

IEC Appliance Inlet C14 or C18 with Filter, Circuit Breaker TA45 (recessed)



## Approvals and Compliances

### Description

- Panel Mount :  
Screw-on mounting from front side
- 3 Functions :  
Appliance Inlet protection class I or II , circuit breaker type TA45 2-pole , Line filter in standard and medical version
- Quick connect terminals 6.3 x 0.8 mm

### Characteristics

- All single elements are already wired
- Circuit Breaker non-illuminated or illuminated
- Suitable for use in equipment according to IEC/UL 60950
- Suitable for use in medical equipment according to IEC/UL 60601-1

### Other versions on request

- Unwired versions
- Other rocker marking
- Medical version M80
- Capacitance CX1
- Variant with notch for V-Lock mating Cordsets

### References

Alternative: version without line filter [DF11](#)

Substitute for type [5145](#)

Alternative: Standard version

### Weblinks

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

### Technical Data

|                                 |                                                                           |
|---------------------------------|---------------------------------------------------------------------------|
| Ratings IEC                     | 1 - 10A @ Ta 40 °C / 250VAC; 50Hz                                         |
| Ratings UL/CSA                  | 1 - 15A @ Ta 40 °C / 250VAC; 60Hz                                         |
| Leakage Current                 | standard < 0.5mA (250V / 60Hz)<br>medical < 5 µA (250 V / 60 Hz)          |
| Dielectric Strength             | > 1.7kVDC between L-N<br>> 2.7kVDC between L/N-PE<br>Test voltage (2 sec) |
| Allowable Operation Temperature | -10°C to 55°C                                                             |
| Climatic Category               | 10/055/21 acc. to IEC 60068-1                                             |
| IP-Protection                   | from front side IP 40 acc. to IEC 60529                                   |
| Protection Class                | Suitable for appliances with protection class I or II acc. to IEC 61140   |
| Terminal                        | Quick connect terminals 6.3 x 0.8 mm                                      |
| Panel Thickness S               | Screw: max 8mm<br>Mounting screw torque max 0.5Nm                         |
| Material: Housing               | Thermoplastic, black, UL 94V-0                                            |

|                         |                                                                                                                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| appliance inlet/-outlet | C14 / C18 acc. to IEC 60320-1<br>UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I or II                                                                                                               |
| Circuit Breakers        | Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235<br>2-pole rocker switch, illuminated or non-illuminated. Optional with undervoltage- or remote trip release<br>Short circuit capacity Icn:<br>at In < 3A/240VAC : 10 x In<br>at In ≥ 3A/240VAC : 300A |
| Line Filter             | Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8<br><a href="#">Technical Details</a>                                                                                                                                             |
| MTBF                    | > 100'000h 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](#)

## Approvals

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

Approval Reference Type: DF12

| Approval Logo                                                                    | Certificates                  | Certification Body | Description                  |
|----------------------------------------------------------------------------------|-------------------------------|--------------------|------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | Certificate Number: 40012935 |
|  | <a href="#">UL Approvals</a>  | UL                 | UL File Number: E72928       |

## Product standards

Product standards that are referenced

| Organization                                                                     | Design                | Standard         | Description                                                           |
|----------------------------------------------------------------------------------|-----------------------|------------------|-----------------------------------------------------------------------|
|  | Designed according to | IEC 60320-1      | Appliance couplers for household and similar general purposes         |
|  | Designed according to | IEC 60939        | Passive filters for suppressing electromagnetic interference          |
|  | Designed according to | IEC 61058-1      | Switches for appliances. Part 1. General requirements                 |
|  | Designed according to | UL 498           | Standard for Attachment Plugs and Receptacles                         |
|  | Designed according to | UL 1283          | Electromagnetic interference filters                                  |
|  | Designed according to | CSA C22.2 no. 42 | General Use Receptacles, Attachment Plugs, and Similar Wiring Devices |
|  | 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                                                                                            |
|------------------------------------------------------------------------------------|--------------------------------|--------------|--------------------------------------------------------------------------------------------------------|
|  | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment.        |
|  | Designed for applications acc. | IEC 60601-1  | Medical electrical equipment - Part 1: General requirements for basic safety and essential performance |

