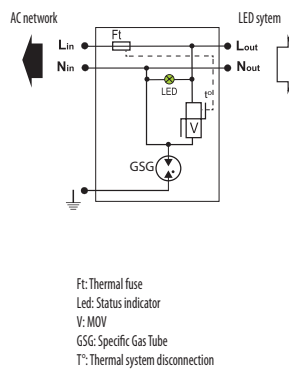
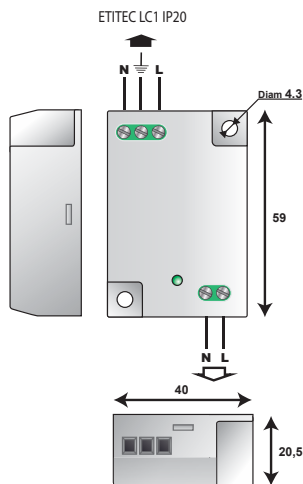


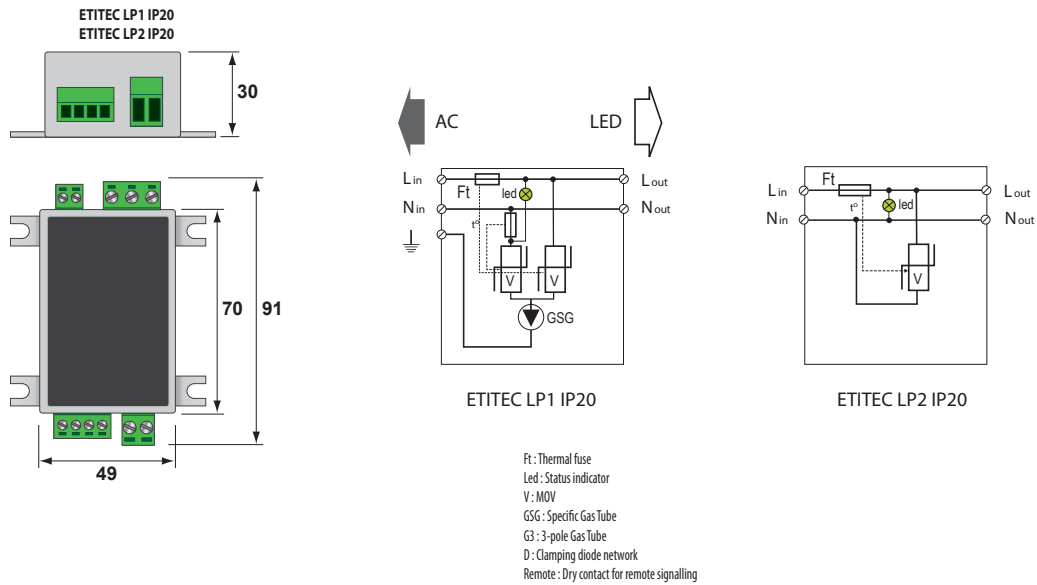
LED lighting protection

| ETITEC LC1 IP20  |             |  |
|--|-------------|--|
| <b>Description</b>   |             | <b>Surge protectors for LED lighting system Class 1</b>                              |
| Network  |             | 220-240 V single phase   |
| AC system  |             | TT/TN  |
| Protection mode(s)   |             | CM/DM  |
| Max. AC operating voltage  | $U_c$       | 320 VAC  |
| Max. Load current  | $I_L$       | 5 A  |
| Residual current - Leakage current at $U_c$                          | $I_{pe}$    | x  |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.                | $U_T$       | 335 Vac withstand  |
| Temporary Over Voltage (TOV) Characteristics - 120 mn                | $U_T$       | 440 Vac disconnection  |
| Temporary Over Voltage N/PE (TOV HT)                                 | $U_T$       | 1200 V/300A/200 ms disconnection   |
| Nominal discharge current - 15 x 8/20 $\mu$ s impulses               | $I_n$       | 5 kA   |
| Max. discharge current - max. withstand @ 8/20 $\mu$ s by pole       | $I_{max}$   | 10 kA  |
| Total lightning current - max. total withstand @ 8/20 $\mu$ s        | $I_{total}$ | 20 kA  |
| Withstand on Combination waveform - Class III test                   | $U_{oc}$    | 10 kV/5 kA   |
| Withstand on overvoltages IEEE C62.41.1                              |             | 10 kV/10 kA  |
| Protection level CM/DM @In (8/20 $\mu$ s) and @ 6kV (1.2/50 $\mu$ s) | $U_p$       | 1.5 kV/ 1.5 kV   |
| Admissible short-circuit current                                     | $I_{scrr}$  | 10000 A  |
| Admissible short-circuit current                                     |             | 25000 A  |
| <b>Associated disconnectors</b>                                      |             |  |
| Thermal disconnector   |             | internal   |
| Installation ground fault breaker                                    |             | Type "S" or delayed  |
| <b>Mechanical characteristics</b>                                    |             |  |
| Dimensions   |             | see diagram  |
| Connection to Network  |             | Screw (2.5 mm <sup>2</sup> max) or Spring (1.5 mm <sup>2</sup> max) contact terminal |
| Voltage/operating indicator  |             | Green Led ON   |
| Disconnection indicator  |             | Disconnection  |
| Failsafe behavior  |             | Led green OFF and AC network cut-off   |
| Remote signaling of disconnection                                    |             | x  |
| Mounting   |             | on plate   |
| Operating temperature  |             | -40 ... +85°C  |
| Protection rating  |             | IP20   |
| Housing material   |             | Thermoplastic UL94-V0  |
| Standards compliance   |             | EN 61643-11 / IEC 61643-11   |

