



PowerSure™ DRS Series

Modular Surge Protective Device (SPD) designed to be easily installed in existing AC panelboards and control panels using standard DIN rail mounting brackets. These devices offer both normal and common surge protection up to 40 kA per phase.

Features

- Effectively handles high-energy transients on TT, TN-C, TN-S and TN-C-S three-phase power systems
- SPD rated Type 2 in accordance with EN 61643-11; Class I & II in accordance with IEC 61643-1
- Built-in thermal components disconnect SPD from the power source to avoid thermal runaway conditions
- MOV only or MOV+Gas Tube models available
- Fast response time, high surge current capability, low voltage protection levels
- Visual inspection window on each module indicates status
- 3-pole terminal provides remote status monitoring
- DIN rail mounting and plug-in module design allow for easy installation, maintenance and replacement of surge element
- 5 year warranty

General Technical Specifications

	DRS12031	DRS23031	DRS27731	DRS34631
Electrical Characteristics				
System Voltage	120/208, 127/220 VAC	230/400, 240/415 VAC	220/380, 254/440 VAC	277/480, 346/600 VAC
Type of Network	TT-TN	TT-TN	TT-TN	TT-TN
Modes of Protection	L-N; N-PE	L-N; N-PE	L-N; N-PE	L-N; N-PE
Nominal Voltage	Un-120 V	Un-230 V	Un-277 V	Un-346 V
Rated Voltage (MCOV)	Uc-150 V	Uc-320 V	Uc-320 V	Uc-420 V
Nominal Discharge Current (8 x 20 μs)	1n-20 kA	1n-20 kA	1n-20 kA	1n-20 kA
Maximum Discharge Current	Imax-40 kA	Imax-40 kA	Imax-40 kA	Imax-40 kA
Voltage Protection Level	Up-1.2 kV	Up-1.6 kV	Up-1.6 kV	Up-2.0 kV
Response Time	TS-25 ns	TS-25 ns	TS-25 ns	TS-25 ns
Relative Humidity	95%	95%	95%	95%
Isolation Resistance	Risol > 103 MV	Risol > 103 MV	Risol > 103 MV	Risol > 103 MV

Test Standards

EN 61643-11	Type 2
IEC61643-1:1998-02	Class II

Mechanical Characteristics

Dimensions (Length x Width x Height)	70.8mm x 90.5mm x 68mm
I/O Connections	By Screw Terminal: 4-25 mm2 By Connection Bus
MOV Encapsulation Material	Epoxy Resin
Disconnection Indicator	Mechanical Indicator
Status Monitoring	Remote Alarm Terminals
Mounting	Symmetrical Rail (EN50022/DIN46277-3)
Operation Temperature Range	-40°C to +85°C
Degree of Protection	IP 20
Disconnection Device	Thermal Cutoff System
Housing Material	ABS/PA UL94V0

How to Specify the Appropriate Model

Example: DRS 120 3 1 Q

Nominal Voltage (Un) (XXX)	# of Metal Oxide Varistor Modules* (X)	# of Gas Tube Modules** (X)	Higher Rated Voltage*** (Optional)
120	0	0	Q
230	1	1	
240	2		
277	3		
346	4		
480			
600			

*MOV modules are typically one module per phase and may be wired L-N, L-G or N-G.
 **Gas Tube modules typically used in the N-G mode for type TT grounding systems.
 ***Certain applications require higher rated components in order to survive frequent voltage rises, in this case order a unit with a "Q" at the end of the part number.

Replacement modules available: Order DRS + Un + M (for MOV) or G (for Gas Tube)