

Compact 2-stage filter for 3-phase systems with neutral conductor



See below:

#### Approvals and Compliances

#### Description

- Quick-connect terminals 6.3 x 0.8 for three phases, neutral conductor and ground

#### Applications

- Especially designed for industrial applications such as: Frequency Converters, Stepper Motor Drives, UPS-Systems, Inverters
- Suitable for use in equipment according to IEC/UL 62368-1

#### Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Microsite](#)

#### Technical Data

|                         |                                                                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Rated Current           | 4 - 6 A @ Ta 40 °C                                                                                                                  |
| Rated voltage           | 250/440 VAC, 50/60 Hz                                                                                                               |
| Approval for            | 4 - 6 A / 250/440 VAC; 50 Hz                                                                                                        |
| Overload Current        | 1.5 x Ir for 1 minute, per hour                                                                                                     |
| Leakage Current         | standard < 0.5 mA (440 V / 50 Hz)                                                                                                   |
| Dielectric Strength     | 250/440 VAC:<br>2.25 kVDC between L-L<br>1.7 kVDC between L-N<br>3 kVDC between L-PE<br>2.7 kVDC between N-PE<br>Test voltage 2 sec |
| Number of Filter Stages | 2-stage                                                                                                                             |
| Weight                  | 0.26 - 0.5 kg                                                                                                                       |
| Material: Housing       | Metal                                                                                                                               |
| Sealing Compound        | UL 94V-0                                                                                                                            |

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| Mounting              | Screw-on mounting on chassis, from top                            |
| Terminal              | Quick connect terminals 6.3 x 0.8 mm                              |
| Operating Temperature | -25 °C to 100 °C                                                  |
| Climatic Category     | 25/100/21 acc. to IEC 60068-1                                     |
| Degree of Protection  | IP20 acc. to IEC 60529                                            |
| Protection Class      | Suitable for appliances with protection class I acc. to IEC 61140 |
| MTBF                  | > 200'000h acc. to MIL-HB-217 F                                   |

#### 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.

#### Approvals

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

Approval Reference Type: FMW4

| Approval Logo                                                                       | Certificates                  | Certification Body | Description                  |
|-------------------------------------------------------------------------------------|-------------------------------|--------------------|------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | Certificate Number: 40004673 |

#### Product standards

Product standards that are referenced

| Organization                                                                        | Design                | Standard  | Description                                                  |
|-------------------------------------------------------------------------------------|-----------------------|-----------|--------------------------------------------------------------|
|  | Designed according to | IEC 60939 | Passive filters for suppressing electromagnetic interference |
|  | Designed according to | UL 1283   | Passive filters for suppressing electromagnetic interference |

Application standards

Application standards where the product can be used

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

Compliances

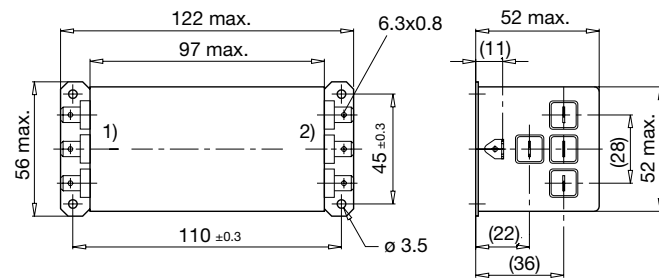
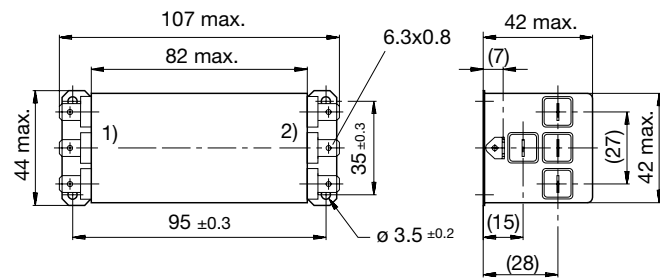
The product complies with following Guide Lines

| Identification                                                                   | Details                                        | Initiator   | Description                                                                                                                                                                                           |
|----------------------------------------------------------------------------------|------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">CE declaration of conformity</a>   | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|  | <a href="#">UKCA declaration of conformity</a> | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.                                                  |
|  | <a href="#">RoHS</a>                           | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863                                                                                                                                                    |
|  | <a href="#">China RoHS</a>                     | 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.                                                                                  |
|  | <a href="#">REACH</a>                          | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.                               |

Dimension [mm]

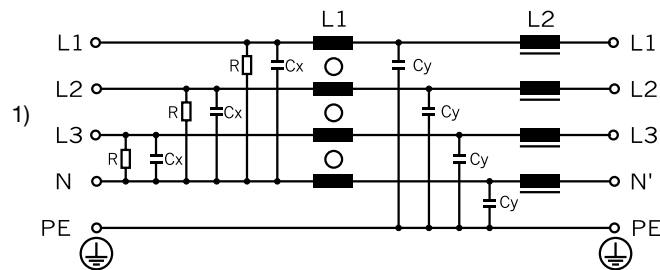
Case 18

Case 20



- 1) Line  
2) Load

Diagrams



- 1) Line

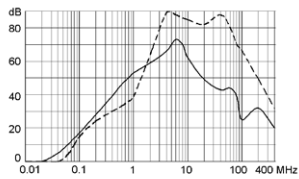
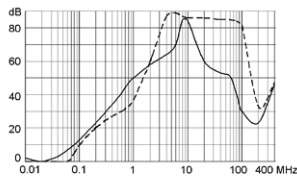
Attenuation Loss

Standard version

4A (FMW-81-0001)

6A (FMW-95-0001)

- - - 50Ω differential mode    50Ω common mode



Variants

| Rated Current [A] | Leakage Current [mA]<br>@ 440V, 60Hz 1) | L1 [mH] | L2 [μH] | Cx [μF] | Cy [nF] | R [MΩ] | Weight [kg] | Housing | Order Number |
|-------------------|-----------------------------------------|---------|---------|---------|---------|--------|-------------|---------|--------------|
| 4                 | 0.07                                    | 0.4     | 4       | 0.33    | 15      | 1      | 0.26 kg     | 18      | FMW-81-0001  |
| 6                 | 0.07                                    | 0.5     | 4       | 0.47    | 15      | 1      | 0.5 kg      | 20      | FMW-95-0001  |

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

1) Leakage current according IEC 60939-1

Packaging unit

5 Pcs