

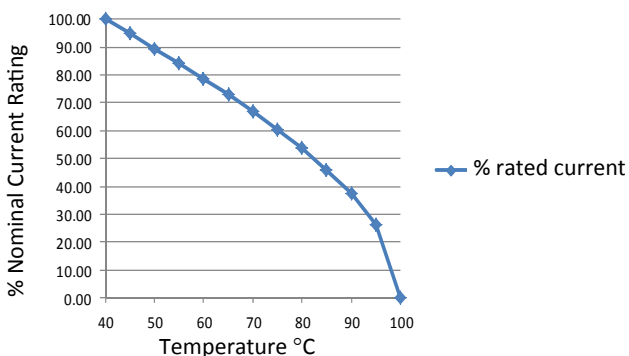
# RES90 Chassis Mounted Filter

## 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

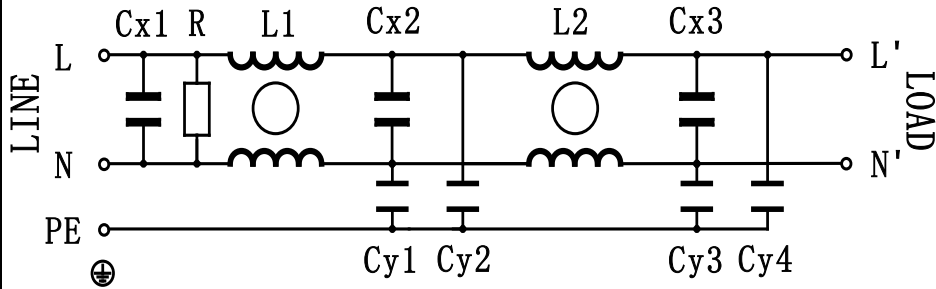
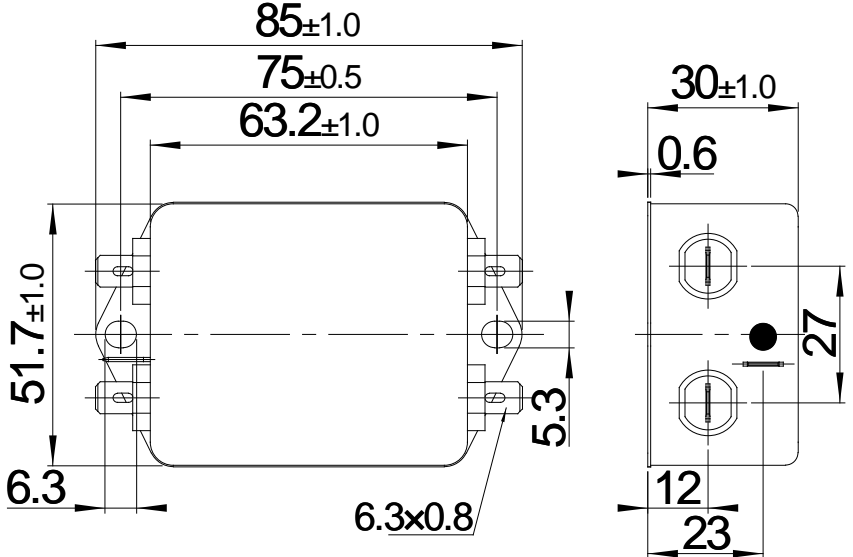

**ROXBURGH** *EMC*



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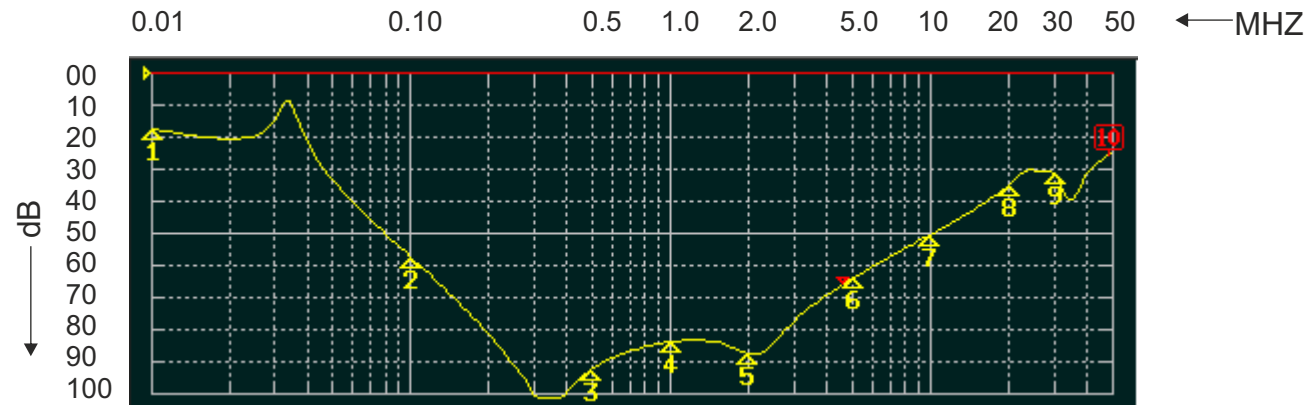
Web: [www.dem-uk.com/roxburgh](http://www.dem-uk.com/roxburgh)

