

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

Standard- or Medical-Filter



C14



70° C



### Description

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

### Approvals

- VDE Certificate Number: 40012935
- UL File Number: E72928

### Characteristics

- All single elements are already wired
- Line switch 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
- Line switch 1-pole
- 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](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

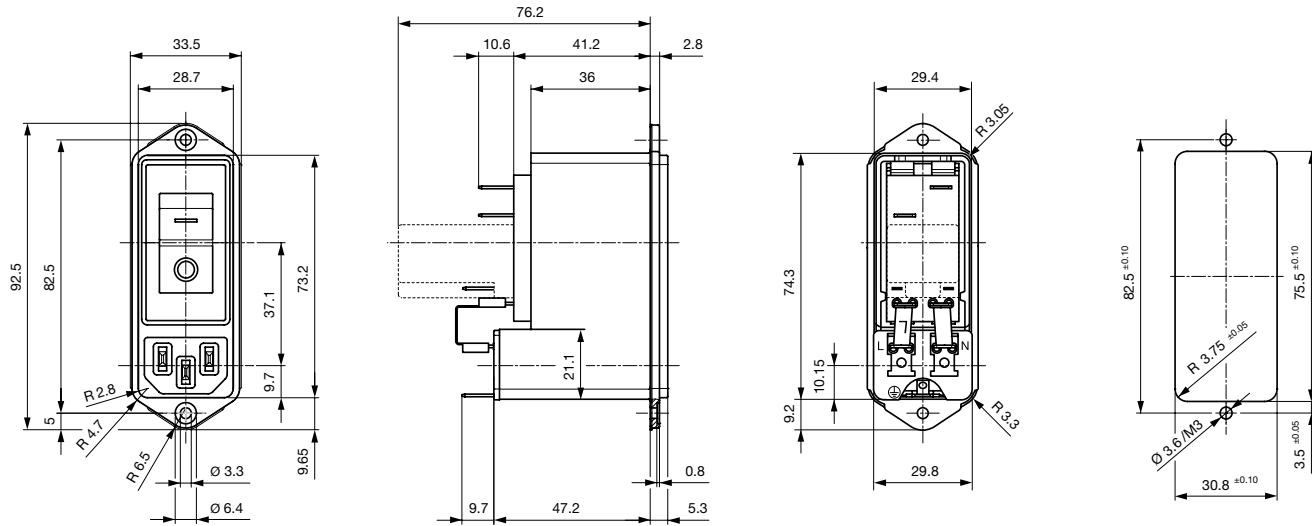
### Technical Data

Ratings IEC	1 - 10 A @ Ta 40 °C / 250VAC; 50Hz
Ratings UL/CSA	1 - 15 A @ Ta 40 °C / 250VAC; 60Hz
Leakage Current	standard < 0.5 mA (250 V / 60 Hz) medical < 5 µA (250 V / 60 Hz)
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)
Allowable Operation Temp.	-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 acc. to IEC 61140
Terminal	Quick connect terminals 6.3 x 0.8 mm
Panel Thickness s	Screw: max 8mm Mounting screw torque max 0.5 Nm
Material: Housing	Thermoplastic, black, UL 94V-0

appliance inlet/-outlet	C14 acc. to IEC 60320-1 UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I
Circuit Breakers	Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235 2-pole rocker switch, illuminated or non-illuminated. Optional with undervoltage- or remote trip release Short circuit capacity Icn: at $I_n < 3A/240VAC$ : $10 \times I_n$ at $I_n \geq 3A/240VAC$ : 300A
Line Switch	2-pole non-illuminated or illuminated acc. to IEC 61058-1 <a href="#">Technical Details</a>
Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 <a href="#">Technical Details</a>
MTBF	> 100'000h acc. to MIL-HB-217 F

