



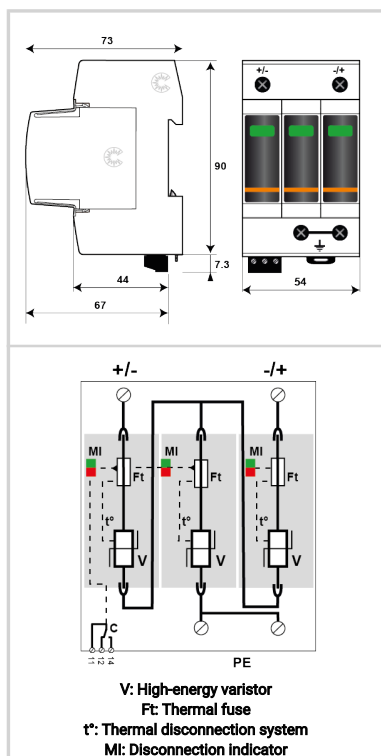
# CITEL



## DC power surge protector

### DDC50S-21Y-500

- DC power Type 2 SPD
- For Energy Storage/EV Charging
- In/Imax: 20/50 kA
- Pluggable modules
- Remote signaling
- prIEC 61643-41 compliance



#### Electrical Characteristics

|                                                                                  |       |           |
|----------------------------------------------------------------------------------|-------|-----------|
| SPD type                                                                         | IEC   | 2         |
| Nominal DC voltage                                                               | Un-dc | 450 Vdc   |
| Max. DC operating voltage                                                        | Uc    | 500 Vdc   |
| Residual Current<br><i>Leakage current to Ground</i>                             | Ipe   | < 0.2 mA  |
| Nominal discharge current<br><i>15 x 8/20 <math>\mu</math>s impulses</i>         | In    | 20 kA     |
| Max. discharge current<br><i>max. withstand @ 8/20 <math>\mu</math>s by pole</i> | Imax  | 50 kA     |
| Impulse current by pole<br><i>max. withstand 10/350<math>\mu</math>s by pole</i> | Iimp  | 4 kA      |
| Protection level +/-<br><i>@ In (8/20<math>\mu</math>s)</i>                      | Up    | 2.1 kV    |
| Admissible short-circuit current                                                 | Iscrr | 100 000 A |

#### Mechanical Characteristics

|                                           |    |                                                                       |
|-------------------------------------------|----|-----------------------------------------------------------------------|
| Connection to Network                     |    | By screw terminals: 2.5-25 mm <sup>2</sup> (35 mm <sup>2</sup> rigid) |
| 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 DC network                                         |
| Disconnection indicator                   |    | 1 mechanical indicator by pole - Red/Green                            |
| Spare module(s)                           |    | MDDC50-500                                                            |
| 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 - 3 TE (EN43880)                                          |
| APPLICATION                               |    | ENERGY STORAGE SYSTEMS (ESS) /EV CHARGING                             |

#### Disconnectors

|                           |  |                                                                  |
|---------------------------|--|------------------------------------------------------------------|
| Thermal disconnector      |  | Internal                                                         |
| Back-up protection device |  | 50 A min. (Iscrr 100 kA) - 125 A max. (Iscrr 50 kA) - gBat Fuses |

#### Standards

|                         |  |                              |
|-------------------------|--|------------------------------|
| Standards compliance    |  | prIEC 61443-41 - IEC61643-11 |
| Environmental standards |  | EU RoHS                      |

#### Part number

828511263

