

## IEC Appliance Inlet C14 with Filter, "Lock and Shield" Mounting

Standard- or Medical-Filter



GRF4: with shield and line filter

**Description**

- Panel Mount:  
Snap-in version from rear-side
- 3 Functions:  
Appliance Inlet Protection class I, with EMC-shield, Line filter in standard and medical version
- Alternative: version without line filter [GRF2](#)

**Approvals**

- VDE License Number: 102348
- UL License Number: E72928
- CSA License Number: 701867

**Characteristics**

- Time saving "Lock and Shield" snap-in design for rear-panel mounting
- All single elements are already wired
- Innovative EMC-shielding with flexible steel segments for an excellent contact to the panel
- Qualified for use in equipment according IEC/EN 60950

**Other versions on request**

- Panel thickness 1.2 mm and 2.0 mm

**References**

[General Product Information](#)

**Weblinks**

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [Mating Connectors](#), [e-Store](#), [Distributor-Stock-Check](#), [Accessories](#)

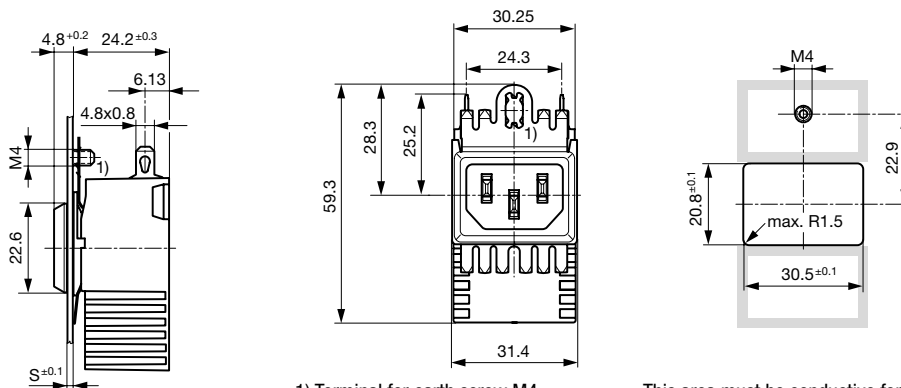
**Technical Data**

|                           |   |
|---------------------------|---|
| Ratings IEC               | 0.5 - 10A @ Ta 40 °C / 250VAC; 50Hz   |
| Ratings UL/CSA            | 0.5 - 15A @ Ta 40 °C / 125VAC; 60Hz   |
| Leakage Current           | standard < 0.5 mA (250 V / 60 Hz)<br>medical < 5 µA (250 V / 60 Hz)         |
| Dielectric Strength       | > 1.7 kVDC between L-N<br>> 2.7 kVDC between L/N-PE<br>Test voltage (2 sec) |
| Allowable Operation Temp. | -25 °C to 85 °C   |
| Climatic Category         | 25/085/21 acc. to IEC 60068-1   |
| Degree of Protection      | from front side IP 40 acc. to IEC 60529                                     |
| Protection Class          | Suitable for appliances with protection class 1 acc. to IEC 61140           |
| Terminal                  | Quick connect terminals 4.8 x 0.8 mm  |
| Panel Thickness s         | Snap-in: 1.5 mm<br>(other on request)                                       |
| Material: Housing         | Thermoplastic, black, UL 94V-0  |

|                         |   |
|-------------------------|---|
| Appliance-Inlet/-Outlet | C14 acc. to IEC/EN 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class 1               |
| Line Filter             | Standard and Medical Version, IEC 60939, IEC 60601-1, UL 1283, UL 544, EN 133 200, CSA C22.2 no. 8<br><a href="#">Technical details</a> |
| MTBF                    | > 3'300'000h acc. to MIL-HB-217 F   |

**Dimensions**

## GRF4



1) Terminal for earth screw M4

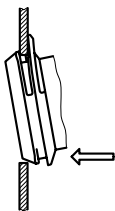
This area must be conductive for optimal shielding. Do not apply paint or coatings.

