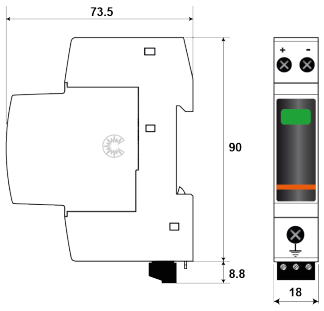
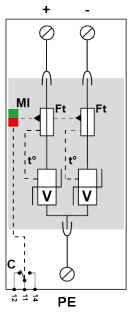
# *DC power surge protector Type 2 - 24 Vdc*

## DDC20CS-20-38

- Type 2 DC power surge protector
- Compact design
- Imax: 20 kA
- Pluggable module
- Low Up protection level
- Remote signaling
- Compliance prIEC 61643-41 and UL1449 ed.5




**V: High-energy varistor**
**Ft: Thermal fuse**
**C: Remote signal contact**
**t°: Thermal disconnection system**
**MI: Disconnection indicator**

| **Electrical Characteristics** | | |
|---|---|---|
| SPD type | IEC | 2 |
| Network | | DC network 24Vdc |
| Nominal PV voltage | Uocstc | 24 Vdc |
| Max. AC operating voltage | Uc | 30 Vac |
| Max. PV operating voltage | Ucpv | 38 Vdc |
| Max. DC operating voltage | Uc | 38 Vdc |
| Max. load current @25°C | IL | 20 A |
| Residual Current<br>*Leakage current to Ground* | Ipe | < 0.2 mA |
| PV Permanent Operating current<br>*Current consumption at Ucpv* | Icpv | < 0.1 mA |
| Follow current | If | None |
| Nominal discharge current<br>*15 x 8/20 µs impulses* | In | 10 kA |
| Max. discharge current<br>*max. withstand @ 8/20 µs by pole* | Imax | 20 kA |
| Total Maximum discharge current<br>*max. total withstand @ 8/20 µs* | Imax Total | 40 kA |
| Current withstand short circuit PV | Iscpv | 1000 A |
| Connection mode(s) | | +/-/PE |
| Protection level +/PE (-/PE)<br>*@ In (8/20µs)* | Up | 250 V |
| Admissible short-circuit current | Isccr | 10 000 A |
| **Mechanical Characteristics** | | |
| Technology | | MOV |
| Connection to Network | | By screw terminals: 1.5-10mm² (actives wires) and 2.5-25mm² (ground) |
| 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 |
| Failsafe mode | | Disconnection from DC network |
| Disconnection indicator | | 1 mechanical indicator - Red/Green |
| Spare module(s) | | MDDC20C-20-38 |
| Remote signaling of disconnection | | Output on changeover contact |
| Wiring for remote signaling | | 1.5 mm² max. |
| Max. Voltage/Current for remote signaling | | 250 V / 0.5 A (AC) / 30 V / 3 A (DC) |
| Dimensions | | See diagram - 1TE (EN43880) |
| **Disconnectors** | | |
| Thermal disconnector | | Internal |
| Back-up protection device | | 20 A min. - 125 A max. - Fuses type gG |
| **Standards** | | |
| Standards compliance | | prIEC 61643-41 and UL1449 ed.5 |
| **Part number** | | |
| **828210421** | | |