

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
- 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](#), [REACH](#), [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.

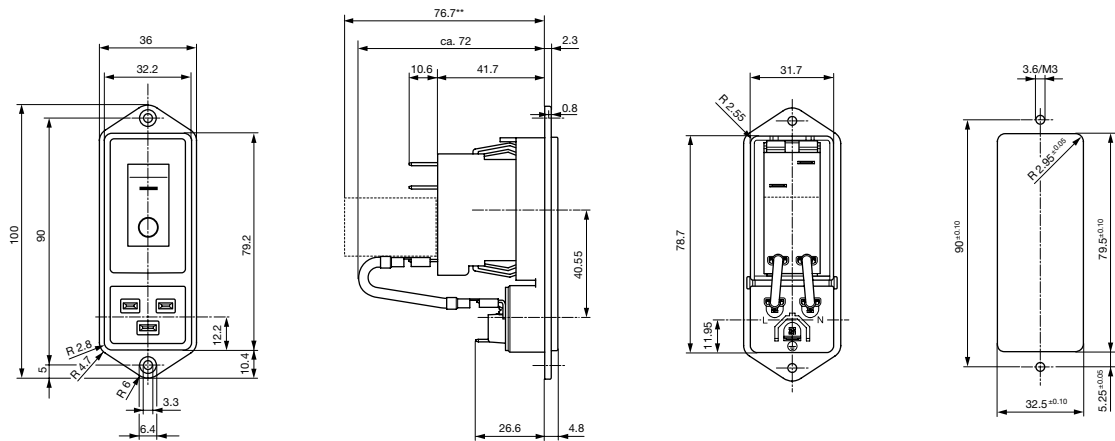
Technical Data

Ratings IEC	16A / 250VAC; 50Hz
Ratings UL/CSA	20A / 125/250VAC; 60Hz
Dielectric Strength	> 1.5 kVAC between L-N > 3 kVAC between L/N-PE (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 Mounting screw torque max 0.5 Nm 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, 16A, Protection Class I
Circuit Breakers	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

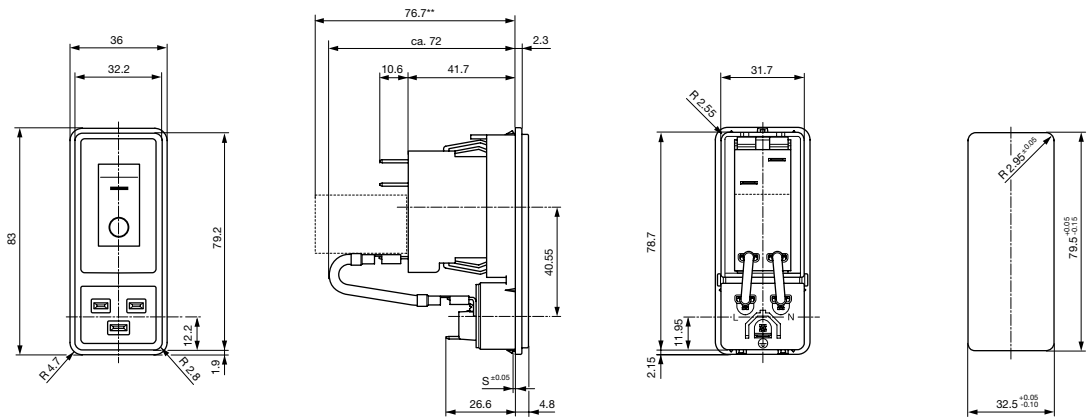
Dimensions

Screw-on mounting



** --- Version TA45 with undervoltage release

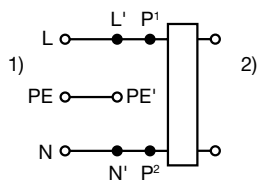
Snap-in mounting



**--- 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

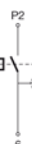
Thermal overload protection

without

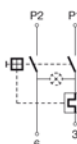
with 1-pole

with 2-pole

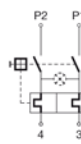
Without illumination



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
H printed
K printed
L printed



white
black
white

Surface

Illustration

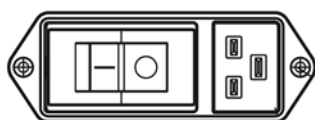
Colour of print

M printed
P printed
R printed



black
white
black

Position of the rocker legend
e.g F



Rated current:

