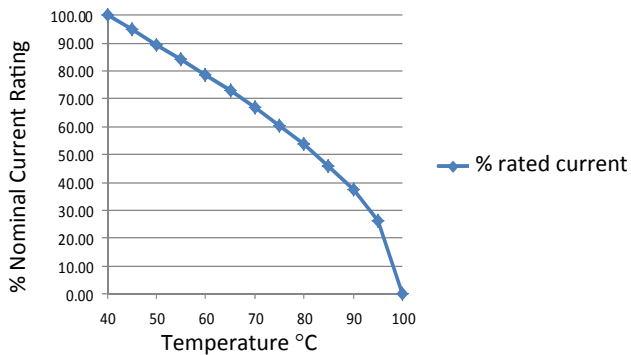


# RES20 Chassis Mounted Filter High Differential Mode

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**  
**+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

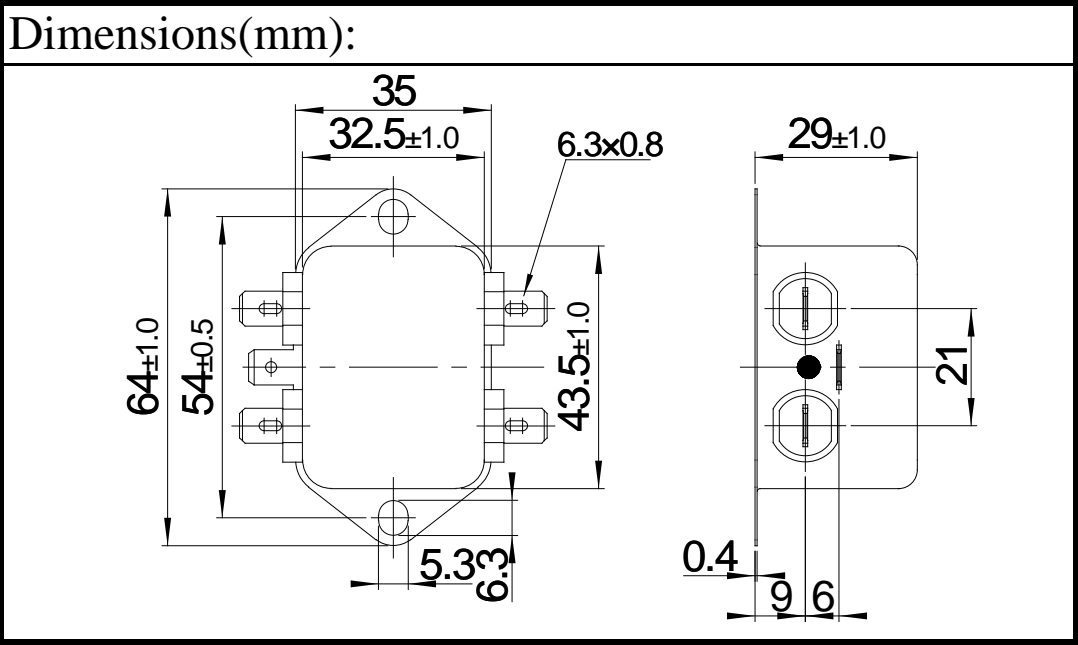
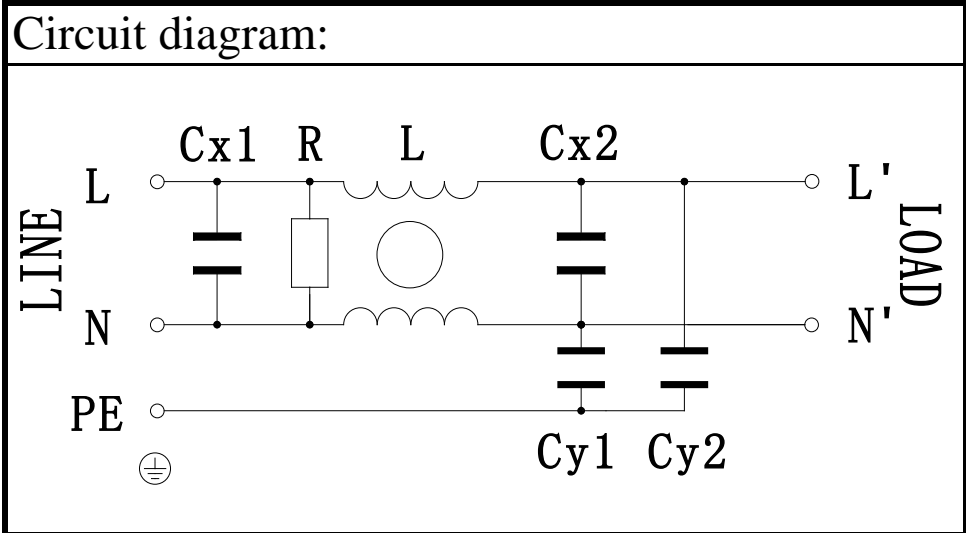
Deltron Emcon House  
Hargreaves Way  
Sawcliffe Industrial Park  
Scunthorpe, North Lincolnshire.  
DN15 8RF



