

## IEC Appliance Inlet C20 with Circuit Breaker TA45



Screw-on version from front or rear side  
Rocker non-illuminated  
white



Snap-in mounting from front side  
Rocker illuminated  
orange



See below:  
[Approvals and Compliances](#)

### 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

### Characteristics

- All single elements are already wired
- Unwired versions available on request
- Circuit Breaker non-illuminated or illuminated
- 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 data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#), [Landing Page](#)

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                       | 16A / 250VAC; 50Hz                                                           |
| Ratings UL/CSA                    | 20A / 250VAC; 60Hz                                                           |
| Dielectric Strength               | > 1.5 kVAC between L-N<br>> 3 kVAC between L/N-PE<br>(1 min/50Hz)            |
| Allowable Operation Temperature   | -10 °C to 55 °C                                                              |
| IP-Protection                     | from front side IP40 acc. to IEC 60529                                       |
| Protection against electric shock | 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/-outlet | C20 acc. to IEC 60320-1, UL 60320-1, CSA C22.2 no. 60320-1 (for cold conditions) pin-temperature 70 °C, 16A, 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 |

### Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

## Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: EF11

| Approval Logo                                                                    | Certificates                  | Certification Body | Description                  |
|----------------------------------------------------------------------------------|-------------------------------|--------------------|------------------------------|
|  | <a href="#">VDE Approvals</a> | VDE                | Certificate Number: 40001029 |
|  | <a href="#">UL Approvals</a>  | UL                 | UL File Number: E96454       |

## Product standards

Product standards that are referenced

| Organization                                                                     | Design                | Standard              | Description                                                           |
|----------------------------------------------------------------------------------|-----------------------|-----------------------|-----------------------------------------------------------------------|
|  | Designed according to | IEC 60320-1           | Appliance couplers for household and similar general purposes         |
|  | Designed according to | UL 60320-1            | Standard for Attachment Plugs and Receptacles                         |
|  | Designed according to | CSA C22.2 no. 60320-1 | General Use Receptacles, Attachment Plugs, and Similar Wiring Devices |

## Application standards

Application standards where the product can be used

| Organization                                                                     | Design                         | Standard     | Description                                                                                     |
|----------------------------------------------------------------------------------|--------------------------------|--------------|-------------------------------------------------------------------------------------------------|
|  | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

