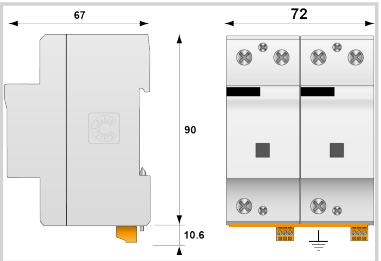
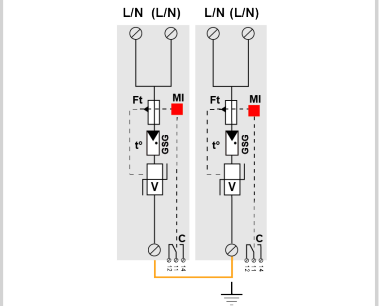
# *Type 1+2+3 AC surge protector - Single phase*

## DS252VG-120



- Type 1+2+3 unipolar surge protector
- 25 kA on 10/350µs impulse
- Low voltage Up
- Internal disconnection, status indicator and remote signaling
- Optimized to TOV
- IEC 61643-11 and 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+3 |
| Network | | 120/208 V |
| AC system | | TN |
| Nominal line voltage | Un | 120 Vac |
| Max. AC operating voltage | Uc | 150 Vac |
| Max. load current<br>*if series connection* | IL | 100 A |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.<br>*Without disconnection* | UT | 180 Vac withstand |
| Temporary Over Voltage (TOV) Characteristics - 120 mn<br>*Without disconnection or with safety disconnection* | UT | 230 Vac withstand |
| Residual Current<br>*Leakage current to Ground* | Ipe | None |
| Follow current | If | None |
| Nominal discharge current<br>*15 x 8/20 µs impulses* | In | 30 kA |
| Max. discharge current<br>*max. withstand @ 8/20 µs by pole* | Imax | 70 kA |
| Impulse current by pole<br>*max. withstand 10/350µs by pole* | Iimp | 25 kA |
| Total lightning current<br>*max. total withstand @ 10/350µs* | Itotal | 50 kA |
| Withstand on Combination waveform IEC 61643-11<br>*Class III test: 1.2/50µs - 8/20µs* | Uoc | 20 kV |
| Withstand on overvoltages IEEE C62.41.1 | | 20 kV |
| Specific energy by pole<br>*max. withstand 10/350 µs* | W/R | 156 kJ/ohm |
| Connection mode(s) | | L/PE and N/PE |
| Protection mode(s) | | Common mode |
| Residual voltage<br>*@ In (8/20 µs)* | Up-in | 0.7 kV |
| Protection level N/PE<br>*@ In (8/20µs)* | Up N/PE | 1 kV |
| Protection level L/PE<br>*@ In (8/20µs)* | Up L/PE | 1 kV |
| Admissible short-circuit current | Isccr | 50 000 A |
| **Mechanical Characteristics** | | |
| Technology | | VG Technology (MOV+GSG) |
| SPD configuration | | Single phase |
| Connection to Network | | By screw terminals: 6-35mm² / by bus |
| Format | | 1-pole modular box assembled |
| 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 by pole |
| Remote signaling of disconnection | | Output on changeover contact |
| Dimensions | | See diagram |
| Weight | | 0.53 kg |
| **Disconnectors** | | |
| Thermal disconnector | | Internal |
| Installation ground fault breaker | | Type 'S' or delayed |
| Back-up protection device | | Fuse assembly: SFD1-25-20S / or Fuses Type gG 315 A |
| **Standards** | | |
| Standards compliance | | IEC 61643-11 / EN 61643-11 / UL1449 ed.5 |
| **Part number** | | |
| **3950** | | |