

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
- 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](#), [Mating Connectors](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

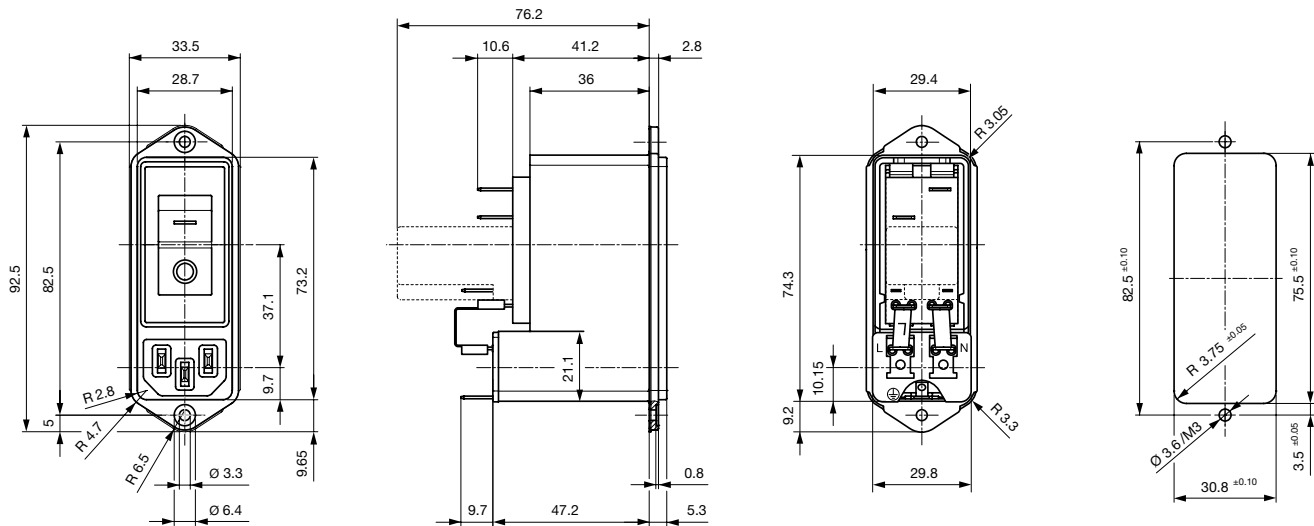
Newly available variants corresponding to V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset.

### Technical Data

Ratings IEC	1 - 10 A @ Ta 40 °C / 250 VAC; 50 Hz
Ratings UL/CSA	1 - 15 A @ Ta 40 °C / 250 VAC; 60 Hz
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
Degree of Protection	IP 40 acc. to
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 60320-1 UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10 A, 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 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



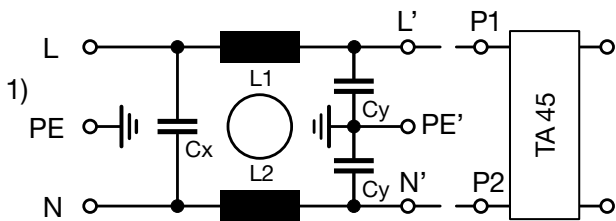
\* --- Version TA45 with undervoltage release

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

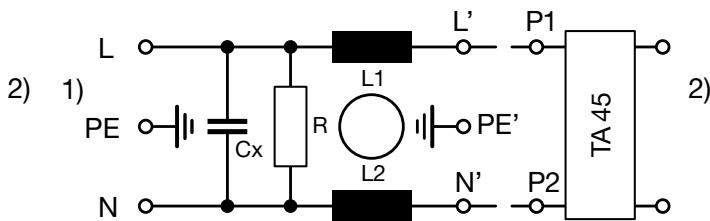
Diagrams

Standard version



1) Line  
2) Load

Medical version (M5)



