

IEC Appliance Inlet C14 with Filter, Circuit Breaker TA45

Standard- or Medical-Filter



### 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: 40035745
- UL File Number: E72928

### Characteristics

- All single elements are already wired  
Unwired versions available on request
- 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

### References

Alternative: version without line filter [6145](#)  
We recommend for new applications the new type [DF12](#)  
Alternative: Standard version [DF12](#)

### Weblinks

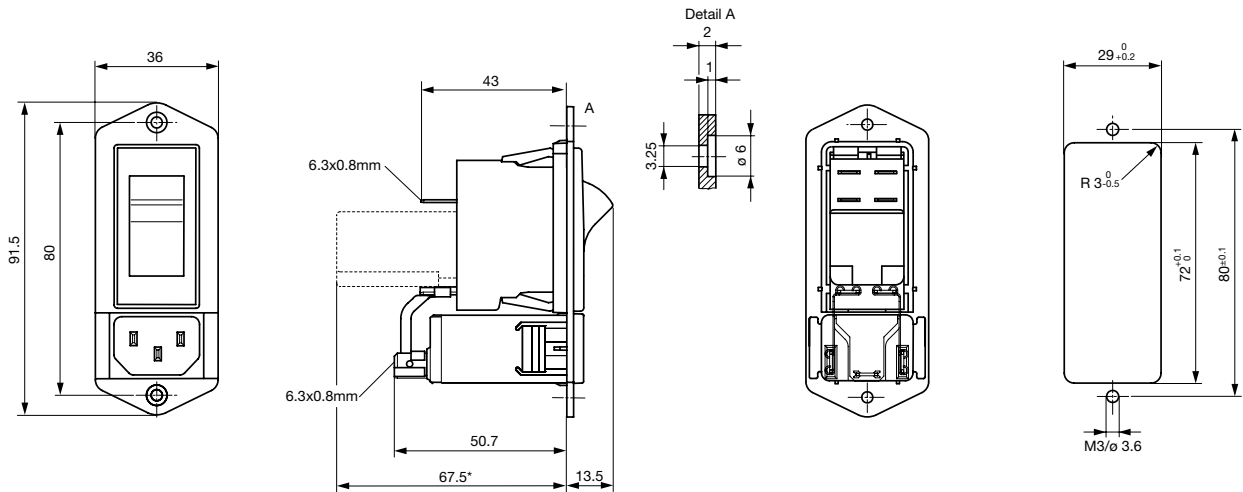
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Mating Connectors](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Accessories](#)

### Technical Data

Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50Hz
Ratings UL/CSA	1 - 15A @ Ta 40 °C / 125 VAC; 60Hz
Leakage Current	standard < 0.5 mA (250 V / 60Hz) 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
Degree of 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 8 mm Mounting screw torque max 0.5 Nm
Material: Housing	Thermoplastic, black, UL 94V-0

Appliance-Inlet/-Outlet	C14 acc. to IEC 60320, 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 In < 3A/240VAC : 10 x In at In ≥ 3A/240VAC : 300A
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

Dimension



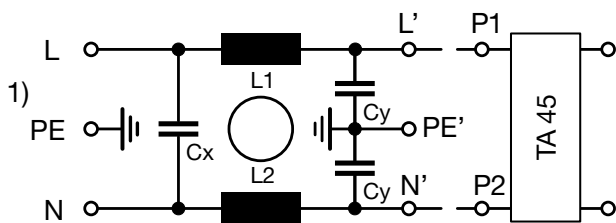
\* --- Version TA45 with undervoltage release

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
1	Standard Version	2 x 11	47	2.2	-
2	Standard Version	2 x 4	47	2.2	-
3	Standard Version	2 x 2.5	47	2.2	-
4	Standard Version	2 x 1.6	47	2.2	-
6	Standard Version	2 x 0.7	47	2.2	-
8	Standard Version	2 x 0.6	47	2.2	-
10	Standard Version	2 x 0.4	47	2.2	-
15	Standard Version	2 x 0.1	47	2.2	-
1	Medical Version (M5)	2 x 11	47	-	1
2	Medical Version (M5)	2 x 4	47	-	1
6	Medical Version (M5)	2 x 0.7	47	-	1
8	Medical Version (M5)	2 x 0.6	47	-	1
10	Medical Version (M5)	2 x 0.4	47	-	1
15	Medical Version (M5)	2 x 0.1	47	-	1

