

SFP 1-5/120AC

Order No.: 2920667

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Device surge protection filter to limit powerful surge voltages, mounting on NS 35.

Commercial data

EAN	4046356158558
Pack	1 pcs.
Customs tariff	85363010
Weight/Piece	0.6218 KG

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Product description

Device protection with interference filter

Technical data

Standards

Housing material	ABS, V0(UL-94)
Inflammability class acc. to UL 94	V0
Color	aluminum
Degree of protection	IP20
Design	Rail-mountable module, one-piece
Mounting type	DIN rail 35 mm
Number of positions	2
Ambient temperature (operation)	-40 °C ... 85 °C
For country-specific use in	USA, CN, BR

Direction of action	L-N & L(N)-PE
Width	112.00 mm
Height	79.00 mm
Length	93.00 mm
Protective circuit	
IEC category	III
EN type	T3
Nominal voltage U_N	120 V AC
Arrester rated voltage U_c (L-N)	200 V DC
	150 V AC
Arrester rated voltage U_c (L-PE)	200 V DC
	150 V AC
Nominal frequency f_N	50 Hz
	60 Hz
Nominal current I_N	5 A ($\leq 72^\circ\text{C}$)
Operating effective current I_c at U_c	≤ 10 mA
Discharge current to PE at U_c	≤ 0.5 mA
Nominal discharge surge current I_n (8/20) μs (L-N)	3 kA
Nominal discharge surge current I_n (8/20) μs (L-PE)	3 kA
Max. discharge surge current I_{max} (8/20) μs maximum (L-N)	10 kA
Max. discharge surge current I_{max} (8/20) μs maximum (L-PE)	10 kA
Combined surge U_{oc}	6 kV (3 kA)
Energy absorption symmetrical	170 J
Energy absorption, asymmetrical	2x 170 J
Protection level U_p (L-N)	≤ 450 V (at 6 kV/3 kA)
Protection level U_p (L-PE)	≤ 450 V (at 6 kV/3 kA)
Protection level U_p (N-PE)	≤ 450 V (at 6 kV/3 kA)
Residual voltage at I_n , (L-N)	≤ 450 V
Residual voltage at I_n , (L-PE)	≤ 450 V
Residual voltage at I_n , (N-PE)	≤ 450 V
Clamping voltage SVR (L-N)	≤ 400 V (at 6 kV/500 A)
Clamping voltage SVR (L-PE)	≤ 400 V (at 6 kV/500 A)
Response time t_A (L-N)	≤ 25 ns

Response time tA (L-PE)	≤ 25 ns
Response time tA (N-PE)	≤ 25 ns
Inductivity in series	2x 1 mH ±30 % (with current compensation)
Capacity (L-N)	2 µF ±10 % (X2, FOW X2-250V)
Capacity (L-PE)	2.2 nF ±20 % (Y, FOW X2-250V)
Capacity (L-PEN)	2.2 nF ±20 % (Y, FOW X2-250V)
Max. required back-up fuse	20 A (gL / gG)
Input attenuation aE, sym.	40 dB (≥ 500 kHz / 50 Ω)
Input attenuation aE, asym.	30 dB (≥ 1 MHz / 50 Ω)
Message surge protection faulty	Remote indicator contact

Non-heating apparatus connection, power supply

Connection name	Input/output
Type of connection	Screw terminal blocks
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Connection method	3-conductor (shielded)
Screw thread	M3
Tightening torque, min	0.5 Nm
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	4 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	6 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	10

Remote indicator contact

Connection name	Remote fault indicator contact
Schaltfunktion_Int	PDT, 1-pos.
Type of connection	Pluggable screw connection
Screw thread	M2
Tightening torque, min	0.25 Nm
Conductor cross section stranded min.	0.14 mm ²
Conductor cross section stranded 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/kcmil min.	28
Conductor cross section AWG/kcmil max	16
Maximum operating voltage U_{max} AC	250 V AC
Maximum operating voltage U_{max} DC	300 V DC
Max. operating current I_{max}	1 A (250 V AC)
	0.25 A (250 V DC)
	1 A (48 V DC)

Connection, protective circuit

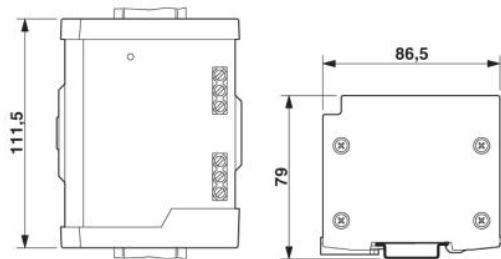
Standards/regulations	IEC 61643-1
	EN 61643-11
	UL 1449
	UL 1283

Protective circuit, filter

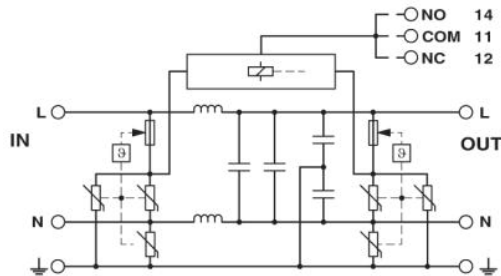
Discharge resistor	$\leq 390 \text{ k}\Omega$
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Drawings

Dimensioned drawing



Circuit diagram



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