

Inlet filter, front side mounting, deeply placed circuit breaker TA45 2-pole

Standard- or Medical-Filter



### Description

- Panel Mount:  
Screw-on from front side
- 3 Functions:  
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
- Alternative: version without line filter [DF11](#)
- Substitute for type [5145](#)

### Approvals

- VDE License Number: 40012935
- UL License Number: E72928

### Characteristics

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

### Other versions on request

- Unwired versions
- Line switch 1-pole
- Other rocker marking
- Medical version M80
- Capacitance CX1

### References

[General Product Information](#)

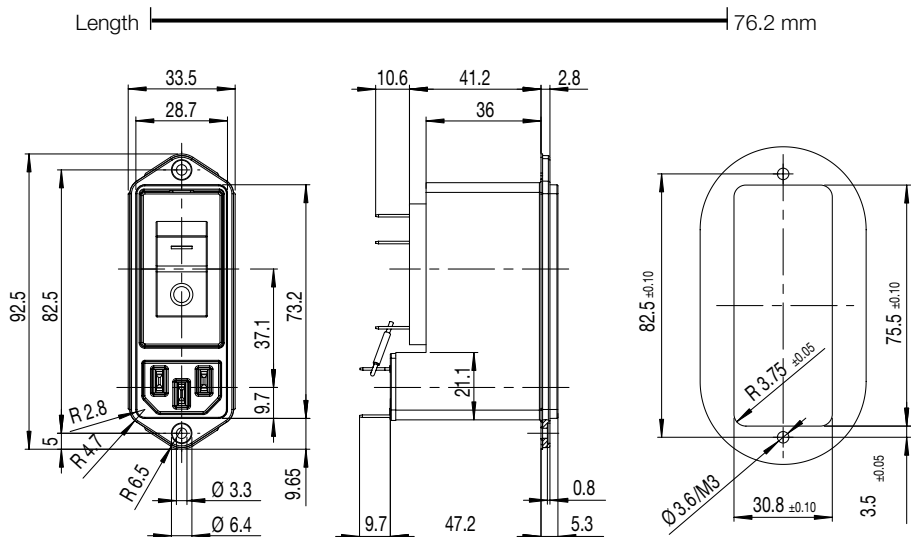
### Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

### Technical Data

Ratings IEC	1 - 10A @ Ta 40 °C / 250 VAC; 50 Hz	Appliance-Inlet /-Outlet	C14 acc. to IEC/EN 60320-1 UL 498, CSA C22.2 no. 42 (for cold condition) pin-temperature 70 °C, 10A, Protection class I
Ratings UL/CSA	1 - 15A @ Ta 40 °C / 250 VAC; 60 Hz	Circuit breaker	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 < 0.5 mA (250 V / 60 Hz) medical < 5 µA (250 V / 60 Hz)	Line Switch	Rocker switch 2-pole non-illuminated or illuminated acc. to IEC 61058-1 <a href="#">Technical details</a>
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)	Line Filter	Standard and Medical Version, IEC 60939, IEC 60601-1, UL 1283, UL 544, EN 133 200, 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-on: max 8 mm Mounting screw torque max 0.5 Nm		
Material: Housing	Thermoplastic, black, UL 94V-0		

## Dimensions



\* Version TA45 with undervoltage release

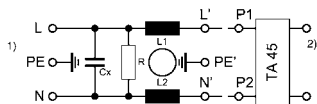
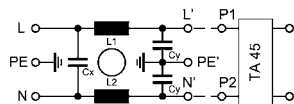
## Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
1	Standard Version	2 x 11	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

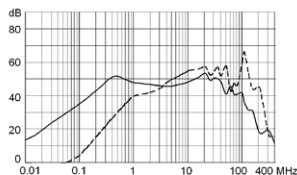
1) Line  
2) Load

**Attenuation Loss**

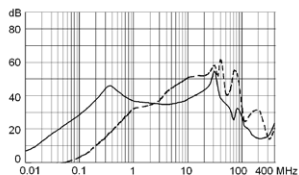
--- differential mode \_\_\_\_ common mode

Standard version

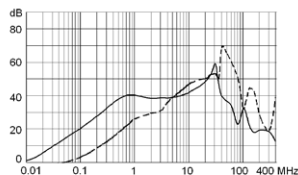
1 A



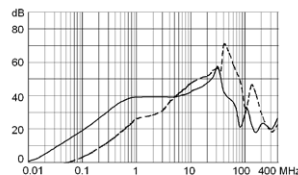
2 A



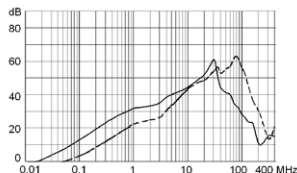
3 A



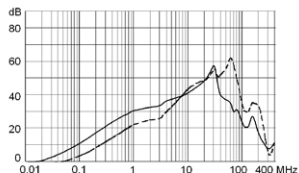
4 A



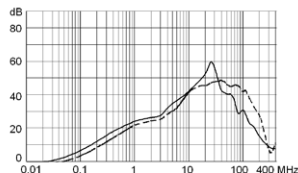
6 A



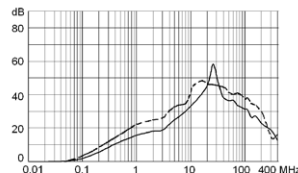
8 A



10 A

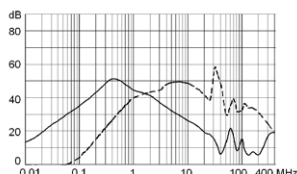


15 A

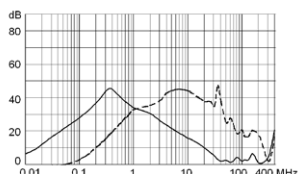


Medical version (M5)

