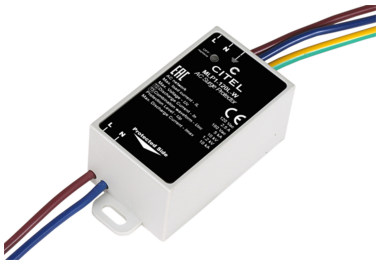
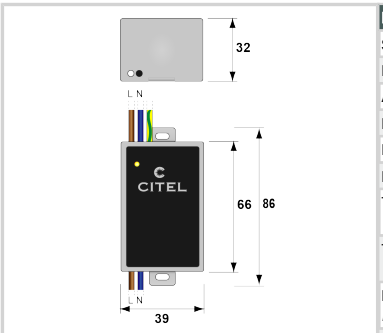
*Surge protector for LED lighting system Class 1*

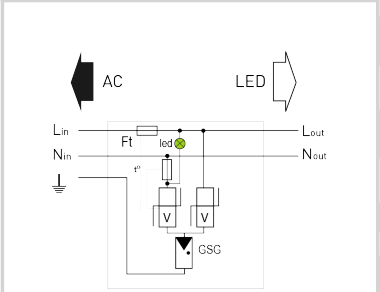
# MLP1-120L-W



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 Imax: 10 kA for highest outdoor requirements according to IEEE & ANSI
- Optical error signalling




**V : Varistor**
**Ft: Thermal fuse**
**GSG: Specifique gas tube**
**LED: Status indicator**
**t°: Thermal system disconnection**

| Electrical Characteristics | | |
|---|---|---|
| SPD type | IEC | 2+3 |
| Network | | 110-120 V single-phase |
| AC system | | TT-TN |
| Nominal line voltage | Un | 110-120 Vac |
| Max. AC operating voltage | Uc | 180 Vac |
| Max. load current @25°C | IL | 2.5 A |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.<br>*Without disconnection* | UT | 175 Vac withstand |
| Temporary Over Voltage (TOV) Characteristics - 120 mn<br>*Without disconnection or with safety disconnection* | UT | 230 Vac disconnection |
| Residual Current<br>*Leakage current to Ground* | Ipe | None |
| Follow current | If | None |
| Nominal discharge current<br>*15 x 8/20 µs impulses* | In | 5 kA |
| Max. discharge current<br>*max. withstand @ 8/20 µs by pole* | Imax | 10 kA |
| Total Maximum discharge current<br>*max. total withstand @ 8/20 µs* | Imax Total | 20 kA |
| Withstand on Combination waveform IEC 61643-11<br>*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) | | Common/Differential mode |
| Protection level L/N<br>*@ In (8/20µs)* | Up L/N | 1.5 kV |
| Protection level L/PE<br>*@ In (8/20µs)* | Up L/PE | 1.2 kV |
| Admissible short-circuit current | Isccr | 10 000 A |
| **Mechanical Characteristics** | | |
| Technology | | MOV+GDT |
| Connection to Network | | By screw terminal: 1.5mm² 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 |
| 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** | | |