



AC surge protector for LED Lighting system Class 1

CITEL

MLPCH1-230L-V



- Type 2 (or 3) surge protectors for LED
- Optimized coordination with internal MOV of driver
- Very compact
- Plate mounting
- Screw terminal connection
- Status indicator
- Disconnection AC end of life
- IEC 61643-11 and EN 61643-11 compliance



	Electrical Characteristics																																																				
<p>GSG: Specific Gas Tube V: Varistor LED: Status indicator L: Coordination inductor Ft: Thermal fuse t*: Thermal disconnection system</p>	<table border="1"> <tr><td>SPD type</td><td></td><td>2 (or 3)</td></tr> <tr><td>Network</td><td></td><td>230-277 V Single-phase</td></tr> <tr><td>AC system</td><td></td><td>TT-TN</td></tr> <tr><td>Max. AC operating voltage</td><td>Uc</td><td>320 Vac</td></tr> <tr><td>Max. load current @25°C</td><td>IL</td><td>2.5 A</td></tr> <tr><td>Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection</td><td>UT</td><td>335 Vac withstand</td></tr> <tr><td>Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection</td><td>UT</td><td>440 Vac disconnection</td></tr> <tr><td>Temporary Over Voltage N/PE (TOV HT) Without disconnection or with safety disconnection</td><td>UT</td><td>1200 V/300A/200 ms disconnection</td></tr> <tr><td>Nominal discharge current 15 x 8/20 μs impulses</td><td>In</td><td>5 kA</td></tr> <tr><td>Max. discharge current max. withstand @ 8/20 μs by pole</td><td>Imax</td><td>10 kA</td></tr> <tr><td>Total Maximum discharge current max. total withstand @ 8/20 μs</td><td>Imax Total</td><td>20 kA</td></tr> <tr><td>Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs</td><td>Uoc</td><td>10 kV</td></tr> <tr><td>Withstand on overvoltages IEEE C62.41.1</td><td></td><td>10 kV / 10 kA</td></tr> <tr><td>Protection mode(s)</td><td></td><td>Common/Differential mode</td></tr> <tr><td>Protection level L/N @ In (8/20μs)</td><td>Up L/N</td><td>1.5 kV</td></tr> <tr><td>Protection level L/PE @ In (8/20μs)</td><td>Up L/PE</td><td>1.5 kV</td></tr> <tr><td>Admissible short-circuit current</td><td>Iscrr</td><td>10 000 A</td></tr> </table>		SPD type		2 (or 3)	Network		230-277 V Single-phase	AC system		TT-TN	Max. AC operating voltage	Uc	320 Vac	Max. load current @25°C	IL	2.5 A	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	Temporary Over Voltage N/PE (TOV HT) Without disconnection or with safety disconnection	UT	1200 V/300A/200 ms disconnection	Nominal discharge current 15 x 8/20 μs impulses	In	5 kA	Max. discharge current max. withstand @ 8/20 μs by pole	Imax	10 kA	Total Maximum discharge current max. total withstand @ 8/20 μs	Imax Total	20 kA	Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs	Uoc	10 kV	Withstand on overvoltages IEEE C62.41.1		10 kV / 10 kA	Protection mode(s)		Common/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	Iscrr	10 000 A
SPD type		2 (or 3)																																																			
Network		230-277 V Single-phase																																																			
AC system		TT-TN																																																			
Max. AC operating voltage	Uc	320 Vac																																																			
Max. load current @25°C	IL	2.5 A																																																			
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																																																			
Temporary Over Voltage N/PE (TOV HT) Without disconnection or with safety disconnection	UT	1200 V/300A/200 ms disconnection																																																			
Nominal discharge current 15 x 8/20 μs impulses	In	5 kA																																																			
Max. discharge current max. withstand @ 8/20 μs by pole	Imax	10 kA																																																			
Total Maximum discharge current max. total withstand @ 8/20 μs	Imax Total	20 kA																																																			
Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs	Uoc	10 kV																																																			
Withstand on overvoltages IEEE C62.41.1		10 kV / 10 kA																																																			
Protection mode(s)		Common/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	Iscrr	10 000 A																																																			
Mechanical Characteristics																																																					
Technology		MOV+GDT																																																			
Connection to Network		By screw terminals: 2.5mm ² max.																																																			
Mounting		On plate																																																			
Housing material		Thermoplastic UL94 V-0																																																			
Operating temperature	Tu	-40/+85°C																																																			
Protection rating		IP20																																																			
Failsafe mode		Disconnection and AC line cut-off																																																			
Disconnection indicator		LED green OFF and AC network cut-off																																																			
Voltage/operating indicator		Green Led ON																																																			
Dimensions		See diagram																																																			
Weight		0.046 kg																																																			
Disconnectors																																																					
Thermal disconnector		Internal																																																			
Installation ground fault breaker		Type 'S' or delayed																																																			
Standards																																																					
Standards compliance		EN 61643-11 / IEC 61643-11																																																			
Part number																																																					
833221																																																					

