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

Standard- or Medical-Filter

V-Lock



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, Mating Connectors, e-Shop, SCHURTER-Stock-Check, Distributor-Stock-Check, Accessories

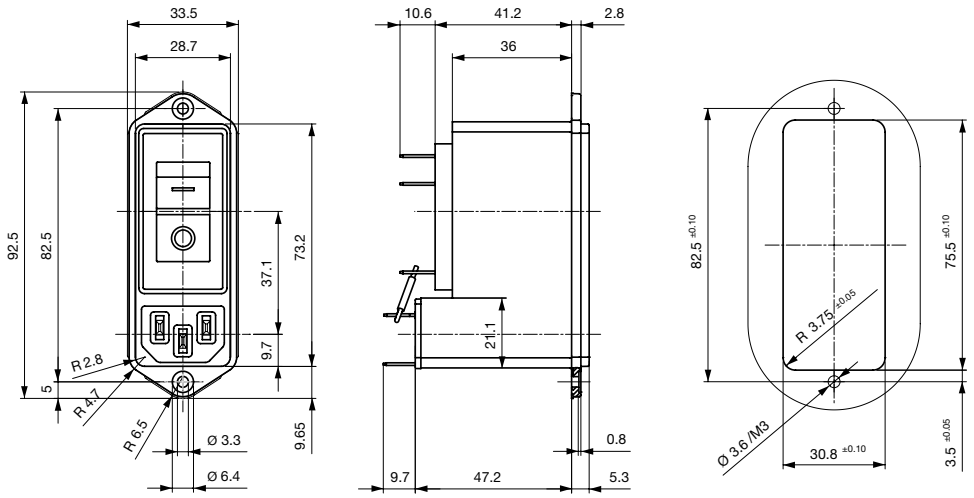
Newly available variants corresponding to V-Lock mating cordset. The connector is equipped with a notch intended for use with the latching cordset. The cord latching system prevents against accidental removal of the cordset.

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	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, 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 Technical Details
Line Filter	Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details
MTBF	> 100'000 h acc. to MIL-HB-217 F

Dimension



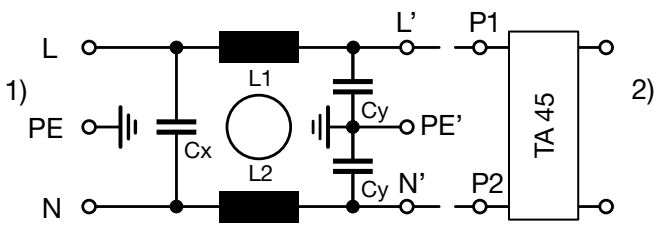
Screw-on version

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

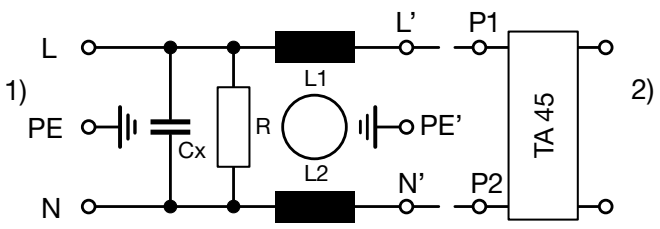
Diagrams

Standard version



1) Line
2) Load

Medical version



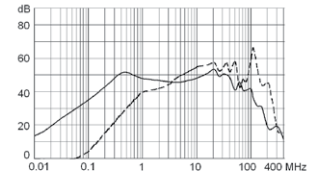
1) Line
2) Load

Attenuation Loss

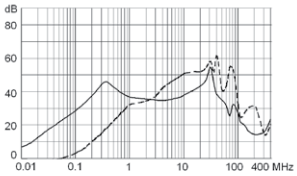
- - - - differential mode _____ common mode

Standard version

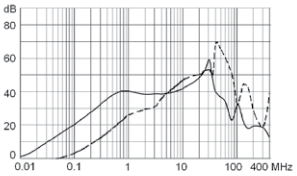
1 A



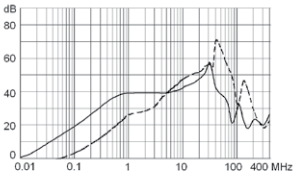
2 A



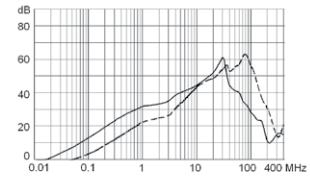
3 A



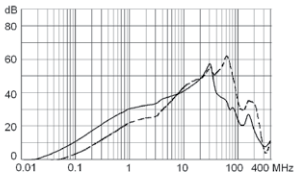
4 A



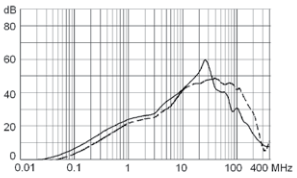
6 A



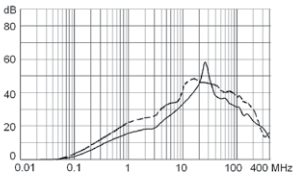
8 A



10 A

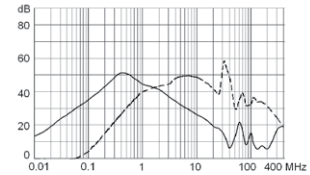


15 A

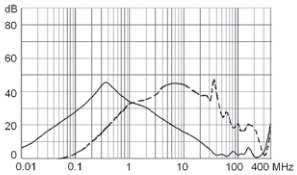


Medical version (M5)

