



CITEL

Type 1+2+3 AC surge protector - 3-phase+N

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 μs)
- › 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

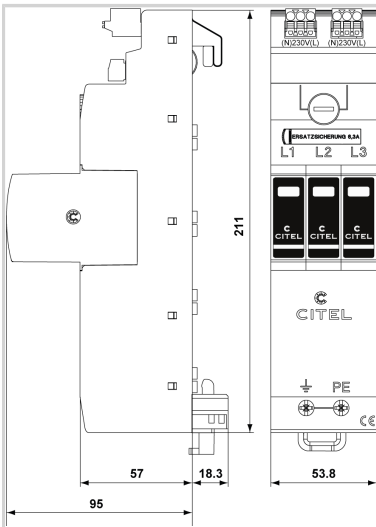


Electrical Characteristics		
SPD type	IEC	1+2+3
Network		230/400V
AC system		TT-TNS
Nominal line voltage	U_n	230/400 Vac
Max. AC operating voltage	U_c	275 Vac
Temporary Over Voltage (TOV) Characteristics - 5 sec. <i>Without disconnection</i>	UT	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics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



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

