



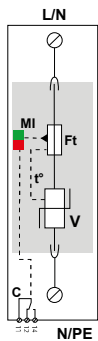
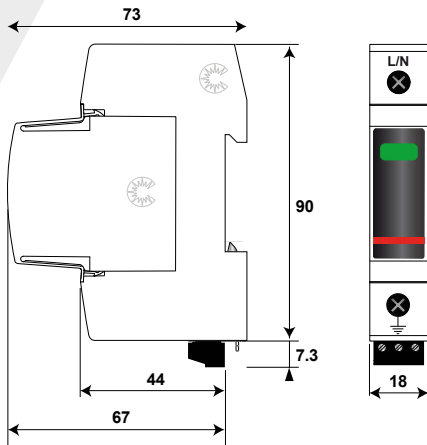
DAC50S-10

# DAC50 SERIES

- Type 2 AC Surge Protector
- In: 20 kA
- I<sub>max</sub>: 50 kA
- Pluggable module for each phase
- Remote signaling (option)
- IEC 61643-11, EN 61643-11 certified
- UL1449 ed.4 compliance



## Characteristics



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

| CITEL Model  |                    | DAC50-10-760  | DAC50-10-440          | DAC50-10-275          | DAC50-10-150          |
|--|--------------------|---|-----------------------|-----------------------|-----------------------|
| Description  |                    | Type 2 AC surge protector - one-pole - pluggable                      |                       |                       |                       |
| Maximum AC operating voltage                                   | Uc                 | 760 Vac   | 440 Vac               | 275 Vac               | 150 Vac               |
| Temporary Over Voltage (TOV) Characteristics - 5 sec.          | UT                 | 1000 Vac withstand  | 580 Vac withstand     | 335 Vac withstand     | 180 Vac withstand     |
| Temporary Over Voltage (TOV) Characteristics -120mn            | UT                 | 1325 Vac disconnection  | 770 Vac disconnection | 440 Vac disconnection | 230 Vac disconnection |
| Residual current Leakage current at U <sub>c</sub>             | I <sub>pe</sub>    | < 1 mA  | < 1 mA                | < 1 mA                | < 1 mA                |
| Follow current   | I <sub>f</sub>     | None  | None                  | None                  | None                  |
| Nominal discharge current 15 x 8/20 μs impulses                | I <sub>n</sub>     | 20 kA   | 20 kA                 | 20 kA                 | 20 kA                 |
| Max. discharge current max. withstand @ 8/20 μs by pole        | I <sub>max</sub>   | 50 kA   | 50 kA                 | 50 kA                 | 50 kA                 |
| Protection level @ 8/20 μs                                     | U <sub>p</sub>     | 2.9 kV  | 2 kV                  | 1.25 kV               | 0.9 kV                |
| Residual voltage @ 5 kA (8/20 μs)                              | U <sub>p-5kA</sub> | 2.6 kV  | 1.5 kV                | 1 kV                  | 0.6 kV                |
| Admissible short-circuit current                               | I <sub>sc cr</sub> | 50 000 A  | 50 000 A              | 50 000 A              | 50 000 A              |
| <b>Associated disconnectors</b>                                |                    |   |                       |                       |                       |
| Thermal disconnector   |                    | internal  |                       |                       |                       |
| Fuses  |                    | 50 A min. - 125 A max. - gG Type                                      |                       |                       |                       |
| Installation ground fault breaker (if any)                     |                    | Type "S" or delayed   |                       |                       |                       |
| <b>Mechanical characteristics</b>                              |                    |   |                       |                       |                       |
| Dimensions   |                    | see diagram - 1TE (DIN43880)  |                       |                       |                       |
| Connection to Network  |                    | By screw terminals: 2.5-25 mm <sup>2</sup> (35mm <sup>2</sup> rigide) |                       |                       |                       |
| Failsafe mode  |                    | Disconnection from network  |                       |                       |                       |
| Disconnection indicator  |                    | 1 mechanical indicator Green/Red                                      |                       |                       |                       |
| Remote signaling of disconnection output on changeover contact |                    | option DAC50S-10-760  | option DAC50S-10-440  | option DAC50S-10-275  | option DAC50S-10-150  |
| Max. voltage/current for remote signaling                      |                    | 250 V/0.5 A (AC) / 30V/3 A (DC)                                       |                       |                       |                       |
| Wiring for remote signaling                                    |                    | max. 1.5 mm <sup>2</sup>  |                       |                       |                       |
| Mounting   |                    | Symmetrical rail 35 mm (EN60715)                                      |                       |                       |                       |
| Operating temperature  |                    | -40/+85°C   |                       |                       |                       |
| Protection rating  |                    | IP20  |                       |                       |                       |
| Housing material   |                    | Thermoplastic UL94-V0   |                       |                       |                       |
| Spare unit   |                    | MDAC50-760  | MDAC50-440            | MDAC50-275            | MDAC50-150            |
| <b>Standards</b>   |                    |   |                       |                       |                       |
| Certification  |                    | KEMA / ÖVE / EAC  |                       |                       |                       |
| Compliance   |                    | EN 61643-11 / IEC 61643-11 / UL1449 ed.4                              |                       |                       |                       |
| <b>Part number</b>   |                    |   |                       |                       |                       |
|  |                    | 821110711   | 821110411             | 821110211             | 821110111             |

