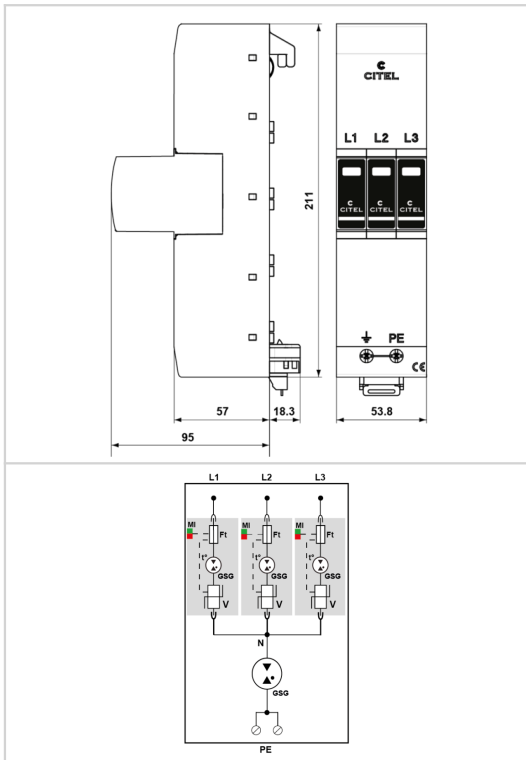


ZPAC1-13VG-31-275



- ✦ 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		230/400 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	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	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	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	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	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	
Weight		0.7401 kg	
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 4ed.	
Certification		KEMA	
Part number			
64004			