

## Compact DIN-mount surge filters, 20A

The DRF series are compact power surge filters designed to protect power distribution systems from externally-induced surges. Models are available for 240VAC and 120VAC. The units are constructed in a DIN 43880-compatible enclosure, allowing DIN-rail mounting in standard DIN switchboards as well as on DIN-rails within location cases and equipment. The units may also be surface-mounted, using 2 screws, by extending the DIN-rail clips outward.

The primary surge rating is for an In of 10kA, with an I<sub>max</sub> rating of 25kA. The aggregate rating (for comparison) is 43kA. Series filtering reduces let-through voltage and secondary surge currents to Category A levels suitable for most equipment.

Indicators show that power is applied to the unit, and that a protection fault exists. The unit contains a fault relay (normally-operated) that signals power failure and/or surge failure via isolated contacts. Wire connection is via touchproof screw terminals accepting up to 6mm<sup>2</sup> cable for power connections and 1.5mm<sup>2</sup> for alarm relay connections.



### FEATURES

- 3 –stage transient protector
- Isolated monitoring contacts
- Power indicator (Green)
- Fault indicator (Red)
- Inbuilt 12dB/octave filter to reduce surges and remove line noise
- Simple installation
- Easily replaceable - DIN-rail or surface mounting

### Applications

Mains supply protection (secondary)  
 Protection of DC distribution systems

### Options

6A current rating (DRF6 series)  
 120VAC, 240VAC models for AC protection

### ORDERING DETAILS

# 10138 20A 120VAC  
 # 10139 20A 240VAC

## Electrical Specifications

MODEL	DRF20-120/240
Number of ports	2
Method of mounting	DIN-rail or surface-mount
Wiring connection	Screw terminals - primary (L1/line, L2/neutral, Earth) - secondary (L1/line, L2/neutral)
Maximum continuous voltage – L1/L2	(10138) 150VAC (10139) 280VAC
Primary clamping voltage L1-L2 (L1+-L2-)	10138 – 200V 10139 – 510V
Current rating -continuous	20A RMS or DC
Maximum attenuation	>45dB @ 1MHz
Lowpass filter cutoff (-3dB)	<10kHz
Protection modes	External L1-L2, L1-E, L2 –E Internal L1-L2, L1-E, L2 –E
Service life (L1-L2, L2-E)	10kA x 15 operations @ 8/20us
Maximum surge current 8/20us L1-L2	25kA
Leakage current @ 240V	<500uA
Thermal monitoring	Primary protection components
Alarms/indicators	2-part display, isolated alarm contacts (normally-closed, 250VAC/50VDC/0.5A)
Fault Condition	Contacts change to open condition, 'REPLACE' indicator (red) illuminates.
Location Category	Protected (indoor or location case). Not suitable for outdoor location.
Termination capacity	Screw terminals – power 6mm <sup>2</sup> , alarm 1.5mm <sup>2</sup>
Enclosure rating	IP20
Cartridge Material	Polycarbonate UL 94 V-O
Standards.	IEC61643-11, AS/NZS 1768, ANSI/IEEE C62.41
Installation instructions	Supplied with unit.
Dimensions	DIN 43880 compatible 71 x 68 x 90mm (W x D X H)
Weight	350g
Environment	-10 to 70°C, 10 to 90%RH (non-condensing)
Warranty	2 years, workmanship and materials