IEC Appliance Inlet C20 with Circuit Breaker TA45

V-Lock





C20

70° C

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.

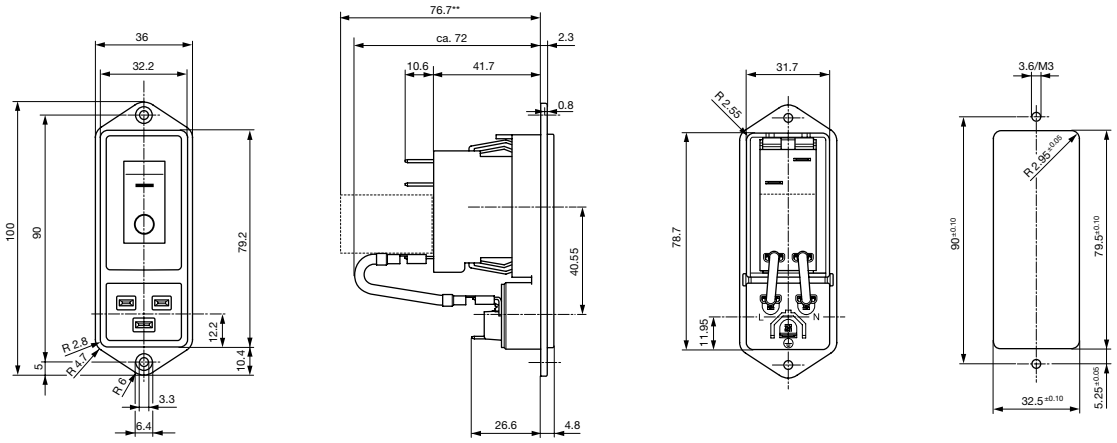
Technical Data

Ratings IEC	16 A / 250 VAC; 50 Hz
Ratings UL/CSA	20 A / 125/250 VAC; 60 Hz
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, 16 A, 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

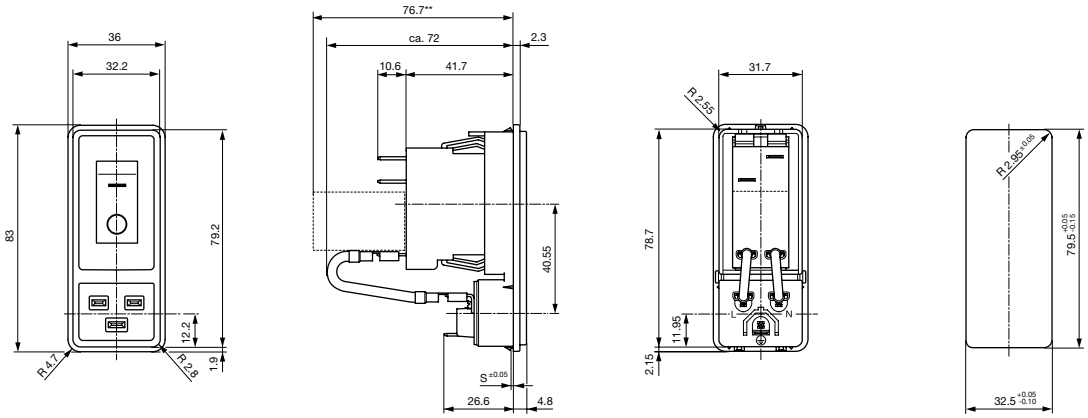
Dimensions

Screw-on mounting



** --- Version TA45 with undervoltage relaese

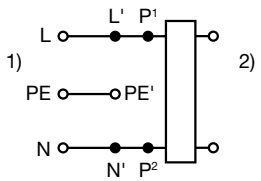
Snap-in mounting



**--- Version TA45 with undervoltage release

Diagrams

Diagram



1) Line
2) Load

Table 1 Selection for type TA45
Order example

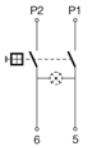
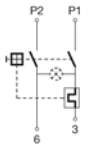
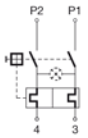
ABT	W	F	150	C0



- 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	**A02**	**A12**	**A32**
	110…120 V	**A04**	**A14**	**A34**

Colours

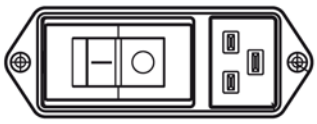
Switch front		Rocker	
		—	⊗
W	black	white	–
B	black	black	–
6	black	–	orange transp.

