



CITEL

ZPAC1-13VG-PRO-U



- Type 1+2+3 combined SPD based on a gas-filled spark gap
- 10-year guarantee
- Discharge capacity per pole:  $I_{imp} = 12.5 \text{ kA}$  (10/350  $\mu\text{s}$ )
- Operating and leakage current-free
- Can be used for lightning protection classes III & IV
- Individually pluggable protection modules: sustainable solution, cost-effective maintenance
- Complies with the IEC 61643-11 and EN 61643-11 standards
- VDE-AR-N 4100 compliant "Use of surge protective devices (SPD) type 1 in main power supply systems"
- Integrated fuse
- Dual voltage tap for RFZ and APZ

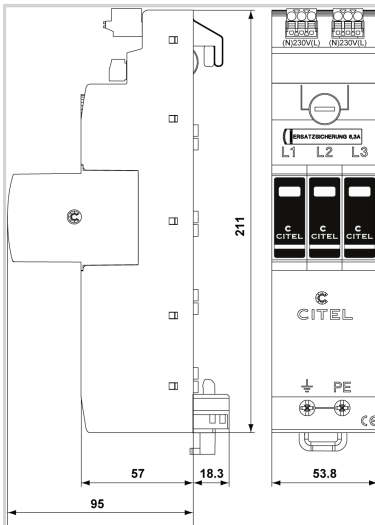


| Electrical Characteristics   |                    |  |
|--|--------------------|--|
| SPD type   | IEC                | 1+2+3  |
| Network  |                    | 230/400 V 3-phase+N  |
| AC system  |                    | TT-TNS   |
| Nominal line voltage   | Un                 | 230/400 Vac  |
| Max. AC operating voltage  | Uc                 | 275 Vac  |
| Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection                              | UT                 | 335 Vac withstand  |
| Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection | UT                 | 440 Vac withstand  |
| Temporary Over Voltage N/PE (TOV HT) Without disconnection or with safety disconnection                  | UT                 | 1200 V/300A/200 ms withstand   |
| Residual Current   |                    |  |
| Leakage current to Ground  | I <sub>pe</sub>    | None   |
| Follow current   | I <sub>f</sub>     | None   |
| Nominal discharge current 15 x 8/20 $\mu\text{s}$ impulses   | I <sub>n</sub>     | 20 kA  |
| Max. discharge current max. withstand @ 8/20 $\mu\text{s}$ by pole                                       | I <sub>max</sub>   | 50 kA  |
| Impulse current by pole max. withstand 10/350 $\mu\text{s}$ by pole                                      | I <sub>imp</sub>   | 12.5 kA  |
| Total lightning current max. total withstand @ 10/350 $\mu\text{s}$                                      | I <sub>total</sub> | 50 kA  |
| Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50 $\mu\text{s}$ - 8/20 $\mu\text{s}$ | U <sub>oc</sub>    | 6 kV   |
| Withstand on overvoltages IEEE C62.41.1  |                    | 20 kV  |
| Specific energy by pole max. withstand 10/350 $\mu\text{s}$  | W/R                | 40 kJ/ohm  |
| Connection mode(s)   |                    | L/N and N/PE   |
| Protection mode(s)   |                    | Common/Differential mode   |
| Protection level L/N @ I <sub>n</sub> (8/20 $\mu\text{s}$ )  | Up L/N             | 1.5 kV   |
| Protection level L/PE @ I <sub>n</sub> (8/20 $\mu\text{s}$ )   | Up L/PE            | 1.5 kV   |
| Residual voltage L/N at 5 kA @ 5 kA (8/20 $\mu\text{s}$ )  | Up-5kA             | 0.7 kV   |
| Admissible short-circuit current   | I <sub>scrr</sub>  | 50 000 A   |
| Mechanical Characteristics   |                    |  |
| Technology   |                    | VG Technology (MOV+GSG)  |
| SPD configuration  |                    | 3-phase+Neutral  |
| Connection to Network  |                    | By 40mm busbar and wire for PE: 6-35mm <sup>2</sup> (50mm <sup>2</sup> ) |
| Format   |                    | Plug-in modular box  |
| Mounting   |                    | 40 mm busbar systems   |
| Housing material   |                    | Thermoplastic UL94 V-0   |
| Operating temperature  | Tu                 | -40/+85°C  |
| Protection rating  |                    | IP20   |
| Failsafe mode  |                    | Disconnection from AC network  |



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## ZPAC1-13VG-PRO-U



|                                   |  |
|-----------------------------------|--|
| Disconnection indicator           | 1 mechanical indicator by pole           |
| Spare module(s)                   | ZMDAC1-13VG-PRO-275                      |
| Remote signaling of disconnection | none                                     |
| Dimensions                        | See diagram                              |
| <b>Disconnectors</b>              |  |
| Thermal disconnector              | Internal                                 |
| Installation ground fault breaker | Type 'S' or delayed                      |
| Back-up protection device         | max. 315 A (gL/gG)                       |
| <b>Standards</b>                  |  |
| Standards compliance              | IEC 61643-11 / EN 61643-11 / UL1449 5ed. |
| Certification                     | KEMA                                     |
| <b>Part number</b>                |  |
| <b>64087</b>                      |  |

