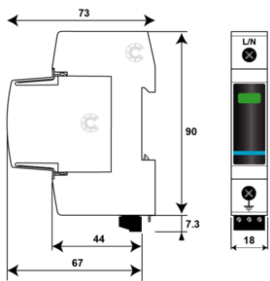
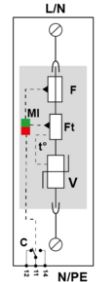


**DACF15S-10-320**



- Type 2 (or 3) AC surge protector
- Interne Disconnection device
- Low caliber of the internal connector = systematic coordination with upstream circuit breaker
- In: 5 kA
- I<sub>max</sub>: 15 kA
- Pluggable module for each phase
- Remote signaling
- EN 61643-11, IEC 61643-11, UL1449 ed.5 compliance



|   |   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
|---|---|----------------------------|----------|-----------------------------------|---------------------|---------------------------|---|---------|---|----------|-----------------------------------|--|------------------------|-----------------------|--|-------------------|--------|----------------|-------------------------------|-------------------------|---|-----------------|-------------|---|------------------------------|-----------------------------|--|-----------------|-----------------------------|--|----------------|--------|----------------------------------|-----------------|-----------|
|    | <b>Electrical Characteristics</b>   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
|  <p>V: High-energy varistor<br/>Ft: Thermal fuse<br/>F: Overcurrent protection (fuse)<br/>t*: Thermal disconnection system<br/>C: Remote signal contact<br/>MI: Disconnection indicator</p>   | <table border="1"> <tr><td>SPD type</td><td></td><td>2 (or 3)</td></tr> <tr><td>Max. AC operating voltage</td><td>U<sub>c</sub></td><td>320 Vac</td></tr> <tr><td>Temporary Over Voltage (TOV) Characteristics - 5 sec. Without disconnection</td><td>UT</td><td>335 Vac withstand</td></tr> <tr><td>Temporary Over Voltage (TOV) Characteristics - 120 mn Without disconnection or with safety disconnection</td><td>UT</td><td>440 Vac disconnection</td></tr> <tr><td>Residual Current Leakage current to Ground</td><td>I<sub>pe</sub></td><td>&lt; 1 mA</td></tr> <tr><td>Follow current</td><td>I<sub>f</sub></td><td>None</td></tr> <tr><td>Nominal discharge current 15 x 8/20 μs impulses</td><td>I<sub>n</sub></td><td>5 kA</td></tr> <tr><td>Max. discharge current max. withstand @ 8/20 μs by pole</td><td>I<sub>max</sub></td><td>15 kA</td></tr> <tr><td>Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs</td><td>U<sub>oc</sub></td><td>10 kV</td></tr> <tr><td>Protection level @ I<sub>n</sub> (8/20μs)</td><td>U<sub>p</sub></td><td>1.2 kV</td></tr> <tr><td>Admissible short-circuit current</td><td>I<sub>sc</sub></td><td>100 000 A</td></tr> </table> |                            | SPD type |                                   | 2 (or 3)            | Max. AC operating voltage | U <sub>c</sub>  | 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 disconnection | Residual Current Leakage current to Ground | I <sub>pe</sub>   | < 1 mA | Follow current | I <sub>f</sub>                | None                    | Nominal discharge current 15 x 8/20 μs impulses | I <sub>n</sub>  | 5 kA        | Max. discharge current max. withstand @ 8/20 μs by pole | I <sub>max</sub>             | 15 kA                       | Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs | U <sub>oc</sub> | 10 kV                       | Protection level @ I <sub>n</sub> (8/20μs) | U <sub>p</sub> | 1.2 kV | Admissible short-circuit current | I <sub>sc</sub> | 100 000 A |
| SPD type  |   | 2 (or 3)                   |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Max. AC operating voltage   | U <sub>c</sub>  | 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 disconnection      |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Residual Current Leakage current to Ground  | I <sub>pe</sub>   | < 1 mA                     |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Follow current  | I <sub>f</sub>  | None                       |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Nominal discharge current 15 x 8/20 μs impulses   | I <sub>n</sub>  | 5 kA                       |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Max. discharge current max. withstand @ 8/20 μs by pole   | I <sub>max</sub>  | 15 kA                      |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Withstand on Combination waveform IEC 61643-11 Class III test: 1.2/50μs - 8/20μs  | U <sub>oc</sub>   | 10 kV                      |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Protection level @ I <sub>n</sub> (8/20μs)  | U <sub>p</sub>  | 1.2 kV                     |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Admissible short-circuit current  | I <sub>sc</sub>   | 100 000 A                  |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| <b>Mechanical Characteristics</b>   |   