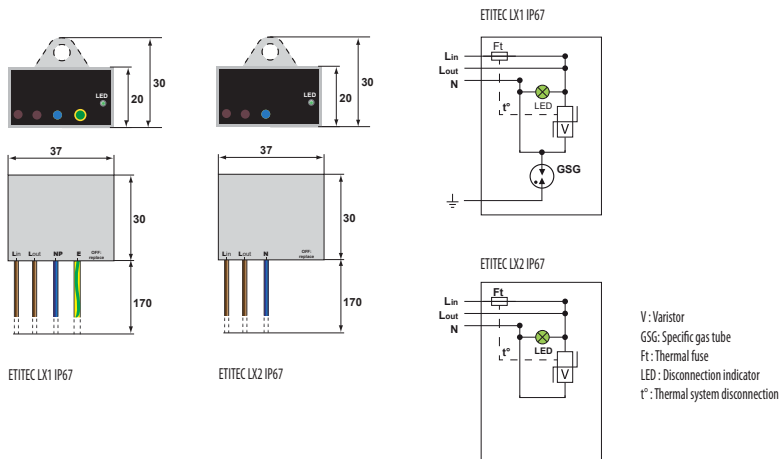


| ETITEC LP  |  |   |
|--|--|---|
| Type   | ETITEC LP1 IP20  | ETITEC LP2 IP20                                 |
| <b>Network</b>   | 220-240 V single phase   |   |
| Protection mode(s)                                       | CM/DM  |   |
| Max. AC operating voltage                                | 305 VAC  |   |
| Max. Load current  | 2,5 A  |   |
| Residual current - Leakage current at Uc                 | x  |   |
| Nominal discharge current - 15 x 8/20 µs impulses        | 5 kA   |   |
| Max. discharge current -max. withstand @ 8/20 µs by pole | 10 kA  |   |
| Total lightning current - max. total withstand @ 8/20 µs | 20 kA  |   |
| Withstand on Combination waveform - Class III test       | 10 kV/5 kA   |   |
| Withstand on overvoltages IEEE C62.41.1                  | 10 kV/10 kA  |   |
| Protection level CM/DM @In (8/20µs) and @ 6kV (1.2/50µs) | 1.5 kV/ 1.5 kV   |   |
| Admissible short-circuit current                         | 10000 A  |   |
| <b>Mechanical characteristics</b>                        |  |   |
| Connection to Network                                    | Screw or spring terminal - 1.5 mm <sup>2</sup> max             |   |
| Voltage/operating indicator                              | Green Led ON   |   |
| Failsafe behavior  | Led green OFF and AC network cut-off                           |   |
| Disconnection indicator                                  | Led green OFF and AC network cut-off or remote signal (option) |   |
| Remote signaling of disconnection                        | Option   |   |
| Standards compliance                                     | IEC 61643-11 / EN 61643-11 / UL1449 ed.4                       |   |
| Description  | Surge protector for LED lighting system Class 1                | Surge protector for LED lighting system Class 2 |
| <b>AC voltage specifications</b>                         |  |   |
| Description  | 220-240 V single phase   | 220-240 V single phase                          |
| AC system  | TT-TN  | TT-TN   |
| Protection mode(s)                                       | CM/DM  | DM  |
| Max. AC operating voltage                                | 305 Vac  | 305 Vac   |
| Max. Load current  | 2,5 A  | 2,5 A   |
| Residual current - Leakage current at Uc                 | x  | x   |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.    | 335 Vac withstand  | 335 Vac withstand                               |
| Temporary Over Voltage (TOV) Characteristics - 120 mn    | 440 Vac disconnection  | 440 Vac disconnection                           |
| Nominal discharge current - 15 x 8/20 µs impulses        | 5 kA   | 5 kA  |
| Max. discharge current -max. withstand @ 8/20 µs by pole | 10 kA  | 10 kA   |
| Total lightning current - max. total withstand @ 8/20 µs | 20 kA  | 20 kA   |
| Withstand on Combination waveform - Class III test       | 10 kV/5 kA   | 10 kV/5 kA                                      |
| Withstand on overvoltages IEEE C62.41.1                  | 10 kV/10 kA  | 10 kV/10 kA                                     |
| Protection level CM/DM @In (8/20µs) and @ 6kV (1.2/50µs) | 1.5 kV/ 1.5 kV   | 1.5 kV  |
| Admissible short-circuit current                         | 10000 A  | 10000 A   |
| Connection to Network                                    | screw 1.5mm <sup>2</sup> max                                   | screw 1.5mm <sup>2</sup> max                    |
| Voltage/operating indicator                              | Green Led ON   | Green Led ON                                    |
| Failsafe behavior  | Disconnection from AC line                                     | Disconnection from AC line                      |
| Disconnection indicator                                  | Green Led OFF and AC line cut-off                              | Green Led OFF and AC line cut-off               |
| Remote signaling of disconnection                        | none   | yes : output on contact NO                      |
| <b>Associated disconnectors</b>                          |  |   |
| Thermal disconnector                                     | internal   | internal  |
| Installation ground fault breaker                        | Type "S" or delayed  | Type "S" or delayed                             |
| <b>Mechanical characteristics</b>                        |  |   |
| Dimensions   | see diagram  | see diagram                                     |
| Mounting   | on plate   | on plate  |
| Operating temperature                                    | -40/+85°C  | -40/+85°C                                       |
| Protection rating  | IP65   | IP20  |
| Housing material   | Thermoplastic UL94-V0  | Thermoplastic UL94-V0                           |
| Standards compliance                                     | IEC 61643-11 / EN 61643-11                                     |   |

