

## IEC Appliance Inlet C20 with Circuit Breaker TA45



### Description

- Panel Mount:  
Screw-on version from front or rear side, snap-in version from front side
- 2 Functions:  
Appliance Inlet Protection class I, circuit breaker type TA45 2-pole
- Quick connect terminals 6.3 x 0.8 mm

### Approvals

- VDE Certificate Number: 40001029
- UL File Number: E96454

### 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
- Suitable for use in equipment according to IEC/UL 60950

### Other versions on request

- Unwired versions
- Variant with notch for V-Lock mating Cordsets

### References

Alternative: version with line filter [EF12](#)

### Weblinks

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

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.

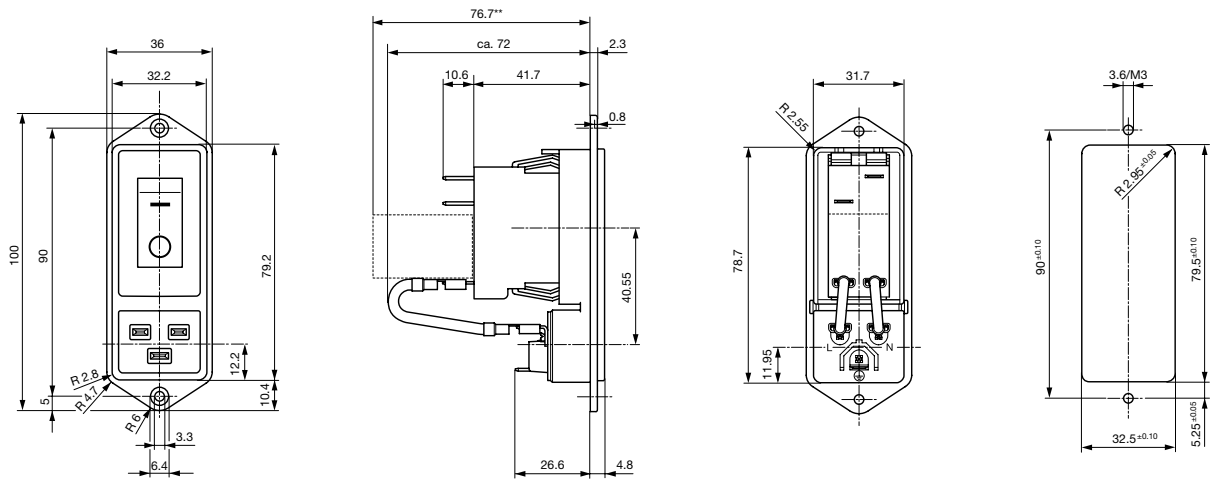
### Technical Data

|                           |                                                                              |
|---------------------------|------------------------------------------------------------------------------|
| Ratings IEC               | 16 A / 250 VAC; 50 Hz                                                        |
| Ratings UL/CSA            | 20 A / 125/250 VAC; 60 Hz                                                    |
| Dielectric Strength       | > 1.5 kVAC between L-N<br>> 3 kVAC between L/N-PE<br>(1 min/50 Hz)           |
| Allowable Operation Temp. | -10 °C to 55 °C                                                              |
| 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<br>Mounting screw torque max 0.5 Nm<br>Snap-in: 1.5/2/2.5 mm |
| Material: Housing         | Thermoplastic, black, UL 94V-0                                               |

|                  |                                                                                                                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appliance Inlet  | C20 acc. to IEC 60320, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 16 A, Protection Class I                                                                                                                              |
| Circuit Breakers | Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235<br>2-pole rocker switch, illuminated or non-illuminated. Optional with undervoltage- or remote trip release<br>Short circuit capacity Icn:<br>at In < 3A/240VAC : 10 x In<br>at In ≥ 3A/240VAC : 300A |
| Line Switch      | Rocker switch 2-pole, non-illuminated or illuminated, acc. to IEC 61058-1<br><a href="#">Technical Details</a>                                                                                                                                     |