# TYPE 2 AC MULTIPOLAR SURGE PROTECTOR

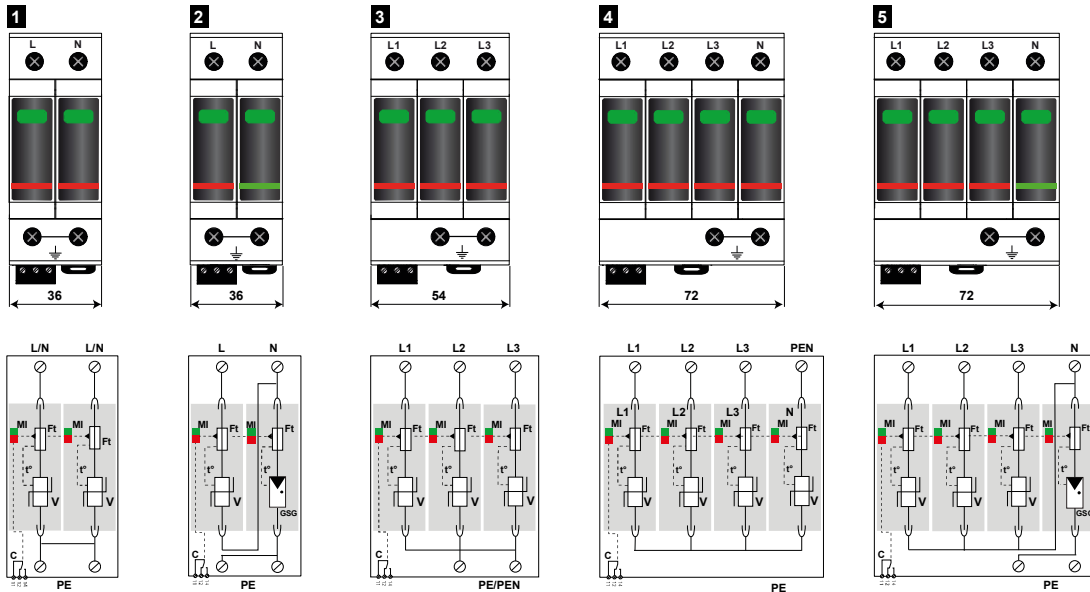
## DAC50-11, DAC50-20, DAC50-30, DAC50-31, DAC50-40



DAC50S-30

DAC50S-xx-xxx

Maximum operating voltage  
 Configuration: 10 (single-pole 1+0), 11 (1+1), 20 (2+0),  
 30 (3+0), 40 (4+0), 31 (3+1)  
 «S» = Remote signal option  
 I<sub>max</sub>

