

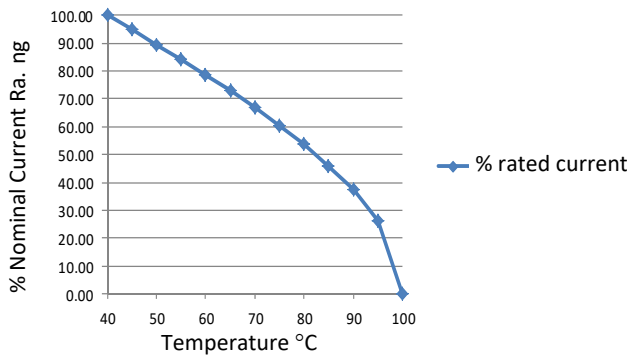
# RES20 Chassis Mounted Filter

## 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**

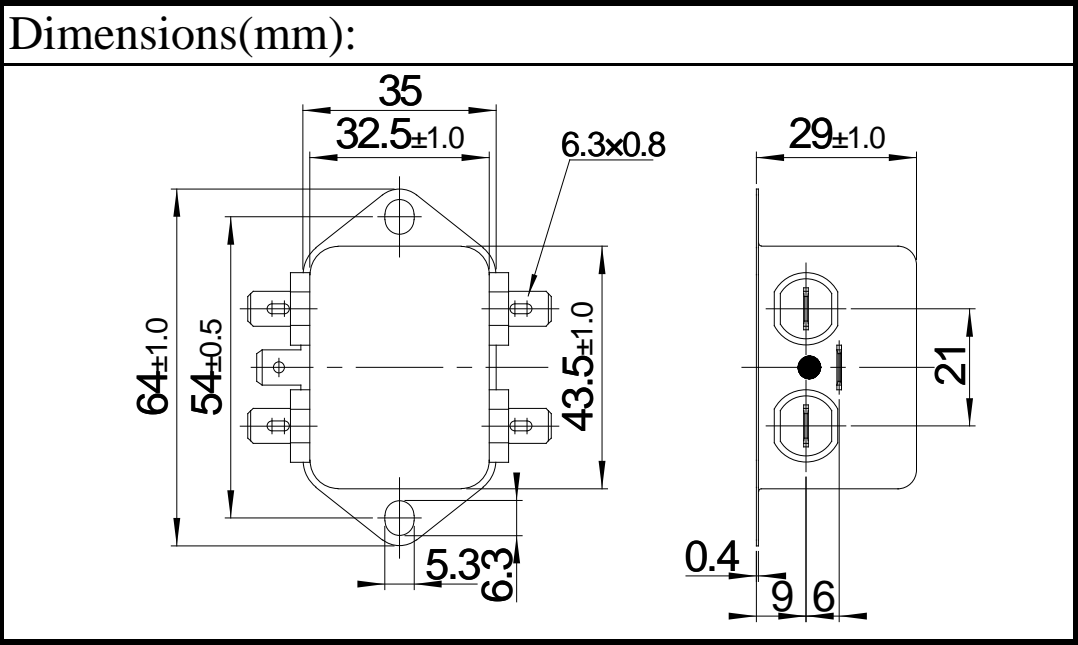
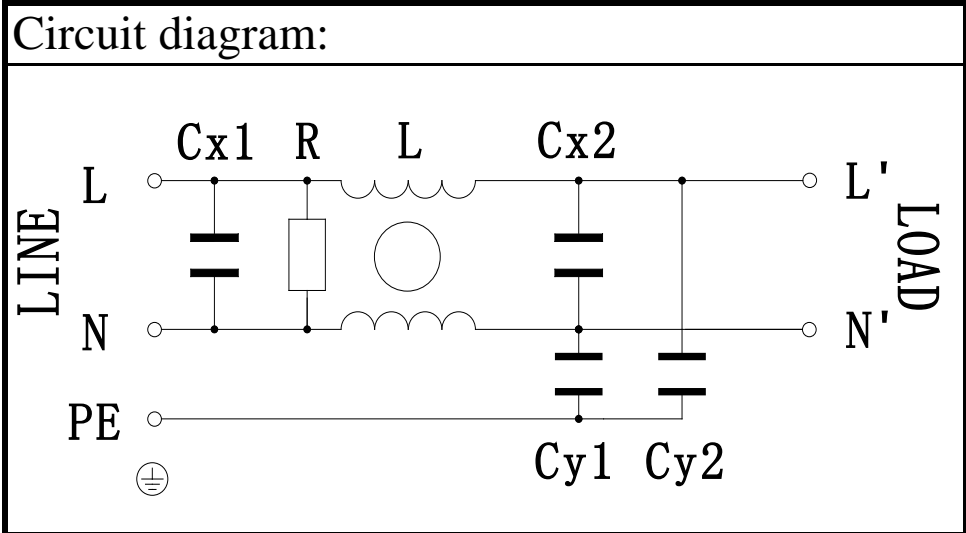
**Other options in this range on page 4**

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



Tel: +44 (0) 1724 273200  
Email: sales@dem-uk.com

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



**Electrical parameters:**

Rated Voltage:	120/250VAC
Rated Current at an ambient temp:	6A@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 (RES20F06-M 0mA)
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)	0.46mA max (RES20F06-M 0mA)
Test Voltage(100%)for 2 sec:	L-N:
	L/N-PE:
	1100VDC/20mA
	2250VDC/20mA

