



DAC1-13S-10

DAC1-13 SERIES

- Type 1 + 2 AC power surge protector
- In: 20 kA
- limp: 12.5 kA
- Pluggable module for each phase
- Remote signaling (option)
- EN 61643-11, IEC 61643-11 certified
- UL 1449 ed.4 compliance



Characteristics

| CITEL Model | | DAC1-13-10-440 | DAC1-13-10-320 | DAC1-13-10-275 | DAC1-13-10-150 |
|---|------------------|---|-----------------------|-----------------------|-----------------------|
| Description | | 1+2 AC surge protector - 1-pole - pluggable | | | |
| Max. AC operating voltage | Uc | 440 Vac | 320 Vac | 275 Vac | 150 Vac |
| Temporary Over Voltage (TOV) Characteristic - 5 sec. | UT | 580 Vac withstand | 335 Vac withstand | 335 Vac withstand | 180 Vac withstand |
| Temporary Over Voltage (TOV) Characteristic - 120 mn | UT | 770 Vac disconnection | 440 Vac disconnection | 440 Vac disconnection | 230 Vac disconnection |
| Residual current Leakage current at Uc | Ipe | < 1 mA | < 1 mA | < 1 mA | < 1 mA |
| Follow current | If | None | None | None | None |
| Nominal discharge current 15 x 8/20 μs impulses | In | 20 kA | 20 kA | 20 kA | 20 kA |
| Max. discharge current max. withstand @ 8/20 μs by pole | I _{max} | 50 kA | 50 kA | 50 kA | 50 kA |
| Impulse current by pole max. withstand 10/350μs | limp | 12.5 kA | 12.5 kA | 12.5 kA | 12.5 kA |
| Specific energy by pole | W/R | 40 kJ/ohm | 40 kJ/ohm | 40 kJ/ohm | 40 kJ/ohm |
| Protection level @ In (8/20μs) | Up | 1.7 kV | 1.6 kV | 1.3 kV | 0.9 kV |
| Residual voltage @ 5kA (8/20μs) | Up-5kA | 1.5 kV | 1.2 kV | 1 kV | 0.6 kV |
| Admissible short-circuit current | Iscsr | 50 000 A | 50 000 A | 50 000 A | 50 000 A |

Associated disconnectors

| | |
|---|---|
| Thermal disconnector | internal |
| Fuses | 125 A min. - 315 A max. - gG type / or CITEL SFD-13 |
| Existing upstream ground fault breaker (if any) | Type "S" or delayed |

Mechanical characteristics

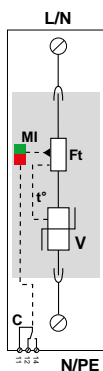
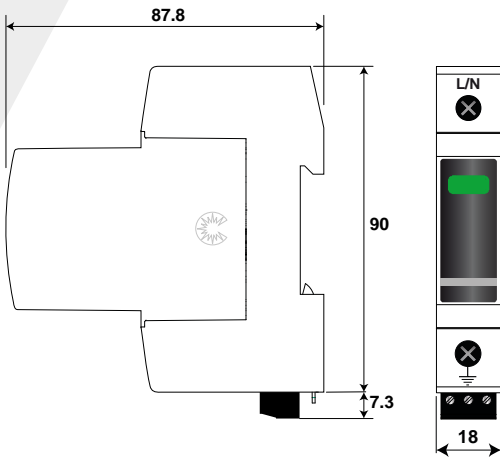
| | | | | |
|--|--|--------------|--------------|--------------|
| Dimensions | see diagram, 1TE, EN 43880 | | | |
| Connection to Network | By screw terminals: 2.5-25 mm ² (35mm ² rigid) | | | |
| Failsafe mode | Disconnection from AC network | | | |
| Disconnection indicator | 1 mechanical indicator Green/Red | | | |
| Remote signaling of disconnection output on changeover contact | option | option | Option | option |
| Max. voltage/current for remote signaling | 250 V/0.5 A (AC) / 30 V/3 A (DC) | | | |
| Wiring for remote signaling | max 1.5 mm ² | | | |
| Mounting | Symmetrical rail 35 mm (EN60715) | | | |
| Operating temperature | -40/+85°C | | | |
| Protection rating | IP20 | | | |
| Housing material | Thermoplastic UL94-V0 | | | |
| Spare unit | MDAC1-13-440 | MDAC1-13-320 | MDAC1-13-275 | MDAC1-13-150 |