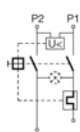
- Without thermal overload protection: code **C00** } $I_n = 20 \text{ A}$
- With thermal overload protection: rated current $I_n \text{ (A)}$

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		

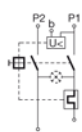
Other rated currents on request

Without release: code C0

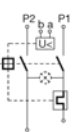
Undervoltage release



U



E



Z

•	•	•
•	•	•
•	•	•

Remote trip release



A

Code

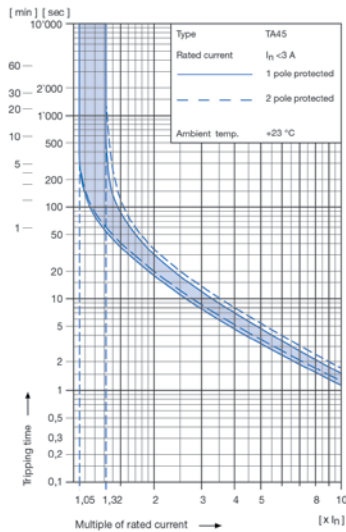
Rated
voltage U_n

•	2	240 V AC
•	3	230 V AC
•	4	120 V AC

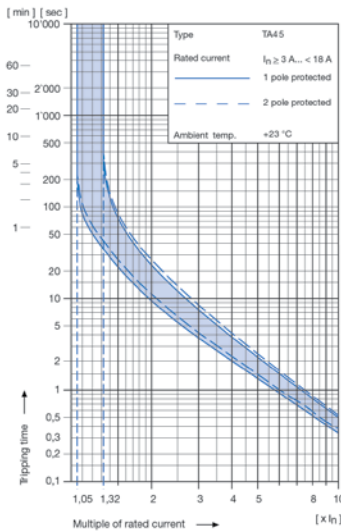
Technical data (continued)

Circuit breaker

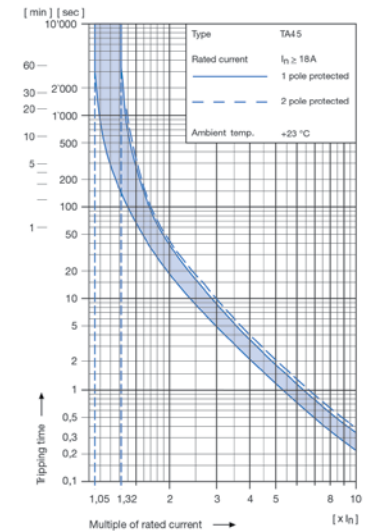
Tripping characteristics
 $I_n < 3 \text{ A}$



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 (2-pole rocker-switch 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

0010.01

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

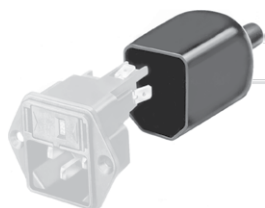
Features

- 0 = Standard
- 1 = V-Lock notch

Packaging unit 16 Pcs

Accessories

Description



Assorted Covers
Rear Cover

0859.0109



Cord retaining kits
Cord retaining strain relief

Flat head, Z

0888.0021

Flat head, H

4700.0008

Mating Outlets/Connectors

Category / Description



Connector Overview complete

IEC Connector C19, Rewireable, Straight

4795

IEC Connector C19, Rewireable, Angled

4790

IEC Connector C19, Rewireable, Straight

0104U

Connector further types to EF11



Power Supply Cord Overview complete

Cord Sets 10 A, North America, 3.0 m, Connector IEC C13, cord end:

4300.0920

Cord Sets 16 A, Europlug, 2.5 m, Connector IEC C19, cord end:

6004.0395

Cord Sets 16 A, North America, 2.5 m, Connector IEC C19, cord end:

6009.5195

Power Supply Cord further types to EF11

Power Supply or Interconnection Cord Overview complete

Kabelverbindung 16 A, diverse, 2.5 m, Connector IEC C19, cord end:

6003.0395

Power Supply or Interconnection Cord further types to EF11

Mating Outlets/Connectors shuttered



[Power Cord Overview complete](#)

[Overview Power Cord with IEC Appliance Connector C19, V-Lock, straight](#)

[VAC19KS](#)

[Power Cord further types to EF11](#)