FIHM series

XP Power

1, 3, 6, 10, 15 & 20A

Chassis mount filter

EMI filters

The FIHM high attenuation dual stage filters are housed in a compact, chassis mounting metal case, for medical applications with a low 5µA @250VAC earth leakage. Input and output connections are via 6.3 x 0.8mm Faston terminals.

The filter should be fitted as close as possible to the mains cable entry point to minimize any radiated emissions from the mains cable within the equipment.

Suitable for class I appliances, all models feature a shielded metal body, and are fitted with a bleed resistor to safely discharge the filter capacitors when power is disconnected.



Features

- Chassis mount filter
- Dual stage
- Compact design
- Medical version
- Voltage range 0 to 250VAC
- Current rating 1, 3, 6, 10, 15 & 20A
- 6.3 x 0.8mm Faston terminals
- Bleed resistor
- Shielded metal body
- Wide operating temperature range
- 3 year warranty

Applications

Medical

Dimensions

See mechanical details

Documentation

For further information click the link or scan the code

→ xppower.com

Models & ratings

Model number/ filter	Rated current	Leakage current		Inductance L1	Inductance L2	Capacitance				Resistance	Weight	Application	Mounting
		115VAC/ 60Hz	250VAC/ 50Hz	10kHz, 0.25V	10kHz, 0.25V	Cx1	Cx2	Cx3	Cy				
FIHMA01C1F	1A	2µA	5µA	2 x 7.4mH	2 x 7.4mH	0.3µF	0.3µF	0.3µF	None	2.2MΩ	121g	Medical	Chassis
FIHMA03C1F	3A			2 x 3.6mH	2 x 3.6mH						121g		Chassis
FIHMA06C1F	6A			2 x 1.4mH	2 x 1.4mH						124g		Chassis
FIHMA10C2F	10A			2 x 2.0mH	2 x 2.0mH						125g		Chassis
FIHMA15C2F	15A			2 x 1.8mH	2 x 1.8mH						130g		Chassis
FIHMA20C2F	20A			2 x 1.0mH	2 x 1.0mH						130g		Chassis

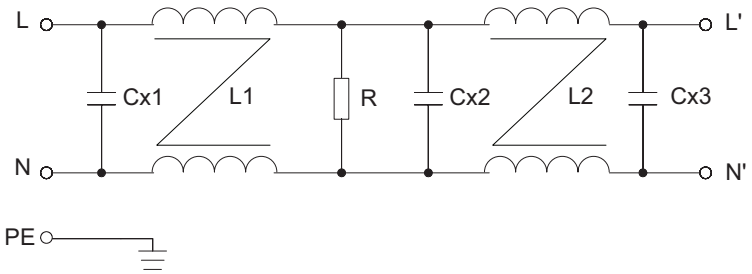
FIHM series

Specification

Characteristic	Minimum	Typical	Maximum	Units	Notes & conditions
Rated voltage			250	VAC	
Input frequency	DC		400	Hz	
Rated current	1		20	A	See models and ratings
Earth leakage current	2		5	mA	See models and ratings
MTBF	2.2			Mhrs	MIL-HDBK 217F, 250VAC at +40°C
Flammability rating	UL94V-2				
Temperature operating	-40		+110	°C	See derating curve
Safety approvals	EN60939-2				Passive filter units for EMI suppression
	ANSI/UL1283				Electromagnetic Interference Filters
Terminals	Faston 6.3 x 0.8mm straight				
Protection class	Suitable for appliances with protection Class I				
Dielectric strength		1500		VAC	

