

Surge Protectors for PV Offgrid Locations

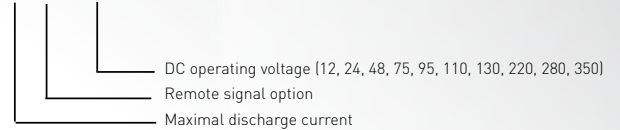
DS2x0S-xxDC Series



DS230-48DC

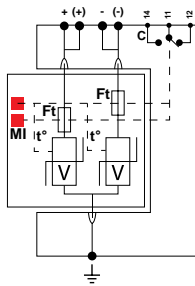
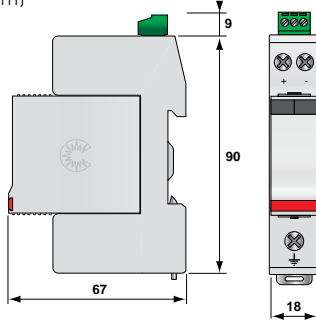
- **Type 2 DC or AC Power Surge Protector**
- **I_{max} : 20 - 40 kA at 8/20 μs**
- **DC Voltage from 12 to 350 V**
- **AC Voltage from 20-350 V**
- **Slim 18 mm Form Factor**
- **Individual Fault Indicator Windows**
- **UL 1449 3rd Edition Recognized**

DS2xx S-xxxDC



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	I _{max} 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	1,200 V	1400 V
Voltage protection rating	V _{pr} 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

