

Lightning arrester type 1 - FLT-PLUS CTRL-3.0/I - 2800170

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The illustration shows version FLT-PLUS CTRL-0,9

Type 1 / Class I (lightning current arrester) with arc chopping spark gap and ignition electronics with control lamp, quenching plates for high mains follow-through current quenching capacity, 1-channel. Protection level: 3 kV. Housing width: 35 mm (2 Div.)

Product Features

- High discharge capacity
- Good follow current quenching capacity with higher rated voltage
- Single-channel
- Direct parallel connection with type 2 arresters supported
- Triggered



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	580.0 GRM
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	150 mm
Width	35.5 mm
Depth	80.5 mm
Horizontal pitch	2 Div.

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 85 °C
Permissible humidity (operation)	≤ 95 %

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Technical data

General

IEC power supply system	TT
	TN-C
	TN-S
	IT
Housing material	PA-GF
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	EN 60664-1
	EN61643-11
Mounting type	DIN rail: 35 mm
Type	Rail-mountable module, one-piece
Number of positions	1
Surge protection fault message	Optical
Direction of action	1L-N/PE

Protective circuit

IEC test classification	I
	T1
EN type	T1
Nominal voltage U_N	230 V AC (400 V AC)
Maximum continuous operating voltage U_C	440 V AC
Maximum continuous operating voltage U_C (L-N)	440 V AC
Maximum continuous operating voltage U_C (L-PEN)	440 V AC
U_T (TOV-proof)	580 V AC (5 sec.)
U_T (TOV-safe)	1640 V AC (200 ms)
Nominal frequency f_N	50 Hz
	60 Hz
Residual current I_{PE}	≤ 3 mA
Standby power consumption P_C	≤ 1.32 VA
Max. discharge current I_{max} (8/20) μ s	50 kA
Nominal discharge current I_n (8/20) μ s	50 kA
Nominal discharge current I_n (8/20) μ s (L-N)	50 kA
Nominal discharge current I_n (8/20) μ s (L-PEN)	50 kA
Impulse discharge current (10/350) μ s charge	25 As
Impulse discharge current (10/350) μ s, specific energy	625 kJ/ Ω
Impulse discharge current (10/350) μ s, peak value I_{imp}	50 kA
Front of wave sparkover voltage at 6 kV (1.2/50) μ s	≤ 3 kV

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Protective circuit

Voltage protection level U_p	≤ 3 kV
Voltage protection level U_p (L-N)	≤ 3 kV
Voltage protection level U_p (L-PEN)	≤ 3 kV
Response time	≤ 100 ns
Response time (L-N)	≤ 100 ns
Response time (L-PEN)	≤ 100 ns
Max. backup fuse with branch wiring	500 A (NH-gL)
Short-circuit resistance I_p with max. backup fuse (effective)	25 kA (440 V AC)
	50 kA (350 V AC)
Follow current quenching capacity I_f	25 kA (440 V AC)
	50 kA (350 V AC)

Connection, protective circuit

Connection method	Screw connection
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block
Connection method	Biconnect terminal block
Screw thread	M6
Tightening torque	8 Nm
Stripping length	19 mm
Conductor cross section stranded min.	16 mm ²
Conductor cross section stranded max.	35 mm ²
Conductor cross section solid min.	10 mm ²
Conductor cross section solid max.	50 mm ²
Conductor cross section AWG/kcmil min.	6
Conductor cross section AWG/kcmil max	1

Standards and Regulations

Standards/regulations	IEC 61643-1 2005
	DIN EN 61643-11 2002
	DIN EN 61643-11/A11 2007

Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27140201
eCl@ss 5.0	27140201

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Classifications

eCl@ss

eCl@ss 5.1	27140201
eCl@ss 6.0	27140201
eCl@ss 7.0	27140201

ETIM

ETIM 2.0	EC000381
ETIM 3.0	EC000381
ETIM 4.0	EC000381
ETIM 5.0	EC000381

UNSPSC

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

Approvals

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UL Recognized / KEMA-KEUR / cUL Recognized / GOST / GL / CCA / IECCEB Scheme / cULus Recognized

Ex Approvals

Approvals submitted

Approval details

UL Recognized 

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Drawings

Circuit diagram