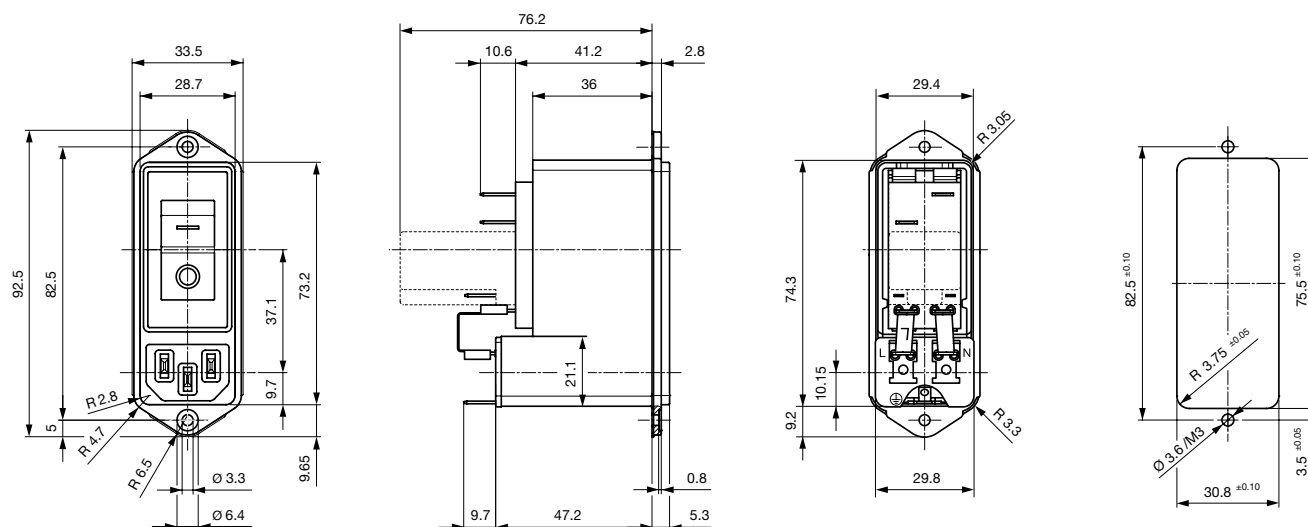
## Compliances

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="#">RoHS</a>                         | SCHURTER AG | EU Directive RoHS 2011/65/EU                                                                                                                                                                                                 |
|  | <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.                                                      |
|  | <a href="#">MicrositeV-Lock</a>              | SCHURTER AG | V-Lock system are based on a matching plug-dose combination. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset. |
|  | <a href="#">Medical Equipment</a>            | SCHURTER AG | Suitable for use in medical equipment according to IEC/UL 60601-1                                                                                                                                                            |

## Dimension [mm]

Screw-on Version



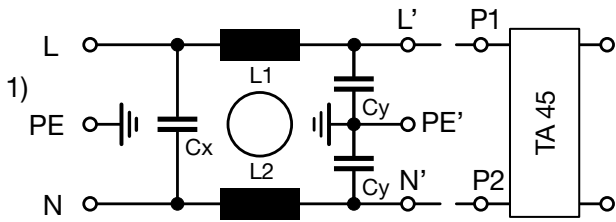
\* --- Version TA45 with undervoltage release

## Technical Data of Filter-Components

| Rated Current<br>[A] | Filter-Type  | Inductances<br>L [mH] | Capacitance<br>CX [nF] | Capacitance<br>CY [nF] | R [MΩ] |
|----------------------|--------------|-----------------------|------------------------|------------------------|--------|
| 1                    | Standard     | 2 x 11                | 100                    | 2.2                    | 1      |
| 2                    | Standard     | 2 x 4                 | 100                    | 2.2                    | 1      |
| 3                    | Standard     | 2 x 2.5               | 100                    | 2.2                    | 1      |
| 4                    | Standard     | 2 x 1.6               | 100                    | 2.2                    | 1      |
| 6                    | Standard     | 2 x 0.7               | 100                    | 2.2                    | 1      |
| 8                    | Standard     | 2 x 0.6               | 100                    | 2.2                    | 1      |
| 10                   | Standard     | 2 x 0.4               | 100                    | 2.2                    | 1      |
| 15                   | Standard     | 2 x 0.1               | 100                    | 2.2                    | 1      |
| 2                    | Medical (M5) | 2 x 4                 | 100                    | -                      | 1      |
| 3                    | Medical (M5) | 2 x 2.5               | 100                    | -                      | 1      |
| 4                    | Medical (M5) | 2 x 1.6               | 100                    | -                      | 1      |
| 6                    | Medical (M5) | 2 x 0.7               | 100                    | -                      | 1      |
| 8                    | Medical (M5) | 2 x 0.6               | 100                    | -                      | 1      |
| 10                   | Medical (M5) | 2 x 0.4               | 100                    | -                      | 1      |
| 15                   | Medical (M5) | 2 x 0.1               | 100                    | -                      | 1      |

