

IEC Appliance Inlet C14 with Filter, Circuit Breaker TA45

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: 40035745
- UL File Number: E72928

Characteristics

- All single elements are already wired
Unwired versions available on request
- Line switch non-illuminated or illuminated
Thermal overload protection
Optional with undervoltage- or remote trip release
- Qualified for use in equipment according IEC/EN 60950

References

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

Weblinks

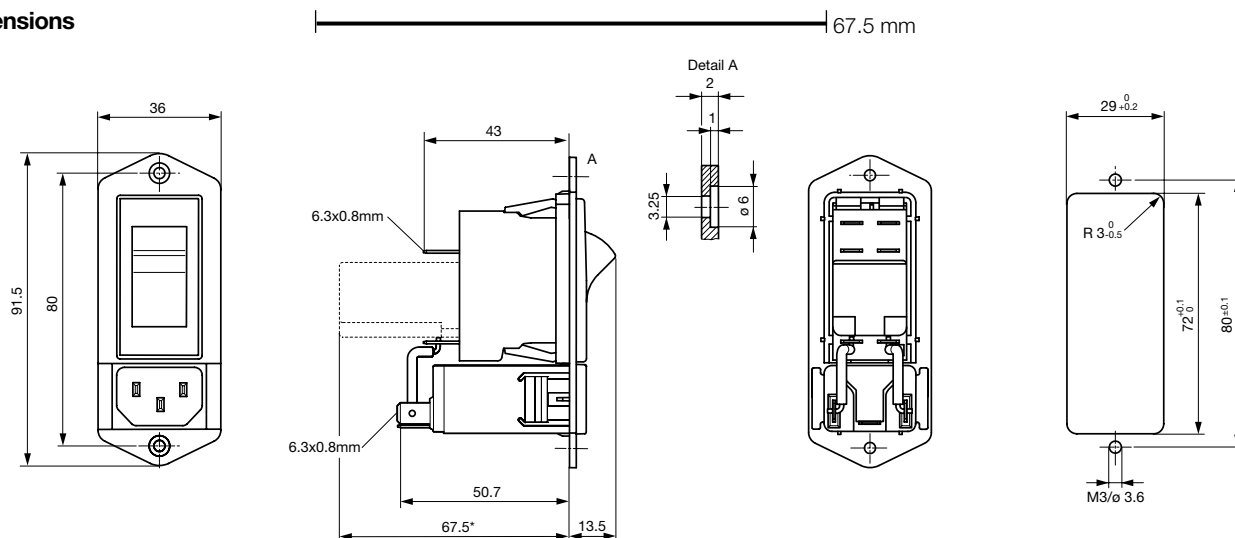
[pdf data sheet](#), [html data sheet](#), [General Product Information](#),
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [Mating Connectors](#), [e-Shop](#),
[SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [CAD-Drawings](#),
[Accessories](#), [Detailed request for product](#)

Technical Data

Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50 Hz
Ratings UL/CSA	1 - 15A @ Ta 40 °C / 125 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	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	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/EN 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 In < 3A/240VAC : 10 x In at In ≥ 3A/240VAC : 300A
Line Switch	2-pole non-illuminated or illuminated acc. to IEC 61058-1 Technical Details
Line Filter	Standard and Medical Version, IEC 60939, IEC 60601-1, UL 1283, UL 544, EN 133 200, CSA C22.2 no. 8 Technical Details
MTBF	> 100'000 h acc. to MIL-HB-217 F

Dimensions



* --- Version TA45 with undervoltage release

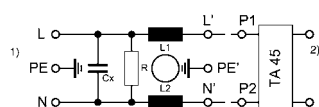
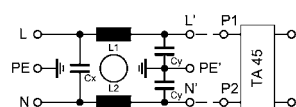
Technical Data of Filter-Components

