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

C20

70° C

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 | 16 A / 250 VAC; 50 Hz |
| Ratings UL/CSA | 20 A / 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 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,<br>UL 60320-1, CSA C22.2 no. 60320-1<br>(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 |

## 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 |
|---|---|---|---|
| | VDE Approvals | VDE | Certificate Number: 40001029 |
| | UL Approvals | 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

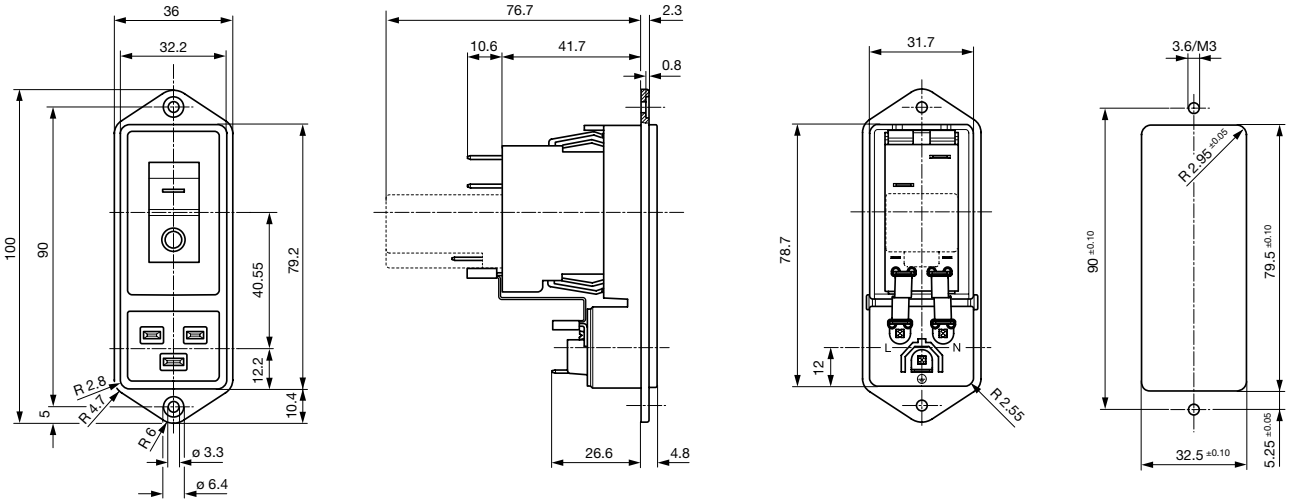
| Organization | Design | Standard | Description |
|---|---|---|---|
| | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

## Compliances

The product complies with following Guide Lines

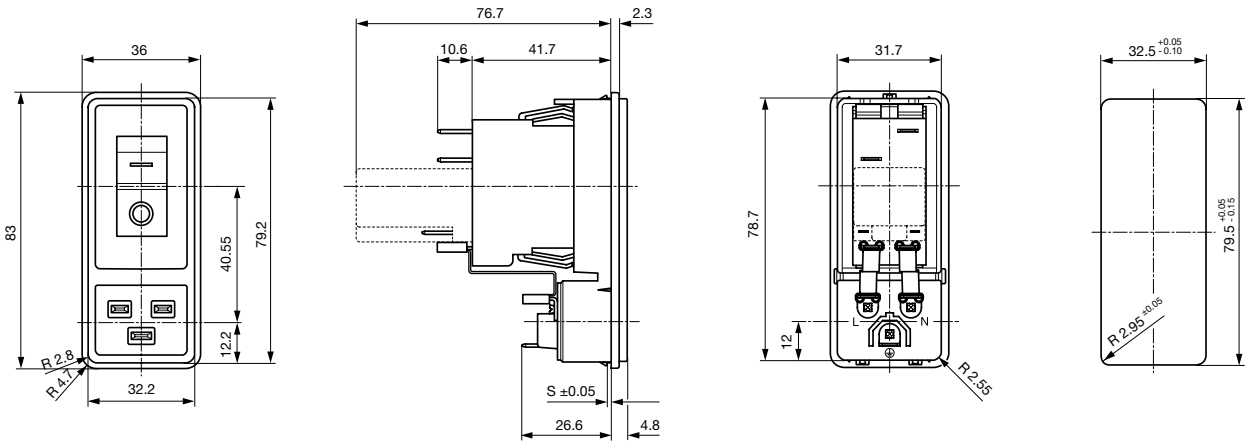
| Identification | Details | Initiator | Description |
|---|---|---|---|
| CE | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| | China RoHS | 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. |
| | REACH | 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. |
| V-Lock | Landing Page V-Lock | 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