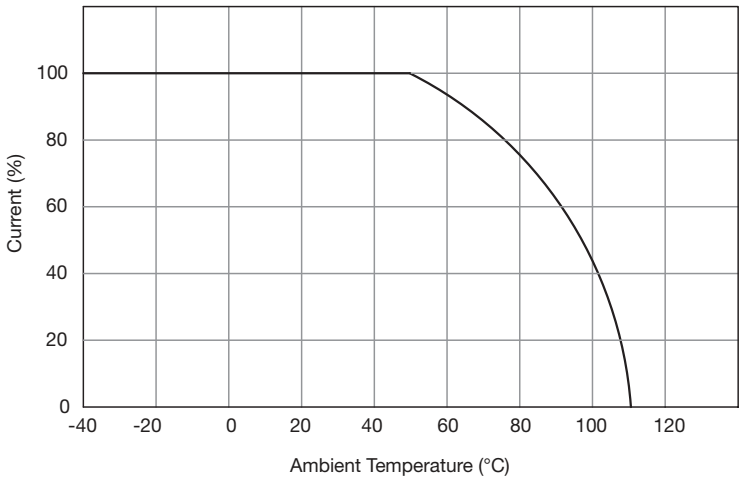
Application notes

Electrical schematic



Note: fuse not supplied

Thermal derating



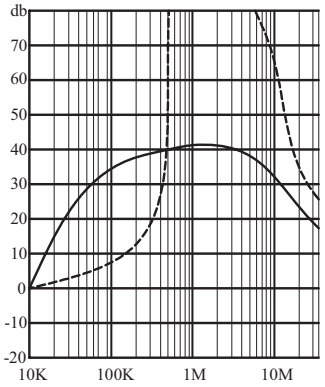
Application notes

Typical attenuation curves

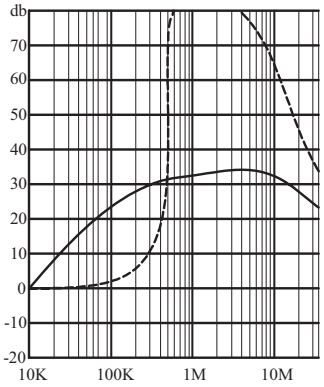
Asymmetrical (Common Mode)

Symmetrical (Differential Mode)

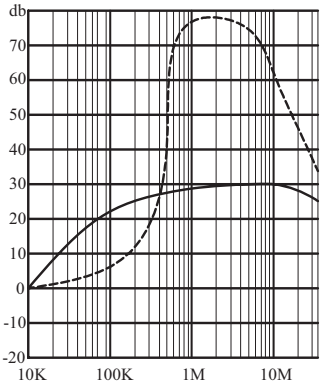
FIHMA01C1F



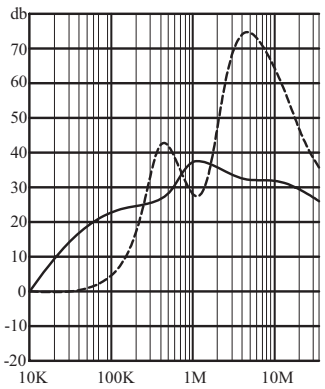
FIHMA03C1F



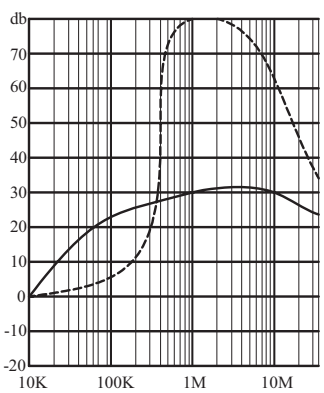
FIHMA06C1F



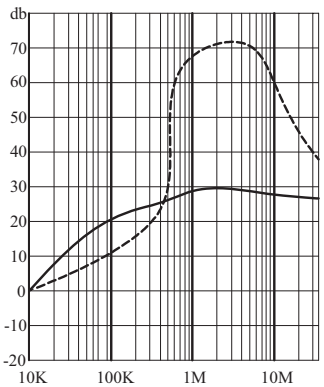
FIHMA10C2F



FIHMA15C2F



FIHMA20C2F

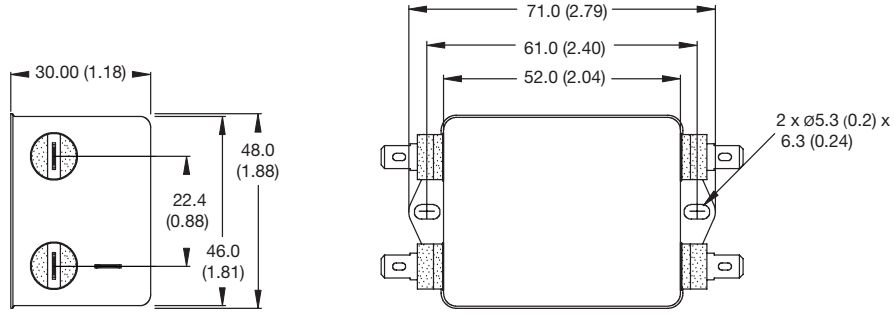


Safety approvals

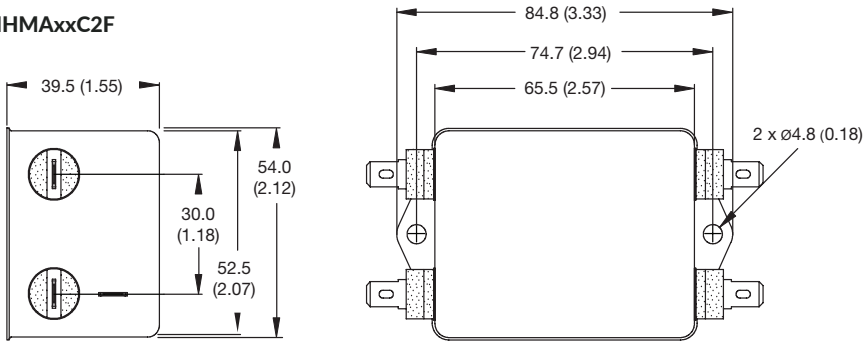
Safety Agency	Standard	Notes & conditions
CE	Meets all applicable directives	
UKCA	Meets all applicable legislation	

Mechanical details

FIHMAxxC1F



FIHMAxxC2F



Notes:

1. All dimensions are in mm (inches)