

Multi-Pole DC or AC Power Surge Protectors

DS2x0-xxDC Series

Imax
20-40 kA



DS230-48DC

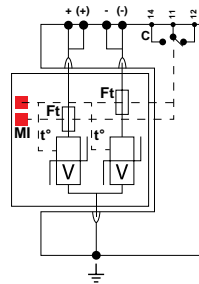
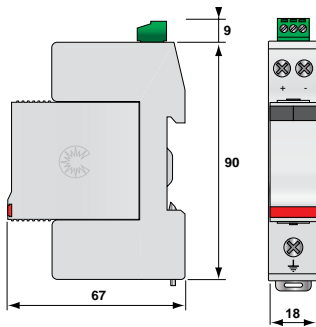
- **Type 2 DC or AC Power Surge Protector**
- **Imax : 20 - 40 kA at 8/20 μs**
- **DC Voltage from 12 to 350 V**
- **AC Voltage from 20-350 V**
- **Slim 18 mm Form Factor**
- **Individual Fault Indicator Windows**
- **UL 1449 3rd Edition Recognized**

DS2xx S-xxxDC

DC operating voltage (12, 24, 48, 75, 95, 110, 130, 220, 280, 350)
Remote signal option
Maximal discharge current

Dimensions and Electrical Diagram

(in mm)



C: Remote signaling contact
V: Varistor
Ft: Thermal fuse
t°: Thermal disconnection system

Characteristics

| CITEL Part Number | DS220S-12DC | DS220S-24DC | DS230S-48DC | DS240S-75DC | DS240S-95DC | DS240S-110DC | DS240S-130DC | DS240S-220DC | DS240S-280DC | DS240S-350DC |
|------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Nominal DC voltage | Un 12 Vdc | 24 Vdc | 48 Vdc | 75 Vdc | 95 Vdc | 110 Vdc | 130 Vdc | 220 Vdc | 280 Vdc | 350 Vdc |
| Maximum DC operating voltage | Uc 24 Vdc | 38 Vdc | 65 Vdc | 100 Vdc | 125 Vdc | 150 Vdc | 180 Vdc | 275 Vdc | 350 Vdc | 460 Vdc |
| Maximum AC operating voltage | Uc 20 Vac | 30 Vac | 50 Vac | 75 Vac | 95 Vac | 115 Vac | 150 Vac | 210 Vac | 275 Vac | 350 Vac |
| Nominal discharge current | In 10 kA | 10 kA | 15 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA | 20 kA |
| Maximal discharge current | Imax 20 kA | 20 kA | 30 kA | 40 kA | 40 kA | 40 kA | 40 kA | 40 kA | 40 kA | 40 kA |
| Protection level at In | Up-In 250 V | 250 V | 300 V | 390 V | 450 V | 500 V | 620 V | 900 V | 1200 V | 1400 V |
| Voltage protection rating | Vpr 330 V | 330 V | 330 V | 400 V | - | - | 600 V | - | - | - |

Associated Disconnection Devices

| | | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Thermal disconnectors | internal | internal | internal | internal | internal | internal | internal | internal | internal | internal |
| Fuses (if necessary) | 20A gG | 20A gG | 20A gG | 50A gG | 50A gG | 50A gG | 50A gG | 50A gG | 50A gG | 50A gG |

Mechanical Characteristics

| | |
|-------------------------|--------------------------------------------------------------------------------------------|
| Dimensions | See diagram |
| Wiring to network | By screw terminals 1.5-10mm ² (active wires) and 2.5-25mm ² (ground) |
| Disconnection indicator | 2 mechanical indicators |
| Replacement module | Pluggable module DSM2x0-xxDC |
| Remote signalling | Option (DS2x0S-xxDC) - output on changeover contact |
| Mounting | Symmetrical rail |
| Operating temperature | -40/+85°C |
| Protection class | IP 20 |
| Housing material | Thermoplastic UL94-V0 |

Standards Compliance

| | |
|-----------------------------|----------------------------------------|
| IEC 61643-11: International | Low voltage SPD - Test Class II |
| EN 61643-11 : Europe | Low voltage SPD - Test Class II |
| UL 1449 3rd Edition: USA | Type 4, for use in Type 2 applications |

Part Number

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 390111 | 390511 | 390411 | 310611 | 310311 | 310711 | 310811 | 310211 | 310511 | 310911 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|