

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

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>)



Pluggable lightning current and surge arrester combination, in acc. with typ 1+2 / Class I+II / B+C arresters. Arresters coordinated following the AEC principle, for 1-phase power supply networks with separately installed PE and N (L1, PE, N).

Product Features

- Plugs can be checked with CHECKMASTER
- High continuous voltage of 350 V AC for 230/400 V AC networks with high voltage fluctuations
- With floating remote indication contact
- Thermal disconnect device for each individual plug
- Optical, mechanical status indication for the individual arresters



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	720.0 g
Custom tariff number	85363030
Country of origin	Germany

Technical data

Environmental Product Compliance

REACH SVHC	UV -328 25973-55-1
------------	--------------------

Dimensions

Height	95 mm
Width	71.2 mm
Depth	71.5 mm
Horizontal pitch	4 Div.

Ambient conditions

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Technical data

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)	25g (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
EN type	T1 + T2
IEC power supply system	TN-S
	TT
Number of ports	One
SPD design	Combination type
Mode of protection	L-N
	L-PE
	N-PE
Mounting type	DIN rail: 35 mm
Color	gray/blue
	black
Housing material	PBT
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	2
Arrester can be tested with CHECKMASTER from software version:	From SW rev. 3.00
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 operating voltage U_C (L-N)	350 V AC
Maximum continuous voltage U_C (N-PE)	350 V AC

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Technical data

Protective circuit

Rated load current I_L	125 A (< 55 °C)
Residual current I_{PE}	≤ 0.01 mA
Standby power consumption P_C	≤ 100 mVA
Nominal discharge current I_n (8/20) μ s (L-N)	25 kA
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
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
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)
Front of wave sparkover voltage at 6 kV (1.2/50) μ s (L-N)	≤ 1.5 kV

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Technical data

Protective circuit

Front of wave sparkover voltage at 6 kV (1.2/50) μ s (L-PE)	≤ 2.2 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 / 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 (N-PE)	≤ 100 ns
Max. backup fuse with branch wiring	315 A (gG)
Max. backup fuse with V-type through wiring	125 A (gG)

Indicator/remote signaling

Connection name	Remote fault indicator contact
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
	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

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Technical data

UL specifications

SPD Type	4CA
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 V AC
Mode of protection	L-N
	L-G
	N-G
Power distribution system	1S
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-N)	1340 V
Measured limiting voltage MLV (L-G)	1550 V
Measured limiting voltage MLV (N-G)	1080 V
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)

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130808
eCl@ss 7.0	27130808
eCl@ss 8.0	27130808

ETIM

ETIM 2.0	EC001457
ETIM 3.0	EC001457
ETIM 4.0	EC001457
ETIM 5.0	EC001457

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Classifications

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals

Approvals

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

Ex Approvals

Approvals submitted

Approval details

UL Recognized 

KEMA-KEUR 

cUL Recognized 
--

CCA

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Approvals

IECEE CB Scheme 

GL

EAC

EAC

cULus Recognized 

Accessories

Accessories

Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Labeled device marker

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Accessories

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: 18 x 5 mm

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Terminal marking

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



Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 5.2 mm, Lettering field: 5 x 4.5 mm

Spare parts

Type 2 surge protection plug - VAL-CP-350-ST - 2859602



Replacement plug for VAL-CP surge arrester with high-capacity varistor free of leakage current.

Lightning/surge arrester combination type 1+2 - FLT-CP-1S-350 - 2859738

Accessories

Type 1 surge protection plug - FLT-CP-350-ST - 2881887



Type 1 / Class I / B arrester (lightning arrester) replacement plug for paths L-N and L-PEN, can be combined with FLASHTRAB compact series of products.

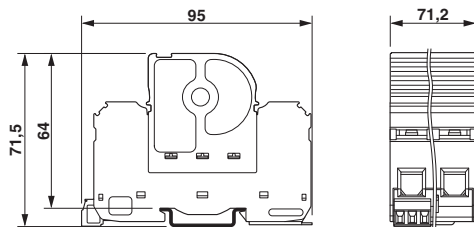
Type 1 surge protection plug - FLT-CP-N/PE-350-ST - 2859686



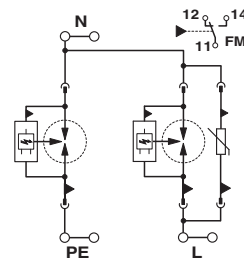
Type 1 / Class I / B arrester (lightning arrester) replacement plug for path N-PE, can be combined with FLASHTRAB compact series of products.

Drawings

Dimensional drawing



Circuit diagram



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[2859738](#)