Rocker legend

	Surface	Illustration		Colour of print
F	embossed	–	O	
H	printed	ON	OFF	white
K	printed	ON	OFF	black
L	printed	–	O	white

	Surface	Illustration		Colour of print
M	printed	–	O	black
P	printed	I	O	white
R	printed	I	O	black

Position of the rocker legend
e.g F



Rated current:

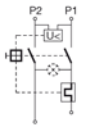
- **Without thermal overload protection: code C00** } I_n = 20 A
- **With thermal overload protection: rated current I_n (A)**

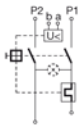
I_n	Code	I_n	Code	I_n	Code	I_n	Code
10,0	**100**	13,0	**130**	16,0	**160**	19,0	**190**
11,0	**110**	14,0	**140**	17,0	**170**	20,0	**200**
12,0	**120**	15,0	**150**	18,0	**180**		

Other rated currents on request

Without release: code C0

Undervoltage release

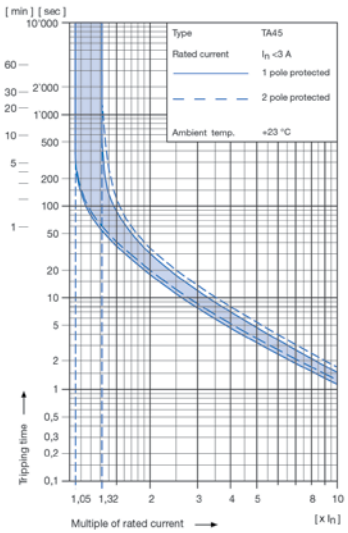




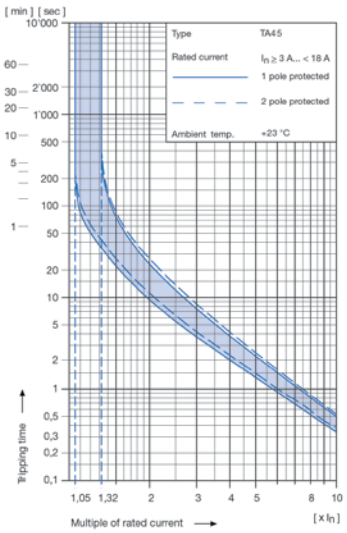
U	E	Z	A	Code	Rated voltage U_n
•	•	•	•	**2**	240 V AC
•	•	•	•	**3**	230 V AC
•	•	•	•	**4**	120 V AC

Technical data (continued)
Circuit breaker

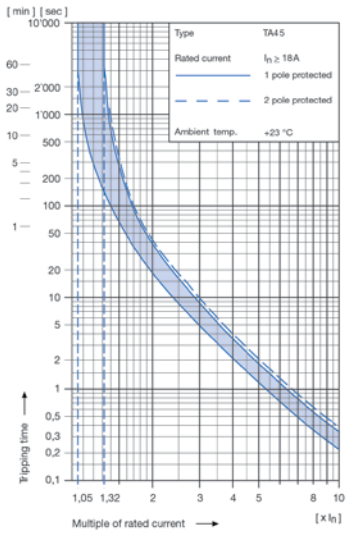
Tripping characteristics
I_n < 3 A



Tripping characteristics
$I_n \geq 3... < 18$ A



Tripping characteristics
$I_n \geq 18$ 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.	0 0 1 0. 0 1
	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

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

Protection class
0 = Class I, housing black

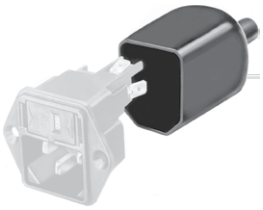
Panel mount
0 = Screw-on version
2 = Snap-in version s = 1,5 mm
3 = Snap-in version s = 2,0 mm
4 = Snap-in version s = 2,5 mm

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	

04.03.2015

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.