*Type 1+2 PV surge protector*

# DS50VGPV-1000/12KT1




- Type 1+2 surge protector for Photovoltaic
- VG Technology
- No leakage, no operating currents
- Improved life expectancy
- Impulse currents Iimp/Itotal: 6.25/12.5 kA (10/350µs)
- Common/Differential mode protection
- Pluggable module
- Remote signaling (option)
- UL1449 ed.5 compliance
- IEC 61643-31, EN 61643-31 certified

| | | |
|---|---|---|
| **Electrical Characteristics** | | |
| SPD type | IEC | 1+2 |
| Network | | PV network 1000 Vdc |
| Nominal PV voltage | Uocstc | 1000 Vdc |
| Max. PV operating voltage | Ucpv | 1200 Vdc |
| Residual Current<br>*Leakage current to Ground* | Ipe | None |
| PV Permanent Operating current<br>*Current consumption at Ucpv* | Icpv | None |
| Follow current | If | None |
| Nominal discharge current<br>*15 x 8/20 µs impulses* | In | 15 kA |
| Max. discharge current<br>*max. withstand @ 8/20 µs by pole* | Imax | 40 kA |
| Total Maximum discharge current<br>*max. total withstand @ 8/20 µs* | Imax Total | 60 kA |
| Impulse current by pole<br>*max. withstand 10/350µs by pole* | Iimp | 6.25 kA |
| Total lightning current<br>*max. total withstand @ 10/350µs* | Itotal | 12.5 kA |
| Current withstand short circuit PV | Iscpv | 15 000 A |
| Protection mode(s) | | Common/Differential mode |
| Protection level +/-<br>*@ In (8/20µs)* | Up | 5.8 kV |
| Protection level +/PE (-/PE)<br>*@ In (8/20µs)* | Up | 4.5 kV |
| **Mechanical Characteristics** | | |
| Technology | | VG Technology (MOV+GSG) |
| Connection to Network | | By screw terminals: 2.5-25mm² |
| Format | | Plug-in modular box |
| Mounting | | Symmetrical rail 35 mm (EN 60715) |
| Housing material | | Thermoplastic UL94 V-0 |
| Operating temperature | Tu | -40/+85°C |
| Protection rating | | IP20 |
| Disconnection indicator | | 3 mechanical indicators |
| Spare module(s) | | DSM50VGPV-1000/12KT1 + DSM50VGPV-1000PE/12KT1 |
| Remote signaling of disconnection | | Option DS50VGPVS-1000/12KT1 - output on changeover contact |
| Dimensions | | See diagram |
| **Disconnectors** | | |
| Thermal disconnector | | Internal |
| Back-up protection device | | Without |
| **Standards** | | |
| Standards compliance | | IEC 61643-31 / EN 61643-31 / EN 50539-11 / UL1449 ed.5 |
| Certification | | TUV |
| **Part number** | | |
| **485323** | | |