## Dimensions

Screw-on Version



\* --- Version TA45 with undervoltage release

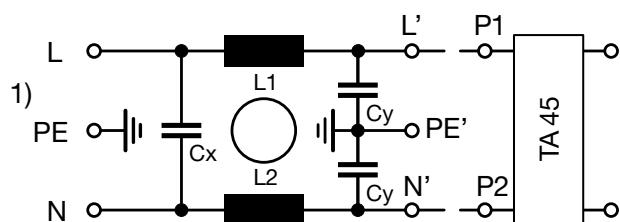
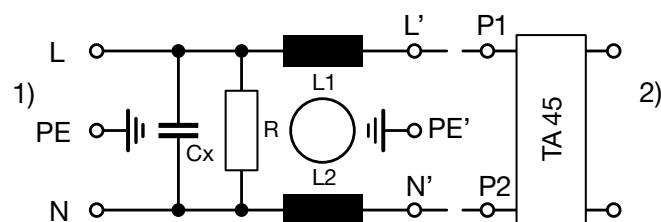
## Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
15	Standard	2 x 11	100	2.2	1
6	Medical (M5)	2 x 11	100	2.2	1
10	Medical (M5)	2 x 11	100	2.2	1
15	Medical (M5)	2 x 11	100	2.2	1

## Diagrams

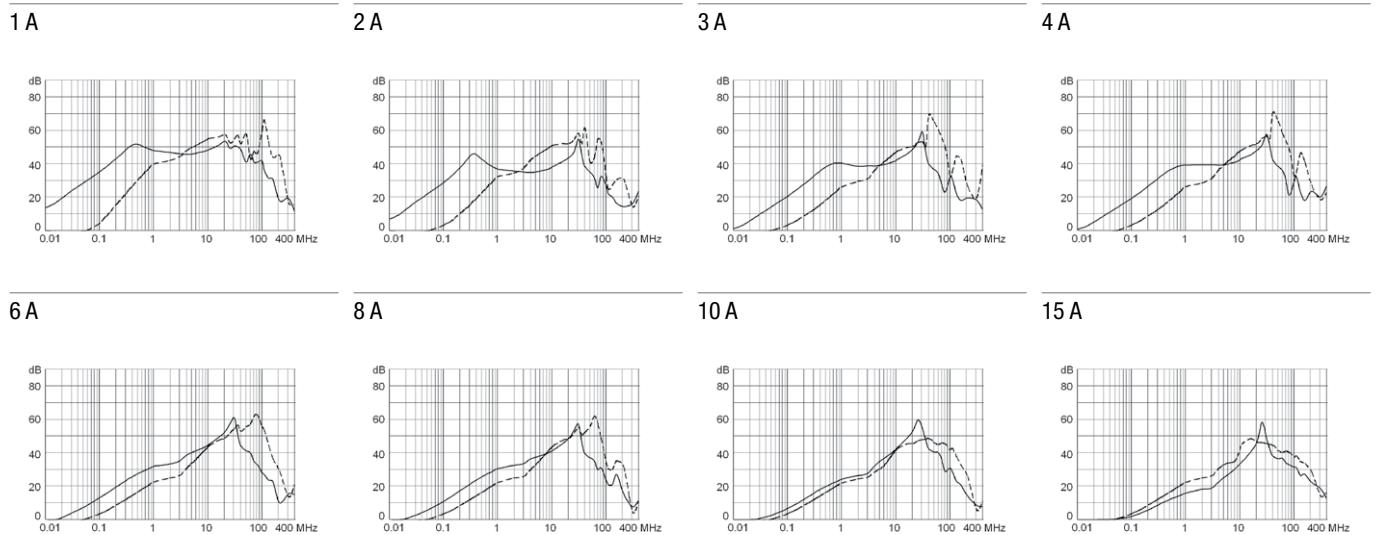
Standard version

Medical version (M5)

1) Line  
2) Load1) Line  
2) Load

**Attenuation Loss**

Standard version



Medical version (M5)