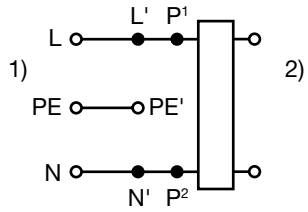

** --- Version TA45 with undervoltage relaese

Snap-in mounting




**--- Version TA45 with undervoltage release

## Diagrams




1) Line
2) Load

## Effect of ambient temperature

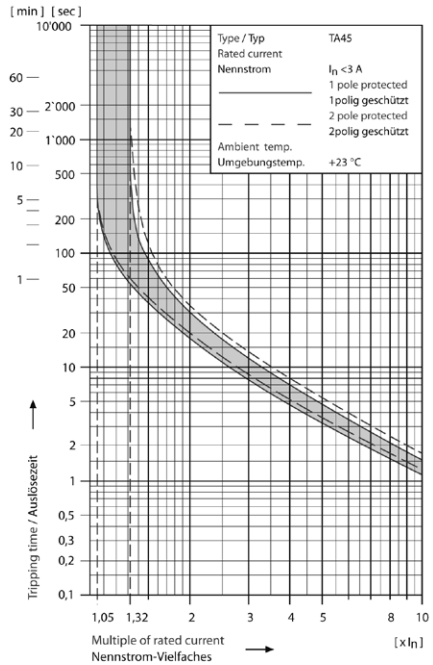
The units are calibrated for an ambient temperature of +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

| 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 |

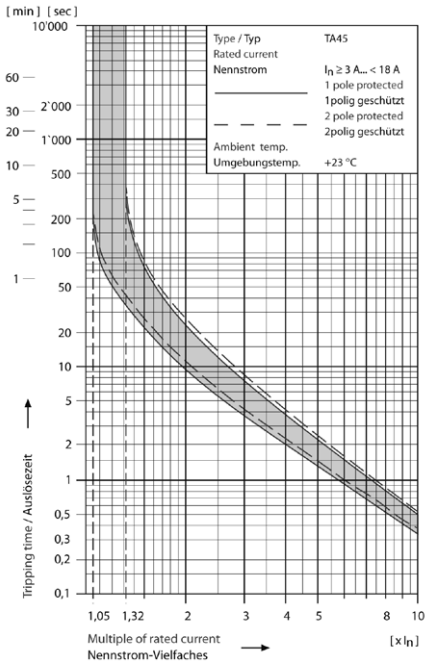
Example: Rated current = 5 A, Environmental temperature = 40 °C, --> Correction factor = 1.08, Resulting current = 5.5 A --> Fount to next higher rated current: 6 A

## Time-Current-Curves

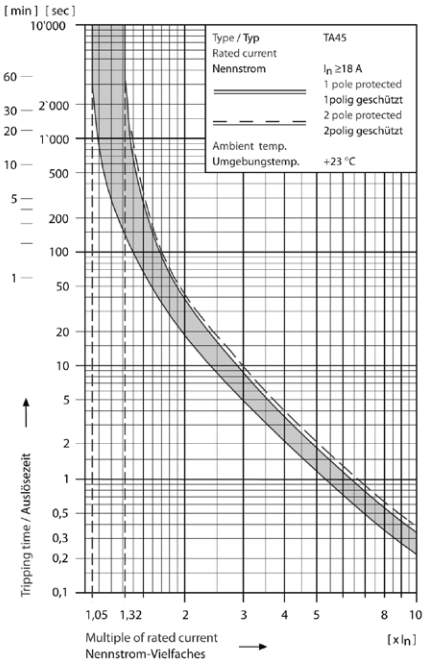
Tripping Characteristics $I_n$ < 3 A




Tripping Characteristics In ≥ 3. . . < 18 A

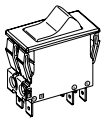


Tripping Characteristics In ≥ 18 A



## Configuration code TA45

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

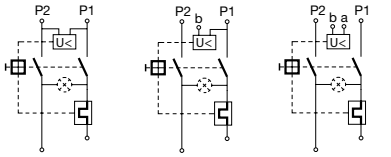


- Circuit Breaker of Equipment
- 2-pole, rocker actuated
- Quick connect terminal

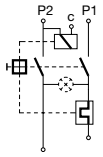
Other types on request

### Without release: code C0

#### Undervoltage release




#### Remote trip release




| U | E | Z | A | Code | Rated voltage $U_n$ |
|---|---|---|---|---|---|
| • | • | • | • | **2** | 240 V AC |
| • | • | • | • | **3** | 230 V AC |
| • | • | • | • | **4** | 120 V AC |

### Rated current circuit breaker of equipment

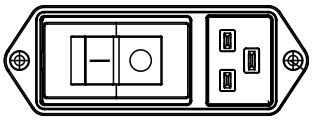
| $I_n$ | Code | $I_n$ | Code | $I_n$ | Code | $I_n$ | Code |
|---|---|---|---|---|---|---|---|
| 10,0 | **100** | 13,0 | **130** | 16,0 | **160** | 19,0 | **190** |
| 11,0 | **110** | 14,0 | **140** | 17,0 | **170** | 20,0 | **200** |
| 12,0 | **120** | 15,0 | **150** | 18,0 | **180** | | |

Other rated currents on request

### Rocker legend

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

Position of the rocker legend e.g F

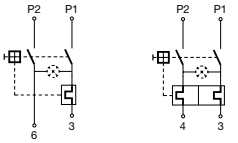


### Colours

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

### Diagram

Thermal overload protection




| | | 1-pole | 2-pole |
|---|---|---|---|
| Without illumination | | **ABT** | **ABD** |
| With illumination | 220…240 V | **A12** | **A32** |
| | 110…120 V | **A14** | **A34** |

**Configuration code (Order example)**

| Type | Configuration code TA45 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EF11 | - | A | B | T | W | F | 1 | 5 | 0 | C | 0 | - | 0 | 0 | 0 | - | 1 | 1 | 1 | - | 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<br>Rear Cover | |
| | | 0859.0109 |
| | Cord retaining kits<br>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 | |

25.11.2019



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