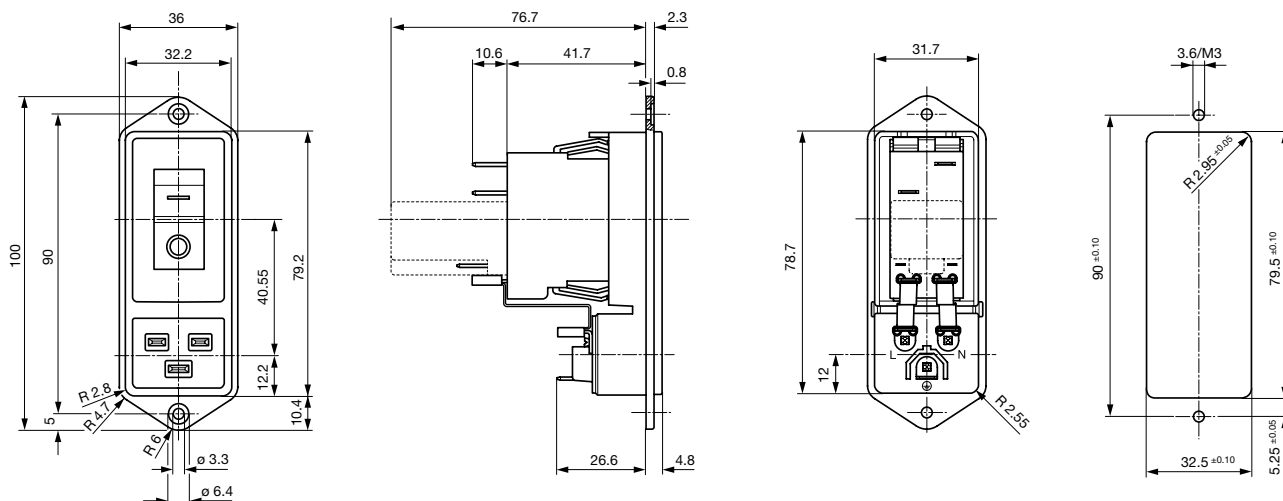
## Compliances

The product complies with following Guide Lines

| Identification                                                                     | Details                                      | Initiator   | Description                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------|----------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <a href="#">CE declaration of conformity</a> | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.                        |
|  | <a href="#">RoHS</a>                         | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863                                                                                                                                                                           |
|  | <a href="#">China RoHS</a>                   | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.                                                                                                         |
|  | <a href="#">REACH</a>                        | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.                                                      |
|  | <a href="#">Landing Page V-Lock</a>          | SCHURTER AG | V-Lock system are based on a matching plug-dose combination. 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. |

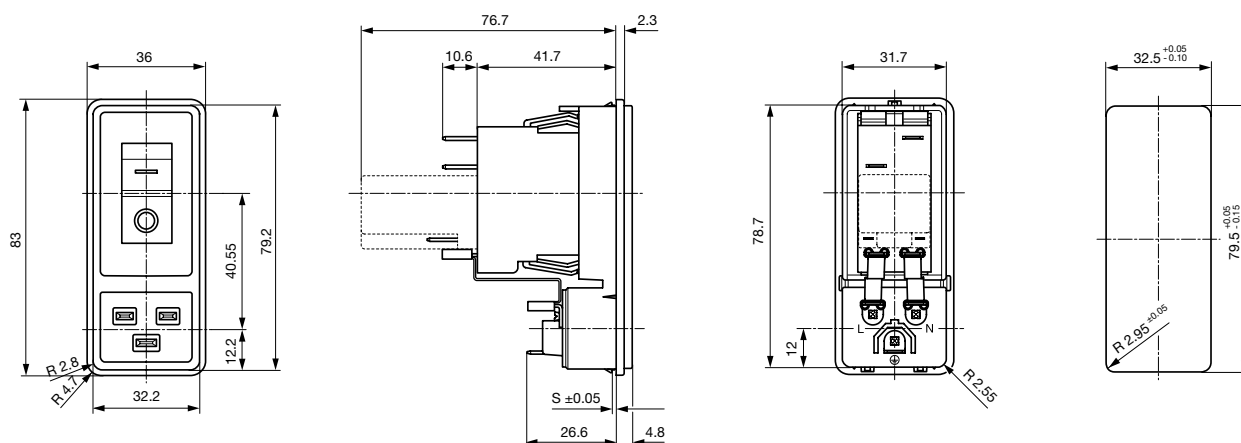
## Dimensions [mm]

Screw-on mounting



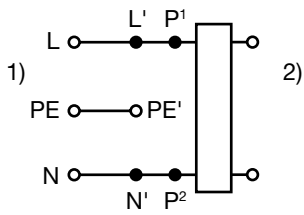
\*\* --- Version TA45 with undervoltage release

Snap-in mounting



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

## Diagrams



1) Line  
2) Load

## Effect of ambient temperature

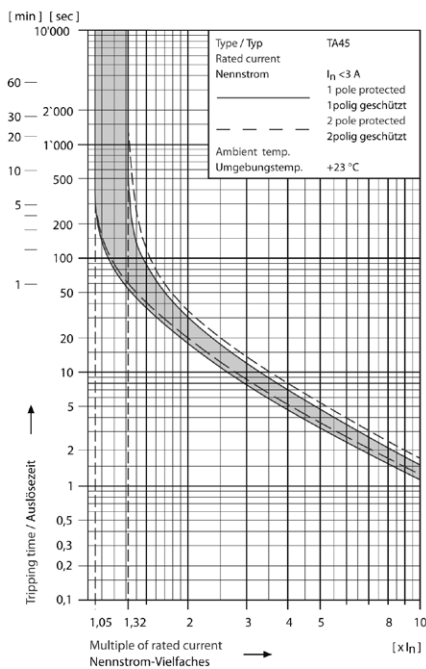
The units are calibrated for an ambient temperature of +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

