

MT-2FM-RJ12 - Surge protection device



2838937

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Rail-mountable module with surge protection for analog telecommunication interfaces, for mounting on NS 35/7.5, housing width: 50 mm

Commercial data

Item number	2838937
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	CL03
Product key	CL3132
GTIN	4017918193409
Weight per piece (including packing)	130.1 g
Weight per piece (excluding packing)	91.87 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Product properties

IEC test classification	C2
	C3
	B2
	D1
Type	DIN rail module, one-piece

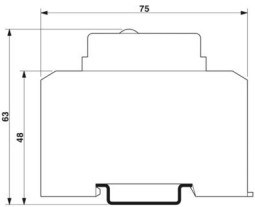
Insulation characteristics

Overvoltage category	III
Pollution degree	2

Connection data

Connection method	Screw connection & RJ12
Screw thread	M3
Tightening torque, min	0.8 Nm
Conductor cross-section flexible min.	0.2 mm ²
Conductor cross-section flexible max.	2.5 mm ²
Conductor cross-section, rigid min.	0.2 mm ²
Conductor cross-section, rigid max.	4 mm ²

Dimensions

Dimensional drawing	
Width	45 mm
Height	77.5 mm
Depth	55 mm

Material specifications

Flammability rating according to UL 94	V0
Housing material	PA

Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Direction of action	Line-Line & Line-Earth Ground
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Maximum continuous voltage U_C (line-line)	185 V DC (a1-b1 / a2-b2)
Maximum continuous voltage U_C (line-earth)	185 V DC
Nominal current I_N	≤ 150 mA
Operating effective current I_C at U_C	≤ 10 μ A
Protective conductor current I_{PE}	≤ 1 μ A
Nominal discharge current I_n (8/20) μ s (line-line)	5 kA
Nominal discharge current I_n (8/20) μ s (line-ground)	5 kA
Max. discharge current I_{max} (8/20) μ s maximum (line-earth)	10 kA (all cores to ground)
Output voltage limitation at 1 kV/ μ s (line-line) spike	≤ 300 V
Output voltage limitation at 1 kV/ μ s (line-earth) spike	≤ 500 V
Output voltage limitation (10/700) μ s (line-line)	≤ 300 V (impulse (4 kV): a,b --> ground)
Output voltage limitation (10/700) μ s (line-earth)	≤ 500 V (impulse (4 kV): Core--> ground)
Residual voltage at I_n (conductor-conductor)	≤ 50 V
Residual voltage at I_n , fixed cable length	0 mm
Voltage protection level U_p (line-line)	≤ 300 V (B2 - 100 A / C2 - 5 kA/ C3 -100 A)
Voltage protection level U_p (line-earth)	≤ 500 V (B2 - 100 A / C2 - 5 kA/ C3 -100 A) ≤ 550 V (D1 - 2,5 kA)
Response time t_A (line-line)	≤ 10 ns
Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.1 dB (up to 500 kHz, 600 Ω system)
Cut-off frequency f_g (3 dB), sym. in 600 Ω system	typ. 2 MHz
Capacity (Core-Core)	typ. 200 pF
Inductivity in series	39 μ H 10 %
Resistance per path	1 Ω
Short-circuit current self-quenching	150 mA
Impulse durability (line-line)	B2 - 4 kV / 100 A C2 - 10 kV / 5 kA C3 - 7.5 kV / 100 A
Impulse durability (line-earth)	B2 - 4 kV / 100 A C2 - 10 kV / 5 kA C3 - 7.5 kV / 100 A D1 - 20 kV / 2.5 kA

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 85 °C

Standards and regulations

Standards Information technology specification

Standards/regulations	IEC 61643-1 E DIN VDE 0675-6/A1 E DIN VDE 0675-6/A2
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	IEC 61643-1
	E DIN VDE 0675-6/A1
	E DIN VDE 0675-6/A2

Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1
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Mounting

