# BDM-012-V/1-FR2

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

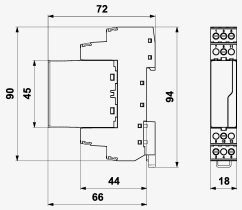
Lightning current arrester with coarse and fine surge protection for 2/3-core signalling lines

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

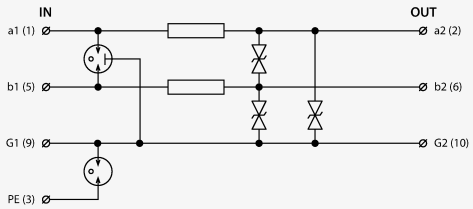
- lightning current arrester with coarse and fine surge protection for 2/3-core signalling lines
- installation at the boundary of LPZ 0 and LPZ 1 zones or higher, at the line entry into building and also installation close to protected device
- for protection of telecommunication lines (version BDGHF-230) and interfaces of I&C, MaR systems, electronic security and fire detection systems, etc. (mainly for RS-485, PROFIBUS interfaces) against 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 | $U_n$ | 12.00 V DC |
| Maximum operating voltage | $U_c$ | 11.00 V AC |
| Maximum operating voltage | $U_c$ | 16.00 V DC |
| Nominal load current | $I_L$ | 2.000 A |
| Treshold frequency core-core | f | 2.00 MHz |
| Serial resistance per core | R | 0.40 Ω |

| | | |
|---|---|---|
| D1 impulse discharge current (10/350 µs) per core | $I_{imp}$ | 2.50 kA |
| D1 total discharge current (10/350 µs) cores-PE | $I_{Total}$ | 5.00 kA |
| C2 nominal discharge current (8/20 µs) GND-PE | $I_n$ | 10.00 kA |
| 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 |
| C3 voltage protection level mode GND-PE at 1 kV/µs | $U_p$ | 550.00 V |
| C3 voltage protection level mode core-GND at 1 kV/µs | $U_p$ | 22.00 V |
| C3 voltage protection level mode core-core at 1 kV/µs | $U_p$ | 22.00 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 $mm^2$ |
| Cross-section of connected conductors solid (max) | | 4.00 $mm^2$ |
| Cross-section of connected conductors stranded (min) | | 0.14 $mm^2$ |
| Cross-section of connected conductors stranded (max) | | 2.50 $mm^2$ |
| 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 | | EC001625 |
| Plug module | | BDM-012-V/1-0 |
| Customs tariff number | | 85363010 |
| EAN | | 8595090563983 |
| Order number | | A06398 |