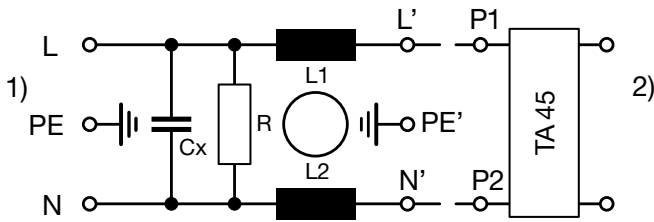
Diagrams

Standard version



1) Line  
2) Load

Medical version (M5)

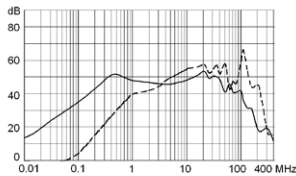


1) Line  
2) Load

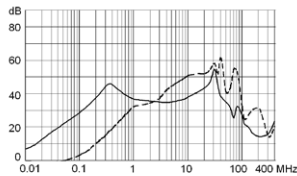
Attenuation Loss

Standard version

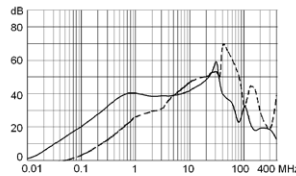
1 A



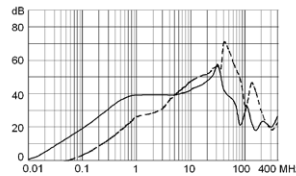
2 A



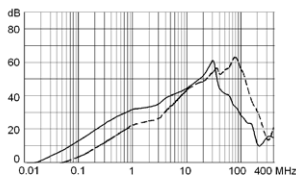
3 A



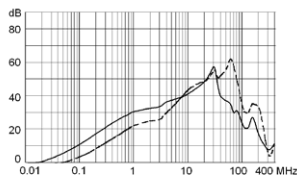
4 A



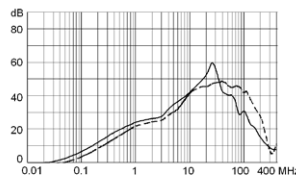
6 A



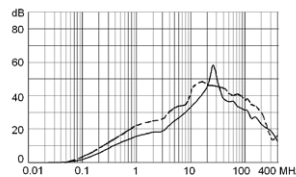
8 A



10 A

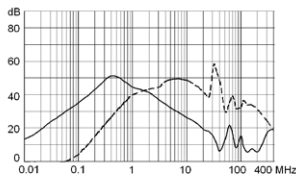


15 A

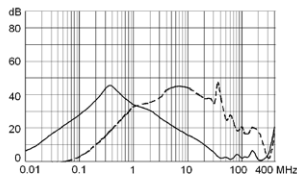


Medical version (M5)

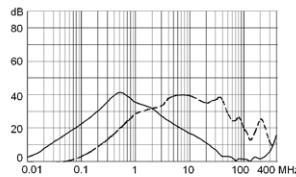
1 A



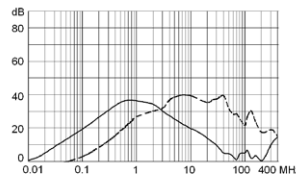
2 A



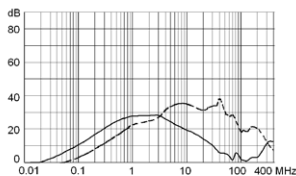
3 A



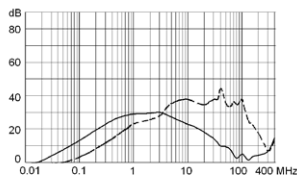
4 A



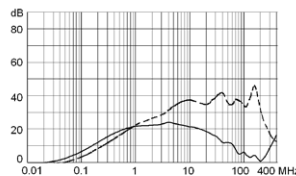
6 A



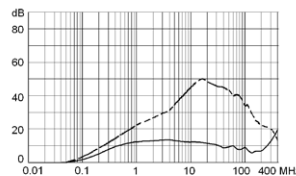
8 A



10 A



15 A



**Table 1 Selection for type TA45**

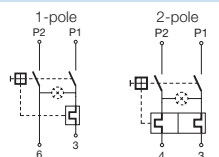
Order example



- Circuit Breaker of Equipment
  - 2-pole, rocker actuated
  - Quick connect terminal
- Other types on request

**Diagram**

Thermal overload protection



Without illumination

**ABT**

**ABD**

With illumination 220...240 V  
110...120 V

**A12**

**A14**

**A32**

**A34**

**Colours**

**Switch front**

**W** black  
**B** black  
**6** black

**Rocker**

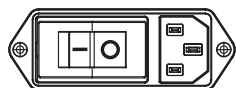
white  
black  
— orange transp.