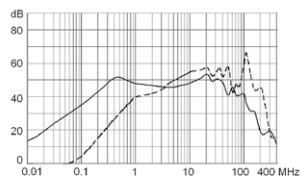
1) Line  
2) Load

## Attenuation Loss

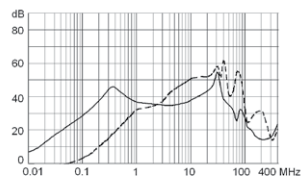
Standard version

--- 50Ω differential mode    — 50Ω common mode

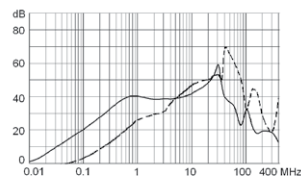
1 A



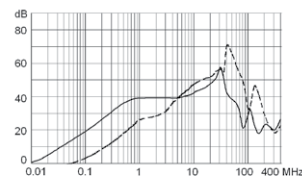
2 A



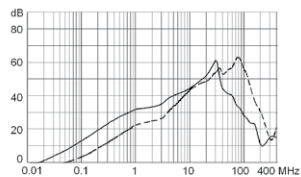
3 A



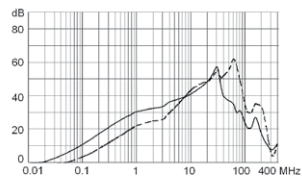
4 A



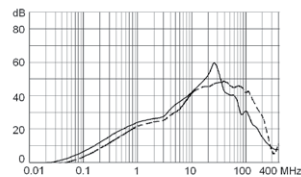
6 A



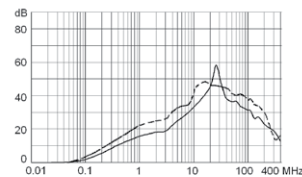
8 A



10 A

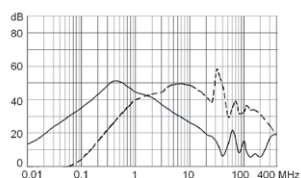


15 A

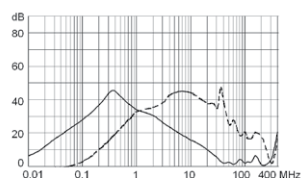


Medical version (M5)

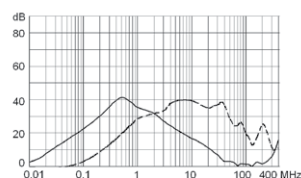
1 A



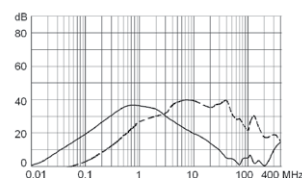
2 A



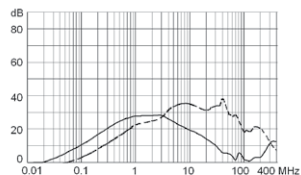
3 A



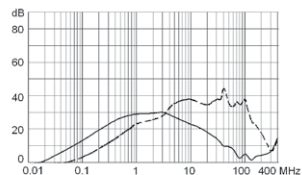
4 A



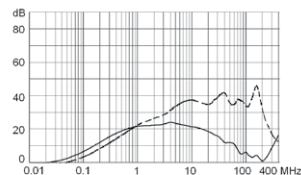
6 A



8 A



10 A



15 A

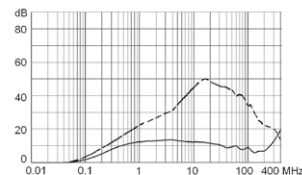


Table 1 Selection for type TA45  
Order example



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

Diagram

Thermal overload protection		without	with 1-pole	with 2-pole
Without illumination				
		ABC	ABT	ABD
With illumination		220...240 V 110...120 V	A02 A14	A32 A34

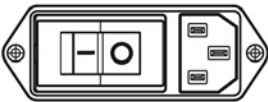
Colours

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
F embossed / Relief	— ○		M printed	— ○	black
H printed / bedruckt	ON OFF	white / weiss	P printed	I ○	white
K printed / bedruckt	ON OFF	black / schwarz	R printed	I ○	black
L 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