Standards

| | |
|---------------|---|
| Certification | KEMA / IEC |
| Compliance | IEC 61643-11 / NF EN 61643-11 / UL1449 ed.4 |

Part number

| | | | | |
|--|-----------|-----------|-----------|-----------|
| | 821710411 | 821710311 | 821710211 | 821710111 |
|--|-----------|-----------|-----------|-----------|



- V: High energy varistor
- MI: Disconnection indicator
- Ft: Thermal fuse
- t*: Thermal disconnection system
- C: Contact for remote signal

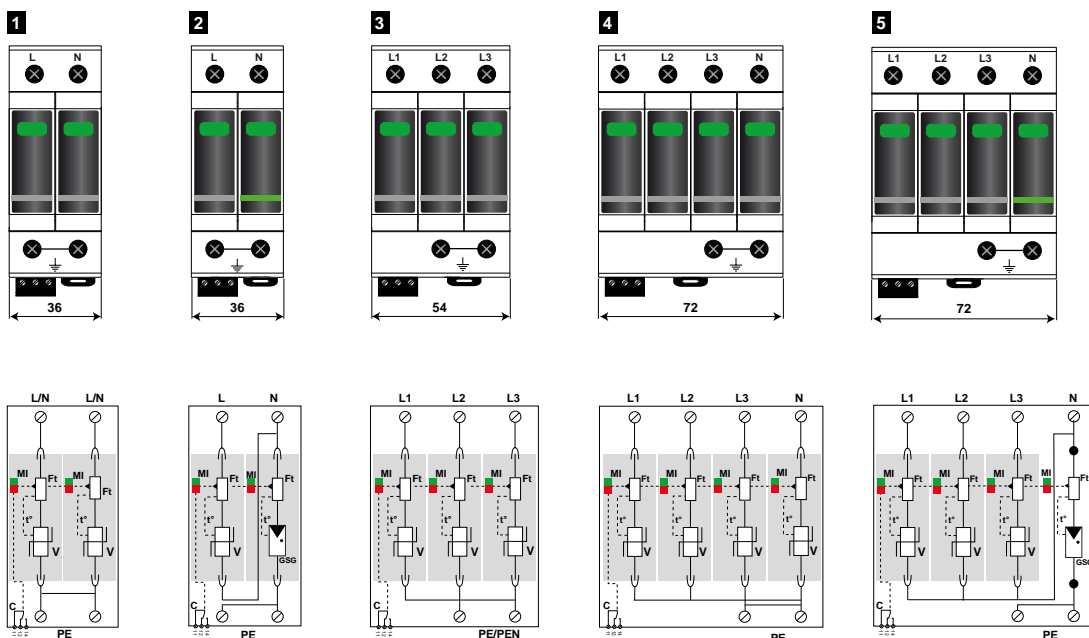
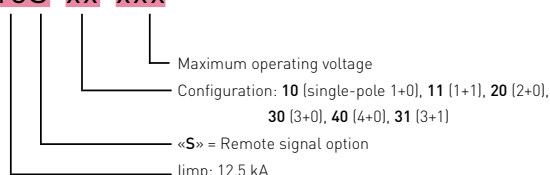
TYPE 1 + 2 AC MULTIPOLAR SURGE PROTECTOR

