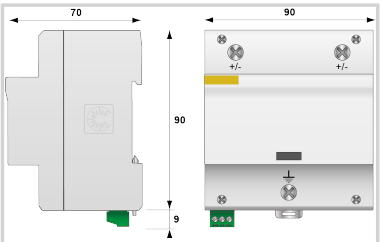
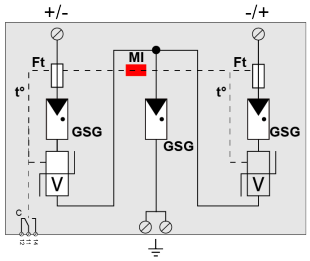
# *Type 1+2 PV surge protector - 1500 Vdc*

## DS60VGPV-600G/51




- Type 1+2 surge protector for photovoltaic
- VG technology
- 600 Vdc
- No leakAge, no operating currents
- Improved life expectancy
- Iimp: 12.5 kA/pole
- Common/Differential mode protection
- Remote signaling
- IEC 61643-31, EN 61643-31, EN 50539-11, UL1449 ed.5 compliance




**V: High-energy varistor**
**GSG: Specific gas tube**
**Ft: Thermal fuse**
**C: Remote signaling contact**
**t°: Thermal disconnection system**
**MI: Disconnection indicator**

| **Electrical Characteristics** | | |
|---|---|---|
| SPD type | IEC | 1+2 |
| Network | | PV 500 Vdc |
| Nominal PV voltage | Uocstc | 600 Vdc |
| Max. PV operating voltage | Ucpv | 720 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 | 20 kA |
| Max. discharge current<br>*max. withstand @ 8/20 µs by pole* | Imax | 40 kA |
| Impulse current by pole<br>*max. withstand 10/350µs by pole* | Iimp | 12.5 kA |
| Total lightning current<br>*max. total withstand @ 10/350µs* | Itotal | 25 kA |
| Current withstand short circuit PV | Iscpv | 15 000 A |
| Connection mode(s) | | +/-/PE |
| Protection mode(s) | | Common/Differential mode |
| Protection level +/-<br>*@ In (8/20µs)* | Up | 2.8 kV |
| Protection level +/PE (-/PE)<br>*@ In (8/20µs)* | Up | 2.2 kV |
| **Mechanical Characteristics** | | |
| Technology | | VG Technology (MOV+GSG) |
| Connection to Network | | By screw terminals: 6-35mm² |
| Format | | 1-pole 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 SPD of the PV line |
| Disconnection indicator | | 1 mechanical indicator |
| Remote signaling of disconnection | | Output on changeover contact - 250 Vac/0.5 A (AC) - 30 Vdc/3A (DC) |
| Dimensions | | See diagram |
| Weight | | 0.252 kg |
| **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 | | |
| **Part number** | | |
| **3963** | | |