



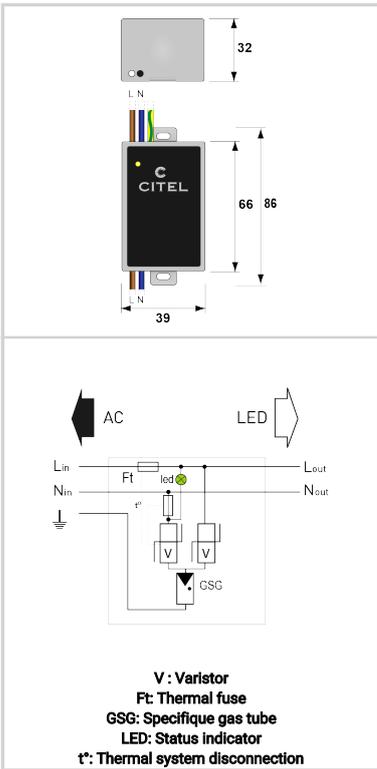
# CITEL

## Surge protector for LED lighting system Class 1

### MLP1-120L-W

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   | IEC                    | 2+3  |
| Network  |                        | 110-120 V single-phase                     |
| AC system  |                        | TT-TN                                      |
| Nominal line voltage   | U <sub>n</sub>         | 110-120 Vac                                |
| Max. AC operating voltage  | U <sub>c</sub>         | 180 Vac                                    |
| Max. load current @25°C  | I <sub>L</sub>         | 2.5 A                                      |
| Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection                              | UT                     | 175 Vac withstand                          |
| Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection | UT                     | 230 Vac disconnection                      |
| Residual Current Leakage current to Ground   | I <sub>pe</sub>        | None                                       |
| Follow current   | I <sub>f</sub>         | None                                       |
| Nominal discharge current 15 x 8/20 μs impulses  | I <sub>n</sub>         | 5 kA                                       |
| Max. discharge current max. withstand @ 8/20 μs by pole  | I <sub>max</sub>       | 10 kA                                      |
| Total Maximum discharge current max. total withstand @ 8/20 μs   | I <sub>max</sub> Total | 20 kA                                      |
| Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs                         | U <sub>oc</sub>        | 10 kV / 5 kA                               |
| Withstand on overvoltages IEEE C62.41.1  |                        | 10 kV / 10 kA                              |
| Protection mode(s)   |                        | Common/Differential mode                   |
| Protection level L/N @ I <sub>n</sub> (8/20μs)   | U <sub>p</sub> L/N     | 1.5 kV                                     |
| Protection level L/PE @ I <sub>n</sub> (8/20μs)  | U <sub>p</sub> L/PE    | 1.2 kV                                     |
| Admissible short-circuit current   | I <sub>sc</sub>        | 10 000 A                                   |
| Mechanical Characteristics   |                        |  |
| 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  | T <sub>u</sub>         | -40/+85°C                                  |
| Protection rating  |                        | IP20                                       |
| Failsafe mode  |                        | Disconnection and AC line cut-off          |
| Disconnection indicator  |                        | LED green OFF and AC network cut-off       |
| Operating indicator  |                        | Green Led ON                               |
| Remote signaling of disconnection  |                        | No   |
| Dimensions   |                        | See diagram                                |
| Disconnectors  |                        |  |
| Thermal disconnector   |                        | Internal                                   |
| Installation ground fault breaker  |                        | Type 'S' or delayed                        |
| Standards  |                        |  |
| Standards compliance   |                        | IEC 61643-11 / EN 61643-11 / UL1449 ed.5   |
| Part number  |                        |  |
| 711111   |                        |  |

