

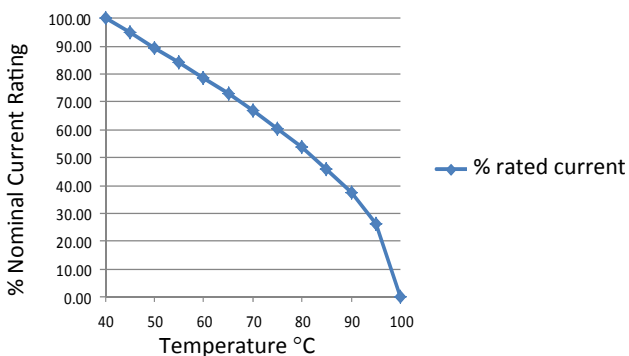
RES90 Chassis Mounted Filter

Very High Differential and Common Mode

Roxburgh's RES90 series is a multi-stage EMC filter with very high differential and common mode attenuation. Featuring excellent attenuation performance this series is suitable for noisy applications where increased filter performance is required.



**Temperature Derating Curve for EMC Filters
Rated at 40°C Ambient and 100°C Maximum**



Call us on:
+44 (0) 1724 273200

Features:

- Multi-stage
- Very high differential and common mode attenuation
- Excellent attenuation performance
- UL approved E191581
- For use from DC to 400Hz
- 1 Amp to 30 Amp

Benefits:

- Compact size for rated current
- Fast-on, screw or wire terminations
- Quick and easy mounting
- Available from UK stock

Application Examples:

- Lighting
- Drives
- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Building automation
- Machinery
- Electronic data/communication processing equipment
- Office automation

Full technical specification on page 2

Performance curves on page 3

Other options in this range on page 4

DEM Manufacturing
Deltron Emcon House
Hargreaves Way
Sawcliffe Industrial Park
Scunthorpe, North Lincolnshire.
DN15 8RF