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

Medical version



1) Line
2) Load

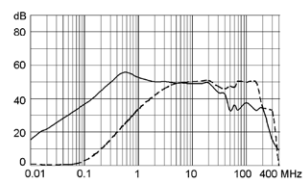
1) Line
2) Load

Attenuation Loss

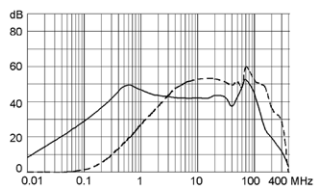
Standard version

- - - differential mode — common mode

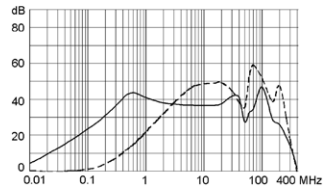
1 A



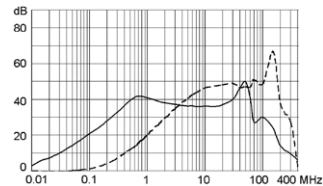
2 A



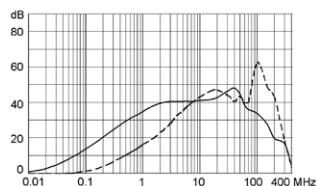
3 A



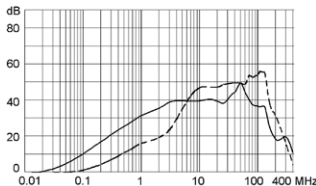
4 A



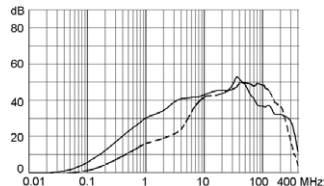
6 A



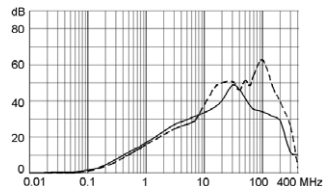
8 A



10 A

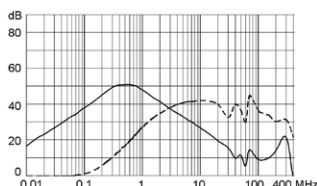


15 A

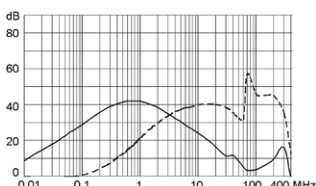


Medical version (M5)

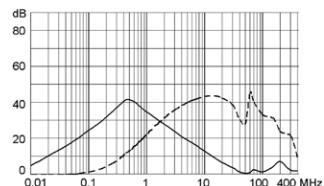
1 A



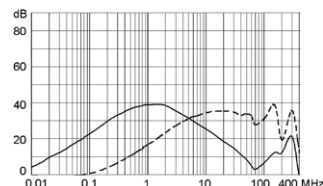
2 A



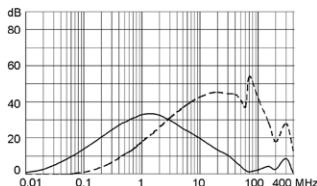
3 A



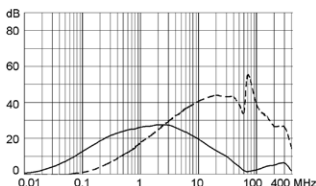
4 A



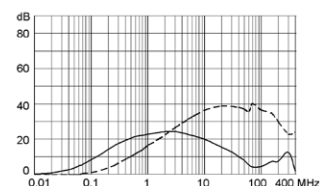
6 A



8 A



10 A



15 A

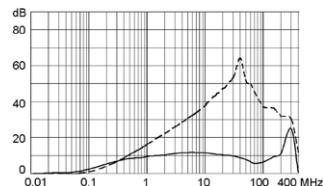


Table 1 Selection for type TA45

Order example



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

Diagram

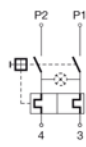
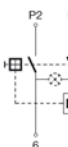
Thermal overload protection

without

with 1-pole

with 2-pole

Without illumination



ABC

ABT

ABD

With illumination

220...240 V
110...120 VA02
A04A12
A14A32
A34

Colours

Switch front

W black
B black
6 black

Rocker

white
black
— orange transp.