Mounting type	DIN rail: 35 mm
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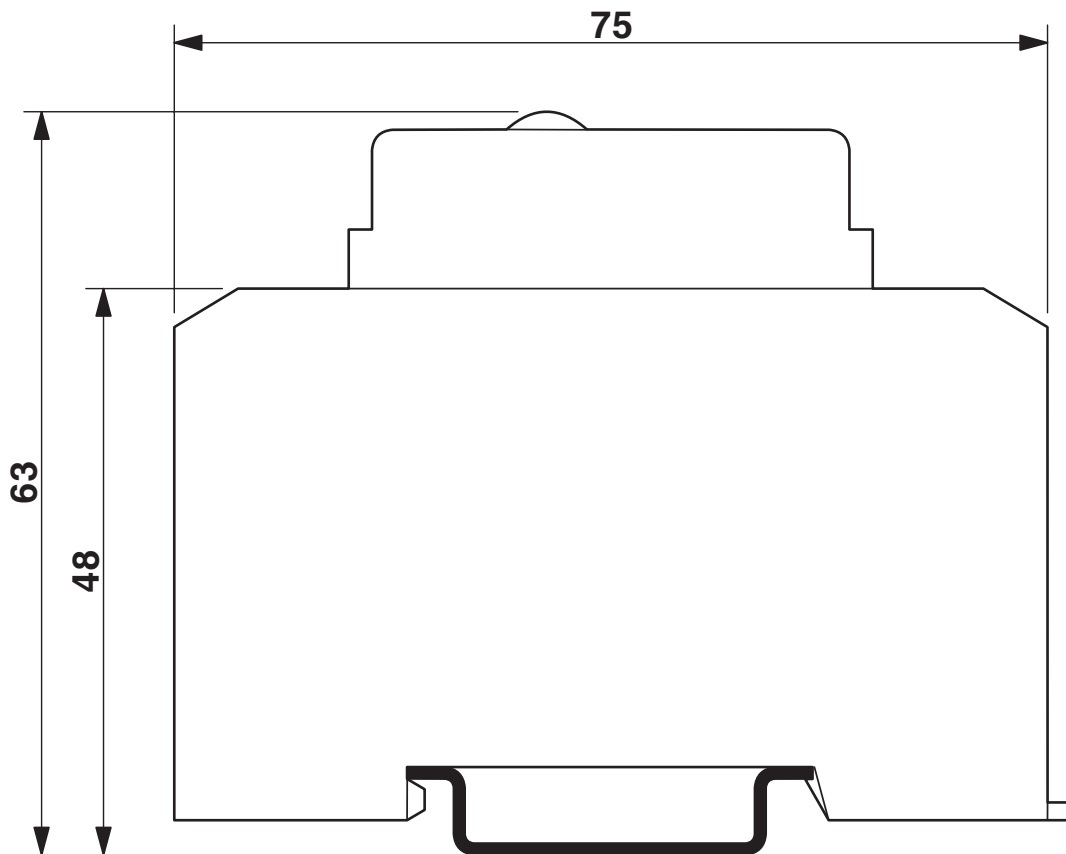
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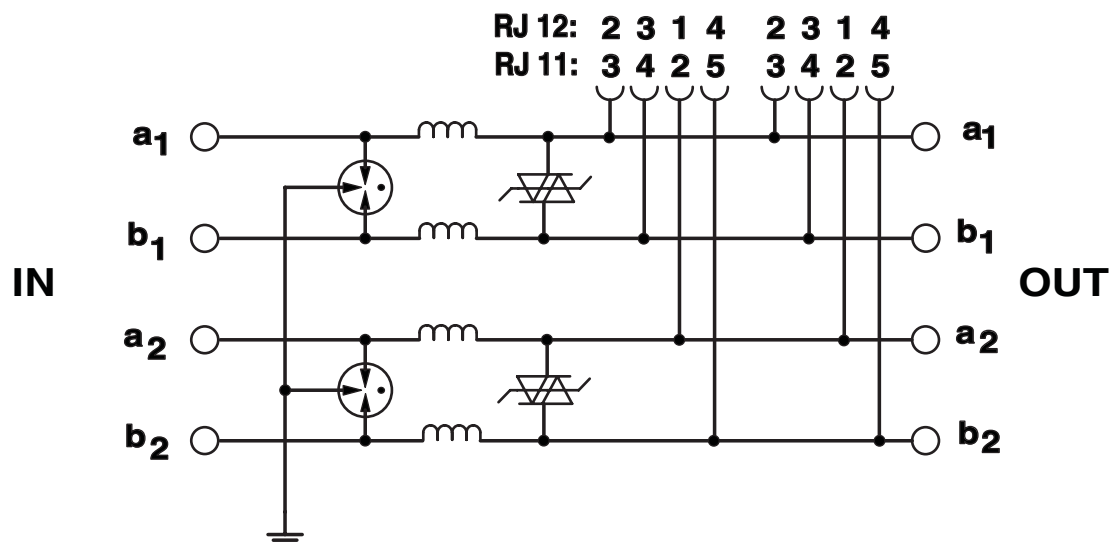
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Drawings

Dimensional drawing



Circuit diagram



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Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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