# DM-048/1-R-DJ

## SPD - for data, signalling and telecommunications lines / I&C / ST2+3 (DM) - compact

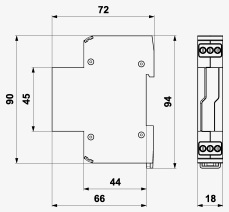
Surge protection for 2-core signalling lines

coupling impedance (R – resistance)

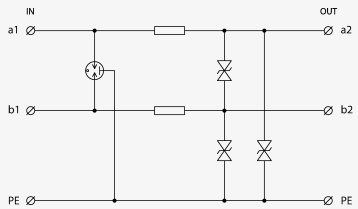
- coarse and fine surge protection for 2-core signalling lines
- installation close to protected equipment
- for protection of communication interfaces of I<(>&<)>C, electronic security and fire detection systems, etc. (mainly for RS-485 interfaces) against impact of surge voltage
- coarse and fine surge protection in differential mode (core – core) and common mode (core – PE)



**Product dimensions**




**Basic circuit diagram**




| Parameter name | | Parameter value |
|---|---|---|
| Type of SPD | | D1,C1,C2,C3,B2 |
| Location of SPD | | ST 2+3 |
| Mounting | | DIN rail 35 mm |
| Nominal voltage | $U_n$ | 48.00 V DC |
| Maximum operating voltage | $U_c$ | 35.60 V AC |
| Maximum operating voltage | $U_c$ | 50.20 V DC |
| Nominal load current | $I_L$ | 0.500 A |
| Treshold frequency core-core | f | 5.00 MHz |
| Serial resistance per core | R | 1.00 Ω |
| D1 total discharge current (10/350 µs) cores-PE | $I_{Total}$ | 1.00 kA |
| C1 voltage protection level mode core-core | $U_p$ | 85.00 V |

| | | |
|---|---|---|
| C1 test voltage mode core-core | $U_{OC}$ | 4.00 kV |
| C1 voltage protection level mode core-PE | $U_p$ | 85.00 V |
| C1 test voltage mode core-PE | $U_{OC}$ | 4.00 kV |
| B2 voltage protection level mode core-core | $U_p$ | 70.00 V |
| B2 test voltage mode core-core | $U_{OC}$ | 1.00 kV |
| B2 voltage protection level mode core-PE | $U_p$ | 70.00 V |
| B2 test voltage mode core-PE | $U_{OC}$ | 1.00 kV |
| C2 nominal discharge current (8/20 µs) per core | $I_n$ | 10.00 kA |
| C2 total discharge current (8/20 µs) cores-PE | $I_{Total}$ | 20.00 kA |
| C3 nominal discharge current (10/1000 µs) core-PE | $I_{SM}$ | 10.00 A |
| C3 nominal discharge current (10/1000 µs) core-core | $I_{SM}$ | 10.00 A |
| C2 voltage protection level mode core-PE at In | $U_p$ | 95.00 V |
| C2 test voltage mode core-PE | $U_{OC}$ | 20.00 kV |
| C2 voltage protection level mode core-core at In | $U_p$ | 95.00 V |
| C2 test voltage mode core-core | $U_{OC}$ | 20.00 kV |
| C3 voltage protection level mode core-PE at 1 kV/µs | $U_p$ | 70.00 V |
| C3 voltage protection level mode core-core at 1 kV/µs | $U_p$ | 70.00 V |
| Response time core-core | $t_a$ | 1 ns |
| Response time core-PE | $t_a$ | 1 ns |
| Connection (input - output) | | terminals-terminals |
| Cross-section of connected conductors solid (max) | | 4.00 $mm^2$ |
| Cross-section of connected conductors stranded (max) | | 4.00 $mm^2$ |
| Degree of protection | | IP 20 |
| Range of ambient temperatures (min/max) | | -40 / 80 °C |
| Humidity | | 5 - 95 % |
| According to standard | | EN 61643-21+A1,A2:2013, IEC 61643-21+A1,A2:2012 |
| ETIM Class | | EC001625 |
| Customs tariff number | | 85363010 |
| EAN | | 8595090567295 |
| Order number | | A06729 |