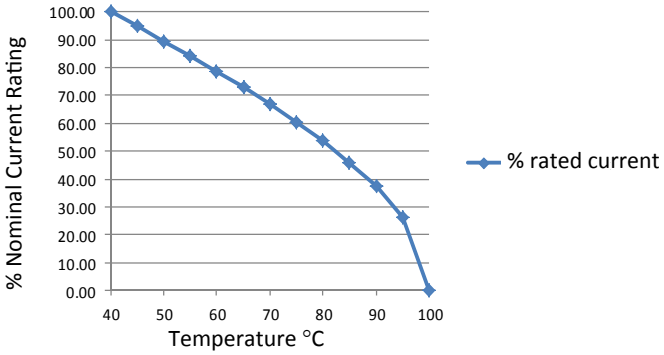
RES80 Chassis Mounted Filter
Multi-Stage, High Differential and High Common Mode

The RES80 series of multi-stage EMC filters from Roxburgh are designed for quick and easy chassis mounting. Featuring high differential mode and high common mode attenuation, this series has good low frequency attenuation.

These general purpose filters are suitable for a broad range of applications including noisy environments where increased filter performance is required.

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



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Features:

- Multi-stage
- High differential and high common mode attenuation
- Good low frequency attenuation
- UL approved E191581
- For use from DC to 400Hz
- 1 Amp to 16 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

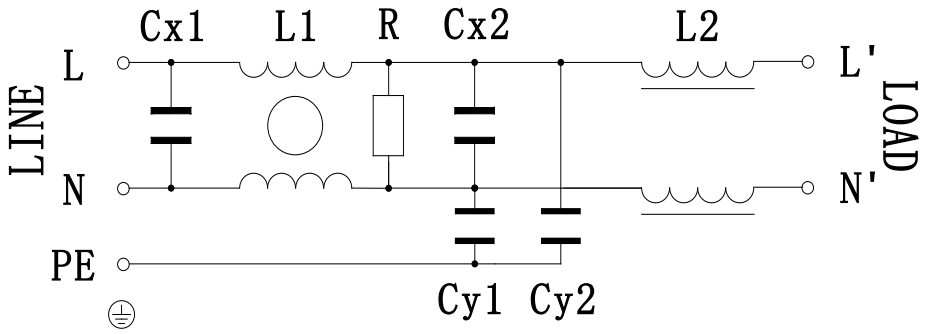
Performance curves on page 3

Other options in this range on page 4

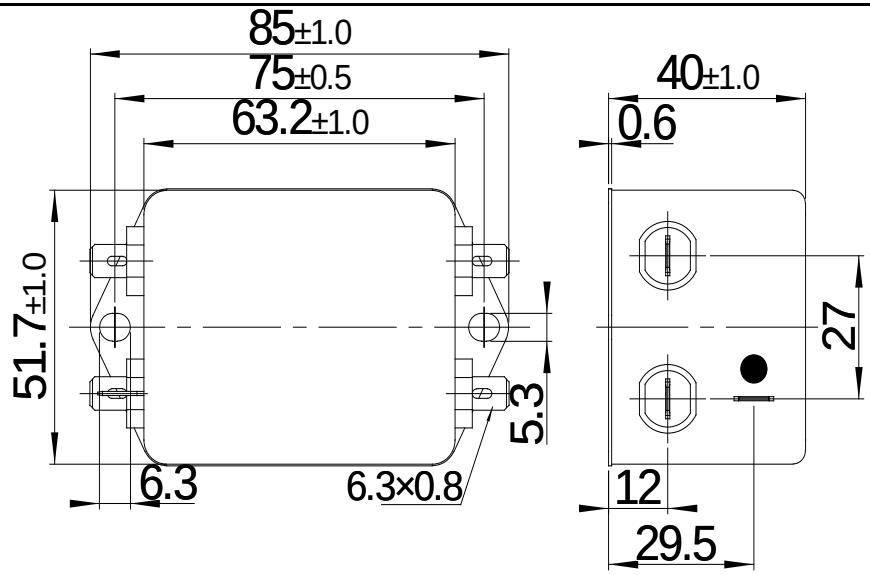
DEM Manufacturing
Deltron Emcon House
Hargreaves Way
Sawcliffe Industrial Park
Scunthorpe, North Lincolnshire.
DN15 8RF

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:	3A@40℃
Operating Frequency:	50/60Hz
Climatic Class(IEC60068-1):	25/100/21
Operational Leakage current: (at 250VAC/50Hz and Total C +/-20%)	0.8mA max (RES80F03-M 0mA)
Operational Leakage current: (at 120VAC/60Hz and Total C +/-20%)	0.46mA max (RES80F03-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'):	9.96mH +50%,-35%
Total Capacitance(L-N/L'-N'):	0.94uF +/-20%
Total Capacitance(L/N-PE) (RES80F03-M):	9.4nF +/-20% (0nF)
Total Resistance(L-N/L'-N'):	470KΩ +/-10%
Weight(Approximate):	240g