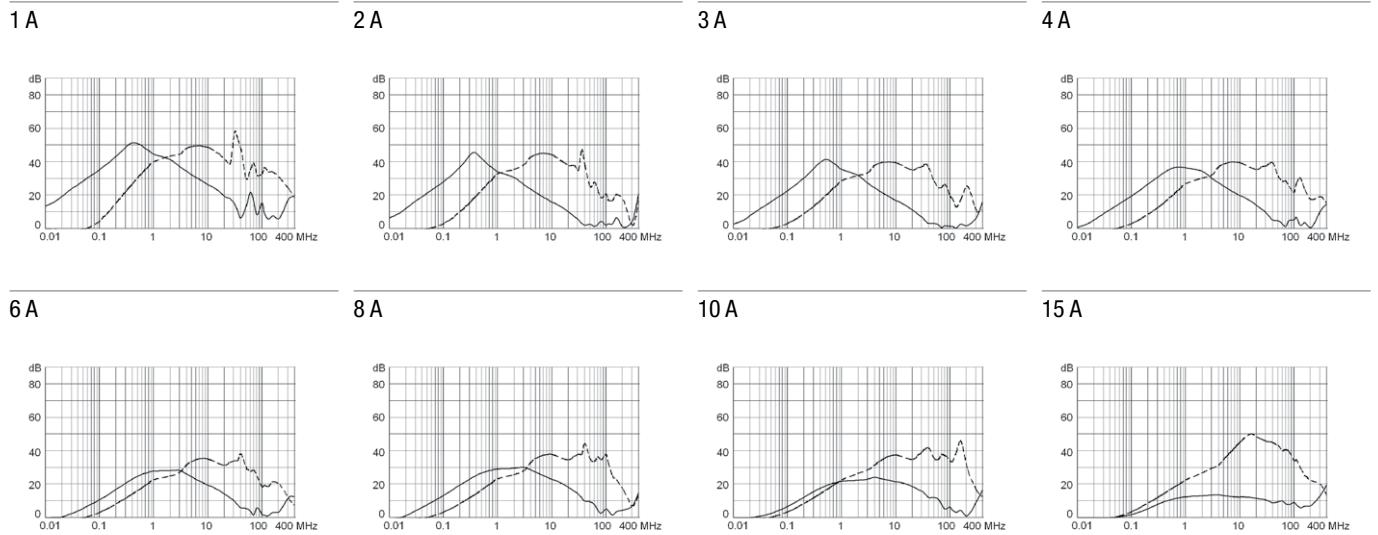


Table 1 Selection for type TA45

Order example



- Line switch
- 2-pole, rocker actuated
- Quick connect terminal

Other types on request

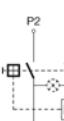
**Diagram**

Thermal overload protection

without



with 1-pole



with 2-pole



Without illumination

**ABC**

With illumination

220...240 V

110...120 V

**ABT****A12****A14****ABD****A32****A34****Colours****Switch front****Rocker**

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

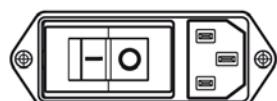
white  
black  
—

—  
—  
orange transp.

**ABT**   **W**   **F**   **150**   **C0****Rocker legend**

Surface	Illustration	Colour of print
<b>F</b> embossed / Relief	— O	
<b>H</b> printed / bedruckt	— O	white / weiss
<b>K</b> printed / bedruckt	— O	black / schwarz
<b>L</b> printed / bedruckt	— O	white / weiss

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

Position of the rocker legend  
e.g F**Rated current:**

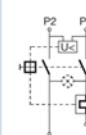
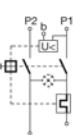
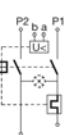
- Without thermal overload protection: code **C00**

$$I_n = 20 \text{ A}$$

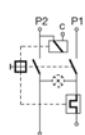
- With thermal overload protection: rated current  $I_n$  (A)

