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









70° C



- 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

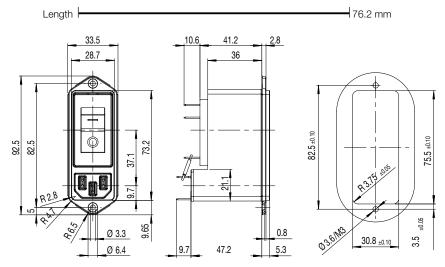
Approvals: www.schurter.com/approvals RoHS: http://www.schurter.com/rohs CHINA-RoHS: www.schurter.com/china-rohs Webstore: www.schurterinc.com/estore/search.ihtml

# **Technical Data**

Ratings IEC	1 - 10 A @ Ta 40 °C / 250 VAC; Hz 50
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-on: max 8mm
	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 condition) pin-temperature 70 °C, 10 A, Protection class I
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
Line Switch	Rocker 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	> 100'000h acc. to MIL-HB-217 F

## **Dimensions**



<sup>\*</sup> Version TA45 with undervoltage release

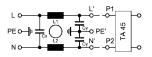
# **Technical Data of Filter-Components**

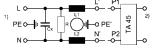
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R</b> [ <b>M</b> Ω]
1	Standard Version	2 x 11	100	2.2	1
2	Standard Version	2 x 4	100	2.2	1
3	Standard Version	2 x 2.5	100	2.2	1
4	Standard Version	2 x 1.6	100	2.2	1
6	Standard Version	2 x 0.7	100	2.2	1
8	Standard 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

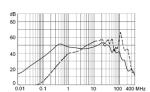
1) Line 2) Load

\_\_\_ common mode

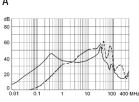
# **Attenuation Loss**

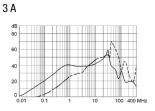
Standard version

1 A

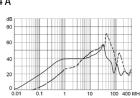


2 A

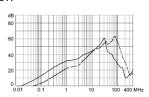




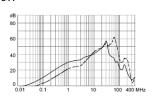
- - - - differential mode 4 A



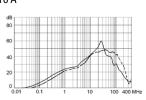
6 A



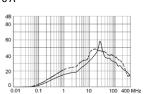
8 A



10 A

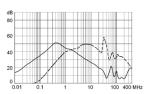


15 A

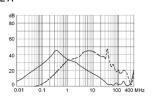


Medical version (M5)

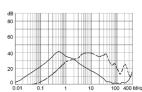
1 A



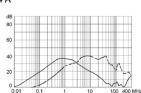
 $2\,A$ 



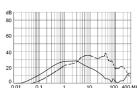
3 A



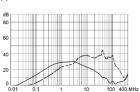
4 A



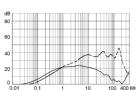
6 A



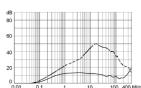
8 A



10 A



15 A



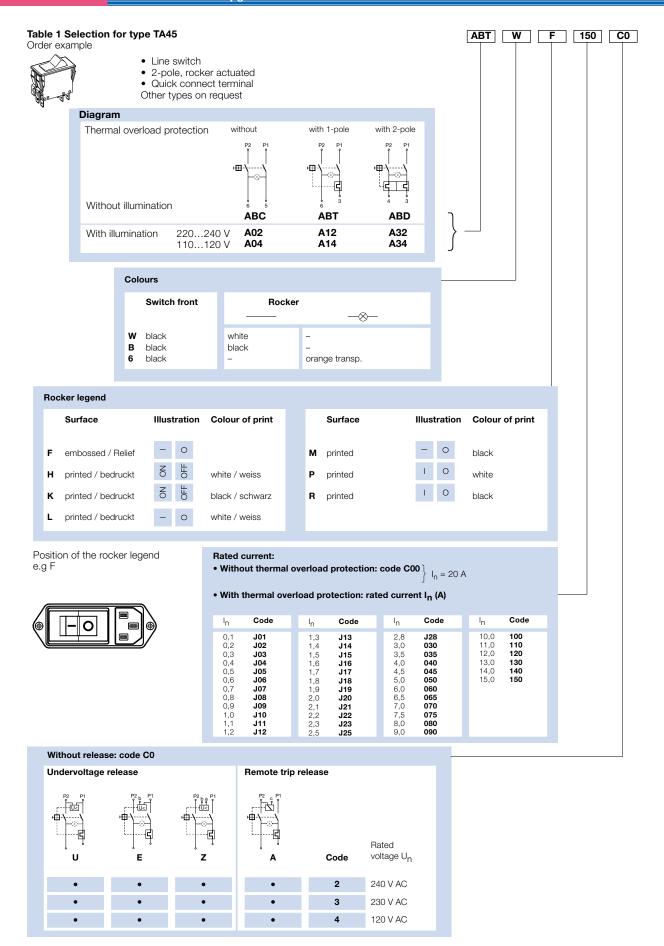
Packaging unit

10 Pcs

## Accessory

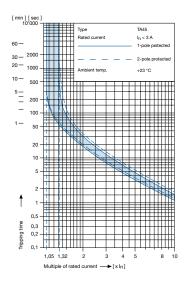
Description



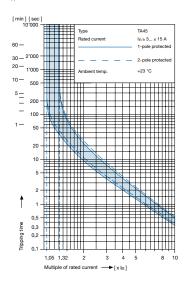


# Technical data (continued) Circuit breaker

Tripping characteristics I<sub>n</sub> < 3 A



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



#### 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

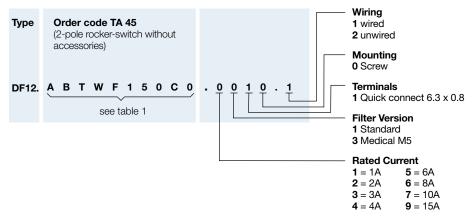
-10	0,89	
- 5	0,91	
0	0,92	
+23	1,00	
+30	1,03	
+40 +55	1,08	
+55	1.16	

\* 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	$6.4 \times 1.08 = 6.5.4$

## Order code (Order example)



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