| 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              |

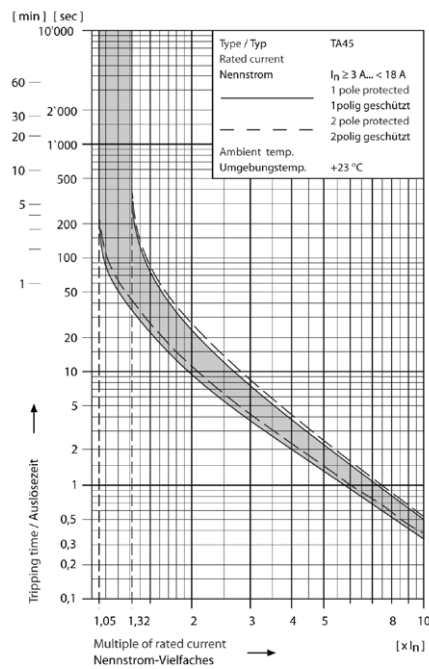
Example: Rated current = 5 A, Environmental temperature = 40 °C, --> Correction factor = 1.08, Resulting current = 5.5 A --> Fount to next higher rated current: 6 A

## Time-Current-Curves

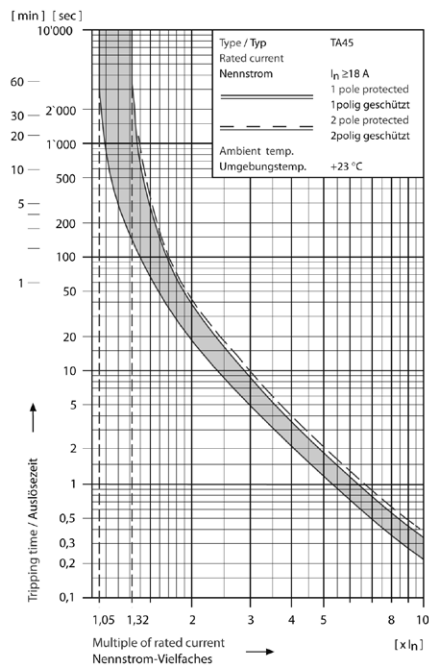
### Tripping Characteristics $I_n < 3$ A



### Tripping Characteristics $I_n \geq 3 \dots < 18$ A

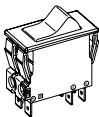


## Tripping Characteristics $I_n \geq 18\text{ A}$



Configuration code TA45

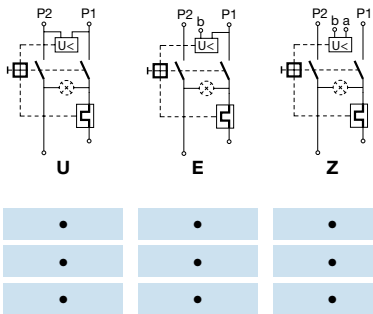
| Type | Configuration code TA45 |   |   |   |   |   |   |   |   |   |     |         |
|------|-------------------------|---|---|---|---|---|---|---|---|---|-----|---------|
| EF11 | A                       | B | T | W | F | 1 | 5 | 0 | C | 0 | 000 | 111-000 |



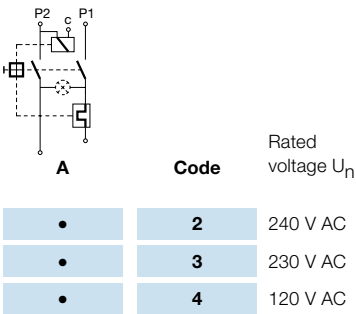
- Circuit Breaker of Equipment
- 2-pole, rocker actuated
- Quick connect terminal
- Other types on request

