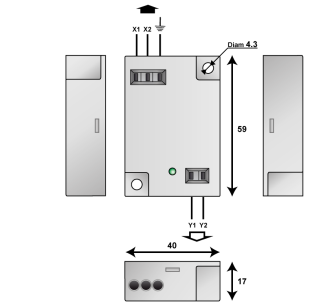
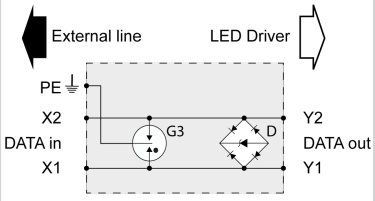
1-pair Data surge protector

MDL-28-R



- Data line protection
- High energy protection in common-mode
- Low clamping level in differential mode
- Galvanic isolation to earth connection
- Indoor applications, IP20 (NEMA 2)
- Plastic enclosure, UL94-V0
- Certified acc. to IEC/EN 61643-21
- Location and test categories: C2, C3





G3: 3-electrode gas tube
D: Clamping diode

Electrical Characteristics		
Network		Digital communication (2-Wire)
Protection modes (network)		CM / DM
Lightning Protection Zones (LPZ)		1 - 3
Nominal line voltage	Un	24 Vdc
Max. DC operating voltage	Uc	28 Vdc
Cut-off frequency *-3dB, 100 ohm system*	f max.	> 30 MHz
Cut-off frequency *-1dB, 100 ohm system*	f max.	> 10 MHz
Max. load current @25°C	IL	500 mA
Signal rise/fall times, to BS EN IEC 62386-101:2022	t, t	3 µs
Nominal discharge current *C2 (1.2/50us / 8/20µs), 10 applications X-C (Line/Earth)*	In	4 kV / 2 kA
Nominal discharge current *CWG (1.2/50us / 8/20us) with 42 ohms, X-X (Line-Line), to IEC 61000-4-5 (unshielded asymmetric)*	In	800 V / 20 A
Max. discharge current *C2 (1.2/50µs / 8/20µs), 10 applications, X-C (Line-Earth)*		20 kV / 10kA
Protection Level *C3 (10/1000µs), 300 applications@10 A, Y-Y (Line/Line)*	Up	< 40 V
Protection Level *C2 (1.2/50µs / 8/20µs), 10 applications, Y-C (Line-Earth)*	Up	< 1000 V
Protection Level *CWG (1.2/50µs / 8/20µs) with 42 ohms, Y-Y (Line-Line), to IEC 61000-4-5 (unshielded asymmetric)*	Up	< 48 V
Line resistance (± 10%)		< 0.2 ohms
Capacitance *@1MHz X-C (Line/Earth)*	C	< 10 pF
Capacitance *@1MHz X-X (Line-Line)*	C	< 30 pF
Mechanical Characteristics		
Technology		GDT+TVS diode
SPD configuration		Data-pair, plus PE
Connection to Network		2 spring terminals opposite side in/out - wire 1.5mm² max.
Format		Plastic Enclosure with connectors input/output
Mounting		On plate
Housing material		Thermoplastic UL94 V-0
Operating and storage temperature		-40/+85°C
Ingress Protection rating		IP20 (NEMA 2)
Failsafe mode		Transmission cut-off - Fault mode 2 (short-circuit)
Dimensions		See diagram
Weight		0.035 kg / 0.09 lbs
Standards		
Standards compliance		IEC 61643-21 / EN 61643-21/ IEC 61000-4-5 / IEC 62386-101
Certification		KEMA
Part number		
831611		