



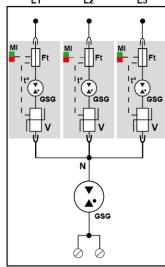
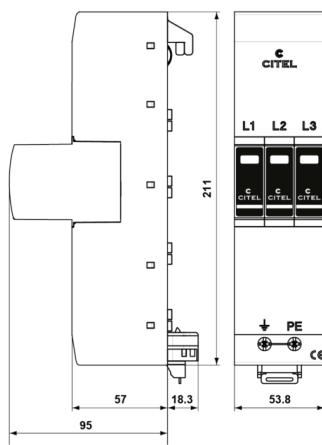
CITEL

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: $Imp= 12.5 \text{ kA}$ (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		230/400 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 ms 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	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	Imax	50 kA
Impulse current by pole max. withstand 10/350 μs by pole	Imp	12.5 kA
Total lightning current max. total withstand @ 10/350 μs	Itotal	50 kA
Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50 μs - 8/20 μs	Uoc	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 @ In (8/20 μs)	Up L/N	1.5 kV
Protection level L/PE @ In (8/20 μs)	Up L/PE	1.5 kV
Residual voltage L/N at 5 kA @ 5 kA (8/20 μs)	Up-5kA	0.7 kV
Admissible short-circuit current	Iscrr	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	Tu	-40/+85°C
Protection rating		IP20
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		