### Technical Data of Filter-Components

| Rated Current [A] | Filter-Type          | Inductances L [mH] | Capacitance CX [nF] | Capacitance CY [nF] | R [MΩ] |
|-------------------|----------------------|--------------------|---------------------|---------------------|--------|
| 0.5               | Standard Version     | 2 x 24             | 100                 | 2.2                 | -      |
| 1                 | Standard Version     | 2 x 12             | 100                 | 2.2                 | -      |
| 3                 | Standard Version     | 2 x 2.5            | 100                 | 2.2                 | -      |
| 6                 | Standard Version     | 2 x 0.78           | 100                 | 2.2                 | -      |
| 10                | Standard Version     | 2 x 0.225          | 100                 | 2.2                 | -      |
| 15                | Standard Version     | 2 x 0.075          | 100                 | 2.2                 | -      |
| 0.5               | Medical Version (M5) | 2 x 24             | 100                 | -                   | 1      |
| 1                 | Medical Version (M5) | 2 x 12             | 100                 | -                   | 1      |
| 3                 | Medical Version (M5) | 2 x 2.5            | 100                 | -                   | 1      |
| 6                 | Medical Version (M5) | 2 x 0.78           | 100                 | -                   | 1      |
| 10                | Medical Version (M5) | 2 x 0.225          | 100                 | -                   | 1      |
| 15                | Medical Version (M5) | 2 x 0.075          | 100                 | -                   | 1      |

### Dimensions

Step 1



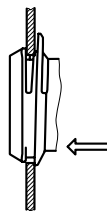
Place the socket in top edge of the panel cut-out.

Step 2



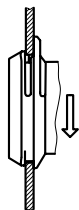
Push the socket upwards.

Step 3



Push the socket forward into the panel cut-out.

Step 4

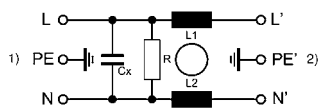
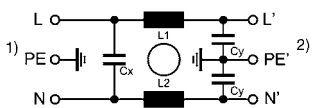


Release the socket. The component is self adjusting.