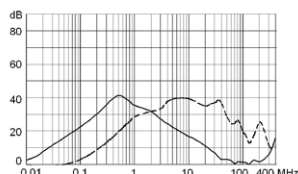
1 A



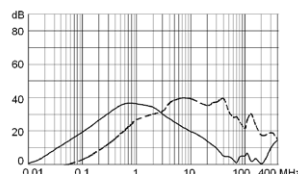
2 A



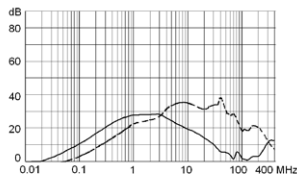
3 A



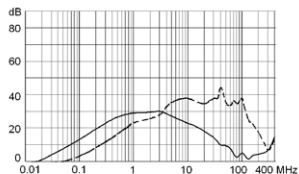
4 A



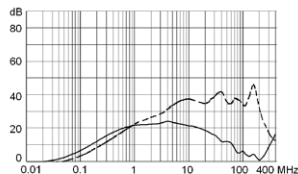
6 A



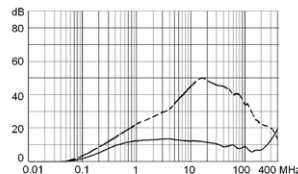
8 A



10 A



15 A



**Packaging unit** 10 Pcs

**Accessory**

Description

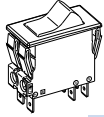


Assorted Covers  
Rear Cover

0859.0109

**Table 1 Selection for type TA45**

Order example

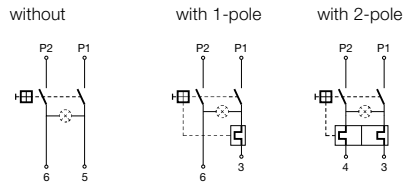


- Line switch
  - 2-pole, rocker actuated
  - Quick connect terminal
- Other types on request

**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

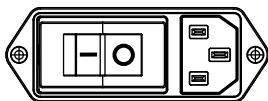
**Rocker**

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		white / weiss	<b>P</b> printed		white
<b>K</b> printed / bedruckt		black / schwarz	<b>R</b> printed		black
<b>L</b> printed / bedruckt		white / weiss			

Position of the rocker legend  
e.g F



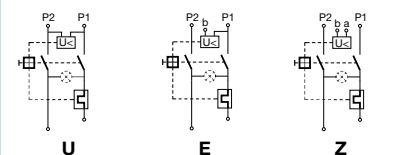
**Rated current:**

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

**Without release: code C0**

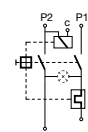
**Undervoltage release**



**U E Z**

•	•	•
•	•	•
•	•	•

**Remote trip release**



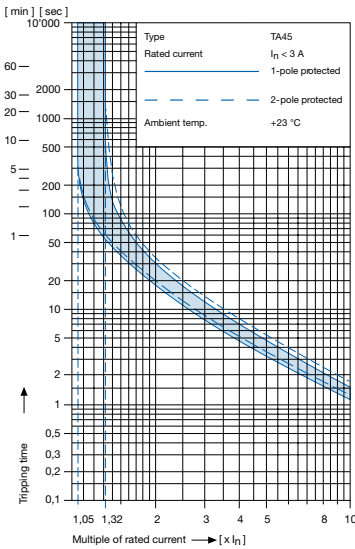
**A Code**

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

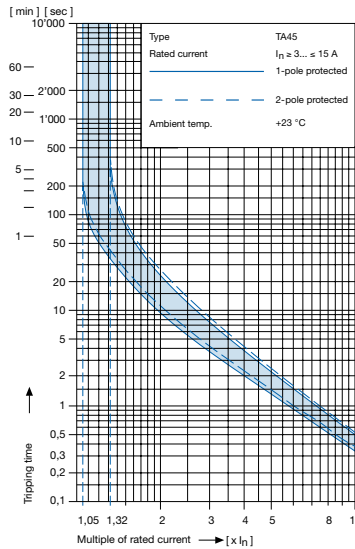
Rated voltage  $U_n$

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

Tripping characteristics  
 $I_n < 3 A$



Tripping characteristics  
 $I_n \ge 3... \le 15 A$



**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.

**<sup>1)</sup> 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)**

<b>Type</b>	<b>Order code TA 45</b> (2-pole rocker-switch without accessories)																
<b>DF12.</b>	<b>A</b>	<b>B</b>	<b>T</b>	<b>W</b>	<b>F</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>C</b>	<b>0</b>	<b>.</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>.</b>	<b>1</b>
	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**  
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