

## MT-RS485-TTL


Order No.: 2749398

The illustration shows version MT-RS485/S

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2749398>

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

### Commercial data

GTIN (EAN)	
sales group	J420
Pack	5 pcs.
Customs tariff	85363010
Catalog page information	Page 100 (TT-2002)

### Product notes

WEEE/RoHS-compliant since:  
04/12/2006

<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

### Technical data

#### General

Color	black
Ambient temperature (operation)	-40 °C ... 80 °C
Mounting type	DIN rail: 35 mm
Design	Rail-mountable module, one-piece

Degree of protection	IP20
Direction of action	Line-Line & Line-Signal Ground/Shield & Signal Ground/Shield-Earth Ground
Width	47.60 mm
Height	54.90 mm
Length	77.50 mm

**Protective circuit**

IEC category	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 $U_c$	$\leq 2$ mA
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Core)	10 kA
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Earth)	10 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s maximum (Core-Core)	10 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s maximum (Core-Earth)	10 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s maximum (Core-GND)	10 kA
Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) spike	$\leq 9$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) spike	$\leq 450$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) static	$\leq 9$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) static	$\leq 450$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-GND) static	$\leq 9$ V
Residual voltage at $I_n$ , (conductor-conductor)	$\leq 9$ V
Residual voltage at $I_n$ , (conductor-GND)	$\leq 9$ V

Protection level $U_p$ (Core-Core)	$\leq 9$ V
Protection level $U_p$ (Core-Earth)	$\leq 450$ V
Protection level $U_p$ (Core-GND)	$\leq 9$ V
Response time $t_A$ (Core-Core)	1 ns
Response time $t_A$ (Core-Earth)	$\leq 1$ ns
	$\leq 100$ ns
Input attenuation $a_E$ , sym.	Typ. 0.1 dB (up to 40 kHz 150 $\Omega$ system)
	Typ. 0.1 dB (Up to 10 kHz)
Input attenuation $a_E$ , asym.	0.5 dB (up to 0.1 MHz 50 $\Omega$ system)
	0.1 dB (up to 10 kHz 600 $\Omega$ 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 $\Omega$

**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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

**Connection, protective circuit**

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

**Certificates / Approvals**



Certification

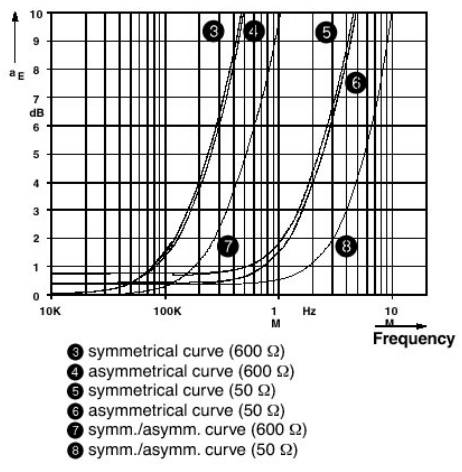
GOST

**Additional products**

Item	Designation	Description
<b>Assembly</b>		
2839295	SSA 3-6	shield fast connections for conductor diameter 3 - 6 mm. Potential connection cable: 200 mm, black
2839512	SSA 5-10	Shield fast connection for conductor diameters 5 - 10 mm. Potential connection cable: 200 mm, black

**Diagrams/Drawings**

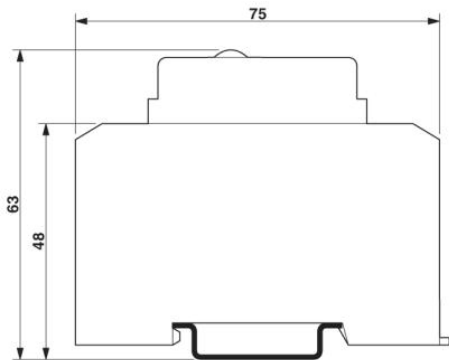
Diagram



Characteristic attenuation curve

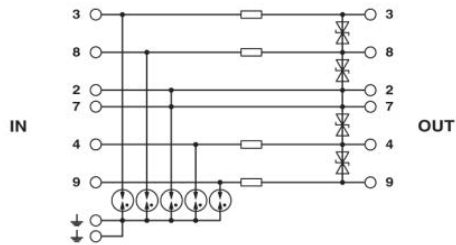
Dimensioned drawing

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Circuit diagram

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