

# BDM-012-V/1-FR1

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

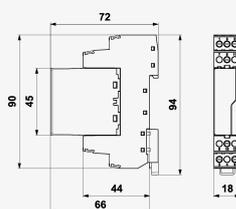
Lightning current arrester combined with fine surge protection for 2/3-core signalling lines

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

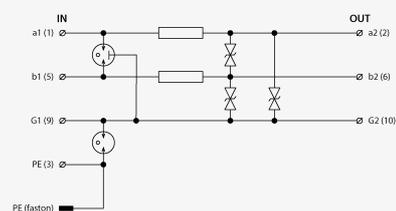
- coarse and fine surge protection of 2/3-core telecommunication, data and other lines
- installation at the boundary of LPZ 0 and LPZ 1 zones at the line entry into building
- for protection of communication interfaces of I&C, electronic security and fire detection systems, etc. (mainly for RS-485 interfaces) 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	$U_n$ 12.00 V DC
Maximum operating voltage	$U_c$ 11.00 V AC
Maximum operating voltage	$U_c$ 16.00 V DC
Nominal load current	$I_L$ 1.000 A
Threshold 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	$I_{SM}$	10.00 A
C3 nominal discharge current (10/1000 $\mu$ s) core-core	$I_{SM}$	10.00 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	$U_p$	22.00 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 <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