### Diagrams

Standard version

Medical version



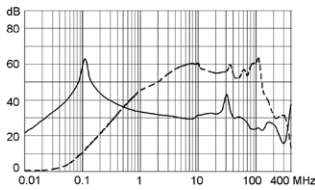
1) Line  
2) Load

1) Line  
2) Load

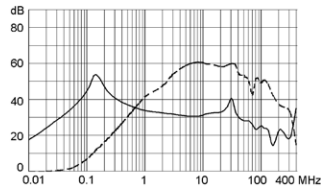
**Attenuation Loss**

--- differential mode \_\_\_\_ common mode

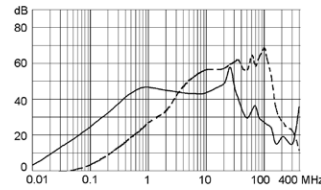
Standard version  
0.5 A



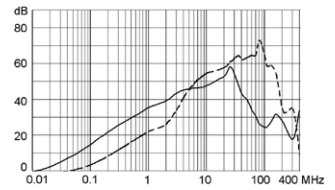
1 A



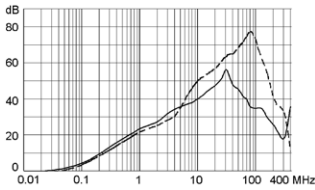
3 A



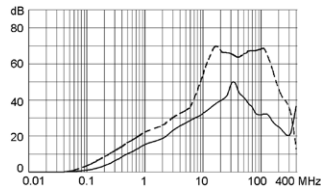
6 A



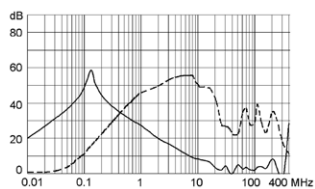
10 A



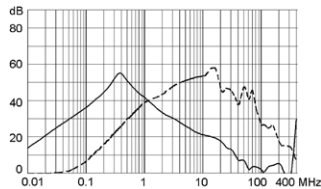
15 A



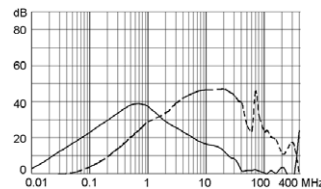
Medical version (M5)  
0.5 A



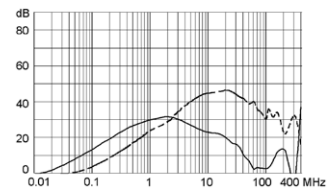
1 A



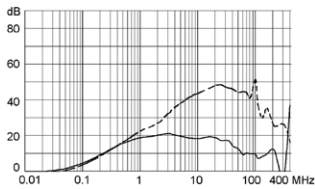
3 A



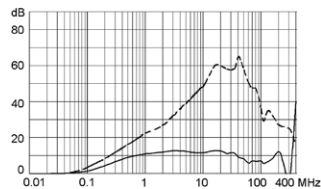
6 A



10 A



15 A



**Variants**

| Rated Current IEC [A] | Rated Current UL [A] | Filter-Type          | Panel Thickness [mm] | Order Number    |
|-----------------------|----------------------|----------------------|----------------------|-----------------|
| 0.5                   | 0.5                  | Standard Version     | 1                    | GRF4.0411.011.C |
| 1                     | 1                    | Standard Version     | 1                    | GRF4.0412.011.C |
| 6                     | 6                    | Standard Version     | 1                    | GRF4.0416.011.C |
| 10                    | 10                   | Standard Version     | 1                    | GRF4.0417.011.C |
| 0.5                   | 0.5                  | Standard Version     | 1.5                  | GRF4.0411.013.C |
| 1                     | 1                    | Standard Version     | 1.5                  | GRF4.0412.013.C |
| 3                     | 3                    | Standard Version     | 1.5                  | GRF4.0413.013.C |
| 6                     | 6                    | Standard Version     | 1.5                  | GRF4.0416.013.C |
| 10                    | 10                   | Standard Version     | 1.5                  | GRF4.0417.013.C |
| 15                    | 15                   | Standard Version     | 1.5                  | GRF4.0419.013.C |
| 3                     | 3                    | Standard Version     | 2                    | GRF4.0413.014.C |
| 0.5                   | 0.5                  | Medical Version (M5) | 1.5                  | GRF4.0021.013.C |
| 1                     | 1                    | Medical Version (M5) | 1.5                  | GRF4.0022.013.C |
| 3                     | 3                    | Medical Version (M5) | 1.5                  | GRF4.0023.013.C |
| 6                     | 6                    | Medical Version (M5) | 1.5                  | GRF4.0026.013.C |
| 10                    | 10                   | Medical Version (M5) | 1.5                  | GRF4.0027.013.C |
| 15                    | 15                   | Medical Version (M5) | 1.5                  | GRF4.0029.013.C |

Articles with packing unit 200 (without ending ".C") are no longer available

Packaging unit 20 Pcs

## Mating Outlets/Connectors

## Category / Description

## Appliance Outlet Overview complete



|   |      |
|---|------|
| IEC Appliance Outlet F, Screw-on Mounting, Front Side, Solder or Quick-connect Terminal           | 4787 |
| IEC Appliance Outlet F, Snap-in Mounting, Front Side, Solder or Quick-connect Terminal            | 4788 |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal | 5091 |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder or Quick-connect Terminal      | 5092 |

[Appliance Outlet further types to GRF4](#)

## Connector Overview complete



|  |        |
|--|--------|
| IEC Connector C15, Rewireable, Straight  | 0101   |
| IEC Connector C15A, Rewireable, Straight | 0102   |
| IEC Connector C15A, Rewireable, Straight | 0102-G |
| IEC Connector C15A, Rewireable, Angled   | 0112   |
| IEC Connector C13, Rewireable, Angled    | 4012   |

[Connector further types to GRF4](#)

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## Power Cord Overview complete



|   |      |
|---|------|
| Power Cord with IEC Connector C13, Angled | 0311 |
| Power Cord with IEC Connector C13, Angled | 3011 |
| Power Cord with IEC Connector C13, Angled | 3012 |
| Power Cord with IEC Connector C13, Angled | 3013 |
| Power Cord with IEC Connector C13         | 3020 |

[Power Cord further types to GRF4](#)

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