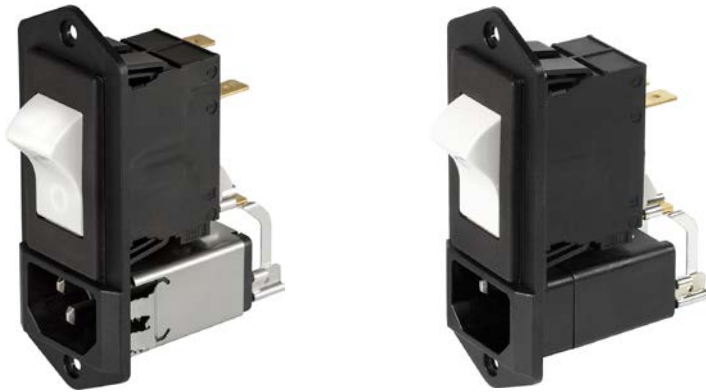


IEC Appliance Inlet C14 with Filter, Circuit Breaker TA45

Standard- or Medical-Filter



Description

- Panel Mount:
Screw-on mounting from front side
- 3 Functions:
Appliance Inlet Protection class I, circuit breaker type TA45
2-pole, Line filter in standard and medical version
- Quick connect terminals 6.3 x 0.8 mm

Approvals

- VDE Certificate Number: 40035745
- UL File Number: E72928

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
- Suitable for use in medical equipment according to IEC/UL 60601-1

References

Alternative: version without line filter [6145](#)
We recommend for new applications the new type [DF12](#); [DF12_Dummy](#)
Alternative: Standard version [DF12](#); [DF12_Dummy](#)