**Rocker legend**

| Surface                     | Illustration | Colour of print |
|-----------------------------|--------------|-----------------|
| <b>F</b> embossed / Relief  | — ○          |                 |
| <b>H</b> printed / bedruckt | ON OFF       | white / weiss   |
| <b>K</b> printed / bedruckt | ON OFF       | black / schwarz |
| <b>L</b> printed / bedruckt | — ○          | white / weiss   |

| Surface          | Illustration | Colour of print |
|------------------|--------------|-----------------|
| <b>M</b> printed | — ○          | black           |
| <b>P</b> printed | I ○          | white           |
| <b>R</b> printed | I ○          | black           |

Position of the rocker legend  
e.g F

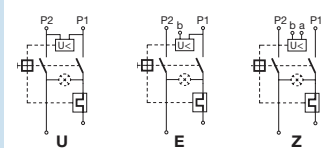


**Rated current circuit breaker of equipment**

| $I_n$ | Code       | $I_n$ | Code       | $I_n$ | Code       | $I_n$ | Code       |
|-------|------------|-------|------------|-------|------------|-------|------------|
| 0,1   | <b>J01</b> | 1,3   | <b>J13</b> | 2,8   | <b>J28</b> | 10,0  | <b>100</b> |
| 0,2   | <b>J02</b> | 1,4   | <b>J14</b> | 3,0   | <b>030</b> | 11,0  | <b>110</b> |
| 0,3   | <b>J03</b> | 1,5   | <b>J15</b> | 3,5   | <b>035</b> | 12,0  | <b>120</b> |
| 0,4   | <b>J04</b> | 1,6   | <b>J16</b> | 4,0   | <b>040</b> | 13,0  | <b>130</b> |
| 0,5   | <b>J05</b> | 1,7   | <b>J17</b> | 4,5   | <b>045</b> | 14,0  | <b>140</b> |
| 0,6   | <b>J06</b> | 1,8   | <b>J18</b> | 5,0   | <b>050</b> | 15,0  | <b>150</b> |
| 0,7   | <b>J07</b> | 1,9   | <b>J19</b> | 6,0   | <b>060</b> | 20,0  | <b>200</b> |
| 0,8   | <b>J08</b> | 2,0   | <b>J20</b> | 6,5   | <b>065</b> |       |            |
| 0,9   | <b>J09</b> | 2,1   | <b>J21</b> | 7,0   | <b>070</b> |       |            |
| 1,0   | <b>J10</b> | 2,2   | <b>J22</b> | 7,5   | <b>075</b> |       |            |
| 1,1   | <b>J11</b> | 2,3   | <b>J23</b> | 8,0   | <b>080</b> |       |            |
| 1,2   | <b>J12</b> | 2,5   | <b>J25</b> | 9,0   | <b>090</b> |       |            |

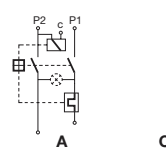
**Without release: code C0**

**Undervoltage release**



|   |   |   |
|---|---|---|
| • | • | • |
| • | • | • |
| • | • | • |

**Remote trip release**



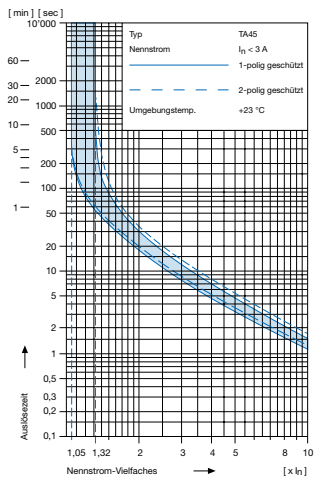
|   |   |
|---|---|
| • | • |
| • | • |
| • | • |

| Code     | Rated voltage $U_n$ |
|----------|---------------------|
| <b>2</b> | 240 V AC            |
| <b>3</b> | 230 V AC            |
| <b>4</b> | 120 V AC            |

