

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

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: 40012935
- UL File Number: E72928

### Characteristics

- All single elements are already wired
- Line switch non-illuminated or illuminated  
Thermal overload protection  
Optional with undervoltage- or remote trip release
- 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

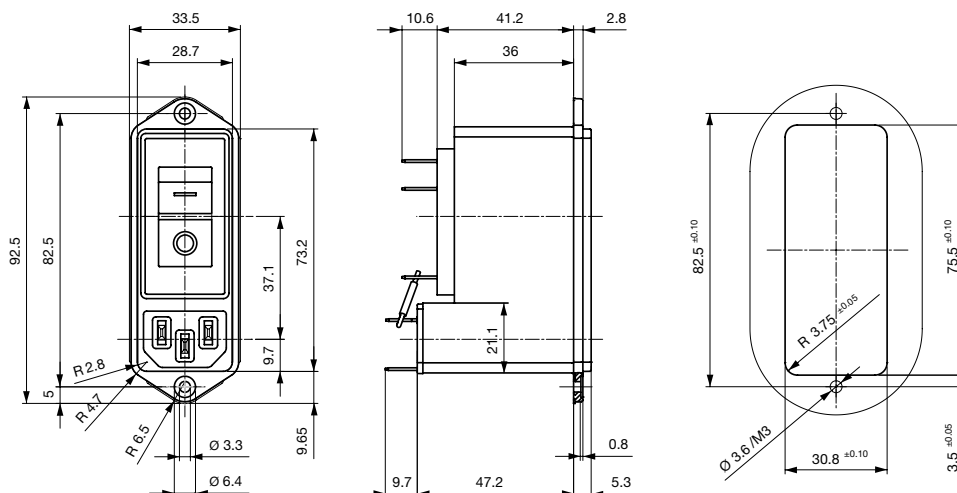
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [Mating Connectors](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [CAD-Drawings](#), [Accessories](#), [Detailed request for product](#)

Newly available variants corresponding to V-Lock mating cordset. 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.

### Technical Data

Ratings IEC	1 - 10A @ Ta 40 °C / 250VAC; 50Hz	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
Ratings UL/CSA	1 - 15A @ Ta 40 °C / 250VAC; 60Hz	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
Leakage Current	standard < 0.5mA (250V / 60Hz) medical < 5 µA (250 V / 60 Hz)	Line Switch	2-pole non-illuminated or illuminated acc. to IEC 61058-1 <a href="#">Technical Details</a>
Dielectric Strength	> 1.7kVDC between L-N > 2.7kVDC between L/N-PE Test voltage (2sec)	Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 <a href="#">Technical Details</a>
Allowable Operation Temp.	-10°C to 55°C	MTBF	> 100'000h acc. to MIL-HB-217 F
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 0.5Nm		
Material: Housing	Thermoplastic, black, UL 94V-0		

Dimension



Screw-on version

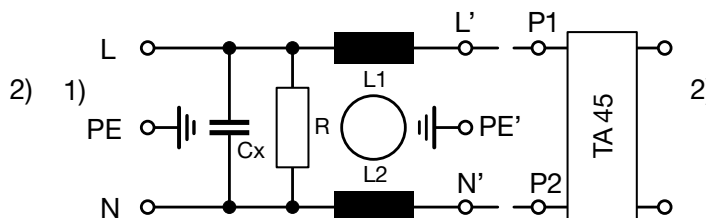
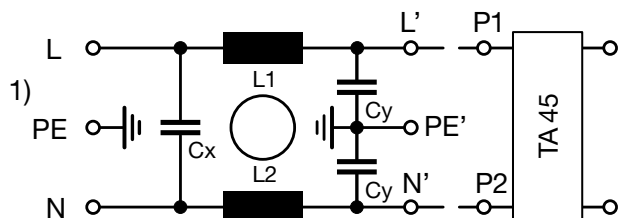
Technical Data of Filter-Components

