level U_p (L-N)	≤ 1.5 kV
Voltage protection level U_p (L-PE)	≤ 2.5 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
Residual voltage U_{res} (L-N)	≤ 1.5 kV (at I_n)
Residual voltage U_{res} (L-PE)	≤ 2.5 kV (at I_n)
Residual voltage U_{res} (N-PE)	≤ 1.5 kV (at I_n)
Front of wave sparkover voltage at 6 kV (1.2/50) μ s (L-N)	≤ 1.5 kV
Front of wave sparkover voltage at 6 kV (1.2/50) μ s (L-PE)	≤ 2.5 kV
Front of wave sparkover voltage at 6 kV (1.2/50) μ s (N-PE)	≤ 1.5 kV
TOV behavior at U_T (L-N)	415 V AC (5 s / withstand mode)
	457 V AC (120 min / withstand mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / withstand mode)
Response time t_A (L-N)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Max. backup fuse with branch wiring	315 A (gG)
Max. backup fuse with V-type through wiring	125 A (gG)

Additional technical data

Follow current quenching capacity I_{fi} (L-N)	100 kA (264 V AC)
Short-circuit current rating I_{SCCR}	100 kA (264 V AC)

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	PDT contact

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Indicator/remote signaling

Operating voltage	12 V AC ... 250 V AC
	125 V DC (200 mA DC)
Operating current	10 mA AC ... 1 A
	1 A (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 min.	0.14 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG	28 ... 16

Connection data

Connection method	Screw terminal blocks
Conductor cross section flexible min.	2.5 mm ²
Conductor cross section flexible max.	25 mm ²
Conductor cross section solid min.	2.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section AWG	13 ... 2
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	18 mm

UL specifications

SPD Type	4CA
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)	528 V AC
Maximum continuous operating voltage MCOV (N-G)	264 V AC
Nom. voltage	240/415 V AC
Mode of protection	L-L
	L-N
	L-G
	N-G
Power distribution system	3Y
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-L)	2450 V
Measured limiting voltage MLV (L-N)	1350 V
Measured limiting voltage MLV (L-G)	1570 V
Measured limiting voltage MLV (N-G)	1080 V

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Technical data

UL specifications

Nominal discharge current I_n (L-L)	20 kA
Nominal discharge current I_n (L-N)	20 kA
Nominal discharge current I_n (L-G)	20 kA
Nominal discharge current I_n (N-G)	20 kA
Follow current (L-N)	10 kA (264 V AC)
Follow current (N-G)	200 A (264 V AC)

UL indicator/remote signaling

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

UL connection data

Conductor cross section AWG	12 ... 2
Tightening torque	40 lb _F -in.

Classifications

eCl@ss

eCl@ss 5.1	27130801
eCl@ss 6.0	27130808
eCl@ss 8.0	27130802
eCl@ss 9.0	27130802

ETIM

ETIM 4.0	EC000381
ETIM 5.0	EC000381

Approvals

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

Ex Approvals

Approvals submitted

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Approval details

UL Recognized 

KEMA-KEUR 

cUL Recognized 

CCA

IECEE CB Scheme 

GL

EAC

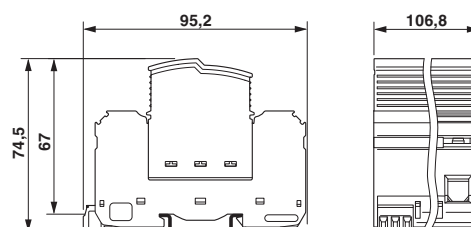
cULus Recognized 

Drawings

Pictogram

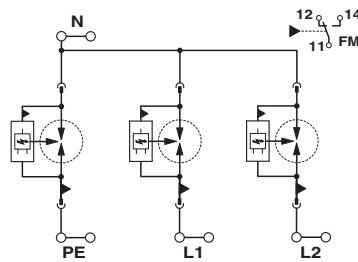


Dimensional drawing



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Circuit diagram



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