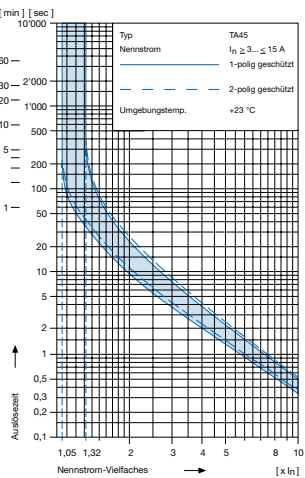
**ABT** **W** **F** **150** **C0**

Technical data (continued)  
Circuit breaker

Tripping characteristics  
 $I_n < 3\text{ A}$



Tripping characteristics  
 $I_n \geq 3 \dots \leq 15\text{ A}$



Effect of ambient temperature 1)

The unit is calibrated for an ambient temperature of +23 °C. To determine the rated current for a lower or higher ambient temperature, use a correction factor from the table below.

\* Ambient temperature [°C] Correction factor

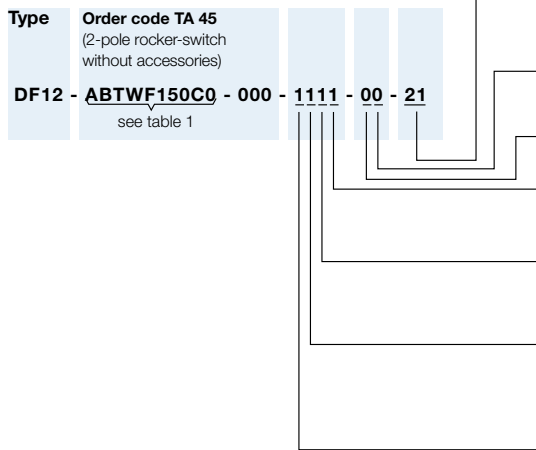
|     |      |
|-----|------|
| -10 | 0,89 |
| -5  | 0,91 |
| 0   | 0,92 |
| +23 | 1,00 |
| +30 | 1,03 |
| +40 | 1,08 |
| +55 | 1,16 |

\* Temperature must be measured at the rear of the breaker next to the terminals after equipment operating temperature has been reached.

1) Example

|                                                     |                    |
|-----------------------------------------------------|--------------------|
| Rated current at +23 °C                             | 6,0 A              |
| Ambient temperature                                 | +40 °C             |
| Correction factor                                   | 1,08               |
| Chosen rated current at + 40 °C ambient temperature | 6 A x 1,08 = 6,5 A |

Configuration code (example)



Optional Variants

- 00 standard
- 21 V-Lock notch

Colour

- 0 black

Mounting

- 0 Screw mounting

Terminal PE

- 0 without (PCI)
- 1 QC 6.3x0.8

Terminal L and N

- 1 QC 6.3x0.8, without connection to TA45
- 3 Connection to TA45 non insulated

Type of mains filter / capacitor / bleed resistor

- 1 standard      X2, Y2      with bleed resistor
- 3 medical M5      X2      with bleed resistor

Rated current 1)

- 1 1A
- 2 2A
- 3 3A
- 4 4A
- 5 6A
- 6 8A
- 7 10A
- 9 15A

1) The rated current of the line-filter must be equal or more than the rated current of TA45

Packaging unit      20 Pcs

## Accessories

### Description



Assorted Covers  
Rear Cover

0859.0109

## Mating Outlets/Connectors

### Category / Description

#### Appliance Outlet Overview complete



|                                                                                                   |      |
|---------------------------------------------------------------------------------------------------|------|
| IEC Appliance Outlet F, Screw-on Mounting, Front Side, Solder 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 |

[Appliance Outlet further types to DF12](#)

#### Connector Overview complete



|                                                                                 |         |
|---------------------------------------------------------------------------------|---------|
| 4782 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13    | 4782    |
| 4022 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13 | 4022    |
| 4785 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13    | 4785    |
| 4300-06 Mounting: Power Cord, 3 x 1 mm² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4300-06 |
| 4012 Mounting: Power Supply Cord, 3 x 1.5 mm², Screw clamps, Connector: IEC C13 | 4012    |

[Connector further types to DF12](#)

...

## Mating Outlets/Connectors shuttered



#### Power Cord Overview complete

|                                                         |         |
|---------------------------------------------------------|---------|
| VAC13KS, Overview, diverse Connector IEC C13, cord end: | VAC13KS |
|---------------------------------------------------------|---------|

[Power Cord further types to DF12](#)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schurter:

[DF12.0979.7310.1](#) [DF12.0991.5110.1](#) [DF12.1034.9310.1](#) [DF12.1384.7310.1](#) [DF12.2837.9310.1](#)