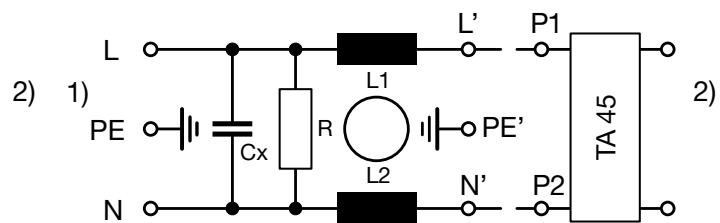
Diagrams

Standard version



1) Line  
2) Load

Medical version



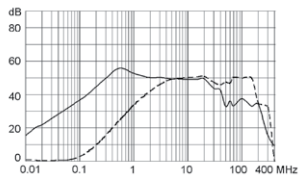
1) Line  
2) Load

**Attenuation Loss**

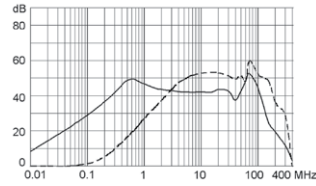
--- differential mode    — common mode

Standard version

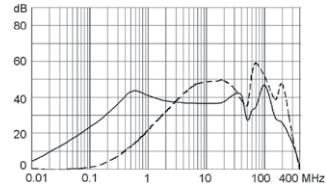
1 A



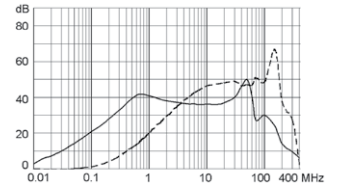
2 A



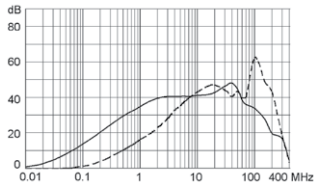
3 A



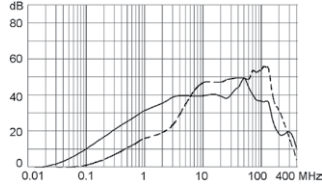
4 A



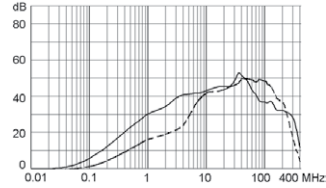
6 A



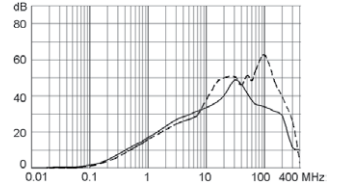
8 A



10 A

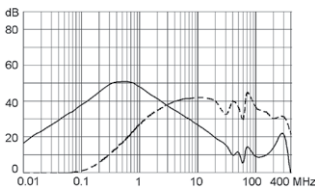


15 A

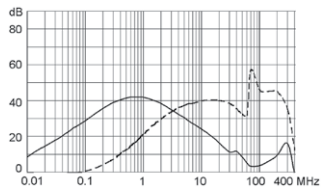


Medical version (M5)

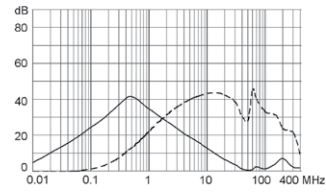
1 A



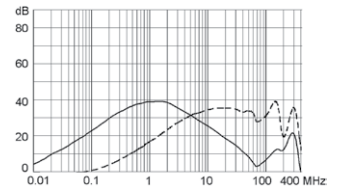
2 A



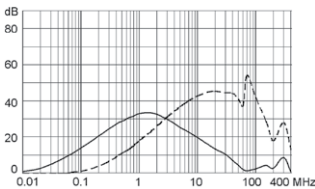
3 A



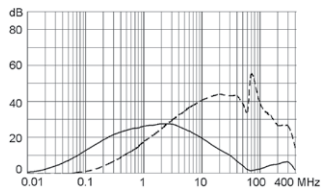
4 A



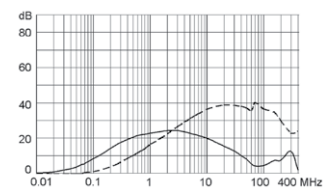
6 A



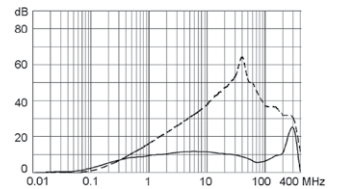
8 A



10 A



15 A



**Table 1 Selection for type TA45**

Order example

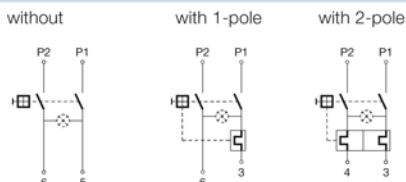


- Line switch
  - 2-pole, rocker actuated
  - Quick connect terminal
- Other types on request