Tel: +44 (0) 1724 273200

Email: sales@dem-uk.com

Web: www.dem-uk.com/roxburgh



**Electrical parameters:**

Rated Voltage:	120/250VAC
Rated Current at an ambient temp:	3A@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 (RES20F03-M 0mA)
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)	0.46mA max (RES20F03-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'):	2.5mH +50%,-35%
Total Capacitance(L-N/L'-N'):	0.3uF +/-20%
Total Capacitance(L/N-PE) (RES20F03-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

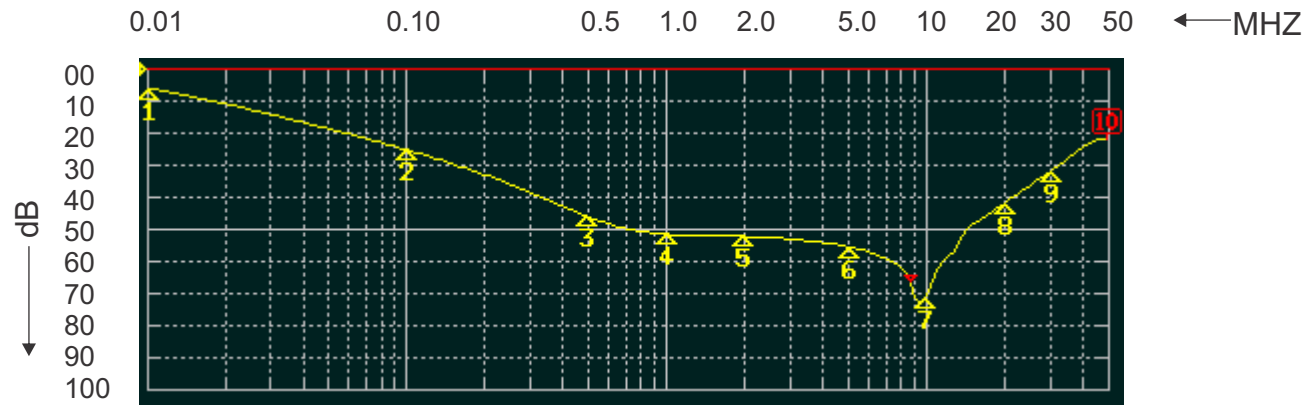
**ROXBURGH EMC**  +44 (0)1724 273200  
sales@dem-uk.com  
www.dem-uk.com/roxburgh

Part **RES20F03**  
Number (Alternate RES20F03-M - no Y caps)

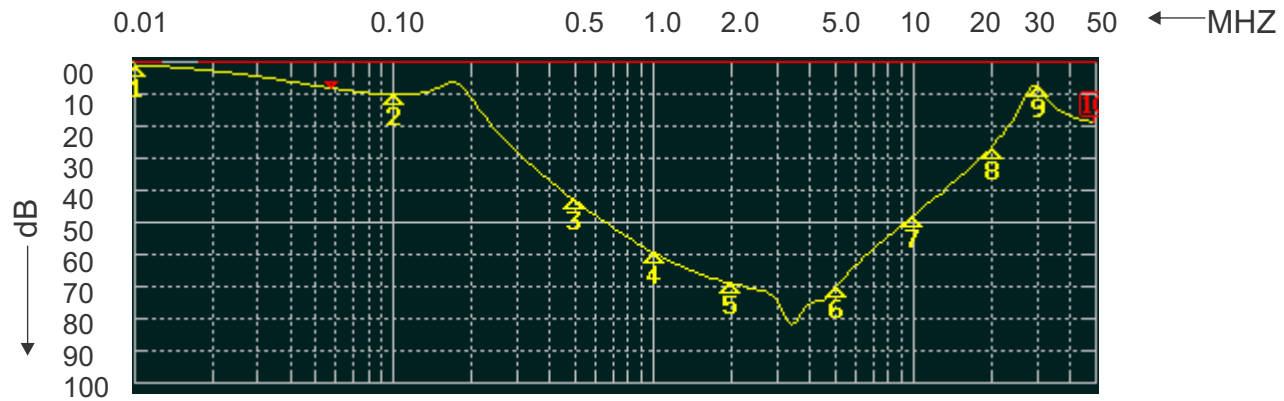
single-phase emc filter
stage marker V1.03

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

**RES20F03**



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 $\Sigma L$ mH	Capacitance $\Sigma Cx$ uF	Capacitance $\Sigma Cy$ nF	Resistance $\Sigma R$ K $\Omega$	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	1.5	20	220			S



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