Safety certification

UL	☑	CSA	☑
ENEC	☑	CQC	☐
CE	☑	VDE	☐

Technical Specification

compiled by	Jay Zhang	2020-8-5
reviewed by	Pallas Wang	2020-8-5
approved by	Henry Huang	2020-8-5

ROXBURGH EMC
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Part Number (Alternate RES80F03-M - no Y caps) **RES80F03**

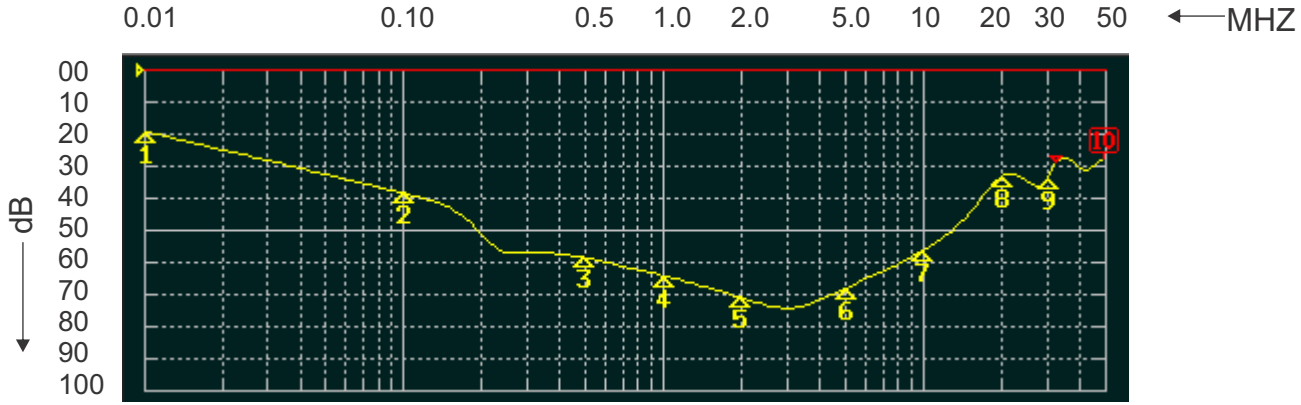
single-phase emc filter

stage marker V1.03

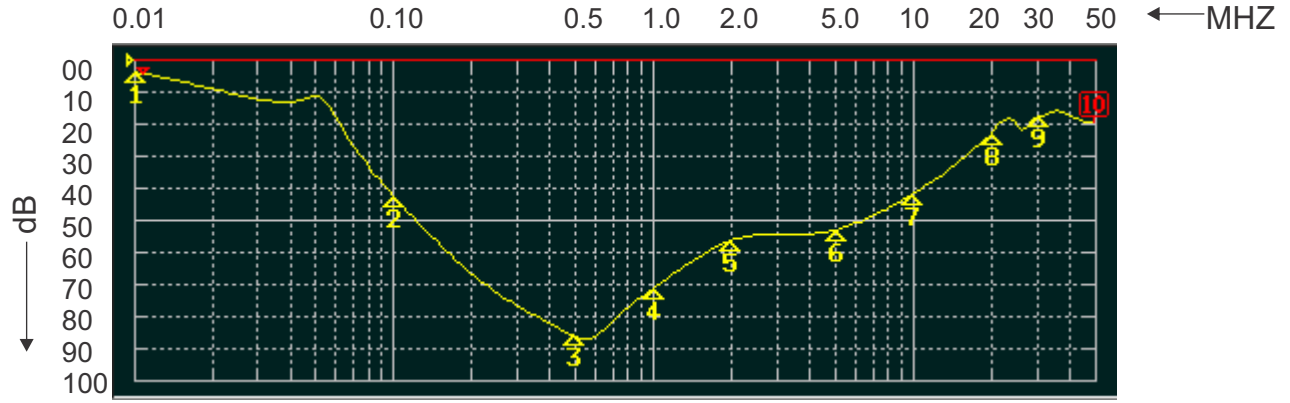
ROXBURGH EMC

FILTER INSERTION LOSS CHARACTERISTICS
CISPR 17 - 50 OHM METHOD

RES80F03



COMMON MODE



DIFFERENTIAL MODE

RES80 Chassis Mounted Filter
Multi-Stage, High Differential and High Common Mode

Options Available:

Part Number	Rated Current @40°C A	Leakage Current @ 230V/50Hz mA	Inductance ∑L mH	Capacitance ∑Cx uF	Capacitance ∑Cy nF	Resistance ∑R KΩ	Connection Type		
									
RES80F01	1	0.73	22.4	0.66	9.4	1000	F	W	
RES80F03	3	0.73	9.96	0.94	9.4	470	F	W	
RES80F06	6	0.73	7.91	2	9.4	220	F	W	
RES80F10	10	0.73	4.56	2	9.4	220	F	W	
RES80F12	12	0.73	3.30	2	9.4	220	F	W	
RES80F16	16	0.73	2.84	2	9.4	220	F	W	S

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