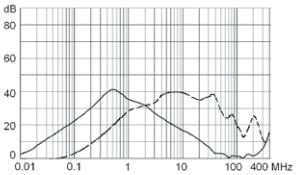
1 A



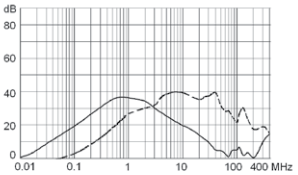
2 A



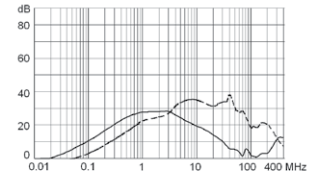
3 A



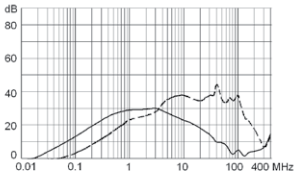
4 A



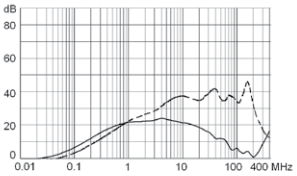
6 A



8 A



10 A



15 A

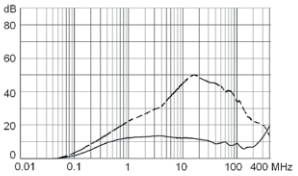


Table 1 Selection for type TA45
Order example

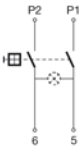
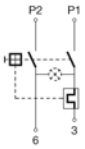
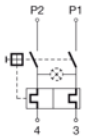
ABT	W	F	150	C0



- 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	**A02**	**A12**	**A32**
	110…120 V	**A04**	**A14**	**A34**

Colours

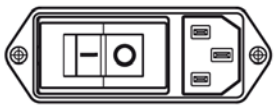
Switch front		Rocker	
		white	–
W	black	black	–
B	black	–	orange transp.
6	black		

Rocker legend

	Surface	Illustration		Colour of print
F	embossed / Relief	–	O	
H	printed / bedruckt	ON	OFF	white / weiss
K	printed / bedruckt	ON	OFF	black / schwarz
L	printed / bedruckt	–	O	white / weiss

	Surface	Illustration		Colour of print
M	printed	–	O	black
P	printed	I	O	white
R	printed	I	O	black

Position of the rocker legend
e.g F



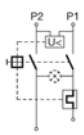
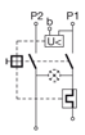
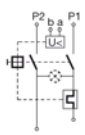
Rated current:

- **Without thermal overload protection: code C00** } I_n = 20 A
- **With thermal overload protection: rated current I_n (A)**

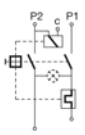
I_n	Code	I_n	Code	I_n	Code	I_n	Code
0,1	**J01**	1,3	**J13**	2,8	**J28**	10,0	**100**
0,2	**J02**	1,4	**J14**	3,0	**030**	11,0	**110**
0,3	**J03**	1,5	**J15**	3,5	**035**	12,0	**120**
0,4	**J04**	1,6	**J16**	4,0	**040**	13,0	**130**
0,5	**J05**	1,7	**J17**	4,5	**045**	14,0	**140**
0,6	**J06**	1,8	**J18**	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

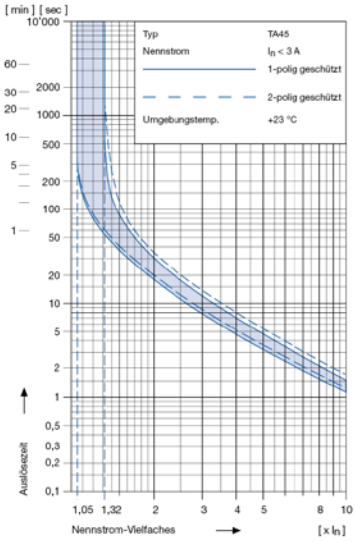
	U	E	Z
			
	•	•	•
	•	•	•
	•	•	•

Remote trip release

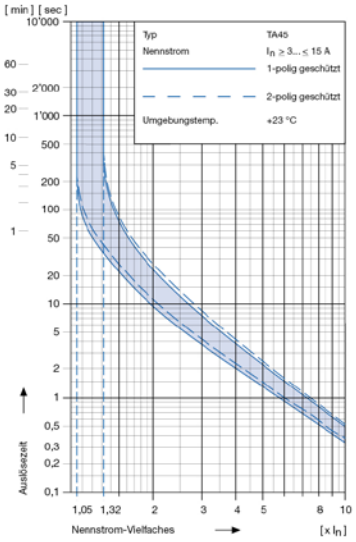
	A	Code	Rated voltage U_n
			
	•	**2**	240 V AC
	•	**3**	230 V AC
	•	**4**	120 V AC

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)

Type DF12.

Order code TA 45
(2-pole rocker-switch without accessories)

DF12. A B T W F 1 5 0 C 0 . 0 0 1 0 . 1 21

see table 1

Specials
21 V-Lock notch

Wiring
1 wired
2 unwired

Mounting
0 Screw

Terminals
1 Quick connect 6.3 x 0.8

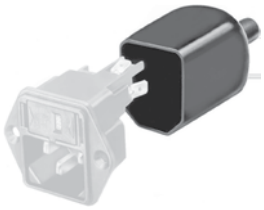
Filter Version
1 Standard
3 Medical M5

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 additional to the order code. The format of this internal part number is, for example DF12.xxxxxxx

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 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 DF12	...

Mating Outlets/Connectors shuttered

	Power Cord Overview complete	
	Overview Power Supply Cord with IEC Connector C13, V-Lock, straight	VAC13KS
	Power Cord further types to DF12	

22.04.2015

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.