Roxburgh DRF Series EMI Filters

Single-phase General Purpose EMI Filters - DIN Rail Mount

The Roxburgh DRF (DIN Rail Filter) Series single-stage filters are specifically designed as line filters for 120/240 VAC devices. Provides good performance for both common mode and differential mode interference and are rated up to 250V. The DRF filters snap on to 35mm DIN rail for ease of mounting in cabinet hardware.

Features

- 0-250 VAC/DC, 0-60 Hz, single-phase
- 1A - 10A models
- Molded plastic case
- Screw terminals
- 35mm DIN rail mount

Filter performance curves are available on item page at www.AutomationDirect.com

Applications

- Ideally suited for products that must conform to part 15, FCC regulations
- Digital electronics
- Control power
- Measuring instruments
- Industrial and commercial controls and instrumentation

Standards and Certifications

CE RoHS 2002/95/EC

DRF Series Filters		
Part Number	***Price***	***Description***
DRF01	$56.00	EMI Input Filter 120/240VAC, 1-ph, 1A
DRF03	$56.00	EMI Input Filter 120/240VAC, 1-ph, 3A
DRF06	$56.00	EMI Input Filter 120/240VAC, 1-ph, 6A
DRF08	$53.00	EMI Input Filter 120/240VAC, 1-ph, 8A
DRF10	$56.00	EMI Input Filter 120/240VAC, 1-ph, 10A

General Specifications	
Voltage Rating	0-240V AC/DC, 0-60 Hz
Voltage Max.	250V
Voltage Withstand	2100V AC/1 min
Phase	1
UL/IEC Pollution Class	Degree II
Humidity	93% RH (non-condensing)
Overload Current	135% 2 hrs, 150% 60s
Insulation Resistance	500VDC >3.5 M Ohms
Climate Class (IEC 60068-1)	-25/85/21
Temperature Rise	45°C
Temperature Rating	-13 to 185°F, -25°C to 85°C
Flammability (UL94)	V-2
Material	Plastic Polyamide
Altitude*	1000m (3000m with derating)
Mounting Clearance	>50mm Gap
Agency Approval*	CE (EN60939-1)

** Derate 1% per 100m after 1000m; Max 3000m.*

***To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific component part number web page.*

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Specifications					
Parameter	*DRF01*	*DRF03*	*DRF06*	*DRF08*	*DRF10*
Max. Power (kW)	0.2	0.7	1.4	1.9	2.4
Current Rating (A)	1	3	6	8	10
SCCR Rating (kA)	5				
Ingress Protection	IP20				
Terminal Style	Screw				
Torque (lb·in [N·m])	4.4 [0.5]				
Max. Wire Gauge (mm² [AWG])	2.5 [14]				
Operational Leakage Current (mA)	0.75				
Total Resistance, Line to Load (mΩ)	640	71	19	15	12
Residual Voltage (V@5s)	1V@5s				
Heat Dissipation (W)	0.64		0.66	0.96	1.2
Weight, lb [kg]	0.23 [0.105]	0.21 [0.098]	0.21 [0.099]	0.23 [0.105]	0.22 [0.10]

Temperature Derating Chart above 40°C*									
Continuous Ampacity at Ambient °C	*Part Number*	*Ambient °C*								
		40	*45*	*50*	*55*	*60*	*65*	*70*	*75*	*80*
	DRF01	1.00	0.93	0.87	0.79	0.72	0.64	0.55	0.44	0.31
	DRF03	3.00	2.80	2.60	2.38	2.15	1.91	1.64	1.33	0.93
	DRF06	6.00	5.60	5.19	4.76	4.31	3.82	3.28	2.65	1.86
	DRF08	8.00	7.47	6.92	6.35	5.74	5.09	4.37	3.54	2.48
	DRF10	10.00	9.34	8.65	7.94	7.18	6.36	5.46	4.42	3.10

** NOTE: Using thes filters above 40C would comprise a non-UL application of device.*

Dimensions

mm [inches]