Without release: code C0

Undervoltage release



Remote trip release



Rated current circuit breaker of equipment

| I <sub>n</sub> | Code | I <sub>n</sub> | Code | I <sub>n</sub> | Code | I <sub>n</sub> | 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

Rocker legend

| Surface    | Illustration | Colour of print |
|------------|--------------|-----------------|
| F embossed | — ○          |                 |
| H printed  | ON OFF       | white           |
| K printed  | ON OFF       | black           |
| L printed  | — ○          | white           |
| M printed  | — ○          | black           |
| P printed  | I ○          | white           |
| R printed  | I ○          | black           |

Position of the rocker legend e.g F

Colours

| Switch front | Rocker           |
|--------------|------------------|
| W black      | white            |
| B black      | black            |
| 6 black      | — orange transp. |

Diagram

| Thermal overload protection | 1-pole                     | 2-pole            |
|-----------------------------|----------------------------|-------------------|
| Without illumination        |                            |                   |
| With illumination           | 220...240 V<br>110...120 V |                   |
|                             | ABT<br>A12<br>A14          | ABD<br>A32<br>A34 |

Configuration code (Order example)

| Type | Configuration code TA45 |   |   |   |   |   |   |   |   |   |   |   |
|------|-------------------------|---|---|---|---|---|---|---|---|---|---|---|
| EF11 | A                       | B | T | W | F | 1 | 5 | 0 | C | 0 | 0 | 0 |

**Optional Variants**

- 0 standard
- 9 V-Lock notch

**Colour**

- 0 black

**Mounting**

- 0 Screw mounting
- 2 Snap-in mounting s = 1.5
- 3 Snap-in mounting s = 2.0
- 4 Snap-in mounting s = 2.5

**Terminal PE**

- 1 Quick-connect terminals 6.3x0.8mm

**Terminal N**

- 1 Quick-connect terminals 6.3x0.8mm, without connection to TA45
- 3 connection to TA45 non insulated

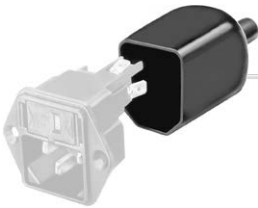
**Terminal L**

- 1 Quick-connect terminals 6.3x0.8mm, without connection to TA45
- 3 connection to TA45 non insulated

Packaging unit 16 Pcs

Accessories

Description



Assorted Covers  
Rear Cover

0859.0109



Cord retaining kits  
Cord retaining strain relief  
Flat head, H

4700.0008

Mating Outlets/Connectors

Category / Description



Connector Overview complete

4795, Mounting: Power Cord, Cable Connector: IEC C19

4795

4790, Mounting: Power Cord, Screw Connector: IEC C19

4790

0104U, Mounting: Power Supply Cord, Screw clamps Connector: IEC C19

0104U

Connector further types to EF11



Power Supply Cord Overview complete

Cord Sets 10 A, North America, 3.0 m, Connector IEC C13, SJT 3x18 AWG, Transparent

4300.0920

Cord Sets 16 A, Europlug, 2.5 m, Connector IEC C19, H05VV-F3G1.5, black

6004.0395

Cord Sets 16 A, Interconnection, 1.0 m, Connector IEC C19, H05VV-F3G1.5, black

6020.0392

Cord Sets 16 A, Interconnection, 2.0 m, Connector IEC C19, H05VV-F3G1.5, black

6020.0394

Cord Sets 16 A, North America, 2.5 m, Connector IEC C19, SJT 3x14 AWG, black

6009.5195

Power Supply Cord further types to EF11

Mating Outlets/Connectors shuttered



Power Cord Overview complete

VAC19KS, Overview, V-Lock cord retaining, diverse Connector IEC C19, diverse, black

VAC19KS

Power Cord further types to EF11

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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