

# BDM-012-V/1-FR1

## SPD - for data, signalling and telecommunications lines / I&C / ST1+2+3 (BDM, BDG) - plugable

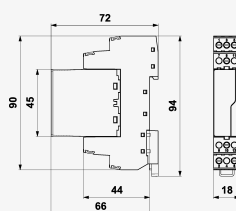
Lightning current arrester combined with fine surge protection for 2/3-core signalling lines

plugable module, coupling impedance ( $R$  – resistance), line separated from protective earth via GDT

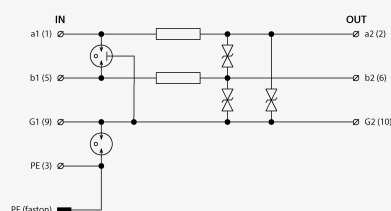
- coarse and fine surge protection of 2/3-core telecommunication, data and other lines
- installation at the boundary of LPZ 0 and LPZ 1 zones at the line entry into building
- for protection of communication interfaces of I&C, electronic security and fire detection systems, etc. (mainly for RS-485 interfaces) against impact of surge voltage
- coarse and fine surge protection (core – core, GND) in differential mode and coarse surge protection in common mode (line – PE)



Product dimensions



Basic circuit diagram



| Parameter name                                         |           | Parameter value |
|--------------------------------------------------------|-----------|-----------------|
| Type of SPD                                            |           | D1,C2           |
| Location of SPD                                        |           | ST 1+2+3        |
| Mounting                                               |           | DIN rail 35 mm  |
| Nominal voltage                                        | $U_n$     | 12 V DC         |
| Maximum operating voltage                              | $U_c$     | 11.00 V AC      |
| Maximum operating voltage                              | $U_c$     | 16.00 V DC      |
| Nominal load current                                   | $I_L$     | 1.000 A         |
| Treshold frequency core-core                           | $f$       | 2.00 MHz        |
| Serial resistance per core                             | $R$       | 0.80 $\Omega$   |
| D1 impulse discharge current (10/350 $\mu$ s) per core | $I_{imp}$ | 2.50 kA         |

|                                                             |             |                                                 |
|-------------------------------------------------------------|-------------|-------------------------------------------------|
| D1 total discharge current (10/350 $\mu$ s) cores-PE        | $I_{Total}$ | 5.00 kA                                         |
| C2 nominal discharge current (8/20 $\mu$ s) GND-PE          | $I_n$       | 10.00 kA                                        |
| C2 nominal discharge current (8/20 $\mu$ s) per core        | $I_n$       | 10.00 kA                                        |
| C2 total discharge current (8/20 $\mu$ s) cores-PE          | $I_{Total}$ | 20.00 kA                                        |
| C3 nominal discharge current (10/1000 $\mu$ s) core-PE      | $I_{SM}$    | 10 A                                            |
| C3 nominal discharge current (10/1000 $\mu$ s) core-core    | $I_{SM}$    | 10 A                                            |
| C3 voltage protection level mode GND-PE at 1 kV/ $\mu$ s    | $U_p$       | 550.00 V                                        |
| C3 voltage protection level mode core-GND at 1 kV/ $\mu$ s  | $U_p$       | 22.00 V                                         |
| C3 voltage protection level mode core-core at 1 kV/ $\mu$ s | $U_p$       | 22 V                                            |
| Response time core-core                                     | $t_a$       | 1 ns                                            |
| Response time core-GND                                      | $t_a$       | 1 ns                                            |
| Response time GND-PE                                        | $t_a$       | 100 ns                                          |
| Connection (input - output)                                 |             | terminals-terminals                             |
| Cross-section of connected conductors solid (min)           |             | 0.14 mm <sup>2</sup>                            |
| Cross-section of connected conductors solid (max)           |             | 4.00 mm <sup>2</sup>                            |
| Cross-section of connected conductors stranded (min)        |             | 0.14 mm <sup>2</sup>                            |
| Cross-section of connected conductors stranded (max)        |             | 2.50 mm <sup>2</sup>                            |
| Degree of protection                                        |             | IP 20                                           |
| Range of ambient temperatures (min/max)                     |             | -40 / 70 °C                                     |
| According to standard                                       |             | EN 61643-21+A1,A2:2013, IEC 61643-21+A1,A2:2012 |
| ETIM Class                                                  |             | EC001466                                        |
| Plug module                                                 |             | BDM-012-V/1-0                                   |
| Customs tariff number                                       |             | 85363010                                        |
| EAN                                                         |             | 8595090557104                                   |
| Order number                                                |             | A05710                                          |