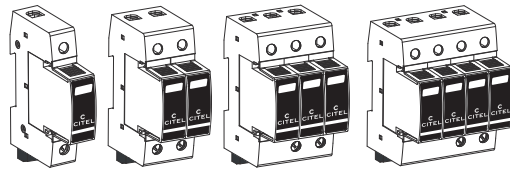


V: High-energy varistor  
 GSG: Specific gas tube  
 Ft: Thermal fuse  
 C: Contact remote signal  
 t°: Thermal disconnection system  
 MI: Disconnection indicator

| Model        | Part number | Network             | AC system           | Protection Mode | Up L/PE | Up L/N  | Up N/PE | Dimensions DIN43880 | Diagram |
|--------------|-------------|---------------------|---------------------|-----------------|---------|---------|---------|---------------------|---------|
| DAC50-31-275 | 821110234   | 230/400 V 3-phase+N | TT-TNS system (3+1) | L/N and N/PE    | -       | 1.25 kV | 1.5 kV  | 4 TE                | 5       |
| DAC50-31-150 | 821110134   | 120/208 V 3-phase+N | TT-TNS system (3+1) | L/N and N/PE    | -       | 0.9 kV  | 1.5 kV  | 4 TE                |         |
| DAC50-40-440 | 821110414   | 230/400 V 3-phase+N | IT system (4+0)     | L/PE and N/PE   | 2 kV    | -       | 2 kV    | 4 TE                | 4       |
| DAC50-40-275 | 821110214   | 230/400 V 3-phase+N | TNS system (4+0)    | L/PE and N/PE   | 1.25 kV | -       | 1.25 kV | 4 TE                |         |
| DAC50-40-150 | 821110114   | 120/208 V 3-phase+N | TNS system (4+0)    | L/PE and N/PE   | 0.9 kV  | -       | 0.9 kV  | 4 TE                | 3       |
| DAC50-30-760 | 821110713   | 690 V 3-phase       | TNC system (3+0)    | L/PE            | 2.9 kV  | -       | -       | 3 TE                |         |
| DAC50-30-440 | 821110413   | 230/400 V 3-phase   | IT system (3+0)     | L/PE            | 2 kV    | -       | -       | 3 TE                |         |
| DAC50-30-275 | 821110213   | 230/400 V 3-phase   | TNC system (3+0)    | L/PE            | 1.25 kV | -       | -       | 3 TE                | 2       |
| DAC50-30-150 | 821110113   | 120/208 V 3-phase   | TNC system (3+0)    | L/PE            | 0.9 kV  | -       | -       | 3 TE                |         |
| DAC50-11-275 | 821110232   | 230 V single phase  | TT-TN system(1+1)   | L/N and N/PE    | -       | 1.25 kV | 1.5 kV  | 2 TE                | 1       |
| DAC50-11-150 | 821110132   | 120 V single phase  | TT-TN system(1+1)   | L/N and N/PE    | -       | 0.9 kV  | 1.5 kV  | 2 TE                |         |
| DAC50-20-440 | 821110412   | 230 V single phase  | IT system (2+0)     | L/PE and N/PE   | 2 kV    | -       | 2 kV    | 2 TE                | 1       |
| DAC50-20-275 | 821110212   | 230 V single phase  | TN system (2+0)     | L/PE and N/PE   | 1.25 kV | -       | 1.25 kV | 2 TE                |         |
| DAC50-20-150 | 821110112   | 120 V single phase  | TN system (2+0)     | L/PE and N/PE   | 0.9 kV  | -       | 0.9 kV  | 2 TE                |         |

INSTALLATION INSTRUCTIONS - NOTICE D'INSTALLATION  
 NOTICIA DE INSTALACIÓN - INSTALLATIONSHINWEISE  
 ISTRUZIONI PER L'INSTALLAZIONE  
 INSTRUCOES DE INSTALCAO - MONTÁŽNÍ NÁVOD  
 РУКОВОДСТВО ПО МОНТАЖУ - 安装指导书