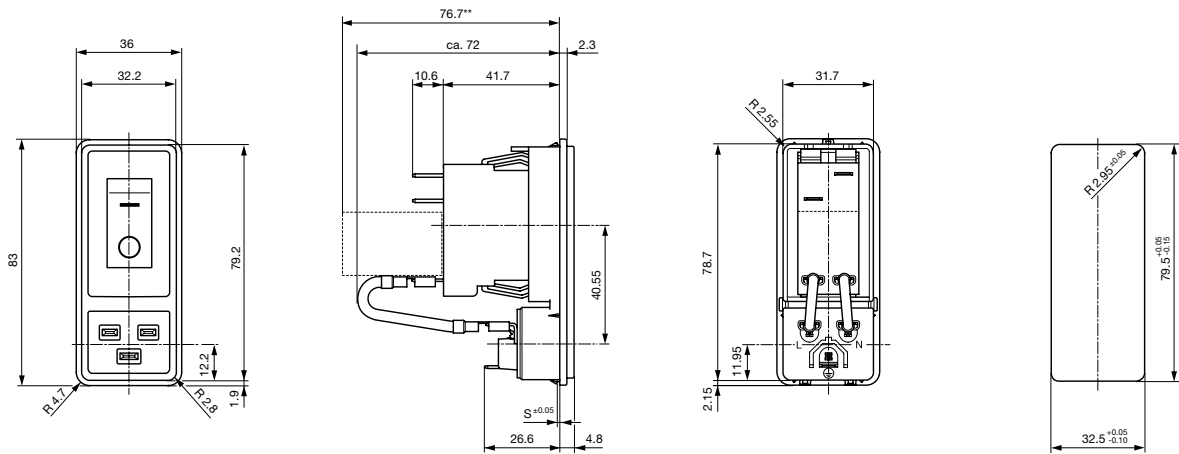
Dimensions

Screw-on mounting



\*\* --- Version TA45 with undervoltage release

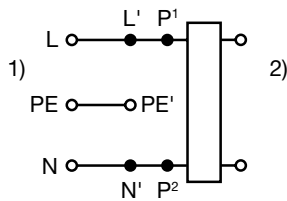
Snap-in mounting



\*\*--- Version TA45 with undervoltage release

Diagrams

Diagram



1) Line  
2) Load

**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 V

A02  
A04

A12  
A14

A32  
A34

**Colours**

**Switch front**

**W** black  
**B** black  
**6** black

**Rocker**

white  
black  
— orange transp.

**Rocker legend**

**Surface**

**Illustration**

**Colour of print**

**F** embossed



white

**H** printed



black

**K** printed



white

**L** printed



**Surface**

**Illustration**

**Colour of print**

**M** printed



black

**P** printed



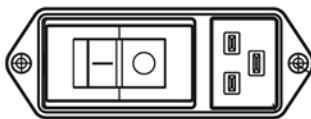
white

**R** printed



black

Position of the rocker legend  
e.g F



**Rated current:**

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

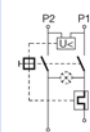
• With thermal overload protection: rated current  $I_n \text{ (A)}$

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

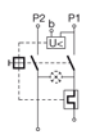
Other rated currents on request

**Without release: code C0**

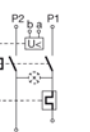
**Undervoltage release**



**U**

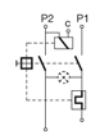


**E**



**Z**

**Remote trip release**



**A**

**Code**

Rated  
voltage  $U_n$

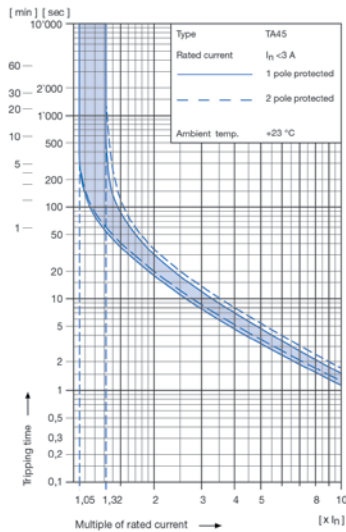
|   |   |   |
|---|---|---|
| • | • | • |
| • | • | • |
| • | • | • |

