

# BDG-024-V/2-FR1

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

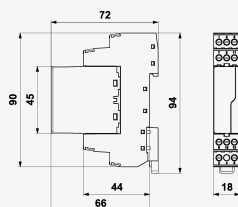
Lightning current arrester with coarse and fine surge protection for two 2-core shielding floating signalling lines

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

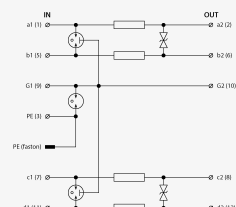
- lightning current arrester with coarse and fine surge protection for two 2-core signalling lines
- installation at the boundary of LPZ 0 and LPZ 1 zones or higher, at the line entry into building and also installation close to protected device
- for protection of communication interfaces of I&C, MaR systems, electronic security and fire detection systems, etc. (mainly for RS-485 inter- faces) against impact of surge voltage
- coarse and fine surge protection (core – core) 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              | $U_n$ | 24 V DC         |
| Maximum operating voltage    | $U_c$ | 25.00 V AC      |
| Maximum operating voltage    | $U_c$ | 36.00 V DC      |
| Nominal load current         | $I_L$ | 1.000 A         |
| Treshold frequency core-core | $f$   | 6.00 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  | $U_p$                                           | 550.00 V |
| C3 voltage protection level mode core-core at 1 kV/ $\mu$ s | $U_p$                                           | 46 V     |
| Response time core-core                                     | $t_a$                                           | 1 ns     |
| Response time core-GND                                      | $t_a$                                           | 100 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                                                  | EC001625                                        |          |
| Plug module                                                 | BDG-024-V/2-0                                   |          |
| Customs tariff number                                       | 85363010                                        |          |
| EAN                                                         | 8595090564881                                   |          |
| Order number                                                | A06488                                          |          |

