

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

Chassis  
mount filter



The FIHM high attenuation dual stage filters are housed in a compact, chassis mounting metal case, for medical applications with a low 5 $\mu$ A @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](http://xppower.com)



### Models & ratings

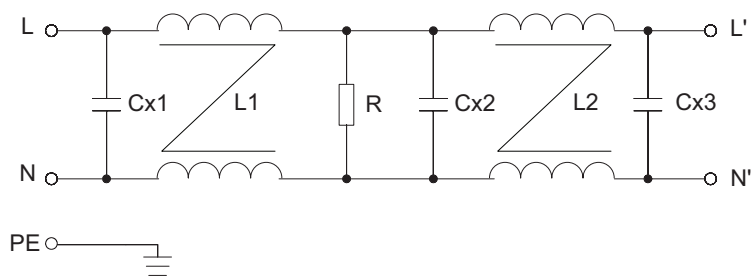
| Model number/<br>filter | Rated<br>current | Leakage current |                 | Inductance L1 | Inductance L2 | Capacitance |             |             |      | Resistance    | Weight | Application | Mounting |
|-------------------------|------------------|-----------------|-----------------|---------------|---------------|-------------|-------------|-------------|------|---------------|--------|-------------|----------|
|                         |                  | 115VAC/<br>60Hz | 250VAC/<br>50Hz | 10kHz, 0.25V  | 10kHz, 0.25V  | Cx1         | Cx2         | Cx3         | Cy   |               |        |             |          |
| FIHMA01C1F              | 1A               | 2 $\mu$ A       | 5 $\mu$ A       | 2 x 7.4mH     | 2 x 7.4mH     | 0.3 $\mu$ F | 0.3 $\mu$ F | 0.3 $\mu$ F | None | 2.2M $\Omega$ | 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  |

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   |                                          |

