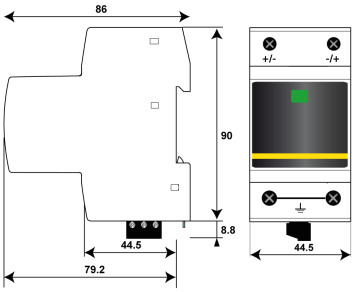
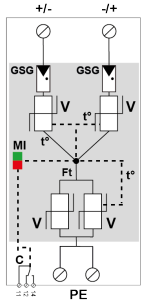
# *Type 1+2+3 PV surge protector - CTC Technology*

## DPVN1-6CVGS-21Y-600

- Type 1+2+3 surge protector for Photovoltaic
- CTC Technology
- VG Technology
- Impulse currents Iimp/Itotal: 6.25/12.5 kA (10/350µs)
- Common/Differential mode protection
- Remote signaling
- IEC 61643-31, EN 61643-31, EN 50539-11, UL1449 ed.5 compliance
- Certified EN 61643-31 and IEC 61643-31




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

| **Electrical Characteristics** | | |
|---|---|---|
| SPD type | IEC | 1+2+3 |
| Network | | PV 500 Vdc |
| Nominal PV voltage | Uocstc | 500 Vdc |
| Max. PV operating voltage | Ucpv | 600 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 |
| 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 |
| Withstand on Combination waveform IEC 61643-11<br>*Class III test: 1.2/50µs - 8/20µs* | Uoc | 6 kV |
| 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 | 2.3 kV |
| Protection level +/PE (-/PE)<br>*@ In (8/20µs)* | Up | 2.3 kV |
| Protection level at 5 kA<br>*@ 5 kA (8/20µs)* | Up | 1,9 kV |
| **Mechanical Characteristics** | | |
| Technology | | VG Technology (MOV+GSG) |
| Connection to Network | | By screw terminals: 2.5-25mm² (35mm²) / by bus |
| Format | | Compact monobloc 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 | | All pole disconnection from PV network |
| Disconnection indicator | | 1 mechanical indicator - Red/Green |
| Remote signaling of disconnection | | Output on changeover contact |
| Max. Voltage/Current for remote signaling | | 250 V / 0.5 A (AC) / 30 V / 3 A (DC) |
| Dimensions | | See diagram - 2.5TE (EN43880) |
| **Disconnectors** | | |
| Thermal disconnector | | CTC Technology integrated |
| Back-up protection device | | Without |
| **Standards** | | |
| Standards compliance | | IEC 61643-31 / EN 61643-31 / EN 50539-11 / UL1449 ed.5 |
| Certification | | KEMA |
| **Part number** | | |
| **65222101** | | |