## Technical data



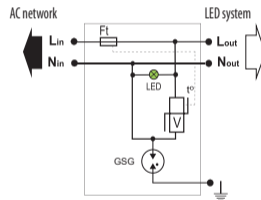
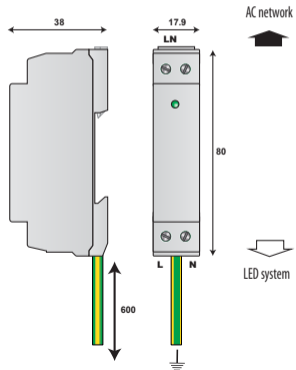
| ETITEC LX  |  |                                     |
|--|--|-------------------------------------|
| Type   | ETITEC LX1 IP67  | ETITEC LX2 IP67                     |
| Description  | Compact Type 2 +3 hard-wired surge protector                   |                                     |
| Application (Classe)   | I  | II                                  |
| Network  | 230-277 V single phase   | 230-277 V single phase              |
| AC system  | TT/TN  | TT/TN                               |
| Protection mode(s)   | CM/DM  | DM                                  |
| Max. AC operating voltage  | 320 VAC  | 320 VAC                             |
| Max. Load current  | 10A  | 10A                                 |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.                | 335 Vac withstand  | 335 Vac withstand                   |
| Temporary Over Voltage (TOV) Characteristics - 120 mn                | 440 Vac disconnection  | 440 Vac disconnection               |
| Temporary Over Voltage N/PE (TOV HT)                                 | 1200 V/300A/200 ms disconnection                               | x                                   |
| Nominal discharge current - 15 x 8/20 $\mu$ s impulses               | 5 kA   | 5 kA                                |
| Max. discharge current - max. withstand @ 8/20 $\mu$ s by pole       | 10 kA  | 10 kA                               |
| Total max. discharge current - max. total withstand @ 8/20 $\mu$ s   | 20 kA  | NA                                  |
| Withstand on Combination waveform - Class III test                   | 10 kV  | 10 kV                               |
| Withstand on overvoltages IEEE C62.41.1                              | 10 kV/10 kA  | 10 kV/10 kA                         |
| Protection level CM/DM @In (8/20 $\mu$ s) and @ 6kV (1.2/50 $\mu$ s) | 1.5 kV/1.5 kV  | 1.5 kV                              |
| Admissible short-circuit current                                     | 10000 A  | 10000 A                             |
| <b>Associated disconnectors</b>                                      |  |                                     |
| Thermal disconnector   | internal   |                                     |
| Installation ground fault breaker                                    | Type "S" or delayed  |                                     |
| <b>Mechanical characteristics</b>                                    |  |                                     |
| Dimensions   | see diagram  |                                     |
| Connection to Network  | by wires :1.5 mm <sup>2</sup> (L/N) & 2.5 mm <sup>2</sup> (PE) | by wires :1.5 mm <sup>2</sup> (L/N) |
| Voltage/operating indicator  | Green Led ON   |                                     |
| Disconnection indicator  | Disconnection  |                                     |
| Failsafe behavior  | Led green OFF and AC network cut-off                           |                                     |