ABT W F 150 C0

**Diagram**

Thermal overload protection



Without illumination

**ABC**      **ABT**      **ABD**

With illumination

220...240 V    **A02**      **A12**      **A32**  
110...120 V    **A04**      **A14**      **A34**

**Colours**

**Switch front**

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

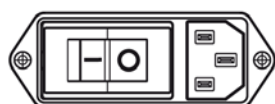
**Rocker**

- white
- black
- 
- orange transp.

**Rocker legend**

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

Position of the rocker legend  
e.g F



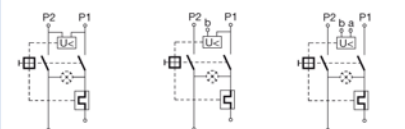
**Rated current:**

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

**Without release: code C0**

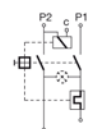
**Undervoltage release**



**U**      **E**      **Z**

•	•	•
•	•	•
•	•	•

**Remote trip release**



**A**

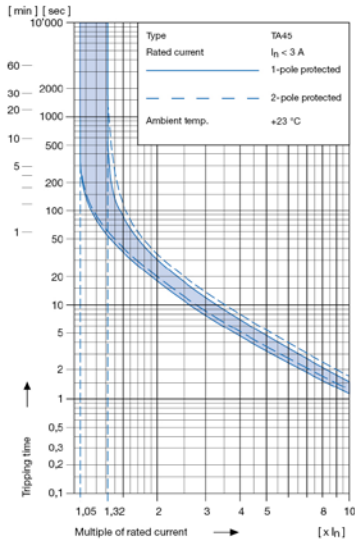
Code	Rated voltage $U_n$
•	<b>2</b> 240 V AC
•	<b>3</b> 230 V AC
•	<b>4</b> 120 V AC

Technical data (continued)

Circuit breaker

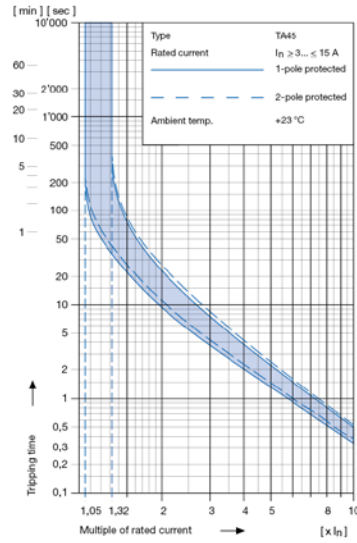
Tripping characteristics

$I_n < 3 A$



Tripping characteristics

$I_n \geq 3 \dots \leq 15 A$



Effect of ambient temperature <sup>1)</sup>

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	<b>6 A x 1,08 = 6,5 A</b>

Order code (Order example)

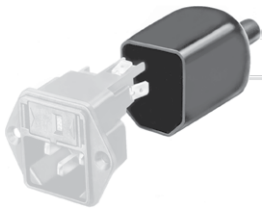
<b>Type</b>	<b>Order code TA45</b> (2-pole rocker-switch without accessories)		<b>Wiring</b> <b>0</b> Without <b>1</b> With <b>Type of line filter</b> <b>1</b> Standard <b>3</b> Medical <b>Rated current of line filter</b> <b>1</b> 1 (A) <b>5</b> 6 (A) <b>2</b> 2 (A) <b>6</b> 8 (A) <b>3</b> 3 (A) <b>7</b> 10 (A) <b>4</b> 4 (A) <b>8</b> 15 (A)
5145.	<b>A B T W F 1 5 0 C 0</b> 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 5145.0031.001

Packaging unit 20 Pcs

Accessories

Description



Assorted Covers  
Rear Cover

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 5145

Connector Overview complete



IEC Connector C13, Rewireable, Straight	4782
IEC Connector C13, Rewireable, Straight	4022
IEC Connector C13, Rewireable, Angled	4785
IEC Connector C13, Rewireable, Angled	4300-06
IEC Connector C13, Rewireable, Angled	4012

Connector further types to 5145

Mating Outlets/Connectors shuttered



Power Cord Overview complete

Overview Power Supply Cord with IEC Connector C13, V-Lock, straight	VAC13KS
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Power Cord further types to 5145