

**NEW**

**EF12 EF12 EF12**

APPLIANCE INLET WITH CIRCUIT BREAKER AND LINE-FILTER

## New compact Power Entry Module EF12

Consisting of appliance inlet, circuit breaker for equipment and line-filter.

Now for high currents

- 12/16 A IEC/EN
- 12/16/20 A UL/CSA



EF12 supplements type EF11  
launched December 2001.

 **SCHURTER**

Certified Management Systems

  
ISO 9001/ISO 14001

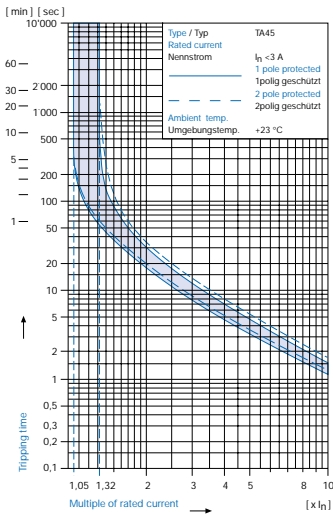
  
\*General Member of\*



## Technical data (continued) Circuit breaker

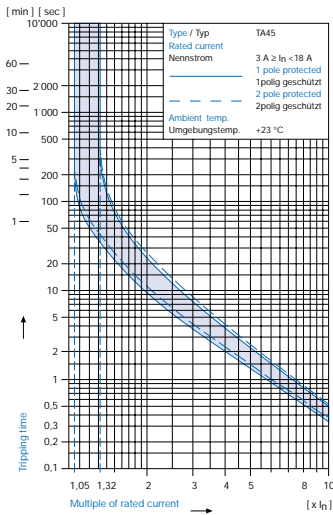
### Tripping characteristics

$I_n < 3 A$



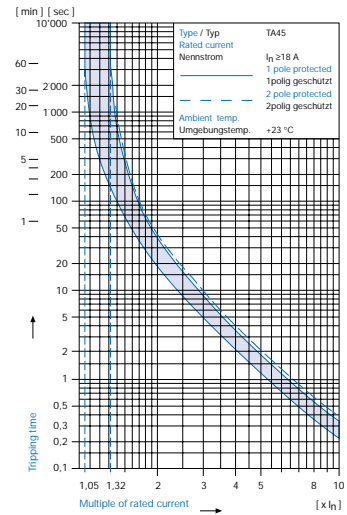
### Tripping characteristics

$I_n \geq 3 \dots < 18 A$



### Tripping characteristics

$I_n \geq 18 A$



### Effect of ambient temperature

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 on the right side:

\* 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

### Example

Rated current at +23 °C

6,0 A

Ambient temperature

+40 °C

Correction factor

1,08

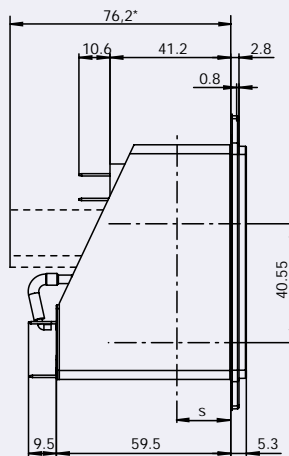
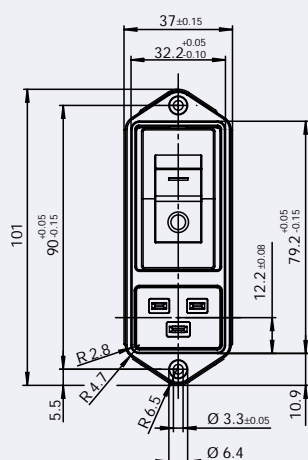
Chosen rated current at +40 °C ambient temperature

**6 A x 1,08 = 6,5 A**

\* Temperature must be measured at the rear of the breaker next to the terminals after equipment operating temperature has been reached.

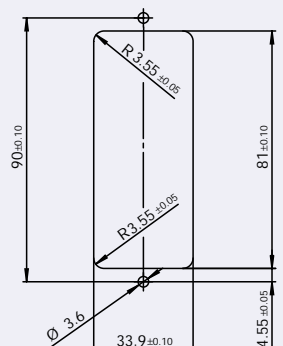
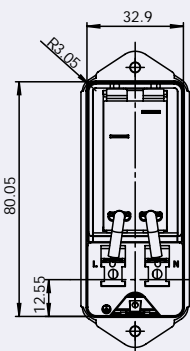
### Dimensions

#### Screw-on mounting



Mounting screw torque 0,5 Nm

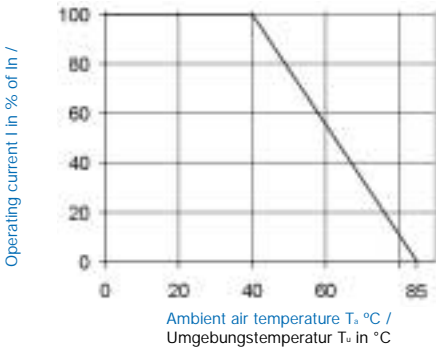
#### Panel cut-out



\* - - - - Version TA45 with undervoltage release

## Derating curve

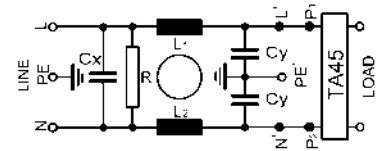
Correlation between max. operating current  $I$  and the ambient air temperature  $T_a$