$I_n$	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>		
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**

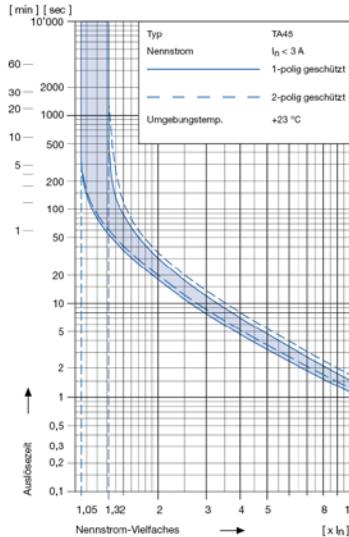
	<b>A</b>	<b>Code</b>	Rated voltage $U_n$
•		<b>2</b>	240 V AC
•		<b>3</b>	230 V AC
•		<b>4</b>	120 V AC

## Technical data (continued)

### Circuit breaker

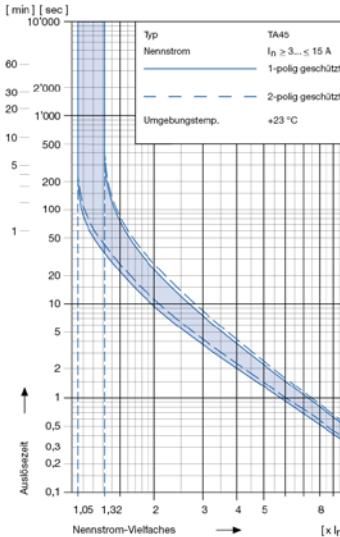
#### Tripping characteristics

$I_n < 3 \text{ A}$



#### 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  $+23^\circ\text{C}$ . To determine the rated current for a lower or higher ambient temperature, use a correction factor from the table below.

#### \* Ambient temperature [ $^\circ\text{C}$ ] Correction factor

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

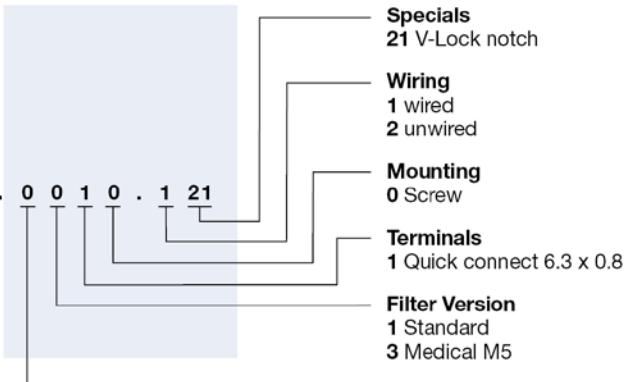
\* Temperature must be measured at the rear of the breaker next to the terminals after equipment operating temperature has been reached.

#### 1) Example

Rated current at $+23^\circ\text{C}$	6,0 A
Ambient temperature	$+40^\circ\text{C}$
Correction factor	1,08
Chosen rated current at $+40^\circ\text{C}$ ambient temperature	$6 \text{ A} \times 1,08 = 6,5 \text{ A}$

### Order code (Order example)

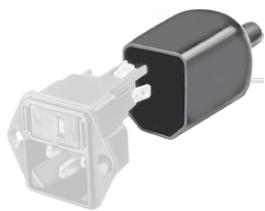
Type	Order code TA 45 (2-pole rocker-switch without accessories)
DF12. A B T W F 1 5 0 C 0	see table 1



Please note that Schurter will establish an internal part number for logistical use in addition to the order code. The format of this internal part number is, for example DF12.xxxxxxxx

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 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4022 Mounting: Power Supply Cord, 3 x 1.5 mm <sup>2</sup> , Screw clamps, Connector: IEC C13	4022
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
4012 Mounting: Power Supply Cord, 3 x 1.5 mm <sup>2</sup> , 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