AC surge protector - Parafoudre Basse Tension  
 Protectiones Baja Tension  
 Überspannungsschutz für Niederspannungsnetze  
 Scaricatori da sovratensioni per rete di energia  
 Protetor de Surto CA. - Svodiče přepětí pro AC  
 Устройство защиты от импульсных перенапряжений, AC - 低压浪涌保护器



**DAC50 range**

**Technical Data**

| AC network * | Wiring | AC system | DAC50G(S)-10-150 | DAC50G(S)-10-275 | DAC50G(S)-10-320 | DAC50(S)-10-150 | DAC50(S)-20-150 | DAC50(S)-30-150 | DAC50(S)-40-150 | DAC50(S)-11-150 | DAC50(S)-10-275 | DAC50(S)-30-275 | DAC50(S)-40-275 | DAC50(S)-11-275 | DAC50(S)-10-320 | DAC50(S)-20-320 | DAC50(S)-30-320 | DAC50(S)-40-320 | DAC50(S)-11-320 | DAC50(S)-10-440 | DAC50(S)-20-440 | DAC50(S)-30-440 | DAC50(S)-40-440 | DAC50(S)-10-530 | DAC50(S)-20-530 | DAC50(S)-30-530 | DAC50(S)-40-530 | DAC50(S)-10-660 | DAC50(S)-20-660 | DAC50(S)-30-660 | DAC50(S)-40-660 | DAC50(S)-10-760 | DAC50(S)-20-760 | DAC50(S)-30-760 | DAC50(S)-40-760 |  |
|--------------|--------|-----------|------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| 120/208 V    | L+N    | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 120/208 V    | L+N    | TN-S/TT   | N/PE             |                  |                  | L/N             |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 120/208 V    | 3L     | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 120/208 V    | 3L+N   | TN-S/TT   | N/PE             |                  |                  | L/N             |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | L+N    | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | L+N    | TN-S/TT   | N/PE             | N/PE             |                  | L/N             |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | L+N    | IT        |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | 3L     | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | 3L     | IT        |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | 3L+N   | TN-S/TT   | N/PE             | N/PE             |                  | L/N             |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 230/400 V    | 3L+N   | IT        |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 277/480 V    | L+N    | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 277/480 V    | L+N    | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 277/480 V    | 3L     | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 277/480 V    | 3L+N   | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 347/600 V    | L+N    | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 347/600 V    | L+N    | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 347/600 V    | 3L     | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 347/600 V    | 3L+N   | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 400/690 V    | L+N    | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 400/690 V    | L+N    | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 400/690 V    | 3L     | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 400/690 V    | 3L+N   | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 480/830 V    | L+N    | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 480/830 V    | L+N    | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 480/830 V    | 3L     | TN-C      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |
| 480/830 V    | 3L+N   | TN-S      |                  |                  |                  | L/PE            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |  |

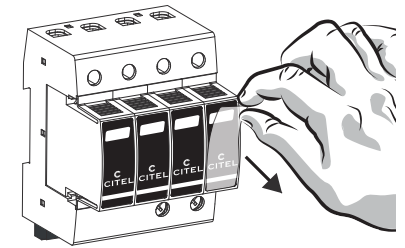
lpe (per pole) 5 µA < 1 mA / (or 0 mA for "11" and "31" versions)  
 Isccr (per pole) NA 50 kA  
 Imax (per pole) 50 kA  
 Ifi 100 A