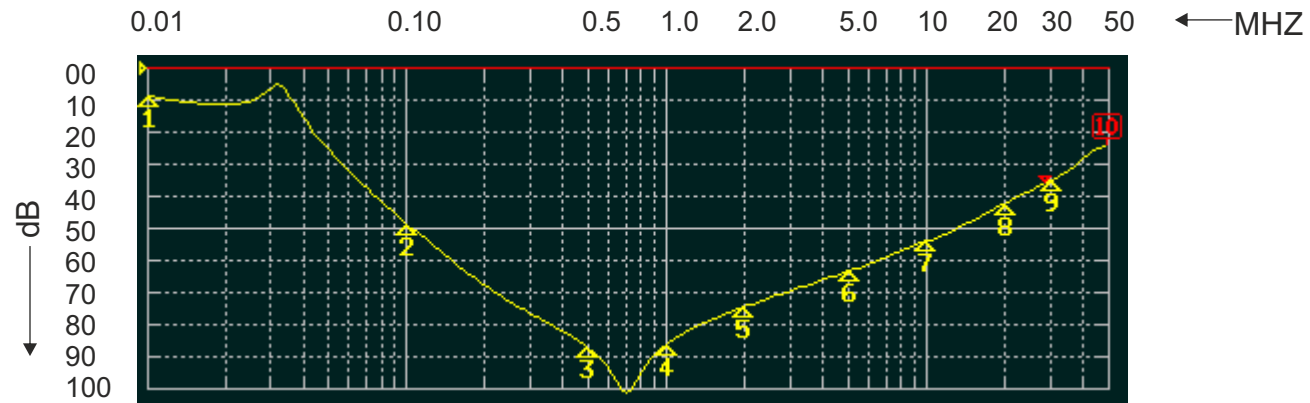
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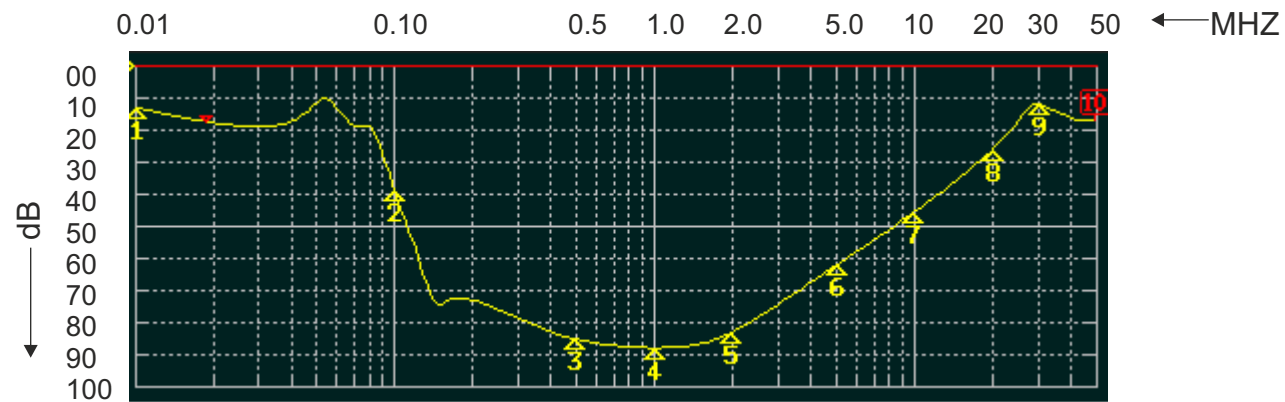
Circuit diagram:		Dimensions(mm):						
Electrical parameters:								
Rated Voltage:	120/250VAC	Filter parameters:						
Rated Current at an ambient temp:	20A@40°C							
Operating Frequency:	50/60Hz							
Climatic Class(IEC60068-1):	25/100/21							
Operational Leakage current: (at 250VAC/50Hz and Total C +/-20%)	1.12mA max (RES90F20-M 0mA)							
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)	0.65mA max (RES90F20-M 0mA)	Total Inductance(L-L'/N-N'):		5.4mH +50%,-35%				
Test Voltage(100%)for 2 sec:		Total Capacitance(L-N/L'-N'):		3uF +/-20%				
	L-N:	Total Capacitance(L/N-PE) (RES90F20-M):		22nF +/-20% (0nF)				
	L/N-PE:	Total Resistance(L-N/L'-N'):		220KΩ +/-10%				
	2250VDC/20mA	Weight(Approximate):		515g				
		Safety certification		Technical Specification				
		UL	☒	CSA	☒	compiled by	Jay Zhang	2020-8-5
		ENEC	☒	CQC	☐	reviewed by	Pallas Wang	2020-8-5
		CE	☒	VDE	☐	approved by	Henry Huang	2020-8-5
		Part		RES90F20		single-phase emc filter		
		Number (Alternate RES90F20-M - no Y caps)		stage marker		V1.03		

ROXBURGH EMC
FILTER INSERTION LOSS CHARACTERISTICS
CISPR 17 - 50 OHM METHOD

RES90F20



COMMON MODE



DIFFERENTIAL MODE



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Very High Differential and Common Mode

Options Available:

Part Number	Rated Current @40°C A	Leakage Current @ 230V/50Hz mA	Inductance ΣL mH	Capacitance ΣCx uF	Capacitance ΣCy nF	Resistance ΣR K Ω	Connection Type	
								
RES90F01	1	0.5	40	0.66	6.4	680	F	W
RES90F03	3	0.5	28	0.99	6.4	470	F	W
RES90F06	6	0.67	16	1.41	8.6	330	F	W
RES90F10	10	0.67	16	1.41	8.6	330	F	W
RES90F16	16	1.02	08	3.00	22	220	F	W
RES90F20	20	1.02	5.4	3.00	22	220	F	
RES90S20	20	1.02	5.4	3.00	22	220		S
RES90S30	30	1.02	3.0	3.00	22	220		S

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