



# CITEL

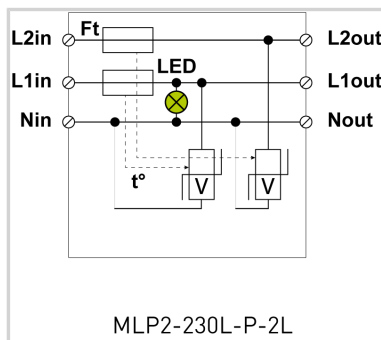
## Surge protector for LED lighting system Class 1

### MLP2-230L-P-2L



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                                      |
| AC system                                                                                                          |                           | TT-TN                                    |
| Nominal line voltage                                                                                               | Un                        | 230-277 Vac                              |
| Max. AC operating voltage                                                                                          | Uc                        | 305 Vac                                  |
| Max. frequency                                                                                                     | f max.                    | 10 MHz                                   |
| Max. load current @25°C                                                                                            | IL                        | 2.5 A                                    |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.<br><i>Without disconnection</i>                              | UT                        | 335 Vac withstand                        |
| Temporary Over Voltage (TOV) Characteristics - 120 mn<br><i>Without disconnection or with safety disconnection</i> | UT                        | 440 Vac disconnection                    |
| Residual Current<br><i>Leakage current to Ground</i>                                                               | Ipe                       | None                                     |
| Follow current                                                                                                     | If                        | None                                     |
| Nominal discharge current<br><i>15 x 8/20 µs impulses</i>                                                          | In                        | 5 kA                                     |
| Max. discharge current<br><i>max. withstand @ 8/20 µs by pole</i>                                                  | I <sub>max</sub>          | 10 kA                                    |
| Total Maximum discharge current<br><i>max. total withstand @ 8/20 µs</i>                                           | I <sub>max</sub><br>Total | 20 kA                                    |
| Withstand on Combination waveform IEC 61643-11<br><i>Class III test: 1.2/50µs - 8/20µs</i>                         | Uoc                       | 10 kV / 5 kA                             |
| Withstand on overvoltages IEEE C62.41.1                                                                            |                           | 10 kV / 10 kA                            |
| Protection mode(s)                                                                                                 |                           | Common/Differential mode                 |
| Protection level CM/DM<br><i>@ In (8/20µs)</i>                                                                     | Up mc<br>/md              | 1.5/1.5 kV                               |
| Admissible short-circuit current                                                                                   | I <sub>sc</sub>           | 10 000 A                                 |
| Mechanical Characteristics                                                                                         |                           |                                          |
| Mounting                                                                                                           |                           | Wall or plate                            |
| Housing material                                                                                                   |                           | Thermoplastic UL94 V-0                   |
| Operating temperature                                                                                              | Tu                        | -40/+85°C                                |
| 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                                                                                                        |                           |                                          |
| 741212                                                                                                             |                           |                                          |