**Filter parameters:**

Total Inductance(L-L'/N-N'):	1mH +50%,-35%
Total Capacitance(L-N/L'-N'):	0.3uF +/-20%
Total Capacitance(L/N-PE) (RES20F06-M):	9.4nF +/-20% (0nF)
Total Resistance(L-N/L'-N'):	1MΩ +/-10%
Weight(Approximate):	70g

Safety certification				Technical Specification		
UL	<input checked="" type="checkbox"/>	CSA	<input checked="" type="checkbox"/>	compiled by	Jay Zhang	2020-8-5
ENEC	<input checked="" type="checkbox"/>	CQC	<input type="checkbox"/>	reviewed by	Pallas Wang	2020-8-5
CE	<input checked="" type="checkbox"/>	VDE	<input type="checkbox"/>	approved by	Henry Huang	2020-8-5

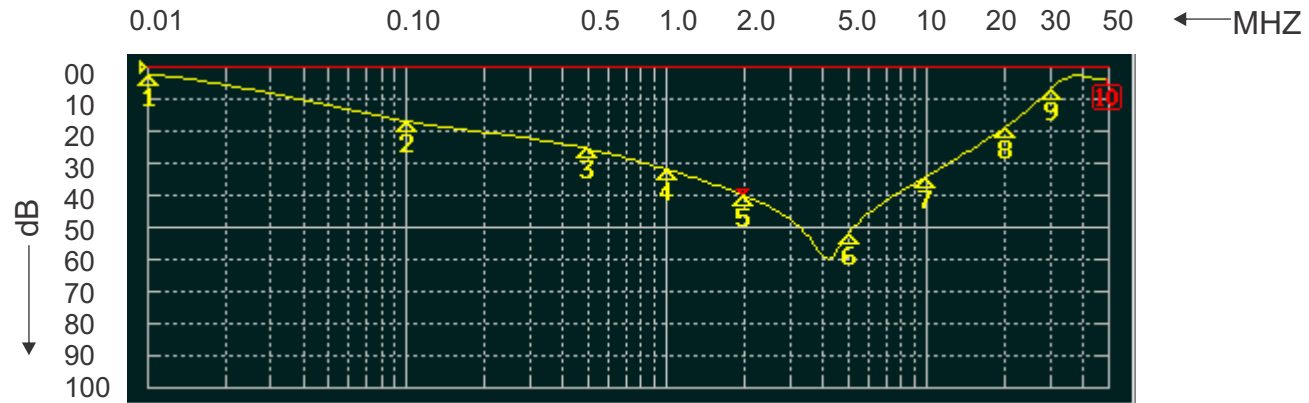
**ROXBURGH EMC**  +44 (0)1724 273200  
sales@dem-uk.com  
www.dem-uk.com/roxburgh

Part **RES20F06**  
Number (Alternate RES20F06-M - no Y caps)

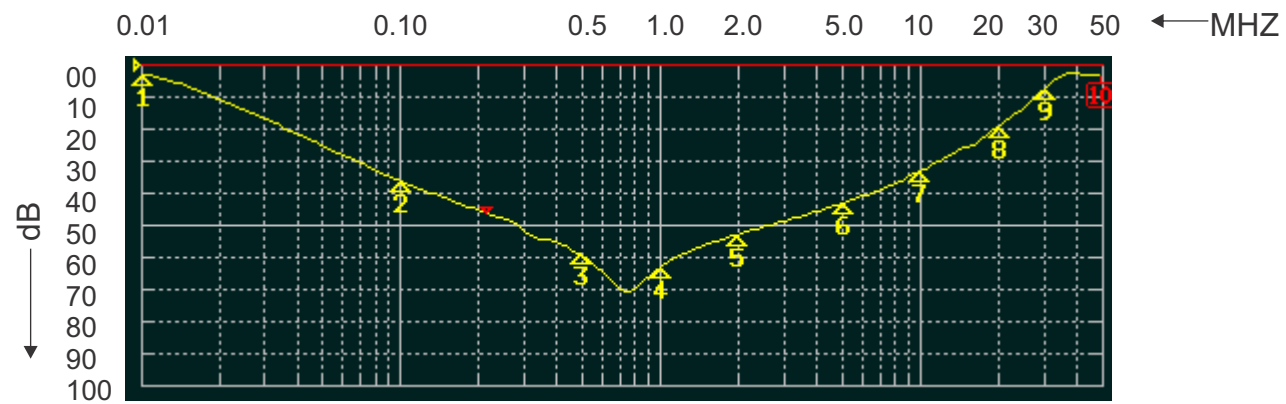
single-phase emc filter  
stage marker V1.03

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

**RES20F06**



COMMON MODE



DIFFERENTIAL MODE



# RES20 Chassis Mounted Filter

## High Differential Mode

### Options Available:

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



Call us on:

Tel: +44 (0) 1724 273200



**DEM Manufacturing**

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

Tel: +44 (0) 1724 273200

Email: [sales@dem-uk.com](mailto:sales@dem-uk.com)

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