Remote signal option: S: e.g. DAC50S-11-275 Table 1

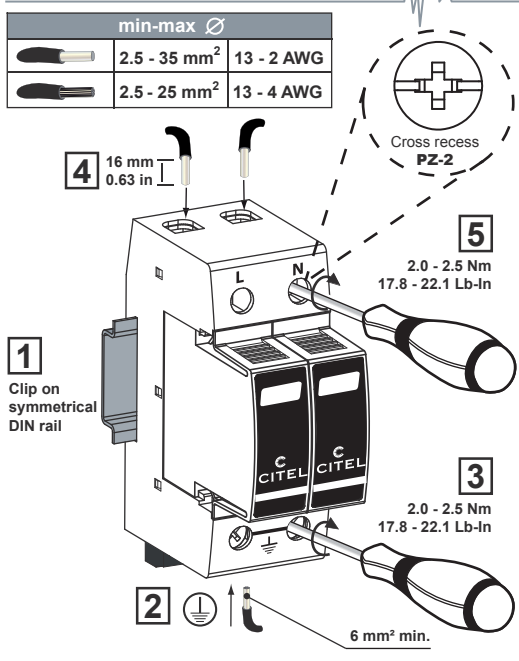
\* Type of LV-System + regulation (e.g. ±10 %)

- 2000 m max. 6500 ft max.
- 40/+85°C max. -40/+185°F max.
- IP20 (built in) indoor use only
- Humidity range 5% to 95%
- Number of ports : 1

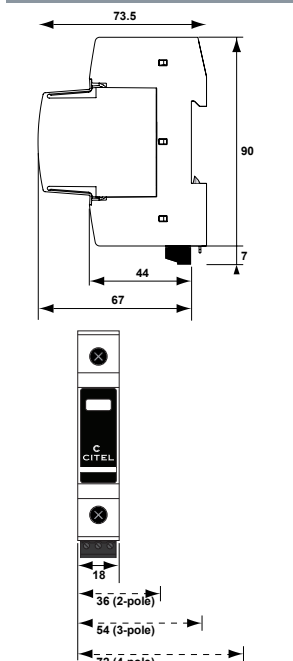
Note: take off the protection film if needed (see below)



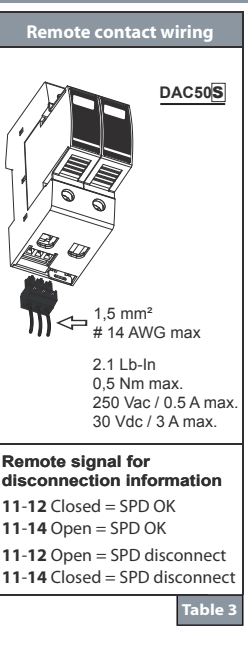
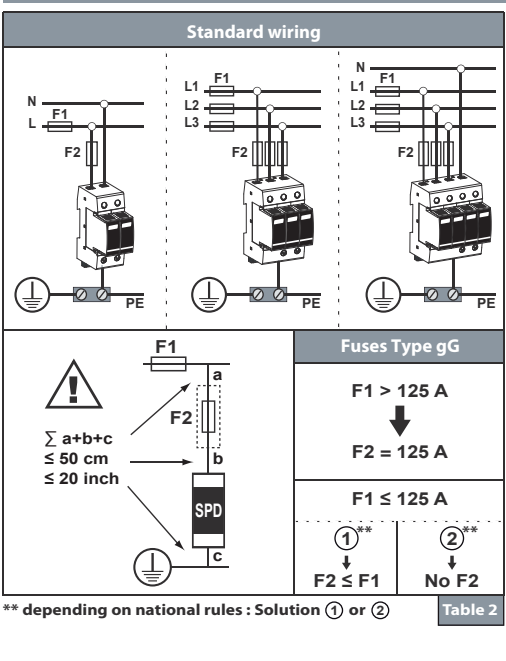
**Installation**



