

GRF2: only with shield, without line filter

| C14   |  |
|-------|--|
|       |  |
| 70° C |  |

#### Description

- Panel mount : Snap-in version rear-side

- 2 Functions :

Appliance Inlet Protection class I , with EMC-shield

#### See below: **Approvals and Compliances**

#### **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
- For applications according IEC/UL 62368-1 we recommend variants with bleed resistor

#### Other versions on request - With solder terminals

### References

Alternative: version with line filter

#### Weblinks

pdf data sheet, html datasheet, General Product Information, Approvals, Distributor-Stock-Check, Accessories, Detailed request for product

#### Technical Data

| 10A @ Ta 40 °C / 250 VAC; 50 Hz  | Appliance inlet/-outlet  | C14 acc. to IEC 60320-1,<br>UL 60320-1, CSA C22.2 no. 60320-1  |
|--|--|--|
| > 1.7kVDC between L-N<br>> 2.7kVDC between L/N-PE                                    |  | (for cold conditions) pin-temperature 70<br>°C, 10A, Protection Class I  |
| Test voltage (2 sec)   | MTBF   | > 3'300'000 h acc. to MIL-HB-217 F   |
| -25 °C to 85 °C  |  |  |
| 25/085/21 acc. to IEC 60068-1  |  |  |
| front side IP40 acc. to IEC 60529  |  |  |
| Suitable for appliances with protection class I acc. to IEC 61140                    |  |  |
| Quick connect terminals 4.8 x 0.8 mm<br>Plug Connector<br>Solder terminal on request |  |  |
| Snap-in: 1.2/1.5/2 mm  |  |  |
| Thermoplastic, black, UL 94V-0   |  |  |
|  | 15A @ Ta 40 °C / 250 VAC; 60 Hz   > 1.7 kVDC between L-N   > 2.7 kVDC between L/N-PE   Test voltage (2 sec)   -25 °C to 85 °C   25/085/21 acc. to IEC 60068-1   front side IP40 acc. to IEC 60529   Suitable for appliances with protection class I acc. to IEC 61140   Quick connect terminals 4.8 x 0.8 mm   Plug Connector   Solder terminal on request   Snap-in: 1.2/1.5/2 mm | 15A @ Ta 40 °C / 250 VAC; 60 Hz   > 1.7 kVDC between L-N   > 2.7 kVDC between L/N-PE   Test voltage (2 sec)   -25 °C to 85 °C   25/085/21 acc. to IEC 60068-1   front side IP40 acc. to IEC 60529   Suitable for appliances with protection   class I acc. to IEC 61140   Quick connect terminals 4.8 x 0.8 mm   Plug Connector   Solder terminal on request   Snap-in: 1.2/1.5/2 mm |

#### **Approvals and Compliances**

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

## GRF2

#### Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: GRF2

| Approval Logo | Certificates         | Certification Body | Description                              |  |
|---------------|----------------------|--------------------|--|--|
|               | <b>VDE</b> Approvals | VDE                | VDE Certificate Number: 40025743         |  |
|               | UL Approvals         | UL                 | UR File Number: E96454                   |  |
| (m)           | CCC Approvals        | CCC                | CCC Certificate Number: 2019180204010440 |  |

#### **Product standards**

Product standards that are referenced

| Organization | Design                | Standard              | Description   |
|--------------|-----------------------|-----------------------|---|
| IEC          | Designed according to | IEC 60320-1           | Appliance couplers for household and similar general purposes         |
| IEC          | Designed according to | IEC 60939             | Passive filters for suppressing electromagnetic interference          |
| IEC          | Designed according to | IEC 61058-1           | Switches for appliances. Part 1. General requirements                 |
| (Y)          | Designed according to | UL 60320-1            | Standard for Attachment Plugs and Receptacles                         |
| (Y)          | Designed according to | UL 1283               | Electromagnetic interference filters                                  |
| CSA<br>Group | Designed according to | CSA C22.2 no. 60320-1 | General Use Receptacles, Attachment Plugs, and Similar Wiring Devices |
| CSA<br>Group | Designed according to | CSA C22.2 no. 8       | Electromagnetic interference (EMI) filters                            |
|              |                       |                       |   |