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

Diagrams

Standard version

Medical version



1) Line  
2) Load

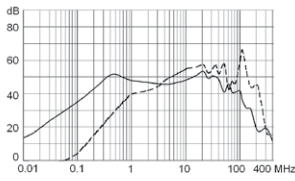
1) Line  
2) Load

**Attenuation Loss**

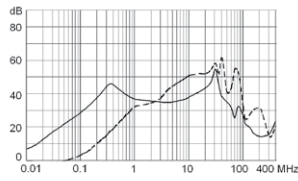
--- differential mode    — common mode

Standard version

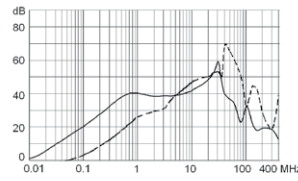
1 A



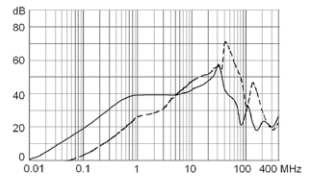
2 A



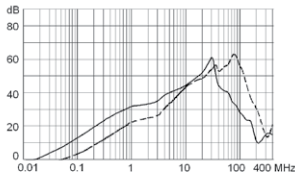
3 A



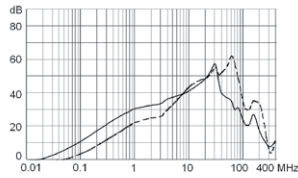
4 A



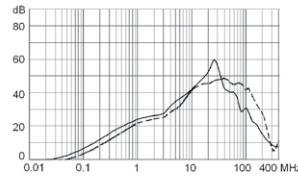
6 A



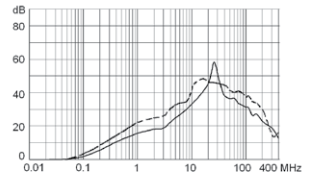
8 A



10 A

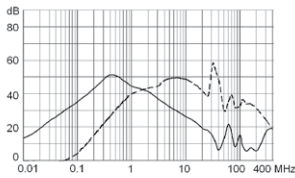


15 A

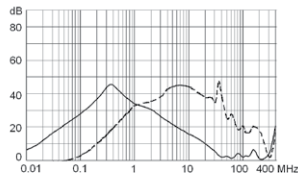


Medical version (M5)

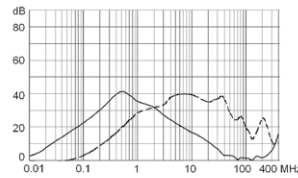
1 A



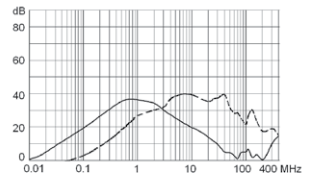
2 A



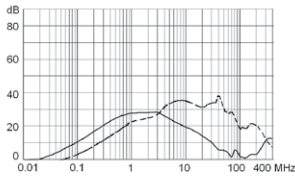
3 A



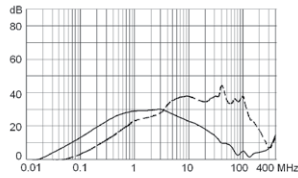
4 A



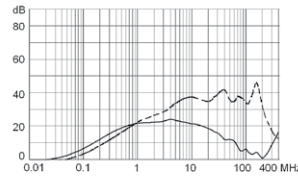
6 A



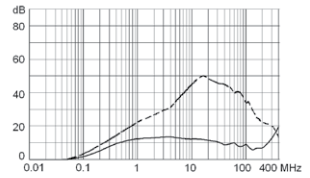
8 A



10 A



15 A



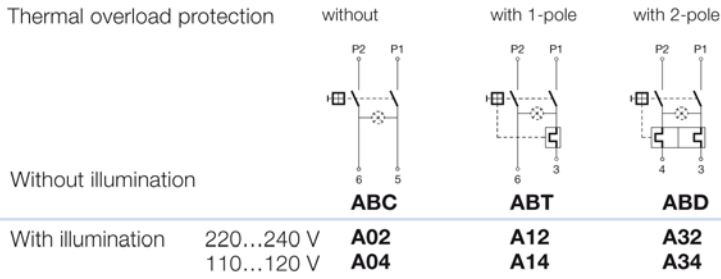
**Table 1 Selection for type TA45**  
Order example



