



Surge protector for LED lighting system Class 1

CITEL

MLPC-VG1-230L-R



- Type 2 (or 3) surge protectors for LED
- Class 1
- Very compact
- Plate mounting
- Spring terminal connection
- Status indicator
- Disconnection AC end of life
- EN 61643-11 compliance



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| | Electrical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>V: Varistor GSG: Specific gas tube LED: Disconnection indicator Ft: Thermal fuse t*: Thermal system disconnection</p> | <table border="1"> <tr><td>SPD type</td><td></td><td>2+3</td></tr> <tr><td>Network</td><td></td><td>220-240 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>10 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 withstand</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>Residual Current Leakage current to Ground</td><td>Ipe</td><td>None</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</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>Iscsr</td><td>10 000 A</td></tr> </table> | | SPD type | | 2+3 | Network | | 220-240 V Single-phase | AC system | | TT-TN | Max. AC operating voltage | Uc | 320 Vac | Max. load current @25°C | IL | 10 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 withstand | Temporary Over Voltage N/PE (TOV HT) Without disconnection or with safety disconnection | UT | 1200 V/300A/200 ms disconnection | Residual Current Leakage current to Ground | Ipe | None | 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 | 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 | Iscsr | 10 000 A |
| SPD type | | 2+3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Network | | 220-240 V Single-phase | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AC system | | TT-TN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. AC operating voltage | Uc | 320 Vac | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. load current @25°C | IL | 10 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 withstand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temporary Over Voltage N/PE (TOV HT) Without disconnection or with safety disconnection | UT | 1200 V/300A/200 ms disconnection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Residual Current Leakage current to Ground | Ipe | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | Iscsr | 10 000 A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mechanical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Technology</td><td></td><td>VG Technology (MOV+GSG)</td></tr> <tr><td>Connection to Network</td><td></td><td>By spring - max. cross section 1.5mm²</td></tr> <tr><td>Mounting</td><td></td><td>On plate</td></tr> <tr><td>Housing material</td><td></td><td>Thermoplastic UL94 V-0</td></tr> <tr><td>Operating temperature</td><td>Tu</td><td>-40/+85°C</td></tr> <tr><td>Protection rating</td><td></td><td>IP20</td></tr> <tr><td>Failsafe mode</td><td></td><td>Disconnection and AC line cut-off</td></tr> <tr><td>Disconnection indicator</td><td></td><td>LED green OFF and AC network cut-off</td></tr> <tr><td>Voltage/operating indicator</td><td></td><td>Green Led ON</td></tr> <tr><td>Dimensions</td><td></td><td>See diagram</td></tr> <tr><td>Weight</td><td></td><td>0.036 kg</td></tr> </table> | | Technology | | VG Technology (MOV+GSG) | Connection to Network | | By spring - max. cross section 1.5mm ² | 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 | | 0.036 kg | | | | | | | | | | | | | | | | | | | | | |
| Technology | | VG Technology (MOV+GSG) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connection to Network | | By spring - max. cross section 1.5mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | 0.036 kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Disconnectors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Thermal disconnector</td><td></td><td>Internal</td></tr> <tr><td>Installation ground fault breaker</td><td></td><td>Type 'S' or delayed</td></tr> </table> | | Thermal disconnector | | Internal | Installation ground fault breaker | | Type 'S' or delayed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thermal disconnector | | Internal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Installation ground fault breaker | | Type 'S' or delayed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Standards | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Standards compliance</td><td></td><td>EN 61643-11 / IEC 61643-11</td></tr> <tr><td>Certification</td><td></td><td></td></tr> </table> | | Standards compliance | | EN 61643-11 / IEC 61643-11 | Certification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Standards compliance | | EN 61643-11 / IEC 61643-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Certification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Part number</td><td colspan="2">836211</td></tr> </table> | | Part number | 836211 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part number | 836211 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

