



# CITEL

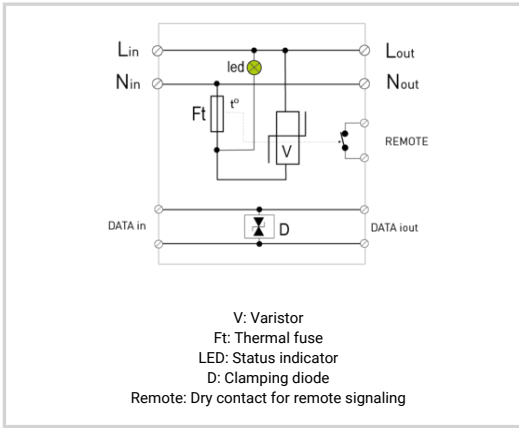
## AC/Data surge protector for Led lighting system Class 2

### MLP2-230S-P/RS



Specially developed spd with combined protection for 2-phase power supply (control phase):

- Many variants available depending on application
- With screw terminals or cable wiring
- IP65 versions
- For protection class I or II application
- Developed for Uoc: 10 kV and I<sub>max</sub>: 10 kA for highest outdoor requirements according to IEEE & ANSI
- Optical error signalling



Electrical Characteristics		
SPD type		2+3
Network		AC: 220-240 V single-phase I Dataline: RS485 or 0-10V
AC system		TT-TN
Nominal line voltage	Un	230-277 Vac
Max. AC operating voltage	Uc	AC : 305 Vac I DATA : 15 Vac
Max. frequency	f max.	DATA : 10 MHz
Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection	UT	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection	UT	440 Vac disconnection
Residual Current Leakage current to Ground	Ipe	None
Follow current	If	None
Nominal discharge current 15 x 8/20 μs impulses	In	5 kA
Total Maximum discharge current max. total withstand @ 8/20 μs	I <sub>max</sub> Total	AC : 20 kA
Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs	Uoc	10 kV / 5 kA
Withstand on overvoltages IEEE C62.41.1		10 kV / 10 kA
Protection mode(s)		Differential Mode
Protection level L/N @ In (8/20μs)	Up L/N	1.5 kV
Protection level L/PE @ In (8/20μs)	Up L/PE	1.5 kV
Admissible short-circuit current	I <sub>sc</sub>	10 000 A
<b>ELEC</b>		
Nominal line voltage	Un	12 V
<b>ELEC</b>		
Insertion loss		< 1dB
<b>ELEC</b>		
Max. load current@25°C	IL	AC : 2.5 A I DATA : 300mA
<b>ELEC</b>		
Nominal discharge current 15 x 8/20 μs impulses	In	AC : 5kA I DATA : 5 kA
<b>ELEC</b>		
Max. discharge current max. withstand @ 8/20 μs by pole	I <sub>max</sub>	AC : 10 kA I DATA : 200 kA
<b>ELEC</b>		
Protection level @ In (8/20μs)	Up	DATA : 30 V
<b>Mechanical Characteristics</b>		
Technology		MOV+GDT
Connection to Network		By screw terminal: 1.5mm <sup>2</sup> max.
Mounting		On plate
Housing material		Thermoplastic UL94 V-0
Operating temperature	Tu	-40/+85°C
Protection rating		IP20
Failsafe mode		Disconnection and AC continuity
Disconnection indicator		Green LED OFF and remote signaling
Voltage/operating indicator		Green Led ON
Remote signaling of disconnection		yes : output on contact NO
Dimensions		See diagram
<b>Disconnectors</b>		
Thermal disconnector		Internal
Installation ground fault breaker		Type 'S' or delayed
<b>Standards</b>		
Standards compliance		IEC 61643-21 / EN 61643-21 / UL1449 ed.5
<b>Part number</b>		