DAC1-13-11, DAC1-13-20, DAC1-13-30, DAC1-13-31, DAC1-13-40



DAC1-13S-20

DAC1-13S-xx-xxx



V: High energy MOV
GSG: Specific gas tube
Mi: Disconnection indicator
Ft: Thermal fuse
t°: Thermal disconnection mechanism
C: Contact for remote signal

| Model | P/N | Network | AC system | Protection Mode | I _{total} | Up L/PE | Up L/N | Up N/PE | Dimension DIN43880 | Diagram |
|----------------|-----------|---------------------|---------------------|-----------------|--------------------|---------|--------|---------|--------------------|---------|
| DAC1-13-31-320 | 821710334 | 230/400 V 3-Phase+N | TT-TNS System [3+1] | L/N and N/PE | 50 kA | - | 1.6 kV | 1.5 kV | 4 TE | 5 |
| DAC1-13-31-275 | 821710234 | 230/400 V 3-Phase+N | TT-TNS System [3+1] | L/N and N/PE | 50 kA | - | 1.3 kV | 1.5 kV | 4 TE | |
| DAC1-13-31-150 | 821710134 | 120/208 V 3-Phase+N | TT-TNS System [3+1] | L/N and N/PE | 50 kA | - | 0.9 kV | 1.5 kV | 4 TE | |
| DAC1-13-40-440 | 821710414 | 230/400 V 3-Phase+N | IT System [4+0] | L/PE and N/PE | 50 kA | 1.7 kV | - | 1.7 kV | 4 TE | 4 |
| DAC1-13-40-320 | 821710314 | 230/400 V 3-Phase+N | TNS System [4+0] | L/PE and N/PE | 50 kA | 1.6 kV | - | 1.6 kV | 4 TE | |
| DAC1-13-40-275 | 821710214 | 230/400 V 3-Phase+N | TNS System [4+0] | L/PE and N/PE | 50 kA | 1.3 kV | - | 1.3 kV | 4 TE | |
| DAC1-13-40-150 | 821710114 | 120/208 V 3-Phase+N | TNS System [4+0] | L/PE and N/PE | 50 kA | 0.9 kV | - | 0.9 kV | 4 TE | 3 |
| DAC1-13-30-440 | 821710413 | 230/400 V 3-Phase | IT System [3+0] | L/PE | 37.5 kA | 1.7 kV | - | - | 3 TE | |
| DAC1-13-30-320 | 821710313 | 230/400 V 3-Phase | TNC System [3+0] | L/PE | 37.5 kA | 1.6 kV | - | - | 3 TE | |
| DAC1-13-30-275 | 821710213 | 230/400 V 3-Phase | TNC System [3+0] | L/PE | 37.5 kA | 1.3 kV | - | - | 3 TE | 1 |
| DAC1-13-30-150 | 821710113 | 120/208 V 3-Phase | TNC System [3+0] | L/PE | 37.5 kA | 0.9 kV | - | - | 3 TE | |
| DAC1-13-11-320 | 821710332 | 230 V single phase | TT-TN System [1+1] | L/N and N/PE | 25 kA | - | 1.6 kV | 1.5 kV | 2 TE | |
| DAC1-13-11-275 | 821710232 | 230 V single phase | TT-TN System [1+1] | L/N and N/PE | 25 kA | - | 1.3 kV | 1.5 kV | 2 TE | 2 |
| DAC1-13-11-150 | 821710132 | 120 V single phase | TT-TN System [1+1] | L/N and N/PE | 25 kA | - | 0.9 kV | 1.5 kV | 2 TE | |
| DAC1-13-20-440 | 821710412 | 230 V single phase | IT System [2+0] | L/PE and N/PE | 25 kA | 1.7 kV | - | 1.7 kV | 2 TE | |
| DAC1-13-20-320 | 821710312 | 230 V single phase | TN System [2+0] | L/PE and N/PE | 25 kA | 1.6 kV | - | 1.6 kV | 2 TE | 1 |
| DAC1-13-20-275 | 821710212 | 230 V single phase | TN System [2+0] | L/PE and N/PE | 25 kA | 1.3 kV | - | 1.3 kV | 2 TE | |
| DAC1-13-20-150 | 821710112 | 120 V single phase | TN System [2+0] | L/PE and N/PE | 25 kA | 0.9 kV | - | 0.9 kV | 2 TE | |