#### **Application standards**

Application standards where the product can be used

| Organization | Design                         | Standard       | Description  |
|--------------|--------------------------------|----------------|--|
| IEC.         | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part<br>1: Safety requirements |

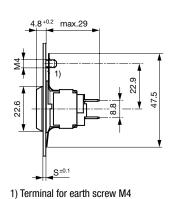
#### Compliances

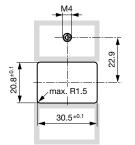
The product complies with following Guide Lines

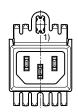
|                | and Ende                       |             |   |
|----------------|--------------------------------|-------------|---|
| Identification | Details                        | Initiator   | Description   |
| CE             | CE declaration of conformity   | SCHURTER AG | The CE marking declares that the product complies with the applicable<br>requirements laid down in the harmonisation of Community legislation on<br>its affixing in accordance with EU Regulation 765/2008. |
| UK<br>CA       | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable<br>requirements laid down in the British Amendment of Regulation (EC)<br>765/2008.  |
| RoHS           | RoHS                           | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863  |
| <b>©</b>       | China RoHS                     | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.  |
| REACH          | REACH                          | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration,<br>Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as<br>"REACH") entered into force.                               |

#### Dimension [mm]







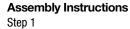


This area must be conductive for optimal shielding. Do not apply paint or coatings.

1) Terminal for earth screw M4

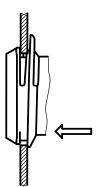
Step 2

#### ,





Place the socket in top edge of the panel cut-out. Step 3



Push the socket forward into the panel cut-out.

Release the socket. The component is self adjusting.

#### All Variants

| Rated Current<br>IEC [A] | Rated Current<br>UL [A] | Filter-Type | Panel Thickness<br>s [mm] | Additional ground terminal          | Weight [g] | Order Number |
|--------------------------|-------------------------|-------------|---------------------------|-------------------------------------|------------|--------------|
| 10                       | 15                      | -           | 1.2                       | -                                   | 13.9g      | GRF2.0212.11 |
| 10                       | 15                      | -           | 1.5                       | -                                   | 13.9g      | GRF2.0215.11 |
| 10                       | 15                      | -           | 2                         | -                                   | 13.9g      | GRF2.0220.11 |
| 10                       | 15                      | -           | 1.2                       | Quick connect terminal 4.8 x 0.8 mm | 14 g       | GRF2.0312.11 |
| 10                       | 15                      | -           | 1.5                       | Quick connect terminal 4.8 x 0.8 mm | 25 g       | GRF2.0315.11 |
| 10                       | 15                      | -           | 2                         | Quick connect terminal 4.8 x 0.8 mm | 14 g       | GRF2.0320.11 |

Availability for all products can be searched real-time:https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

Packaging unit

100 Pcs

# Push the socket upwards. Step 4

#### Mating Outlets/Connectors

Category / Description

#### Appliance Outlet Overview complete



| 4787, Mounting: Screw-on mounting, Appliance Outlet: IEC Solder terminals, 10 A, Suitable for appliances with pro-<br>tection class I   | 4787 |
|---|------|
| 4788, Mounting: Snap-in version, Appliance Outlet: IEC Solder / Quick Connect, 10 A, Suitable for appliances with<br>protection class I | 4788 |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal                                       | 5091 |
|   |      |
|   |      |
| Connector Overview complete   |      |



| 4782 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13    | 4782    |
|---|---------|
| 4785 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13    | 4785    |
| 4300-06 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13 | 4300-06 |
| 4781 Mounting: Power Cord, Cable, Connector: IEC C15  | 4781    |
| 4784 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C15    | 4784    |
|   |         |