Rocker legend

Surface

Illustration

Colour of print

F embossed / Relief



white / weiss

H printed / bedruckt



black / schwarz

K printed / bedruckt



white / weiss

L printed / bedruckt



white / weiss

Surface

Illustration

Colour of print

M printed



black

P printed



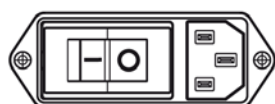
white

R printed



black

Position of the rocker legend
e.g F



Rated current:

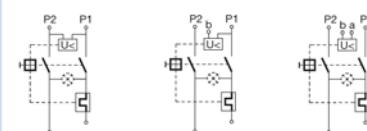
• Without thermal overload protection: code C00 } $I_n = 20\text{ A}$

• With thermal overload protection: rated current I_n (A)

I_n	Code	I_n	Code	I_n	Code	I_n	Code
0,1	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

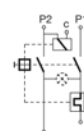


U

E

Z

Remote trip release



A

Code

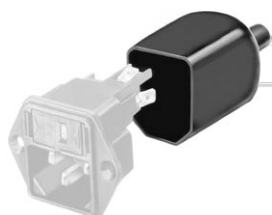
Rated voltage U_n

•	•	•	•	2	240 V AC
•	•	•	•	3	230 V AC
•	•	•	•	4	120 V AC

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
IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder or Quick-connect Terminal	5092

[Appliance Outlet further types to 5145](#)

Connector Overview complete



IEC Connector C15, Rewireable, Straight	0101
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

[Connector further types to 5145](#)

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Power Cord Overview complete



Power Cord with IEC Connector C13, Angled	0311
Power Cord with IEC Connector C13, Angled	3011
Power Cord with IEC Connector C13, Angled	3012
Power Cord with IEC Connector C13, Angled	3013
Power Cord with IEC Connector C13	3020

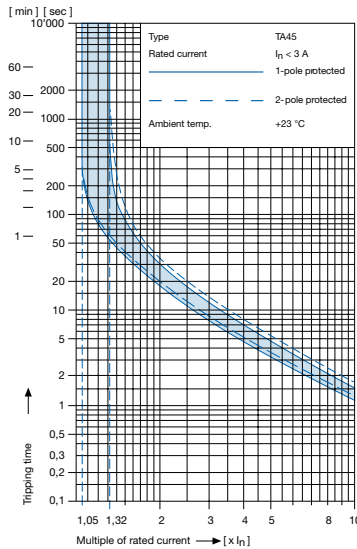
[Power Cord further types to 5145](#)

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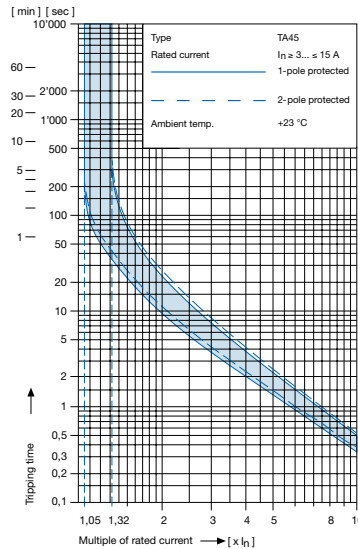
Technical data (continued)

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

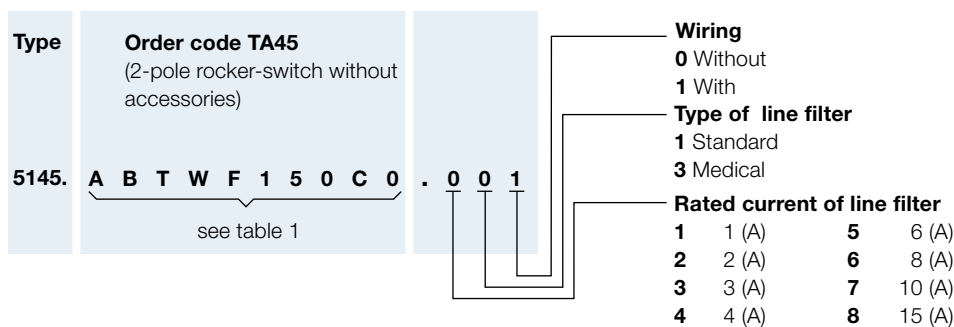
-10	0,89
- 5	0,91
0	0,92
+23	1,00
+30	1,03
+40	1,08
+55	1,16

* 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

Order code (Order example)



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