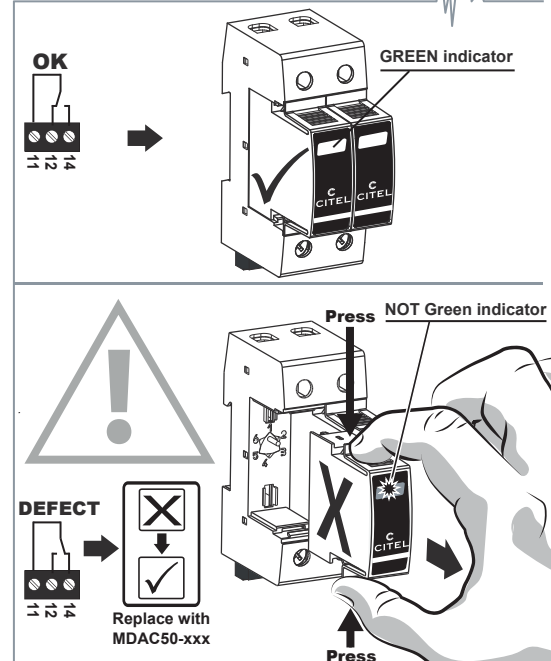
**Dimensions (mm)**



**Wiring**



**Maintenance**





# CITEL

SAFETY INSTRUCTIONS  
 CONSIGNES DE SECURITE  
 SICHERHEITSHINWEISE  
 ADVERTENCIA DE SEGURIDAD  
 AVVERTENZE IMPORTANTI  
 AVISOS IMPORTANTES  
 МЕРЫ БЕЗОПАСНОСТИ  
 BEZPEČNOSTNÍ POKYNY  
 安全須知



*This document could be modified without notice.  
 Updated Information on Website.*

*Ce document peut être modifié sans préavis.  
 Informations à jour sur site web.*

*Änderungen am Dokument ohne Ankündigung möglich.  
 Aktuelle Informationen finden Sie auf unserer Webseite.*

*Este documento puede ser modificado sin previo aviso.  
 Información actualizada en el sitio web.*

*Questo documento può essere modificato senza preavviso.  
 Informazioni attualizzate disponibili sul sito web.*

*Este documento pode ser modificado sem aviso prévio.  
 Informação atualizada no website.*

*В документ могут вноситься изменения.  
 Актуальную информацию смотрите на нашей  
 WEB-странице.*

*Změny v tomto dokumentu jsou možné bez předchozího  
 upozornění.*

*Aktuální informace najdete na naší webové stránce.*

*本文件的修改恕不另行通知。  
 查看最新文件请登陆公司网站。*

[www.citel.fr](http://www.citel.fr)  
[www.citel.de](http://www.citel.de)  
[www.citel.us](http://www.citel.us)  
[www.citel.com.cn](http://www.citel.com.cn)  
[www.citel.ru](http://www.citel.ru)  
[www.citel.in](http://www.citel.in)

2, rue Troyon 92316 Sèvres CEDEX France



## ATTENTION !

### GB

- Installation must be performed only by electrically skilled operator.
- National electrical installation rules must be followed.
- The unit must be used only as surge protector and according the conditions described in this document.
- Surge protectors must be selected in relation with an dedicated AC network (see Table 1)
- Dedicated fuses must be installed in the surge protector branch (see Table 2).
- In case of red indicator, the surge protector must be replaced.



## ATENCIÓN !

### ES

- Solo un operador eléctrico capacitado puede realizar la instalación.
- Las reglas generales nacionales de instalación eléctrica deben ser respetadas.
- El producto solo tiene un uso de protección contra sobretensiones transitorias y debe ser utilizado en las condiciones mencionadas en este documento.
- Las protecciones contra sobretensiones transitorias se usan en relación con una red de baja tensión determinada (ver tabla 1).
- Fusibles dedicados deben ser instalados aguas arriba de la protección, en la conexión en paralelo (ver tabla 2).
- Se debe sustituir la protección cuando el indicador esta puesto en rojo.



## ВНИМАНИЕ!

### RUS

- монтаж и подключение изделия должны производиться только специалистами-электриками.
- необходимо учитывать требования местных норм и стандартов.
- изделие может использоваться только для защиты от импульсных перенапряжений в соответствии с настоящей инструкцией.
- параметры сети должны соответствовать характеристикам изделия (см. таблицу 1).
- обязательна установка токовых предохранителей соответствующего номинала (таблица 2).
- при обнаружении индикатора состояния красного цвета изделие должно быть заменено.



