



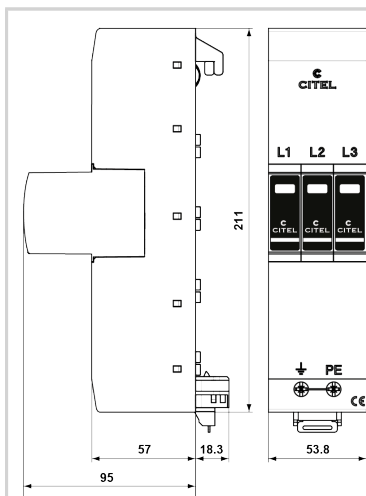
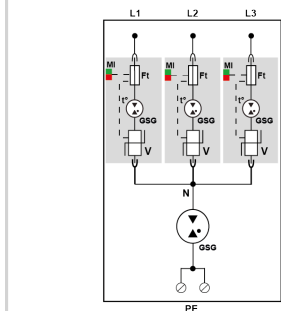
CITEL

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

ZPAC1-13VG-31-275



- 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)
- Safe disconnecting device
- Operating and leakage current-free
- Can be used for lightning protection classes III + IV
- Cost-effective maintenance thanks to individual plug-in modules
- Complies with the IEC 61643-11 and EN 61643-11 standards
- Complies with VDE-AR-N 4100 "Use of surge protective devices (SPD) type 1 in main power supply systems"



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. 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_{pe}	None
Follow current	I_f	None
Nominal discharge current 15 x 8/20 μs impulses	I_n	20 kA
Max. discharge current max. withstand @ 8/20 μs by pole	I_{max}	50 kA
Impulse current by pole max. withstand 10/350 μs by pole	I_{imp}	12.5 kA
Total lightning current max. total withstand @ 10/350 μs	I_{total}	50 kA
Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50 μs - 8/20 μs	U_{oc}	6 kV
Withstand on overvoltages IEEE C62.41.1		20 kV
Specific energy by pole max. withstand 10/350 μs	W/R	40 kJ/ohm
Connection mode(s)		L/N and N/PE
Protection mode(s)		Common/Differential mode
Protection level L/N @ I_n (8/20 μs)	U_p L/N	1.5 kV
Protection level L/PE @ I_n (8/20 μs)	U_p L/PE	1.5 kV
Residual voltage L/N at 5 kA @ 5 kA (8/20 μs)	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



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Failsafe mode		Disconnection from AC network
Disconnection indicator		1 mechanical indicator by pole
Spare module(s)		ZMDAC1-13VG-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		
64004		

