



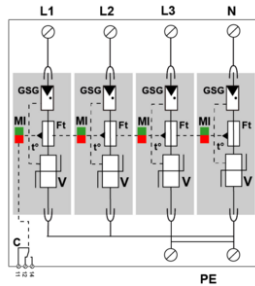
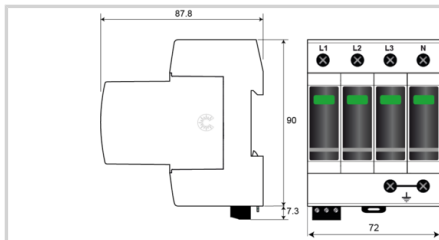
## Type 1+2 AC surge protector - 1-pole

# CITEL

## DAC1-13VGS-40-275



- 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
- Optimized to TOV
- EN 61643-11, IEC 61643-11 and UL1449 ed.5 compliance
- Certified EN 61643-11 and IEC 61643-11



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   |                        | 1+2+3               |
| Network  |                        | 230/400 V 3-phase+N |
| AC system  |                        | TNS                 |
| Max. AC operating voltage  | Uc                     | 275 Vac             |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.<br><i>Without disconnection</i>                              | UT                     | 335 Vac withstand   |
| Temporary Over Voltage (TOV) Characteristics - 120 mn<br><i>Without disconnection or with safety disconnection</i> | UT                     | 440 Vac withstand   |
| Residual Current   | Ipe                    | None                |
| Leakage current to Ground  |                        |                     |
| Follow current   | If                     | None                |
| Nominal discharge current<br><i>15 x 8/20 µs impulses</i>  | In                     | 20 kA               |
| Max. discharge current<br><i>max. withstand @ 8/20 µs by pole</i>  | I <sub>max</sub>       | 50 kA               |
| Total Maximum discharge current<br><i>max. total withstand @ 8/20 µs</i>   | I <sub>max</sub> Total | 200 kA              |
| Impulse current by pole<br><i>max. withstand 10/350µs by pole</i>  | I <sub>imp</sub>       | 12.5 kA             |
| Total lightning current<br><i>max. total withstand @ 10/350µs</i>  | I <sub>total</sub>     | 50 kA               |
| Withstand on Combination waveform IEC 61643-11<br><i>Class III test: 1.2/50µs - 8/20µs</i>                         | Uoc                    | 6 kV                |
| Specific energy by pole<br><i>max. withstand 10/350 µs</i>   | W/R                    | 40 kJ/ohm           |
| Protection mode(s)   |                        | L/PE and N/PE       |
| Protection level L/PE<br><i>@ In (8/20µs) and @ 6 kV (1,2/50 µs)</i>   | L/PE                   | 1.5 kV              |
| Protection level N/PE<br><i>@ In (8/20µs) and @ 6 kV (1,2/50 µs)</i>   | Up N/PE                | 1.5 kV              |
| Protection level N/PE at 5 kA<br><i>@ 5 kA (8/20µs)</i>  | Up-5kA                 | 0.7 kV              |
| Residual voltage L/PE at 5 kA<br><i>@ 5 kA (8/20µs)</i>  | Up-5kA                 | 0.7 kV              |
| Admissible short-circuit current   | I <sub>sc</sub>        | 50 000 A            |

### Mechanical Characteristics

|   |    |   |
|---|----|---|
| Technology                                |    | VG Technology (MOV+GSG)   |
| SPD configuration                         |    | 3-phase+Neutral   |
| 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-275  |
| Remote signaling of disconnection         |    | 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 - 4TE (EN43880)   |
| Weight                                    |    | 0.653 kg  |

### Disconnectors

|                                   |  |   |
|-----------------------------------|--|---|
| Thermal disconnector              |  | Internal  |
| Installation ground fault breaker |  | Type 'S' or delayed   |
| Back-up protection device         |  | Fuse assembly: SFD1-13S-40 / or 125 A min. - 315 A max. - Fuses Type gG |

**DAC1-13VGS-40-275**

|                      |  |
|----------------------|--|
| <b>Standards</b>     |  |
| Standards compliance | IEC 61643-11 / EN 61643-11 / UL1449 ed.5 |
| Certification        | KEMA                                     |
| <b>Part number</b>   |  |
| 821730224            |  |