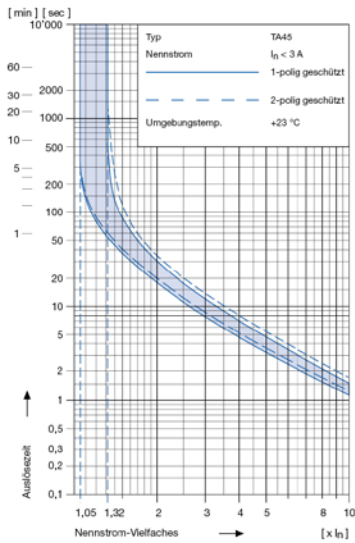
	<b>A</b>	<b>Code</b>	Rated voltage $U_n$
•	<b>2</b>	240 V AC	
•	<b>3</b>	230 V AC	
•	<b>4</b>	120 V AC	

## Technical data (continued)

### Circuit breaker

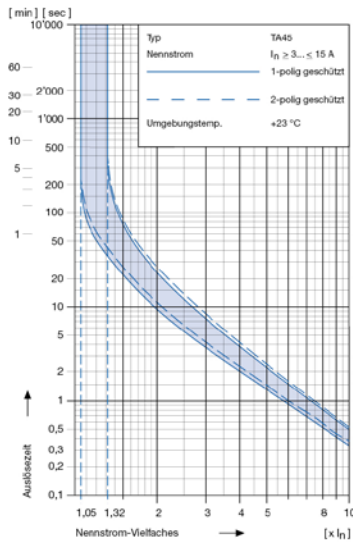
#### Tripping characteristics

$I_n < 3 \text{ A}$



#### Tripping characteristics

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



#### Effect of ambient temperature <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	6 A x 1,08 = 6,5 A

#### Order code (Order example)

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

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

Variants

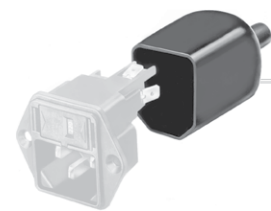
Circuit Breakers				Filter		Connectors		Internally wired	Config. Code	Order Number
Rated Current [A]	Rocker colour	Illumination	Add-on modules	Rated Current [A]	Filter Type	Protection Class	V-Lock			
15	orange	illuminated	without	15	Standard	I		prewired	DF12.A326F150C0.9110.1	DF12.2851.9110.1
15	black	non-illuminated	without	15	Standard	I		prewired	DF12.ABDBL150C0.9110.1	DF12.1089.9110.1
15	white	non-illuminated	without	15	Standard	I		prewired	DF12.ABDWF150C0.9110.1	DF12.0885.9110.1
10	black	non-illuminated	without	10	Medical (M5)	I		prewired	DF12 .ABDBL100C0.7310.1	DF12.2078.7310.1
10	white	non-illuminated	without	10	Medical (M5)	I		prewired	DF12 .ABDWF100C0.7310.1	DF12.0470.7310.1
12	black	non-illuminated	without	15	Medical (M5)	I		prewired	DF12.ABDBL120C0.9310.1	DF12.2420.9310.1
15	black	non-illuminated	Remote trip release	15	Medical (M5)	I		prewired	DF12 .ABDBH150A3.9310.1	DF12.4051.9310.1
15	white	non-illuminated	without	15	Medical (M5)	I		prewired	DF12.ABTWF150C0.9310.1	DF12.0031.9310.1
6	black	non-illuminated	without	6	Medical (M5)	I	●	prewired	DF12.ABDBP060C0.5310.121	DF12.1488.5310.121

Availability for all products can be searched real-time:<http://www.schurter.com/Stock-Check/Stock-Check-SCHURTER>

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](#)