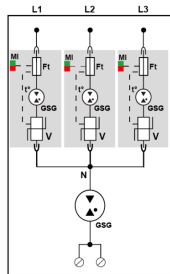
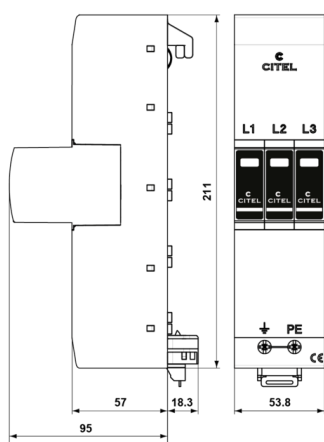


### ZPAC1-13VG-31-275



- ✦ 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  $\mu\text{s}$ )
- ✦ 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 $\mu\text{s}$ impulses	In	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 $\mu\text{s}$	Uoc	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 @ In (8/20 $\mu\text{s}$ )	Up L/N	1.5 kV
Protection level L/PE @ In (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>sc</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
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		