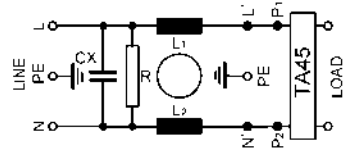
## Diagram

Line-switch non-illuminated

Standard version



Medical version

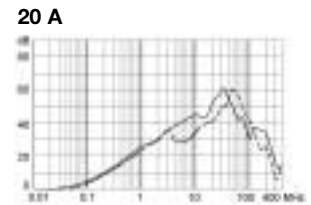
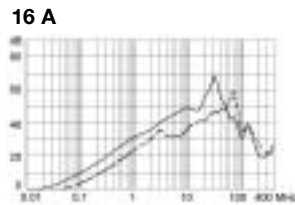
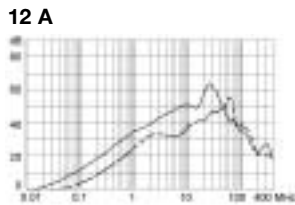


## Technical data of filters-components

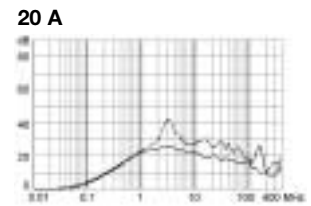
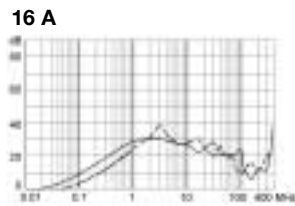
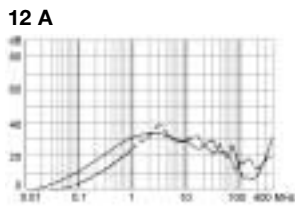
Rated current (A)	Filter-Type	Inductance L 1/L2 (mH)	Capacitance		R (MΩ)	DC-Resistance @ 25 °C (mΩ)
			CX (nF)	CY (nF)		
12	Standard	2 x 0,8	100	2 x 2,2	1	7,5
16		2 x 0,6				5
20		2 x 0,3				3,5
12	Medical	2 x 0,8	100		1	7,5
16		2 x 0,6				5
20		2 x 0,3				3,5

## Attenuation loss line-filter

Standard version / Standardversion



Medical version



## Order code for EF12 (order example)

Type /	Order code TA45 /	
	(2-pole rocker-switch without accessories) /	
F2.	<b>A B T W F 1 5 0 C 0 .</b>	11 10 01
	see table 1	

- Line filter, rated current, 1 = 20 A, 2 = 16 A, 3 = 12 A
- Line filter version, 1 = standard, 2 = medical
- Terminals 1 = Quick connect terminals 6,3 x 0,8 mm
- Panel mount: 0 = Screw-on version
- Protection class: 0 = Class I, housing black
- Wiring: 1 = wired

Please note that Schurter will establish an internal new part number for logistical use in addition to the order code. For example, order code F2ABTW200C011 will reflect the internal part number of EF12.0035.1110.01.

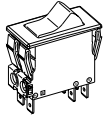
## Application note

The rated current of the line-filter must be equal or less than the rated current of the circuit-breaker

## Other versions on request

- Rocker switch illuminated

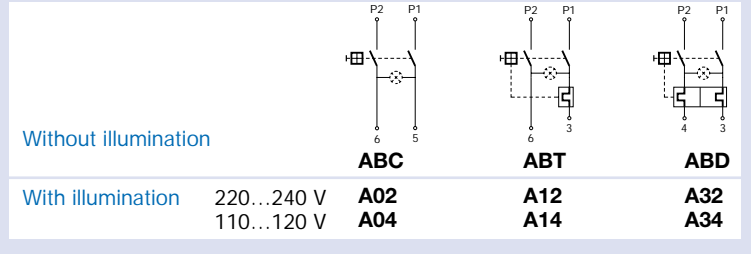
**Table 1**  
Selection for type TA45  
Order example



- Line-switch
- 2-pole, rocker actuated
- Quick connect terminal

Other types on request

### Diagram



### Colours

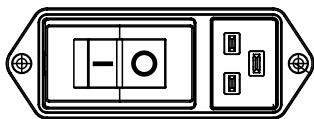
Switch front		Rocker	
<b>W</b>	black	white	—
<b>B</b>	black	black	—
<b>6</b>	black	—	orange transp.

**ABT** **W** **F** **150** **C0**

### Rocker legend

Surface	Illustration	Colour of print	Surface	Illustration	Colour of print
<b>F</b> embossed	— O		<b>M</b> printed	— O	black
<b>H</b> printed	ON OFF	white	<b>P</b> printed	I O	white
<b>K</b> printed	ON OFF	black	<b>R</b> printed	I O	black
<b>L</b> printed	— O	white			

Position of the rocker legend  
e. g F



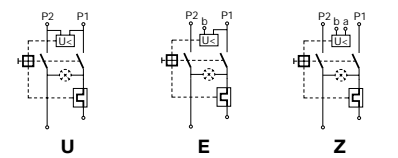
• Without thermal overload protection: code C00  $I_n = 16 \text{ A}$

• With thermal overload protection: rated current  $I_n \text{ (A)}$

$I_n$	Code	$I_n$	Code	$I_n$	Code	$I_n$	Code
10,0	<b>100</b>	13,0	<b>130</b>	16,0	<b>160</b>	19,0	<b>190</b>
11,0	<b>110</b>	14,0	<b>140</b>	17,0	<b>170</b>	20,0	<b>200</b>
12,0	<b>120</b>	15,0	<b>150</b>	18,0	<b>180</b>		

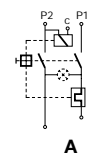
### Without release: code C0

#### Undervoltage release



•	•	•
•	•	•
•	•	•

#### Remote trip release



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