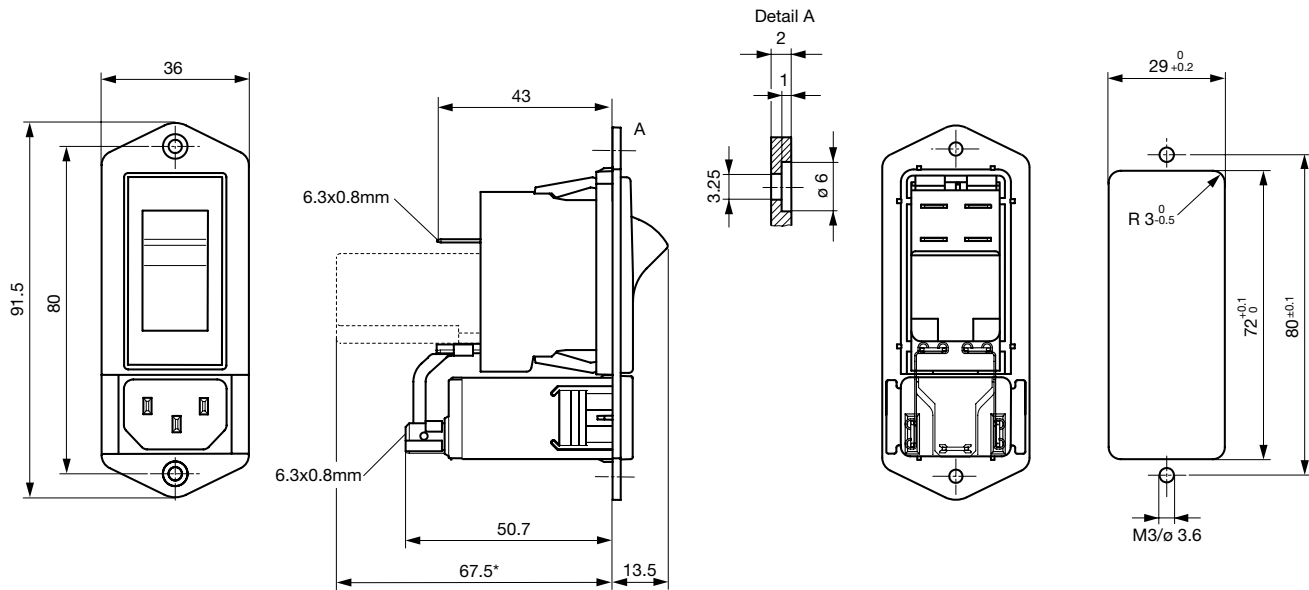
Weblinks

[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

Technical Data

| | | | |
|---------------------------|---|-------------------------|---|
| Ratings IEC | 1 - 10A @ Ta 40 °C / 250 VAC; 50Hz | Appliance-Inlet/-Outlet | C14 acc. to IEC 60320-1, UL 498, CSA C22.2 no. 42 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I |
| Ratings UL/CSA | 1 - 15A @ Ta 40 °C / 125 VAC; 60Hz | 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 I _{cn} : at I _n < 3A/240VAC : 10 x I _n at I _n ≥ 3A/240VAC : 300A |
| Leakage Current | standard < 0.5 mA (250 V / 60Hz) medical < 5 µA (250 V / 60 Hz) | Line Filter | Standard and Medical Version, IEC 60939, UL 1283, CSA C22.2 no. 8 Technical Details |
| Dielectric Strength | > 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec) | MTBF | > 100'000h acc. to MIL-HB-217 F |
| Allowable Operation Temp. | -10°C to 55°C | | |
| Climatic Category | 10/055/21 acc. to IEC 60068-1 | | |
| 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 | | |
| Material: Housing | Thermoplastic, black, UL 94V-0 | | |

Dimensions



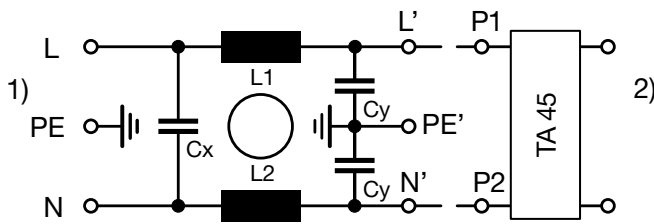
* --- Version TA45 with undervoltage release

Technical Data of Filter-Components

| Rated Current [A] | Filter-Type | Inductances L [mH] | Capacitance CX [nF] | Capacitance CY [nF] | R [MΩ] |
|-------------------|----------------------|--------------------|---------------------|---------------------|--------|
| 1 | Standard Version | 2 x 11 | 47 | 2.2 | - |
| 2 | Standard Version | 2 x 4 | 47 | 2.2 | - |
| 3 | Standard Version | 2 x 2.5 | 47 | 2.2 | - |
| 4 | Standard Version | 2 x 1.6 | 47 | 2.2 | - |
| 6 | Standard Version | 2 x 0.7 | 47 | 2.2 | - |
| 8 | Standard Version | 2 x 0.6 | 47 | 2.2 | - |
| 10 | Standard Version | 2 x 0.4 | 47 | 2.2 | - |
| 15 | Standard Version | 2 x 0.1 | 47 | 2.2 | - |
| 1 | Medical Version (M5) | 2 x 11 | 47 | - | 1 |
| 2 | Medical Version (M5) | 2 x 4 | 47 | - | 1 |
| 6 | Medical Version (M5) | 2 x 0.7 | 47 | - | 1 |
| 8 | Medical Version (M5) | 2 x 0.6 | 47 | - | 1 |
| 10 | Medical Version (M5) | 2 x 0.4 | 47 | - | 1 |
| 15 | Medical Version (M5) | 2 x 0.1 | 47 | - | 1 |

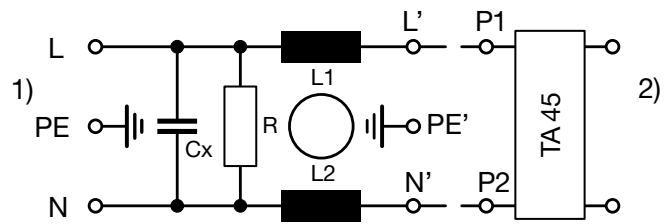
Diagrams

Standard version



1) Line
2) Load

Medical version (M5)