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

ABT W F 150 C0

**Diagram**



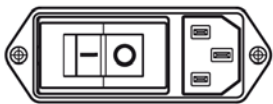
**Colours**

Switch front	Rocker	
W black	white	—
B black	black	—
6 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



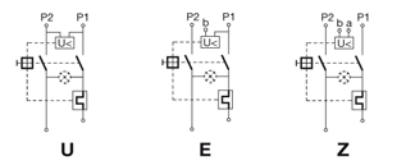
**Rated current:**

- 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**



•	•	•
•	•	•
•	•	•

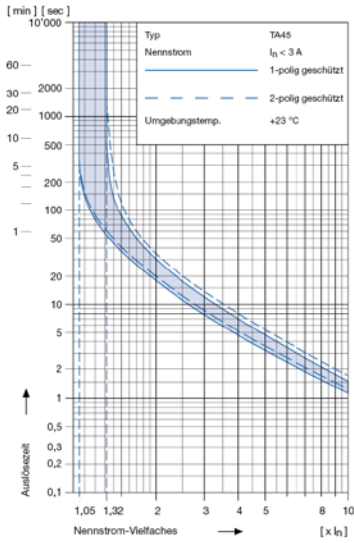
**Remote trip release**



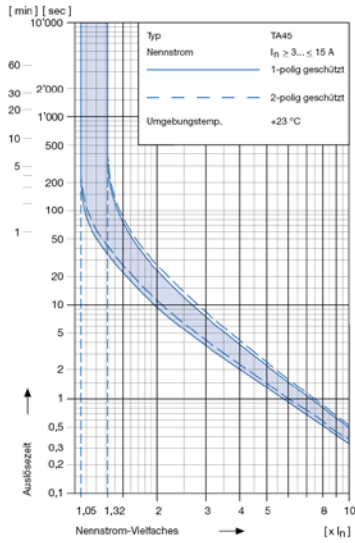
•	<b>2</b>	240 V AC
•	<b>3</b>	230 V AC
•	<b>4</b>	120 V AC

**Technical data (continued)**  
**Circuit breaker**

Tripping characteristics  
 $I_n < 3 A$



Tripping characteristics  
 $I_n \geq 3... \leq 15 A$



**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

**Order code (Order example)**

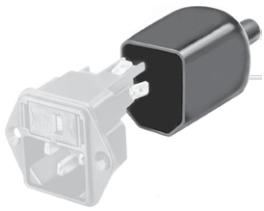
<p><b>Type</b></p> <p><b>Order code TA 45</b> (2-pole rocker-switch without accessories)</p>	<p><b>DF12 . A B T W F 1 5 0 C 0 . 0 0 1 0 . 1 21</b></p> <p>see table 1</p>	<p><b>Specials</b> 21 V-Lock notch</p> <p><b>Wiring</b> 1 wired 2 unwired</p> <p><b>Mounting</b> 0 Screw</p> <p><b>Terminals</b> 1 Quick connect 6.3 x 0.8</p> <p><b>Filter Version</b> 1 Standard 3 Medical M5</p> <p><b>Rated Current Filter</b> 1 = 1A    5 = 6A 2 = 2A    6 = 8A 3 = 3A    7 = 10A 4 = 4A    9 = 15A</p>
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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.xxxxxx

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 DF12](#)



[Connector Overview complete](#)

IEC Connector C15A, Rewireable, Straight	0102
IEC Connector C15A, Rewireable, Straight	0102-G
IEC Connector C15A, Rewireable, Angled	0112
IEC Connector C13, Rewireable, Angled	4012
IEC Connector C13, Rewireable, Straight	4022

[Connector further types to DF12](#)

## 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 DF12](#)