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

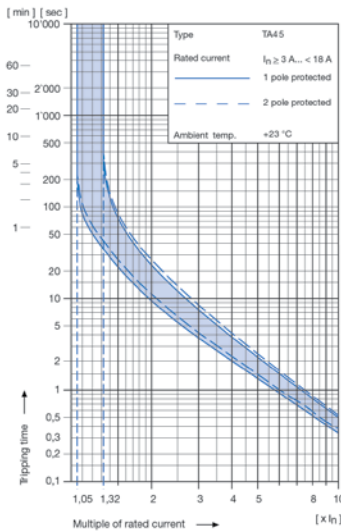
## Technical data (continued)

### Circuit breaker

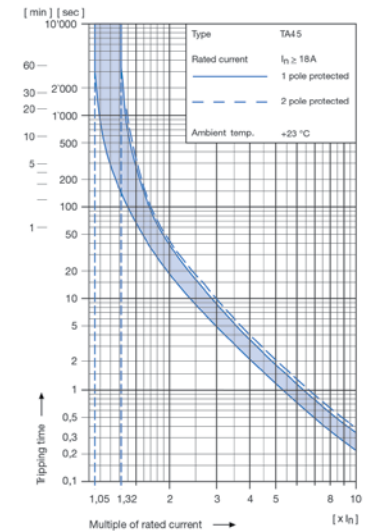
Tripping characteristics  
 $I_n < 3 \text{ A}$



Tripping characteristics  
 $I_n \geq 3 \dots < 18 \text{ A}$



Tripping characteristics  
 $I_n \geq 18 \text{ A}$



### 1) 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 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 for EF11 (order example)

| Type  | Order code TA45<br>(2-pole rocker-switch<br>without accessories) |
|-------|------------------------------------------------------------------|
| EF11. | A B T W F 1 5 0 C 0 .                                            |
|       | see table 1                                                      |

Please note that Schurter will establish an internal new part number for logistical use in addition to the order code. The format of this internal part number is, for example EF11.3103.0010.01

0 0 1 0 0 1

#### Wiring

- 1 = wired, quick-connect terminals non-insulated
- 2 = unwired
- 3 = wired, quick-connect terminals insulated

#### Protection class

- 0 = Class I, housing black

#### Panel mount

- 0 = Screw-on version
- 2 = Snap-in version s = 1,5 mm
- 3 = Snap-in version s = 2,0 mm
- 4 = Snap-in version s = 2,5 mm

#### Terminals

- 1 = Quick connect terminals 6,3 x 0,8 mm

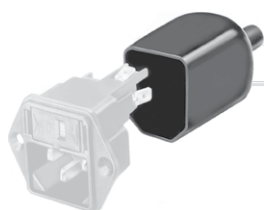
#### Features

- 0 = Standard
- 1 = V-Lock notch

Packaging unit 16 Pcs

## Accessories

### Description



Assorted Covers  
Rear Cover



Cord retaining kits  
Cord retaining strain relief

## Mating Outlets/Connectors

### Category / Description



#### Connector Overview complete

|                                         |       |
|-----------------------------------------|-------|
| IEC Connector C19, Rewireable, Straight | 0104U |
| IEC Connector C19, Rewireable, Angled   | 4790  |
| IEC Connector C19, Rewireable, Straight | 4795  |

Connector further types to EF11



#### Power Supply Cord Overview complete

|                                                               |           |
|---------------------------------------------------------------|-----------|
| US Power Supply Cord with IEC Connector C13, hospital grade   | 4300.0920 |
| EU Power Supply Cord with IEC Connector C19, straight/ angled | 6004.0395 |
| US Power Supply Cord with IEC Connector C19, straight         | 6009.5195 |

Power Supply Cord further types to EF11

#### Power Supply or Interconnection Cord Overview complete

|                                                     |           |
|-----------------------------------------------------|-----------|
| Diverse Power Supply and Interconnection Cords 16 A | 6003.0395 |
|-----------------------------------------------------|-----------|

Power Supply or Interconnection Cord further types to EF11