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| <table border="1"> <tr><td>Technology</td><td>MOV</td></tr> <tr><td>SPD configuration</td><td>Single phase</td></tr> <tr><td>Connection to Network</td><td>By screw terminals: 2.5-25mm<sup>2</sup> (35mm<sup>2</sup> rigid)</td></tr> <tr><td>Format</td><td>Plug-in modular box</td></tr> <tr><td>Mounting</td><td>Symmetrical rail 35 mm (EN 60715)</td></tr> <tr><td>Housing material</td><td>Thermoplastic UL94 V-0</td></tr> <tr><td>Operating temperature</td><td>T<sub>u</sub> -40/+85°C</td></tr> <tr><td>Protection rating</td><td>IP20</td></tr> <tr><td>Failsafe mode</td><td>Disconnection from AC network</td></tr> <tr><td>Disconnection indicator</td><td>1 mechanical indicator - Red/Green</td></tr> <tr><td>Spare module(s)</td><td>MDACF15-320</td></tr> <tr><td>Remote signaling of disconnection</td><td>output on changeover contact</td></tr> <tr><td>Wiring for remote signaling</td><td>1.5 mm<sup>2</sup> max.</td></tr> <tr><td>Dimensions</td><td>See diagram - 1TE (EN43880)</td></tr> <tr><td>Weight</td><td>0.114 kg</td></tr> </table> |   | Technology                 | MOV      | SPD configuration                 | Single phase        | 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 | T <sub>u</sub> -40/+85°C                   | Protection rating | IP20   | Failsafe mode  | Disconnection from AC network | Disconnection indicator | 1 mechanical indicator - Red/Green              | Spare module(s) | MDACF15-320 | Remote signaling of disconnection                       | output on changeover contact | Wiring for remote signaling | 1.5 mm <sup>2</sup> max.   | Dimensions      | See diagram - 1TE (EN43880) | Weight                                     | 0.114 kg       |        |                                  |                 |           |
| Technology  | MOV   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| SPD configuration   | Single phase  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| 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   | T <sub>u</sub> -40/+85°C  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Protection rating   | IP20  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Failsafe mode   | Disconnection from AC network   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Disconnection indicator   | 1 mechanical indicator - Red/Green  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Spare module(s)   | MDACF15-320   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Remote signaling of disconnection   | output on changeover contact  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Wiring for remote signaling   | 1.5 mm <sup>2</sup> max.  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Dimensions  | See diagram - 1TE (EN43880)   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Weight  | 0.114 kg  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| <b>Disconnectors</b>  |   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| <table border="1"> <tr><td>Thermal disconnector</td><td>Internal</td></tr> <tr><td>Installation ground fault breaker</td><td>Type 'S' or delayed</td></tr> <tr><td>Back-up protection device</td><td>internal (equivalent AC rating : 25 A, gG Type)</td></tr> </table>   |   | Thermal disconnector       | Internal | Installation ground fault breaker | Type 'S' or delayed | Back-up protection device | internal (equivalent AC rating : 25 A, gG Type)                     |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Thermal disconnector  | Internal  |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Installation ground fault breaker   | Type 'S' or delayed   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Back-up protection device   | internal (equivalent AC rating : 25 A, gG Type)   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| <b>Standards</b>  |   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| Standards compliance  |   | IEC 61643-11 / EN 61643-11 |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| <b>Part number</b>  |   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |
| 821310321   |   |                            |          |                                   |                     |                           |   |         |   |          |                                   |  |                        |                       |  |                   |        |                |                               |                         |   |                 |             |   |                              |                             |  |                 |                             |  |                |        |                                  |                 |           |