



Type 1+2+3 AC surge protector - Single phase

CITEL

DACN1-25CVGS-11-320



- Type 1 + 2+3 AC surge protector
- VG Technology
- Iimp: 25 kA on 10/350µs impulse
- In: 25 kA
- Optimized to TOV
- No leakage current
- Monobloc
- Remote signaling
- EN 61643-11, IEC 61643-11 complied



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| | Electrical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>V: High-energy varistor GSG: Specific gas tube Ft: Thermal fuse C: Remote signaling contact t*: Thermal disconnection system MI: Disconnection indicator</p> | <table border="1"> <tr> <td>SPD type</td> <td></td> <td>1+2+3</td> </tr> <tr> <td>Network</td> <td></td> <td>230 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>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 withstand</td> </tr> <tr> <td>Residual Current Leakage current to Ground</td> <td>Ipe</td> <td>None</td> </tr> <tr> <td>Follow current</td> <td>If</td> <td>None</td> </tr> <tr> <td>Nominal discharge current 15 x 8/20 µs impulses</td> <td>In</td> <td>25 kA</td> </tr> <tr> <td>Max. discharge current max. withstand @ 8/20 µs by pole</td> <td>I_{max}</td> <td>100 kA</td> </tr> <tr> <td>Impulse current by pole max. withstand 10/350µs by pole</td> <td>I_{imp}</td> <td>25 kA</td> </tr> <tr> <td>Total lightning current max. total withstand @ 10/350µs</td> <td>I_{total}</td> <td>50 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>6 kV</td> </tr> <tr> <td>Protection level @ In (8/20µs)</td> <td>Up</td> <td>1.5 kV</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 N/PE @ In (8/20µs)</td> <td>Up N/PE</td> <td>1.5 kV</td> </tr> <tr> <td>Admissible short-circuit current</td> <td>I_{sc}</td> <td>50 000 A</td> </tr> </table> | | SPD type | | 1+2+3 | Network | | 230 V single-phase | AC system | | TT-TN | Max. AC operating voltage | Uc | 320 Vac | 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 withstand | Residual Current Leakage current to Ground | Ipe | None | Follow current | If | None | Nominal discharge current 15 x 8/20 µs impulses | In | 25 kA | Max. discharge current max. withstand @ 8/20 µs by pole | I _{max} | 100 kA | Impulse current by pole max. withstand 10/350µs by pole | I _{imp} | 25 kA | Total lightning current max. total withstand @ 10/350µs | I _{total} | 50 kA | Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50µs - 8/20µs | Uoc | 6 kV | Protection level @ In (8/20µs) | Up | 1.5 kV | Protection level L/N @ In (8/20µs) | Up L/N | 1.5 kV | Protection level N/PE @ In (8/20µs) | Up N/PE | 1.5 kV | Admissible short-circuit current | I _{sc} | 50 000 A |
| SPD type | | 1+2+3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Network | | 230 V single-phase | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AC system | | TT-TN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. AC operating voltage | Uc | 320 Vac | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 withstand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Residual Current Leakage current to Ground | Ipe | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Follow current | If | None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal discharge current 15 x 8/20 µs impulses | In | 25 kA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. discharge current max. withstand @ 8/20 µs by pole | I _{max} | 100 kA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Impulse current by pole max. withstand 10/350µs by pole | I _{imp} | 25 kA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total lightning current max. total withstand @ 10/350µs | I _{total} | 50 kA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50µs - 8/20µs | Uoc | 6 kV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection level @ In (8/20µs) | Up | 1.5 kV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection level L/N @ In (8/20µs) | Up L/N | 1.5 kV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection level N/PE @ In (8/20µs) | Up N/PE | 1.5 kV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Admissible short-circuit current | I _{sc} | 50 000 A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mechanical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Technology</td> <td></td> <td>VG Technology (MOV+GSG)</td> </tr> <tr> <td>SPD configuration</td> <td></td> <td>Single phase</td> </tr> <tr> <td>Connection to Network</td> <td></td> <td>By screw terminals: 2.5-25mm² (35mm² rigid)</td> </tr> <tr> <td>Format</td> <td></td> <td>Monobloc modular box</td> </tr> <tr> <td>Mounting</td> <td></td> <td>Symmetrical rail 35 mm (EN 60715)</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 from AC network</td> </tr> <tr> <td>Disconnection indicator</td> <td></td> <td>1 mechanical indicator - Red/Green</td> </tr> <tr> <td>Remote signaling of disconnection</td> <td></td> <td>Output on changeover contact</td> </tr> <tr> <td>Wiring for remote signaling</td> <td></td> <td>1.5 mm² max.</td> </tr> <tr> <td>Max. Voltage/Current for remote signaling</td> <td></td> <td>250 V / 0.5 A (AC) / 30 V / 3 A (DC)</td> </tr> <tr> <td>Weight</td> <td></td> <td>0.285 kg</td> </tr> </table> | | Technology | | VG Technology (MOV+GSG) | SPD configuration | | Single phase | Connection to Network | | By screw terminals: 2.5-25mm ² (35mm ² rigid) | Format | | Monobloc modular box | Mounting | | Symmetrical rail 35 mm (EN 60715) | Housing material | | Thermoplastic UL94 V-0 | Operating temperature | Tu | -40/+85°C | Protection rating | | IP20 | Failsafe mode | | Disconnection from AC network | Disconnection indicator | | 1 mechanical indicator - Red/Green | Remote signaling of disconnection | | Output on changeover contact | Wiring for remote signaling | | 1.5 mm ² max. | Max. Voltage/Current for remote signaling | | 250 V / 0.5 A (AC) / 30 V / 3 A (DC) | Weight | | 0.285 kg | | | | | | | | | | | | |
| Technology | | VG Technology (MOV+GSG) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPD configuration | | Single phase | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connection to Network | | By screw terminals: 2.5-25mm ² (35mm ² rigid) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Format | | Monobloc modular box | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mounting | | Symmetrical rail 35 mm (EN 60715) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Housing material | | Thermoplastic UL94 V-0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating temperature | Tu | -40/+85°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection rating | | IP20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Failsafe mode | | Disconnection from AC network | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disconnection indicator | | 1 mechanical indicator - Red/Green | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remote signaling of disconnection | | Output on changeover contact | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wiring for remote signaling | | 1.5 mm ² max. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Voltage/Current for remote signaling | | 250 V / 0.5 A (AC) / 30 V / 3 A (DC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight | | 0.285 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> <tr> <td>Back-up protection device</td> <td></td> <td>315 A max. - Fuses Type gG / or SFD1-25S</td> </tr> </table> | | Thermal disconnector | | Internal | Installation ground fault breaker | | Type 'S' or delayed | Back-up protection device | | 315 A max. - Fuses Type gG / or SFD1-25S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thermal disconnector | | Internal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Installation ground fault breaker | | Type 'S' or delayed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Back-up protection device | | 315 A max. - Fuses Type gG / or SFD1-25S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Standards | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Standards compliance</td> <td></td> <td>EN 61643-11 / IEC 61643-11</td> </tr> </table> | | Standards compliance | | EN 61643-11 / IEC 61643-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Standards compliance | | EN 61643-11 / IEC 61643-11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Part number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 64182 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

