

Surge protection device - MT-RS485-TTL - 2749398

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Rail-mountable module with surge voltage coarse and fine protection for RS-485 interface, with TTL level, for mounting on NS 35/7.5, housing width: 50 mm

The illustration shows version MT-RS485/S



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	118.19 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	77.5 mm
Width	47.6 mm
Depth	54.9 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Degree of protection	IP20

General

Color	black
Mounting type	DIN rail: 35 mm
Type	Rail-mountable module, one-piece
Direction of action	Line-Line & Line-Signal Ground/Shield & Signal Ground/Shield-Earth Ground

Protective circuit

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Technical data

Protective circuit

IEC test classification	C2
	C3
	D1
VDE requirement class	C2
	C3
	D1
Nominal voltage U_N	5 V DC
Maximum continuous voltage U_C (wire-ground)	5.8 V DC
Nominal current I_N	450 mA (25 °C)
Operating effective current I_C at U_C	≤ 2 mA
Nominal discharge current I_n (8/20) μ s (Core-Core)	10 kA
Nominal discharge current I_n (8/20) μ s (Core-Earth)	10 kA
Max. discharge current I_{max} (8/20) μ s maximum (Core-Core)	10 kA
Max. discharge current I_{max} (8/20) μ s maximum (Core-Earth)	10 kA
Max. discharge current I_{max} (8/20) μ s maximum (Core-GND)	10 kA
Output voltage limitation at 1 kV/ μ s (Core-Core) spike	≤ 9 V
Output voltage limitation at 1 kV/ μ s (Core-Earth) spike	≤ 450 V
Output voltage limitation at 1 kV/ μ s (Core-Core) static	≤ 9 V
Output voltage limitation at 1 kV/ μ s (Core-Earth) static	≤ 450 V
Output voltage limitation at 1 kV/ μ s (Core-GND) static	≤ 9 V
Residual voltage at I_n (conductor-conductor)	≤ 9 V
Residual voltage at I_n (conductor-GND)	≤ 9 V
Voltage protection level U_p (core-core)	≤ 9 V
Voltage protection level U_p (core-ground)	≤ 450 V
Voltage protection level U_p (core-GND)	≤ 9 V
Response time t_A (Core-Core)	1 ns
Response time t_A (Core-Earth)	≤ 1 ns
	≤ 100 ns
Input attenuation aE, sym.	typ. 0.1 dB (up to 40 kHz 150 Ω system)
	typ. 0.1 dB (Up to 10 kHz)
Input attenuation aE, asym.	0.5 dB (up to 0.1 MHz 50 Ω system)
	0.1 dB (up to 10 kHz 600 Ω system)
Cut-off frequency f_g (3 dB), asym. (GND) in 50 Ohm system	600 kHz
Cut-off frequency f_g (3 dB), asym. (GND) in 150 Ohm system	200 kHz
Cut-off frequency f_g (3 dB), asym. (GND) in 600 Ohm system	50 kHz
Resistance in series	4.4 Ω

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Technical data

Connection data

Connection method	Screw connection
Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Stripping length	8 mm
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12

Standards and Regulations

Standards/regulations	Draft IEC 64644-1
	E VDE 0845-3-1

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	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610

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Classifications

UNSPSC

UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approvals submitted

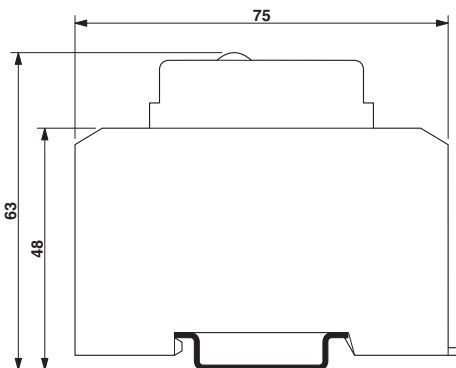
Approval details

EAC

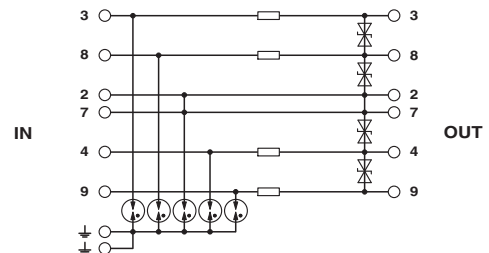
EAC

Drawings

Dimensional drawing

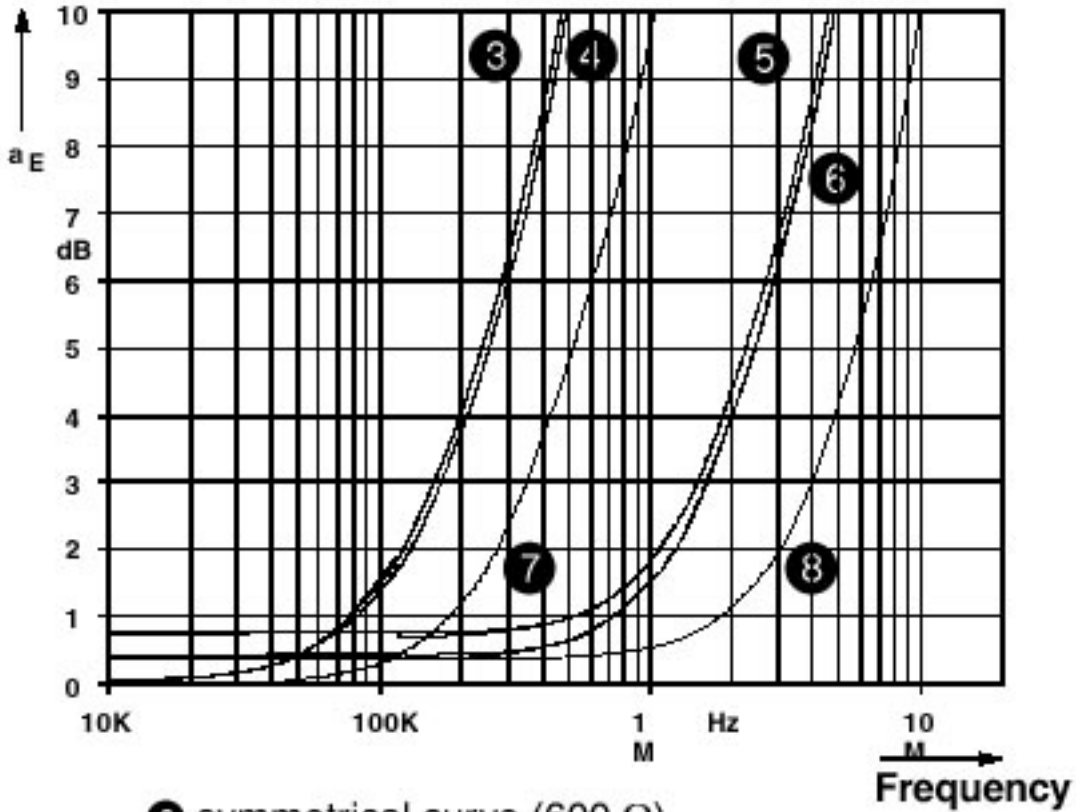


Circuit diagram



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Diagram



- ③ symmetrical curve (600 Ω)
- ④ asymmetrical curve (600 Ω)
- ⑤ symmetrical curve (50 Ω)
- ⑥ asymmetrical curve (50 Ω)
- ⑦ symm./asymm. curve (600 Ω)
- ⑧ symm./asymm. curve (50 Ω)

Characteristic attenuation curve