



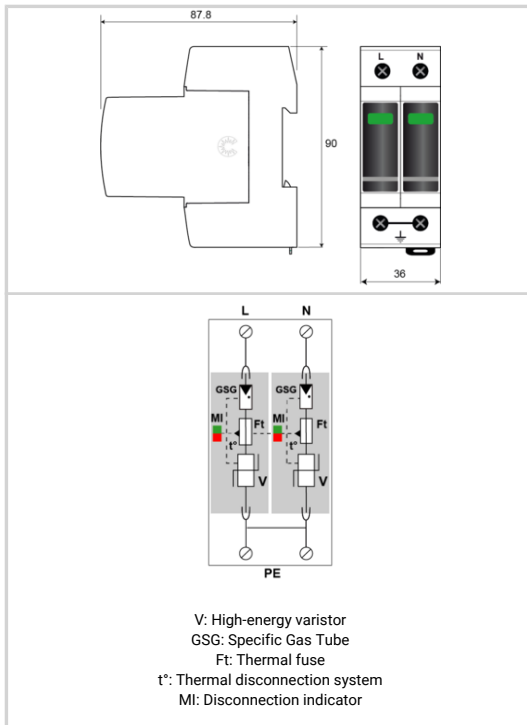
# Type 1+2+3 AC surge protector - Single phase

# CITEL

## DAC1-13VG-20-150



- Type 1 + 2 + 3 AC surge protector
- VG Technology
- In : 20 kA
- Iimp : 12,5 kA on 10/350µs impulse
- No leakage current
- Pluggable module for each phase
- Remote signaling (option)
- Optimized to TOV
- EN 61643-11, IEC 61643-11 certified
- UL1449 ed.5 compliance



| Electrical Characteristics   |                        |   |
|--|------------------------|---|
| SPD type   |                        | 1+2+3   |
| Network  |                        | 120 V single-phase  |
| AC system  |                        | TN  |
| Max. AC operating voltage  | Uc                     | 150 Vac   |
| Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection                              | UT                     | 180 Vac withstand   |
| Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection | UT                     | 230 Vac withstand   |
| Residual Current Leakage current to Ground   | Ipe                    | None  |
| Follow current   | If                     | None  |
| Nominal discharge current 15 x 8/20 µs impulses  | In                     | 20 kA   |
| Max. discharge current max. withstand @ 8/20 µs by pole  | I <sub>max</sub>       | 50 kA   |
| Total Maximum discharge current max. total withstand @ 8/20 µs   | I <sub>max</sub> Total | 100 kA  |
| Impulse current by pole max. withstand 10/350µs by pole  | I <sub>imp</sub>       | 12.5 kA   |
| Total lightning current max. total withstand @ 10/350µs  | I <sub>total</sub>     | 25 kA   |
| Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50µs - 8/20µs                         | Uoc                    | 6 kV  |
| Specific energy by pole max. withstand 10/350 µs   | W/R                    | 40 kJ/ohm   |
| Protection mode(s)   |                        | L/PE and N/PE   |
| Protection level L/PE @ In (8/20µs) and @ 6 kV (1,2/50 µs)   | L/PE                   | 1.5 kV  |
| Protection level N/PE @ In (8/20µs) and @ 6 kV (1,2/50 µs)   | Up N/PE                | 1.5 kV  |
| Protection level N/PE at 5 kA @ 5 kA (8/20µs)  | Up-5kA                 | 0.4 kV  |
| Residual voltage L/PE at 5 kA @ 5 kA (8/20µs)  | Up-5kA                 | 0.4 kV  |
| Admissible short-circuit current   | I <sub>sc</sub>        | 50 000 A  |
| Mechanical Characteristics   |                        |   |
| Technology   |                        | VG Technology (MOV+GSG)   |
| SPD configuration  |                        | Single phase  |
| Connection to Network  |                        | By screw terminals: 2.5-25mm <sup>2</sup> (35mm <sup>2</sup> rigid)     |
| 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 AC network   |
| Disconnection indicator  |                        | 1 mechanical indicator by pole - Red/Green                              |
| Spare module(s)  |                        | MDAC1-13VG-150  |
| Remote signaling of disconnection  |                        | option DAC1-13VGS-20-150 : output on changeover contact                 |
| Wiring for remote signaling  |                        | 1.5 mm <sup>2</sup> max.  |
| Max. Voltage/Current for remote signaling  |                        | 250 V / 0.5 A (AC) / 30 V / 3 A (DC)                                    |
| Dimensions   |                        | See diagram - 2TE (EN43880)   |
| Weight   |                        | 0.282 kg  |
| Disconnectors  |                        |   |
| Thermal disconnector   |                        | Internal  |
| Installation ground fault breaker  |                        | Type 'S' or delayed   |
| Back-up protection device  |                        | Fuse assembly: SFD1-13S-20 / or 125 A min. - 315 A max. - Fuses Type gG |

**DAC1-13VG-20-150**

|                      |  |
|----------------------|--|
| <b>Standards</b>     |  |
| Standards compliance | IEC 61643-11 / EN 61643-11 / UL1449 ed.5 |
| Certification        | KEMA                                     |
| <b>Part number</b>   |  |
| 821730112            |  |