

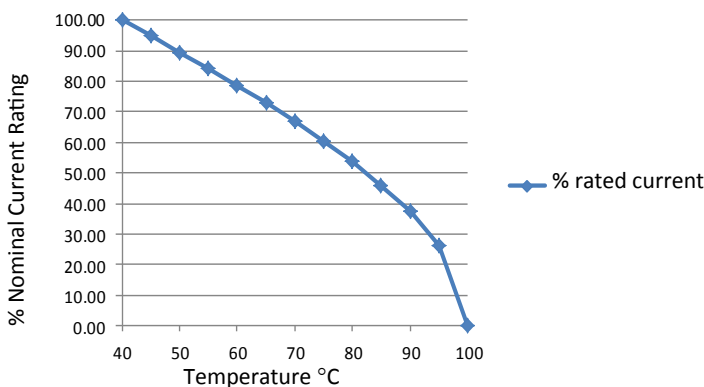
# RES30-M High Performance EMI Filter

## Medical Applications

Roxburgh EMC's RES30-M range are single phase filters, designed specifically for the medical industry. They offer a high attenuation performance and are well suited for particularly noisy applications. There are ten variations to select from with an operating frequency from dc to 400Hz.



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



Call us on:  
Tel: +44 (0) 1724 273228

### Features:

- Single Phase
- High Attenuation Performance
- 1 Amp to 30 Amp Options
- UL Approved E191581

### Benefits:

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

### Applications:

These filters are designed for applications within the **medical industry**

**Full technical specification on page 2**

**Other options in this range on page 3**

**DEM Manufacturing**  
Deltron Emcon House  
Hargreaves Way  
Sawcliffe Industrial Park  
Scunthorpe, North Lincolnshire.  
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RES30F01

Rev. 0

**CHARACTERISTICS:**

Rated Voltage:	250VAC max
Rated Current at Ambient:	1A @ 40°C
Operating Frequency:	DC-60HZ
Climatic Class (IEC60068-1):	25/100/21
Temperature Range:	-25°C to +100°C
Over load Current:	1.5 x Rated Ct. for 1 Min

Operational Leakage current : ( at 230VAC and Total C +/-20%)	0.002 mA max
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Worst case Leakage current : ( N interrupted and Total C +/-20%)	<0.68 mA max
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DCR @ 25°C (+/-25%) :	325 mΩ
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Test Volatge (100%) for 2 sec:-	P-P:	1500VDC
	P-GND:	3000VDC

Ingress Protection:	IP 20
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Weight (Approximate):	60 gr
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**FILTER PARAMETERS:**

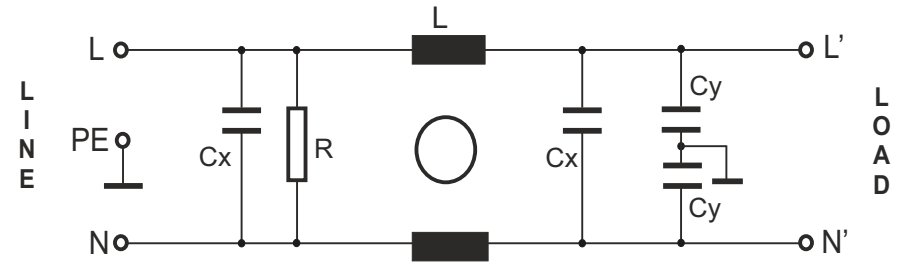
Total Inductance (P-P'+N-N') @10KHz:	20mH +50%,-30%
Total Capacitance (P-P/P-N) @1KHz:	0.44μF +/- -20%
Total Capacitance (P/N-GND) @1KHz:	4.4nF +/- -20%
Total Resistance (P-P/P-N):	1M Ω +/- -10%
Total Resistance (P/N-GND):	

**APPROVALS:** REACH  
RoHS  
UL



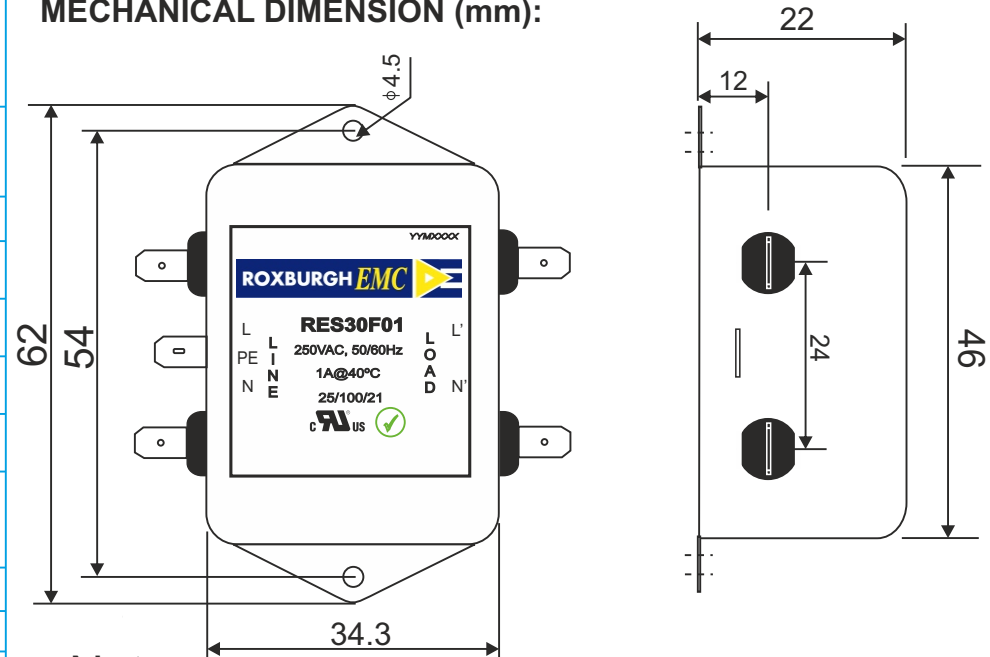
APPROVED BY AJAY  
Date:25-04-2014

**CIRCUIT DIAGRAM:**



Y-capacitors not included in -M versions designed for medical applications.

**MECHANICAL DIMENSION (mm):**



**Note:**

Housing matl. Fe with Ni Plated  
Fast-On Terminal ( 6.38 x 0.8mm)  
Connections

TOLERANCE: +/-1.0 mm






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# RES30-M High Performance EMI Filter

## Medical Applications

### Options Available:

Part Number	Rated Current @40°C A	Leakage Current @ 230V/50Hz mA	Inductance $\Sigma L$ mH	Capacitance $\Sigma Cx$ uF	Resistance $\Sigma R$ K $\Omega$	Connection Type		
								
RES30F01-M	1	0.002	20	0.44	1000	F	W	
RES30F03-M	3	0.002	14	0.66	1000	F	W	
RES30F04-M	4	0.002	14	0.66	1000	F	W	
RES30F06-M	6	0.002	8	0.94	680	F	W	
RES30F08-M	8	0.002	8	0.94	680	F	W	
RES30F10-M	10	0.002	8	0.94	680	F	W	
RES30F12-M	12	0.002	4	2.00	330	F	W	
RES30F16-M	16	0.002	4	2.00	330	F	W	
RES30F20-M	20	0.002	4	2.00	330	F		S
RES30S30-M	30	0.002	2	2.00	330			S

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