

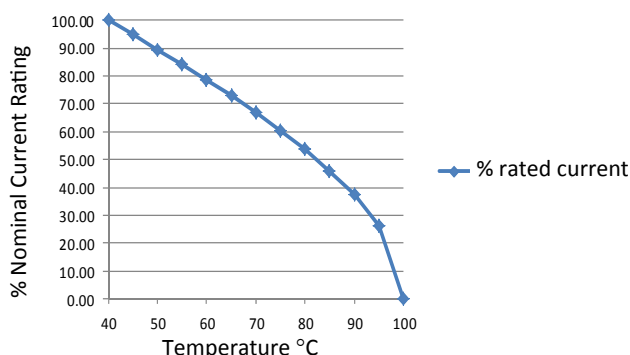
RES20 Chassis Mounted Filter

High Differential Mode

The RES20 series of single phase filters from Roxburgh are designed for quick and easy chassis mounting. Featuring high differential attenuation the RES20 series is suitable for a broad range of applications.



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



Call us on:

Tel: +44 (0) 1724 273200

Features:

- 1 Amp to 60 Amp
- Single phase high differential attenuation
- UL approved E191581
- For use from DC to 400Hz

Benefits:

- Compact size for rated current
- Fast-on, screw or wire terminations
- Quick and Easy Mounting

Application Examples:

- Lighting
- 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

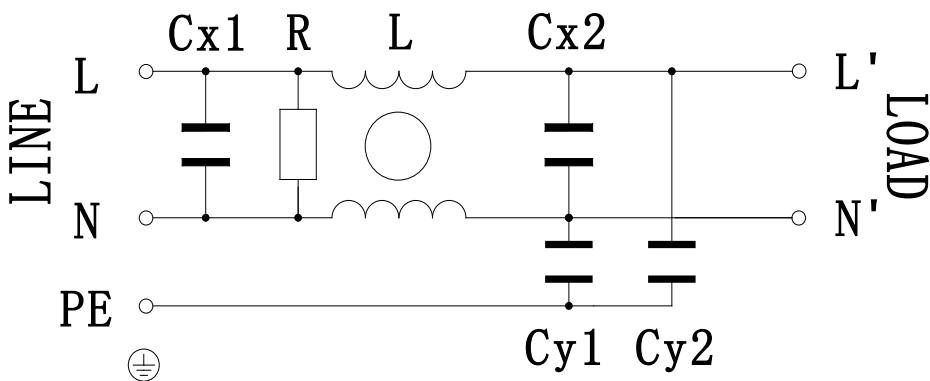
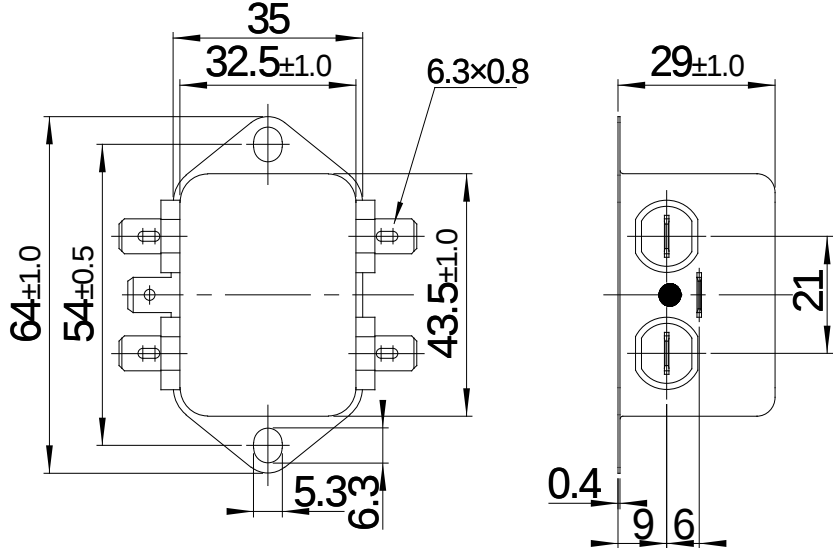
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Hargreaves Way
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Scunthorpe, North Lincolnshire.
DN15 8RF



Tel: 44 (0) 1724 273200

Email: sales@dem-uk.com

Web: www.dem-uk.com/roxburgh

Circuit diagram:		Dimensions(mm):					
							
Electrical parameters:							
Rated Voltage:		120/250VAC					
Rated Current at an ambient temp:		12A@40°C					
Operating Frequency:		50/60Hz					
Climatic Class(IEC60068-1):		25/100/21					
Operational Leakage current: (at 250VAC/50Hz and Total C +/-20%)		0.8mA max (RES20F12-M 0mA)					
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)		0.46mA max (RES20F12-M 0mA)					
Test Voltage(100%)for 2 sec:							
L-N:		1100VDC/20mA					
L/N-PE:		2250VDC/20mA					
Filter parameters:							
Total Inductance(L-L'/N-N'):				0.7mH +50%,-35%			
Total Capacitance(L-N/L'-N'):				0.3uF +/-20%			
Total Capacitance(L/N-PE) (RES20F12-M):				9.4nF +/-20% (0nF)			
Total Resistance(L-N/L'-N'):				1MΩ +/-10%			
Weight(Approximate):				75g			
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 RES20F12				single-phase emc filter			
Number (Alternate RES20F12-M - no Y caps)				stage marker		V1.03	

