

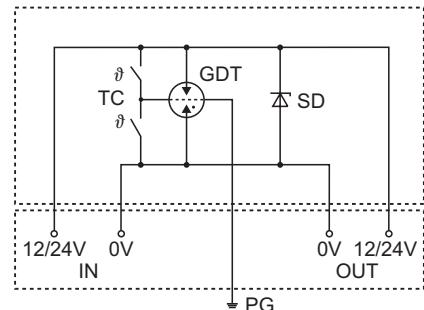
surge protection of DC power supplies

 NEW product

- **Purpose:** the RP-DC series has been developed to protect DC power supplies
- **Mounting:** direct mounting on 35 mm DIN rail mount, EN 50022
- **Overvoltage protection:** coarse protection is provided by a three terminal gas discharge tube while fine protection is provided using a high speed silicon stage
- **Thermal protection:** internal thermal disconnectors are used to reduce the hazards of thermal runaway during fault conditions, or if mains incursion onto the low voltage data circuit, occurs
- **Housing:** module design with changeable protective insert
- **Compliance with standard:** PN-IEC 61643-1
- **Recognitions, certifications:** CE



RP-DC 12V, RP-DC 24V



Legend:

| | |
|-----|----------------------------|
| TC | thermo-clip |
| GDT | gas discharge tube |
| SD | signal-direction TVS diode |
| PG | protective grounding |

| Type of arrester | RP-DC 12V | RP-DC 24V |
|--|--|---|
| Technical data | | |
| Protection construction | two parts: base and extractable insert ① | |
| Number of protected pairs | 1 (2 conductors) | |
| Nominal operating voltage U_n | 12 V DC | 24 V DC |
| Max. continuous operating voltage U_c | 15 V DC | 28 V DC |
| Rated spark overvoltage | | |
| • (12/24V-0V) | 15...19 V | 30...36 V |
| • (12/24V / 0V-PG) | 184...276 V | 184...276 V |
| Nominal current at 25 °C I_n | 10 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 µs) | < 32 V (0,12) | < 60 V (0,24) |
| Response time t_A | < 1 ns | |
| Thermal protection | thermo-clip TC | |
| Insulation resistance (12/24V-0V) | $\geq 12 \text{ M}\Omega / 12 \text{ V DC}$ | $\geq 24 \text{ M}\Omega / 24 \text{ V DC}$ |
| Insulation resistance (12/24V / 0V-PG) | > 1 GΩ / 100 V | |
| Serial resistance R | < 0,1 Ω | |
| Transverse capacitance C | < 1 nF | < 3 nF |
| Limit frequency f_G | 30 MHz | |
| Operating temperature Ø | -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) | |

① Universal base 12/24 V DC. Selected inserts 12 V DC or 24 V DC.