| Remote signaling of disconnection                                    | x  |                                     |
| Mounting   | wall or plate  |                                     |
| Operating temperature  | -40/+85°C  |                                     |
| Protection rating  | IP67   |                                     |
| Housing material   | Thermoplastic UL94-V0  |                                     |
| Standards compliance   | EN 61643-11 / IEC 61643-11                                     |                                     |



**ETITEC L1 DIN**

| ETITEC L1 DIN   |  |
|---|--|
| <b>Description</b>  | Surge protectors for LED lighting system Class 1   |
| Network   | 220-240 V single phase   |
| AC system   | TT/TN  |
| Protection mode(s)  | CM/DM  |
| Max. AC operating voltage                                 | 320 VAC  |
| Max. Load current   | 10A  |
| Residual current - Leakage current at Uc                  | x  |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.     | 335 Vac withstand  |
| Temporary Over Voltage (TOV) Characteristics - 120 mn     | 440 Vac disconnection  |
| Temporary Over Voltage N/PE (TOV HT)                      | 1200 V/300A/200 ms disconnection   |
| Nominal discharge current - 15 x 8/20 μs impulses         | 5 kA   |
| Max. discharge current - max. withstand @ 8/20 μs by pole | 10 kA  |
| Total lightning current - max. total withstand @ 8/20 μs  | 20 kA  |
| Withstand on Combination waveform - Class III test        | 10 kV / 5 kA   |
| Withstand on overvoltages IEEE C62.41.1                   | 10 kV/10 kA  |
| Protection level CM/DM @In (8/20μs) and @ 6kV (1.2/50μs)  | 1.5 kV/ 1.5 kV   |
| Admissible short-circuit current                          | 10000 A  |
| <b>Associated disconnectors</b>                           |  |
| Thermal disconnector                                      | internal   |
| Installation ground fault breaker                         | Type «S» or delayed  |
| <b>Mechanical characteristics</b>                         |  |
| Dimensions  | see diagram  |
| Connection to Network                                     | Screw terminal 2.5 mm <sup>2</sup> max., Earthing conductor 2 mm <sup>2</sup> - length 60 cm |
| Voltage/operating indicator                               | Led green ON   |
| Disconnection indicator                                   | Disconnection and AC line cut-off  |
| Failsafe behavior   | Led green OFF and AC network cut-off   |
| Remote signaling of disconnection                         | x  |
| Mounting  | Symmetrical rail 35mm (EN60715)  |
| Operating temperature                                     | -40 ... +85°C  |
| Protection rating   | IP20   |
| Housing material  | Thermoplastic UL94-V0  |
| Standards compliance                                      | EN 61643-11 / IEC 61643-11   |

## Technical data



V: Varistor

Ft: Thermal fuse

LED: Disconnection indicator

MI: Mechanical disconnection indicator

t°: Thermal system disconnection

GSG: Specific Gas Tube