## ATTENTION !

### FR

- L'installation ne doit être effectuée que par un opérateur électricien dûment qualifié.
- Les règles générales d'installation électrique nationales doivent être respectées.
- Le produit est uniquement destiné à un usage parafoudre et doit être utilisé dans les conditions décrites dans ce document.
- Les parafoudres sont utilisés en fonction d'un réseau BT déterminé (voir table 1)
- Des fusibles dédiés doivent être installés dans les branches du parafoudre (voir table 2).
- En cas d'indicateur passant au rouge, le parafoudre doit être remplacé.



## ATTENZIONE !

### IT

- L'installazione deve essere fatta solamente da elettricisti qualificati.
- Devono essere rispettate le regolamentazioni nazionali e locali riguardanti l'installazione di apparati elettrici.
- L'unità deve essere usata solo come protezione da sovratensioni e secondo le condizioni descritte in questo documento.
- Le protezioni da sovratensione devono essere scelte in funzione della corrente alternata di rete (vedere la tabella 1).
- Fusibili dedicati devono essere installati nel ramo protetto da sovratensione (vedere la tabella 2).
- Nel caso in cui si accenda l'indicatore rosso, l'unità di protezione da sovratensione deve essere sostituita.



## VAROVÁNÍ

### CZ

- Montáž a připojení svodiče přepětí smí provádět pouze pracovník s příslušnou elektrotechnickou kvalifikací.
- Je zapotřebí dodržovat zásady bezpečnosti práce i platné národní elektrotechnické předpisy.
- Svodič přepětí se smí používat pouze v souladu se svými technickými parametry a podle těchto montážních pokynů.
- Svodiče přepětí je zapotřebí zvolit a používat tak, aby odpovídaly napájecí síti (viz tabulka 1).
- Potřeba instalace pojistek pro předjištění před svodiče a jejich volba - viz tabulka 2.
- Pokud ukazatel správné funkce má ČERVENOU barvu, pak svodič/modul je VADNÝ a musí být vyměněn.



## WARNING !

### D

- Die Montage und der Anschluss des Gerätes dürfen nur durch eine Elektrofachkraft durchgeführt werden.
- Nationale Installations Vorschriften sind zu beachten.
- Das Gerät ist nur im Rahmen dieser Installationshilfe und seiner technischen Daten zu verwenden.
- Die Ableiter sind nach der Niederspannungsnetzform auszuwählen (siehe Tabelle 1).
- Die Vorsicherungen sind nach der Tabelle 2 zu selektieren und zu installieren.
- Ist die Anzeige im Sichtfenster auf ROT umgeschaltet, so ist das Modul DEFECT und muss ausgetauscht werden.



## AVISO !

### PT

- A instalação deve ser feita por um electricista habilitado.
- Devem ser seguidas todas as regras de segurança indicadas pelo operador eléctrico.
- Esta protecção deve ser utilizada apenas como protecção contra sobretensões e de acordo com as condições mencionadas neste documento.
- A protecção deve ser escolhida de acordo com a rede eléctrica AC (ver quadro 1).
- Devem ser instalados fúsiveis de protecção a montante da protecção (ver quadro 2).
- Caso o indicador vermelho esteja activo, dever-se-á substituir a protecção.



## 安全須知!

### 中文

- 产品安装只能由具备专业资质的人员实施;
- 请遵守国家电气安装相关规范;
- 本产品仅作为浪涌保护器且在本文件所规定的条件下使用;
- 请根据不同的电源网络制式选用浪涌保护器, 参见 Table 1;
- 请在浪涌保护器前端安装规定的熔断器, 参见 Table 2;
- 当状态指示变为红色时, 须及时更换浪涌保护器;