ROXBURGH

EMC

0 2 2 200

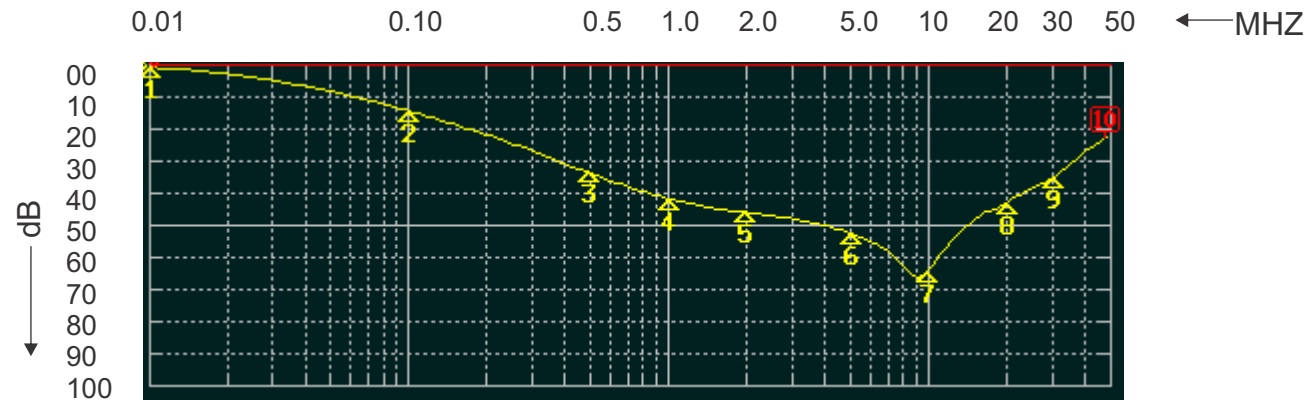
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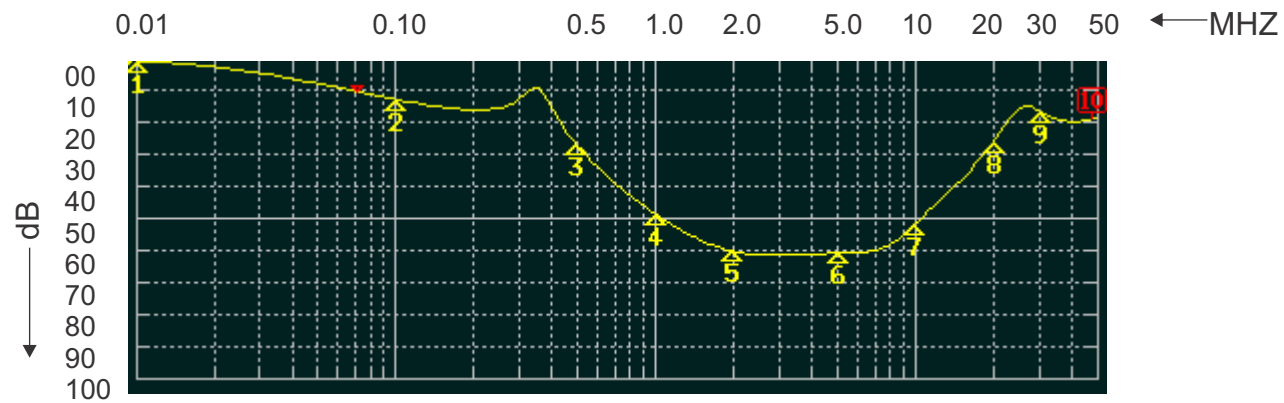
ROXBURGH EMC

FILTER INSERTION LOSS CHARACTERISTICS CISPR 17 - 50 OHM METHOD

RES20F12



COMMON MODE



DIFFERENTIAL MODE



RES20 Chassis Mounted Filter

High Differential 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	
								
RES20F01	1	0.74	12	0.3	9.4	1000	F	W
RES20F03	3	0.74	2.5	0.3	9.4	1000	F	W
RES20F06	6	0.74	1	0.3	9.4	1000	F	W
RES20F10	10	0.74	0.8	0.3	9.4	1000	F	W
RES20F12	12	0.74	0.7	0.3	9.4	1000	F	W
RES20F16	16	0.74	0.65	0.3	9.4	1000	F	W
RES20F20	20	0.74	0.6	0.3	9.4	1000	F	W
RES20S20	20	0.74	0.6	0.3	9.4	1000		W S
RES20S30	30	0.87	0.67	0.94	20	470		S
RES20S60	60	0.87	1	3	20	220		S

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