

**BDM-06**  
**BDM-12**  
**BDM-24**  
**BDM-48**  
**BDM-230**

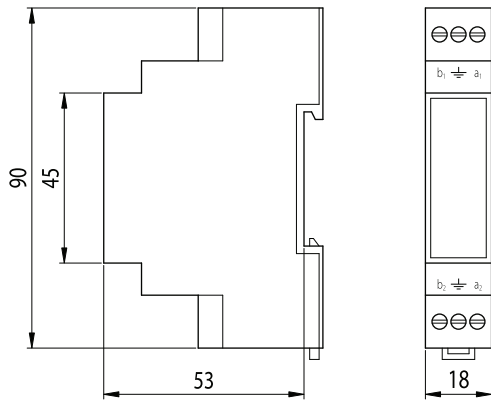
**Lightning current arrester**

Combined with coarse and fine surge protection for telecommunication and signalling networks.

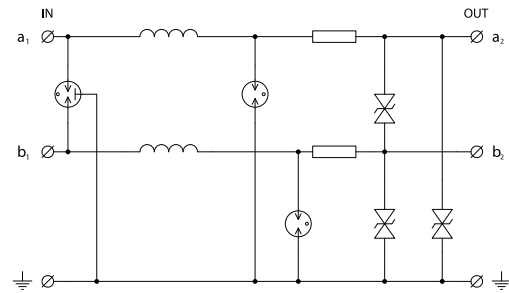
Designed to protect 2-wire telecommunication, data and other lines and the communication interface of M&C, ESS, and EFS control systems, etc. at the boundary of LPZ 0<sub>A</sub>-LPZ 1 zones and higher. It is installed directly before the protected equipment. Longitudinal overvoltage (core – earth) and lateral overvoltage (core – core) are prevented by a three-level combination of lightning current arrester, coarse and fine surge protection.



**Dimension drawing**



**Basic circuit diagram**



**Technical data**

		<b>BDM-06</b>	<b>BDM-12</b>	<b>BDM-24</b>	<b>BDM-48</b>	<b>BDM-230</b>
Location SPD		ST 1+2+3	ST 1+2+3	ST 1+2+3	ST 1+2+3	ST 1+2+3
Nominal voltage	$U_n$	6 V DC	12 V DC	24 V DC	48 V DC	230 V DC
Maximum operating voltage	$U_c$	8,1 V DC / 5,7 V AC	14,5 V DC / 10,2 V AC	26,8 V DC / 19 V AC	50,2 V DC / 35,6 V AC	243 V DC / 172 V AC
Nominal current	$I_n$	1 A	1 A	1 A	1 A	1 A
D1 total impulse current (10/350 $\mu$ s)	$I_{imp}$	5 kA	5 kA	5 kA	5 kA	5 kA
C2 nominal discharge current (8/20 $\mu$ s) per line	$I_n$	10 kA	10 kA	10 kA	10 kA	10 kA
C2 voltage protection level line – line at $I_n$	$U_p$	25 V	40 V	65 V	95 V	800 V
C2 voltage protection level line – PE at $I_n$	$U_p$	25 V	40 V	65 V	95 V	800 V
C3 voltage protection level line – line at 1 kV/ $\mu$ s	$U_p$	14 V	22 V	40 V	75 V	380 V
C3 voltage protection level line – PE at 1 kV/ $\mu$ s	$U_p$	14 V	22 V	40 V	75 V	380 V
Series resistance per line	$R$	1 $\Omega$	1 $\Omega$	1 $\Omega$	1 $\Omega$	1 $\Omega$
Threshold frequency line – line	$f_G$	4 MHz	11 MHz	17 MHz	24 MHz	53 MHz
Response time line – line	$t_a$	1 ns	1 ns	1 ns	1 ns	1 ns
Response time line – PE	$t_a$	1 ns	1 ns	1 ns	1 ns	1 ns
Degree of protection		IP 20	IP 20	IP 20	IP 20	IP 20
Range of operating temperatures		-40 °C ... +80 °C	-40 °C ... +80 °C	-40 °C ... +80 °C	-40 °C ... +80 °C	-40 °C ... +80 °C
Mounting on		DIN rail 35 mm	DIN rail 35 mm	DIN rail 35 mm	DIN rail 35 mm	DIN rail 35 mm
Cross-section of connected conductors						
Solid max		ISO: 4 mm <sup>2</sup> ; AWG: 11	ISO: 4 mm <sup>2</sup> ; AWG: 11	ISO: 4 mm <sup>2</sup> ; AWG: 11	ISO: 4 mm <sup>2</sup> ; AWG: 11	ISO: 4 mm <sup>2</sup> ; AWG: 11
Stranded max		ISO: 2,5 mm <sup>2</sup> ; AWG: 13	ISO: 2,5 mm <sup>2</sup> ; AWG: 13	ISO: 2,5 mm <sup>2</sup> ; AWG: 13	ISO: 2,5 mm <sup>2</sup> ; AWG: 13	ISO: 2,5 mm <sup>2</sup> ; AWG: 13
Tightening torque		0,6 Nm	0,6 Nm	0,6 Nm	0,6 Nm	0,6 Nm
Meets the requirements of standard		EN 61643-21	EN 61643-21	EN 61643-21	EN 61643-21	EN 61643-21
Ordering number		8595090522027	8595090522034	8595090522041	8595090522058	8595090530787