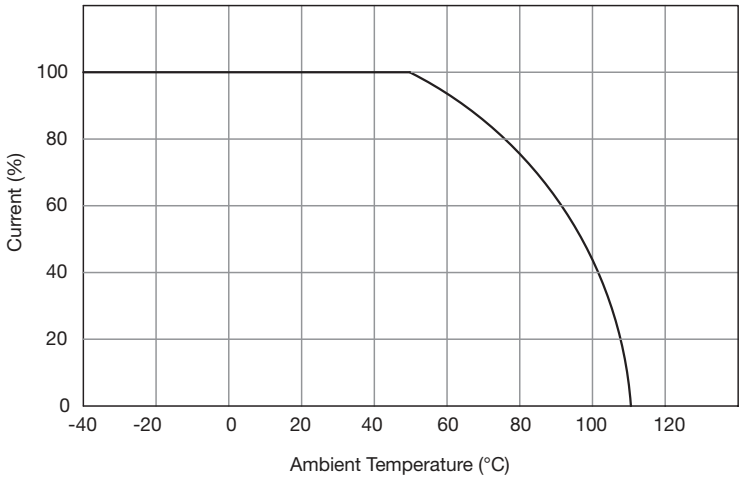
Application notes

Electrical schematic



Note: fuse not supplied

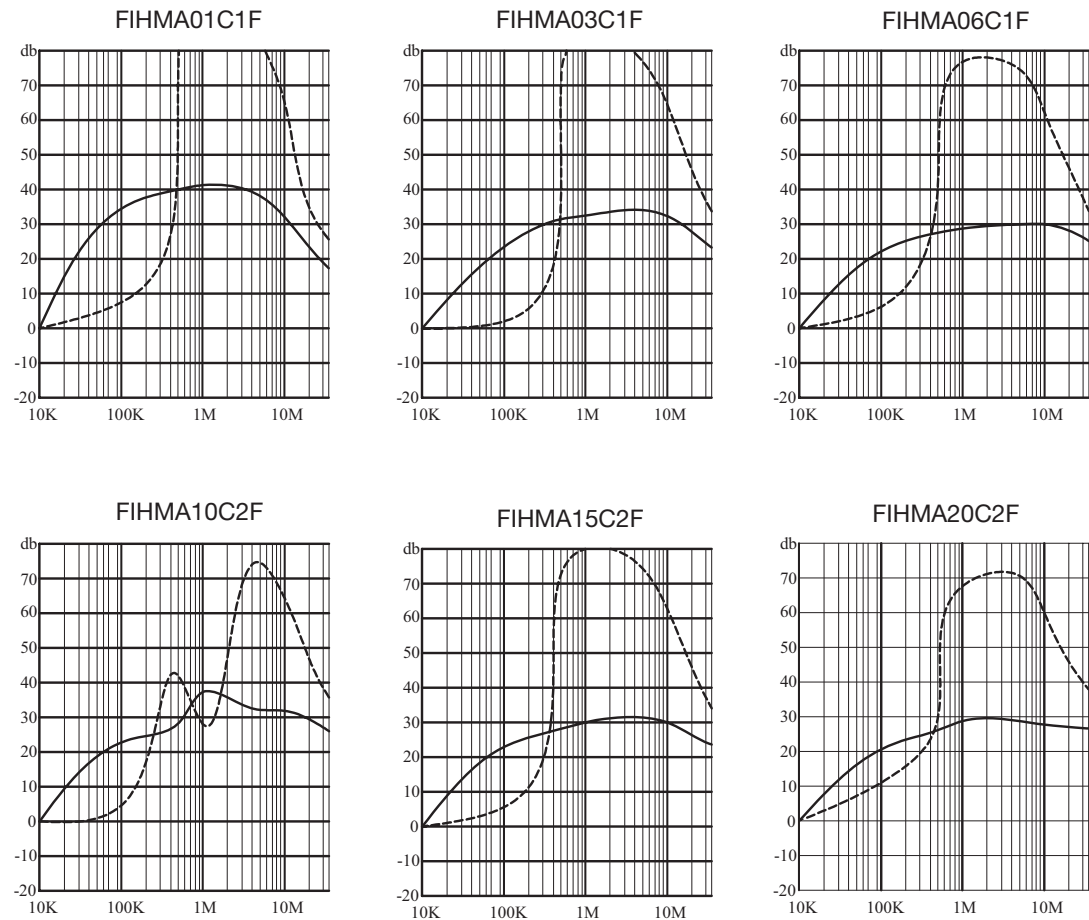
Thermal derating



Application notes

Typical attenuation curves

Asymmetrical (Common Mode)  
Symmetrical (Differential Mode)

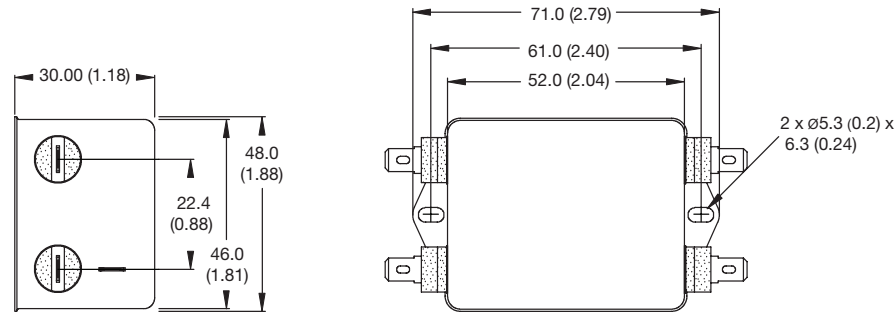


Safety approvals

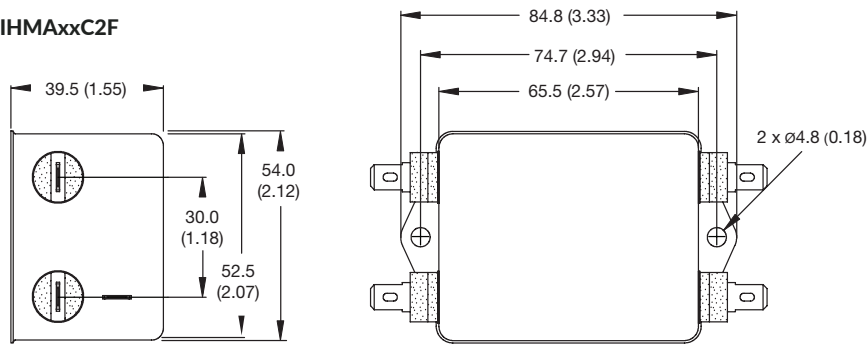
| Safety Agency | Standard                         | Notes & conditions |
|---------------|----------------------------------|--------------------|
| CE            | Meets all applicable directives  |                    |
| UKCA          | Meets all applicable legislation |                    |

Mechanical details

FIHMAxxC1F



FIHMAxxC2F



Notes:  
1. All dimensions are in mm (inches)