

Single- and 3-phase AC surge protector

DS40



DS40 surge protectors are used mainly for primary protection of single- and three-phase networks at the main electrical panel. They provide common-mode protection (between the active conductors and ground) and are available in one-phase, single-phase, three-phase, and three-phase+neutral versions and with a remote signalling option (DS4*S).

The DS40 is built with a plug-in module and a fixed base, which allows a easy and fast maintenance.

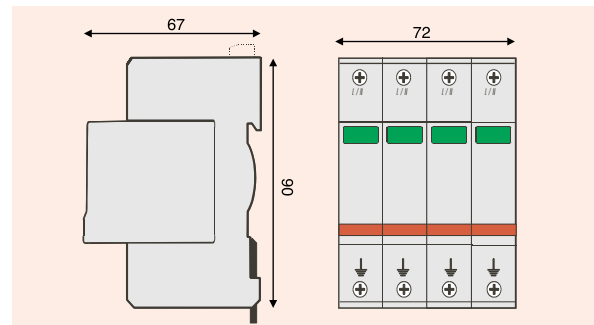
- Primary surge protector
- Discharge currents:
In: 15kA/Imax: 40 kA
- Individual pluggable module for each phase
- Remote signaling option

Common part numbers*

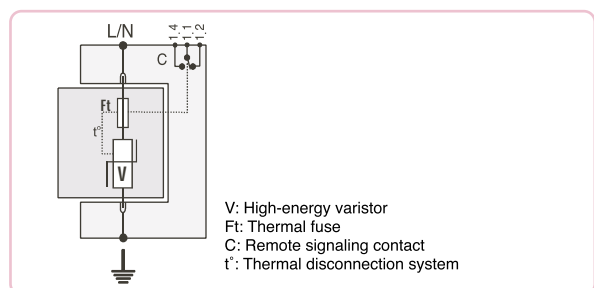
DS42-230	Single phase (L/N)
DS44-230	3-phase + Neutral (3 L/N)
DS42S-230	Single phase + remote signaling
DS44S-230	3-phase + remote signaling
DSM40-230	Plug-in 230V module
DSB1	Base for DSM40/DSM10 module
DSB1-S	Base with remote signaling

(*) Exhaustive list on page D5

Dimensions (in mm)



Electrical diagram



Characteristics

CITEL part number	DS40-400	DS40-230	DS40-120
Type of network	230/400V	230/400V	120/208V
Neutral configuration	TT-TN-IT	TT-TN	TT-TN
Nominal voltage*	Un 400 V rms	230 V rms	120 V rms
Max. operating voltage	Uc 440 V rms	250 V rms	150 V rms
Operating current leakage current at Un	Ic < 1 mA	< 1 mA	< 1 mA
Nominal discharge current 20 x 8/20µs impulses	In 15 kA	15 kA	15 kA
Maximum discharge current 1 x 8/20µs impulse	Imax 40 kA	40 kA	40 kA
Protection level residual voltage at In	Up 2 kV	1,5 kV	0,9 kV
Admissible short-circuit current	Icc 25000 A	25000 A	25000 A
Associated disconnection devices			
Thermal disconnector	Internal		
Fuses or circuit-breaker	Type gG fuse, 14x51, 50A C-curve HBC circuit-breaker, 40A		
Installation ground fault breaker	Type "S" or delayed		
Mechanical characteristics			
Dimensions	see diagram		
Connection	- by screw terminals, 4 to 25mm ² - by connection bus		
Disconnection indicator	Mechanical indicator		
Remote signaling of disconnection	Option (DS4*S)		
Mounting	Symmetrical rail (EN50022/DIN46277-3)		
Operating temperature	-40/+85 °C		
Housing material	Polycarbonate UL94V0		
Standards compliance			
IEC 61643-11	International	Low voltage SPD (Test Class II)	
NFC 61740	France	Parafoudre Basse Tension	
VDE 0675-6	Germany	Überspannungableiter (class C)	

* Other Uc voltages : 600V - 480V - 320V - 280V