

Type 1+2 combined lightning current and surge arrester - FLT-SEC-P-T1-3S-440/35-FM - 2908264

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Pluggable lightning current arrester for higher nominal voltages, in accordance with Type 1/Class I, for 3-phase power supply networks, with separate N and PE (L1, L2, L3, PE, N).

Your advantages

- ✓ Spark gap has no line follow current
- ✓ Free of leakage current
- ✓ High continuous voltage of 440 V AC for 400/690 V AC networks with high voltage fluctuations
- ✓ Pluggable
- ✓ Low voltage protection level of 2.5 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 055626 289090
GTIN	4055626289090
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	95.2 mm
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Technical data

Dimensions

Width	142.4 mm
Depth	74.5 mm (incl. DIN rail 7.5 mm)
Horizontal pitch	8 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
EN type	T1 / T2
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	4
Surge protection fault message	Optical, remote indicator contact

Protective circuit

Nominal voltage U_N	400/690 V AC (TN-S)
	400/690 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)

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Protective circuit

Maximum continuous voltage U_C	440 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)	35 kA
Nominal discharge current I_n (8/20) μs (L-PE)	35 kA
Nominal discharge current I_n (8/20) μs (N-PE)	100 kA
Maximum discharge current I_{max} (8/20) μs (L-N)	50 kA
Maximum discharge current I_{max} (8/20) μs (L-PE)	50 kA
Impulse discharge current (10/350) μs (L-N), charge	17.5 As
Impulse discharge current (10/350) μs (L-N), specific energy	310 kJ/Ω
Impulse discharge current (10/350) μs (L-N), peak current value I_{imp}	35 kA
Impulse discharge current (10/350) μs (L-PE), charge	17.5 As
Impulse discharge current (10/350) μs (L-PE), specific energy	310 kJ/Ω
Impulse discharge current (10/350) μs (L-PE), peak current value I_{imp}	35 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
Total discharge current I_{total} (10/350) μs	100 kA
Follow current interrupt rating I_{fi} (L-N)	50 kA
Follow current interrupt rating I_{fi} (L-PE)	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)	≤ 2.5 kV
Voltage protection level U_p (L-PE)	≤ 4.5 kV
Voltage protection level U_p (N-PE)	≤ 2.5 kV
Residual voltage U_{res} (L-N)	≤ 2.5 kV (at I_n)
Residual voltage U_{res} (L-PE)	≤ 4.5 kV (at I_n)
Residual voltage U_{res} (N-PE)	≤ 2.5 kV (at I_n)
TOV behavior at U_T (L-N)	580 V AC (5 s / withstand mode)
	800 V AC (120 min / withstand mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / 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	400 A (gG)

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Technical data

Indicator/remote signaling

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 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-L)	880 V AC
Maximum continuous operating voltage MCOV (L-N)	440 V AC
Maximum continuous operating voltage MCOV (L-G)	440 V AC
Maximum continuous operating voltage MCOV (N-G)	440 V AC
Nom. voltage	400/690 V AC
Rated load current I _L	50 A
Mode of protection	L-L
	L-N
	L-G
	N-G
Power distribution system	Wye

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UL specifications

Nominal frequency	50/60 Hz
Voltage protection rating VPR (L-L)	3000 V
Voltage protection rating VPR (L-N)	1800 V
Voltage protection rating VPR (L-G)	1800 V
Voltage protection rating VPR (N-G)	1500 V
Nominal discharge current I_n	20 kA
Short-circuit current rating (SCCR)	25 kA

UL indicator/remote signaling

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

UL connection data

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

Standards and Regulations

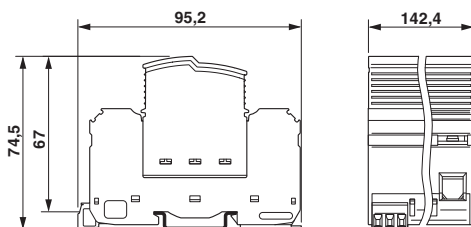
Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012

Environmental Product Compliance

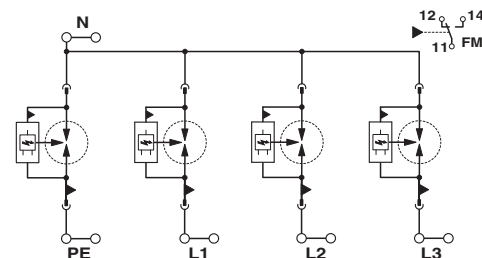
REACH SVHC	N,N-dimethylacetamide 127-19-5
	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Dimensional drawing



Circuit diagram



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Classifications

eCl@ss

eCl@ss 10.0.1	27130802
eCl@ss 11.0	27130802
eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130802
eCl@ss 9.0	27130802

ETIM

ETIM 4.0	EC000381
ETIM 6.0	EC000381
ETIM 7.0	EC000381

UNSPSC

UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

EAC / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

Type 1+2 combined lightning current and surge arrester - FLT-SEC-P-T1-3S-440/35-FM - 2908264

Approvals

EAC			RU C-DE.*09.B.00169
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 330181
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cULus Recognized			
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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

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Accessories

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, Number of individual labels: 5

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, Number of individual labels: 5

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, Number of individual labels: 5

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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 size: 18 x 5 mm, Number of individual labels: 5

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

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, Number of individual labels: 120

Spare parts

Type 1 surge protection plug - FLT-SEC-P-T1-440/35-P - 2905989



Replacement plug for lightning current arresters from the FLASHTRAB SEC PLUS 440 product range, for L-N and L-PE paths.

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Accessories

Type 1 surge protection plug - FLT-SEC-P-T1-N/PE-440/100-P - 2907263



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