

surge protection of data / signal circuits

- **Purpose:** the **RP-TC** series of low voltage protective devices has been developed to protect against the effects of induced voltages onto data, signal and communication circuits
- **Mounting:** direct mounting on 35 mm DIN rail mount, EN 50022
- **Overvoltage protection:** the circuit topology consists of a multi-stage protector providing both common (longitudinal) mode and differential (transverse) mode protection. Coarse protection is provided by a three terminal gas discharge tube while fine protection is provided using a high speed silicon or metal oxide varistor stage. Care is taken to ensure coordination between these two stages without voltage or surge current blind spots occurring
- **Thermal protection:** is provided to reduce the hazards of thermal runaway should there be an inadvertent mains incursion fault module design with changeable protective insert
- **Housing:**
- **Compliance with standard:** PN-IEC 61643-1
- **Recognitions, certifications:** 

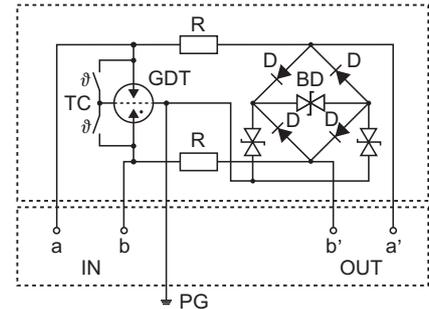
Type of arrester	RP-TC 5V	RP-TC 12V	RP-TC 24V
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Technical data				
Protection construction	two parts: base and extractable insert			
Number of protected pairs	1 (2 conductors)			
Nominal operating voltage	U_n	5 V DC	12 V DC	24 V DC
Max. continuous operating voltage	U_c	7 V DC	15 V DC	28 V DC
Rated spark overvoltage				
• (a-b)		7,9...9.5 V	15...19 V	30...36 V
• (a/b-PG)		7,9...9.5 V	15...19 V	30...36 V
Nominal current at 25 °C	I_n	1 A		
Nominal discharge current (8/20)	I_{sn}	10 kA		
Max. discharge current (8/20)	I_{max}	20 kA		
Residual voltage at 5 kA (8/20 μ s)		< 20 V	< 39 V	< 65 V
Response time	t_A	< 1 ns		
Thermal protection		thermo-clip TC		
Insulation resistance (a-b)		$\geq 5 \text{ k}\Omega /$ 5 V DC	$\geq 12 \text{ M}\Omega /$ 12 V DC	$\geq 24 \text{ M}\Omega /$ 24 V DC
Insulation resistance (a/b-PG)		$> 1 \text{ G}\Omega / 100 \text{ V}$		
Serial resistance	R	< 0,1 Ω		
Transverse capacitance	C	30 pF		
Limit frequency	f_G	35 MHz		
Operating temperature	ϑ	-40...+80 °C		
Cross-section of connection wire		max. 6 mm ²		
Terminal screw torque		0,25 Nm		
Housing protection category		IP 20		
Housing material		thermoplastic, extinguishing degree UL 94 V-0		
Housing colour		yellow		
Dimensions		90 x 17,5 x 68 mm (DIN 43880: 1TE)		



NEW product

RP-TC 5V, RP-TC 12V, RP-TC 24V



Legend:

- TC thermo-clip
- GDT gas discharge tube
- R resistor
- BD bi-directional TVS diode
- PG protective grounding - connected to a 35 mm DIN rail, EN 50022

