



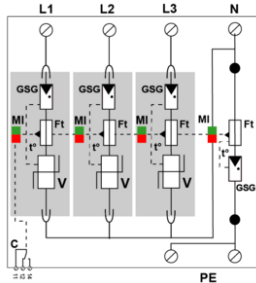
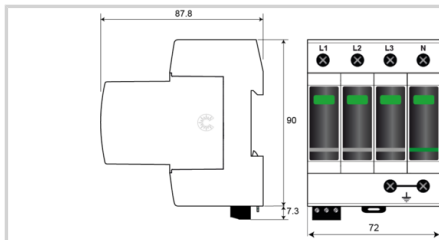
## Type 1+2+3 AC surge protector - 3-phase+N

# CITEL

## DAC1-13VGS-31-320



- Type 1 + 2 + 3 AC surge protector
- VG Technology
- In : 20 kA
- Iimp : 12,5 kA on 10/350µs impulse
- No leakage current
- Pluggable module for each phase
- Remote signaling
- Optimized to TOV
- EN 61643-11, IEC 61643-11 and UL1449 ed.5 compliance
- Certified EN 61643-11 and IEC 61643-11



V: High-energy varistor  
 GSG: Specific gas tube  
 Ft: Thermal fuse  
 C: Remote signaling contact  
 t\*: Thermal disconnection system  
 MI: Disconnection indicator

### Electrical Characteristics

SPD type		1+2+3
Network		230/400 V 3-phase+N
AC system		TT-TNS
Max. AC operating voltage	Uc	320 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 <sub>max</sub>	50 kA
Total Maximum discharge current max. total withstand @ 8/20 µs	I <sub>max</sub> Total	100 kA
Impulse current by pole max. withstand 10/350µs by pole	I <sub>imp</sub>	12.5 kA
Total lightning current max. total withstand @ 10/350µs	I <sub>total</sub>	50 kA
Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50µs - 8/20µs	U <sub>oc</sub>	6 kV
Specific energy by pole max. withstand 10/350 µs	W/R	40 kJ/ohm
Protection mode(s)		L/N and N/PE
Protection level @ In (8/20µs) and @ 6 kV (1,2/50 µs)	Up L/N	1.5 kV
Protection level N/PE @ In (8/20µs) and @ 6 kV (1,2/50 µs)	Up N/PE	1.5 kV
Residual voltage L/N at 5 kA @ 5 kA (8/20µs)	Up-5kA	0.9 kV
Protection level N/PE at 5 kA @ 5 kA (8/20µs)	Up-5kA	0.9 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 screw terminals: 2.5-25mm <sup>2</sup> (35mm <sup>2</sup> rigid)
Format		Plug-in modular box
Mounting		Symmetrical rail 35 mm (EN 60715)
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 - Red/Green
Spare module(s)		MDAC1-13VG-320 + MDAC1-50G-xxx
Remote signaling of disconnection		output on changeover contact
Wiring for remote signaling		1.5 mm <sup>2</sup> max.
Max. Voltage/Current for remote signaling		250 V / 0.5 A (AC) / 30 V / 3 A (DC)
Dimensions		See diagram - 4TE (EN43880)

### Disconnectors

Thermal disconnector		Internal
Installation ground fault breaker		Type 'S' or delayed
		Fuse assembly: SFD1-13S-31 / or 125 A min. - 315 A max. - Fuses

**DAC1-13VGS-31-320**

Back-up protection device	Type gG
<b>Standards</b>	
Standards compliance	IEC 61643-11 / EN 61643-11 / UL1449 ed.5
Certification	KEMA
<b>Part number</b>	
<b>821730344</b>	