Circuit diagram:		Dimensions(mm):						
								
Electrical parameters:		Filter parameters:						
Rated Voltage:	120/250VAC	Total Inductance(L-L'/N-N'):		16mH +50%,-35%				
Rated Current at an ambient temp:	6A@40°C	Total Capacitance(L-N/L'-N'):		1.41uF +/-20%				
Operating Frequency:	50/60Hz	Total Capacitance(L/N-PE) (RES90F06-M):		8.6nF +/-20% (0nF)				
Climatic Class(IEC60068-1):	25/100/21	Total Resistance(L-N/L'-N'):		330KΩ +/-10%				
Operational Leakage current: (at 250VAC/50Hz and Total C +/-20%)	0.73mA max (RES90F06-M 0mA)	Weight(Approximate):		205g				
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)	0.43mA max (RES90F06-M 0mA)	Safety certification			Technical Specification			
Test Voltage(100%)for 2 sec:  L-N: L/N-PE:		UL	<input checked="" type="checkbox"/>	CSA	<input checked="" type="checkbox"/>	compiled by	Jay Zhang	2020-8-5
	1100VDC/20mA	ENEC	<input checked="" type="checkbox"/>	CQC	<input type="checkbox"/>	reviewed by	Pallas Wang	2020-8-5
	2250VDC/20mA	CE	<input checked="" type="checkbox"/>	VDE	<input type="checkbox"/>	approved by	Henry Huang	2020-8-5
 <div> +44 (0)1724 273200  sales@dem-uk.com  www.dem-uk.com/roxburgh </div>		Part <b>RES90F06</b>				single-phase emc filter		
		Number (Alternate RES90F06-M - no Y caps)				stage marker	V1.03	

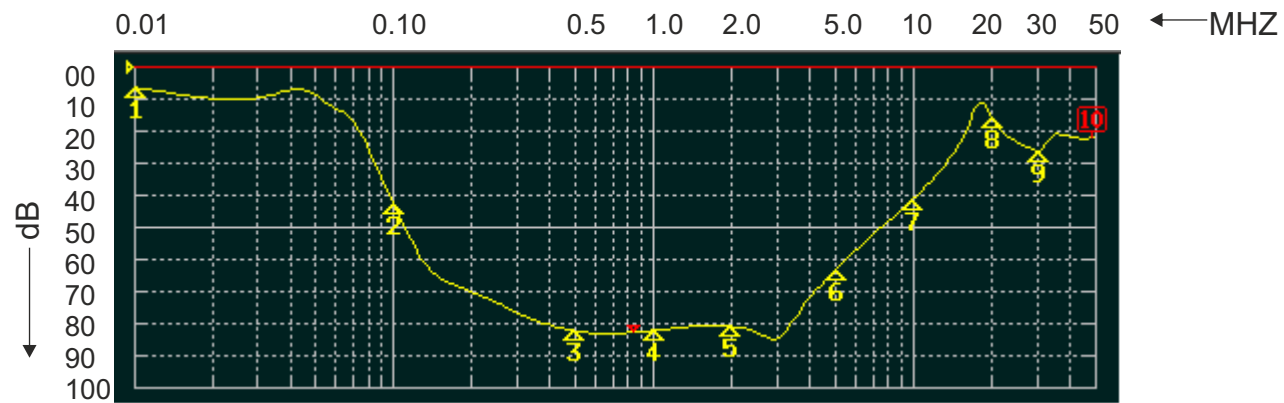
# ROXBURGH EMC

## FILTER INSERTION LOSS CHARACTERISTICS CISPR 17 - 50 OHM METHOD

RES90F06



COMMON MODE





DIFFERENTIAL MODE



# RES90 Chassis Mounted Filter

## Very High Differential and Common Mode

### Options Available:

Part Number	Rated Current @40°C A	Leakage Current @ 230V/50Hz mA	Inductance $\Sigma L$ mH	Capacitance $\Sigma Cx$ uF	Capacitance $\Sigma Cy$ nF	Resistance $\Sigma R$ K $\Omega$	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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