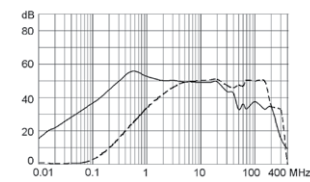
1) Line
2) Load

Attenuation Loss

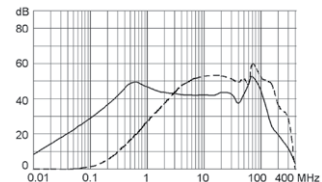
Standard version

--- 50Ω differential mode ___ 50Ω common mode

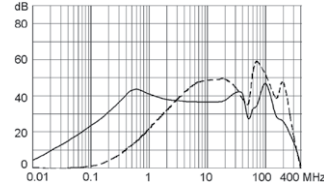
1 A



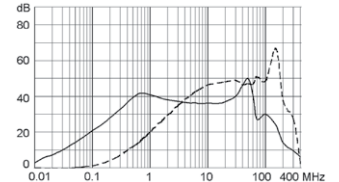
2 A



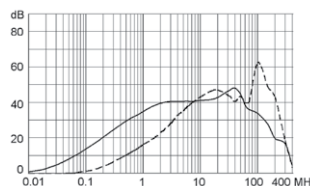
3 A



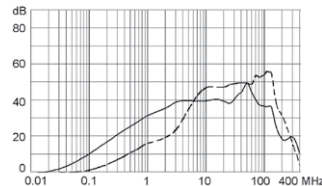
4 A



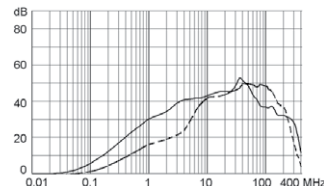
6 A



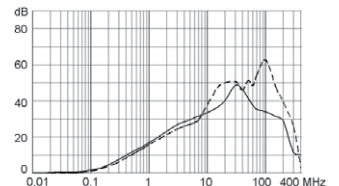
8 A



10 A

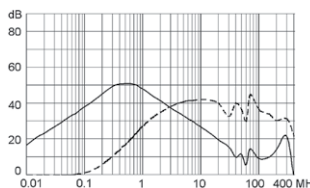


15 A

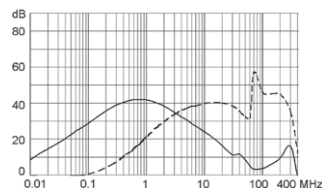


Medical version (M5)

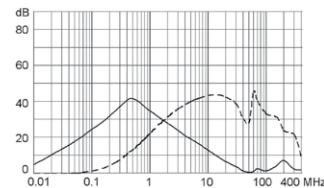
1 A



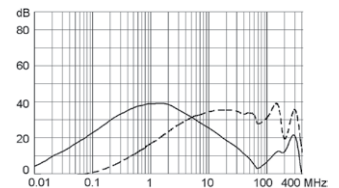
2 A



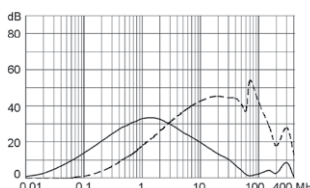
3 A



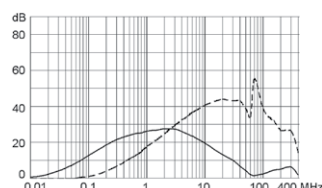
4 A



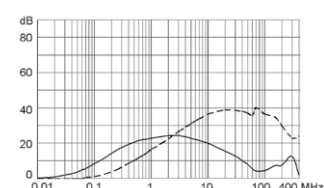
6 A



8 A



10 A



15 A

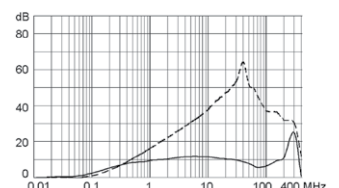


Table 1 Selection for type TA45

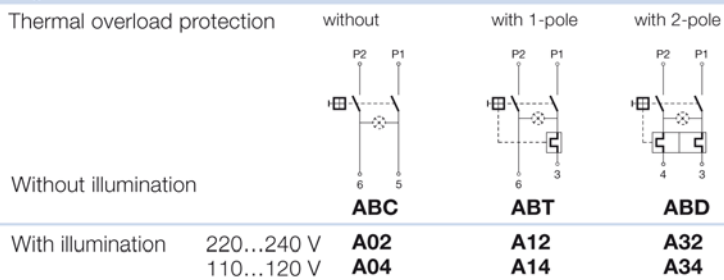
Order example



- Line switch
 - 2-pole, rocker actuated
 - Quick connect terminal
- Other types on request

ABT W F 150 C0

Diagram



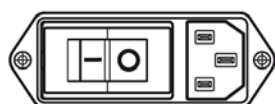
Colours

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

Rocker legend

| Surface | Illustration | Colour of print | Surface | Illustration | Colour of print |
|----------------------|--------------|-----------------|-----------|--------------|-----------------|
| F embossed / Relief | | — | M printed | | black |
| H printed / bedruckt | | white / weiss | P printed | | white |
| K printed / bedruckt | | black / schwarz | R printed | | black |
| L printed / bedruckt | | white / weiss | | | |

Position of the rocker legend
e.g F



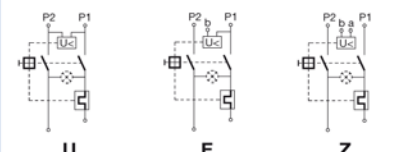
Rated current:

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

| I_n | Code | I_n | Code | I_n | Code | I_n | Code |
|-------|------|-------|------|-------|------|-------|------|
| 0,1 | J01 | 1,3 | J13 | 2,8 | J28 | 10,0 | 100 |
| 0,2 | J02 | 1,4 | J14 | 3,0 | 030 | 11,0 | 110 |
| 0,3 | J03 | 1,5 | J15 | 3,5 | 035 | 12,0 | 120 |
| 0,4 | J04 | 1,6 | J16 | 4,0 | 040 | 13,0 | 130 |
| 0,5 | J05 | 1,7 | J17 | 4,5 | 045 | 14,0 | 140 |
| 0,6 | J06 | 1,8 | J18 | 5,0 | 050 | 15,0 | 150 |
| 0,7 | J07 | 1,9 | J19 | 6,0 | 060 | | |
| 0,8 | J08 | 2,0 | J20 | 6,5 | 065 | | |
| 0,9 | J09 | 2,1 | J21 | 7,0 | 070 | | |
| 1,0 | J10 | 2,2 | J22 | 7,5 | 075 | | |
| 1,1 | J11 | 2,3 | J23 | 8,0 | 080 | | |
| 1,2 | J12 | 2,5 | J25 | 9,0 | 090 | | |

Without release: code C0

Undervoltage release



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

Remote trip release



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

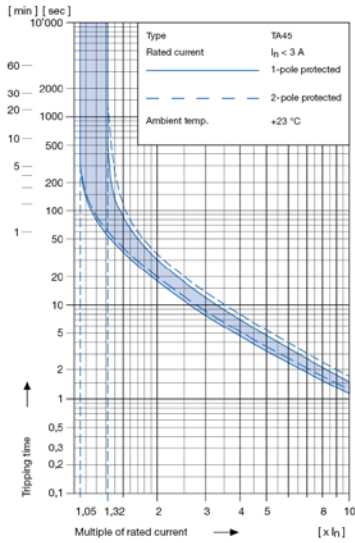
| Code | Rated voltage U_n |
|------|---------------------|
| 2 | 240 V AC |
| 3 | 230 V AC |
| 4 | 120 V AC |

Technical data (continued)

Circuit breaker

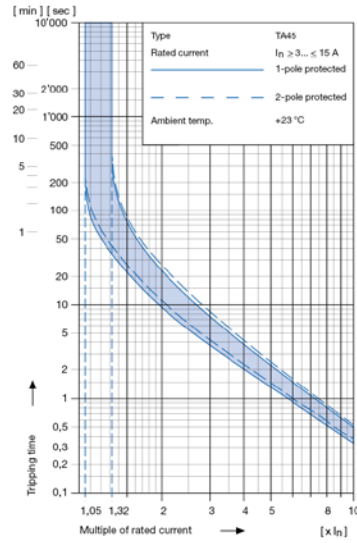
Tripping characteristics

$I_n < 3 A$



Tripping characteristics

$I_n \ge 3... \le 15 A$



Effect of ambient temperature ¹⁾

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 (Order example)

| | | |
|-------------|--|--|
| Type | Order code TA45 (2-pole rocker-switch without accessories) | |
| 5145. | A B T W F 1 5 0 C 0 see table 1 | |

Wiring
0 Without
1 With

Type of line filter
1 Standard
3 Medical

Rated current of line filter

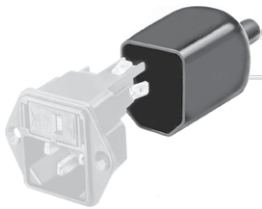
| | | | |
|----------|-------|----------|--------|
| 1 | 1 (A) | 5 | 6 (A) |
| 2 | 2 (A) | 6 | 8 (A) |
| 3 | 3 (A) | 7 | 10 (A) |
| 4 | 4 (A) | 8 | 15 (A) |

Please note that Schurter will establish an internal part number for logistical use in addition to the order code. The format of this internal part number is, for example 5145.0031.001

Packaging unit 20 Pcs

Accessories

Description



Assorted Covers
Rear Cover

0859.0074

Mating Outlets/Connectors

Category / Description

Appliance Outlet Overview complete



| | |
|---|------|
| IEC Appliance Outlet F, Screw-on Mounting, Front Side, Solder Terminal | 4787 |
| IEC Appliance Outlet F, Snap-in Mounting, Front Side, Solder or Quick-connect Terminal | 4788 |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal | 5091 |

Appliance Outlet further types to 5145

Connector Overview complete



| | |
|--|---------|
| 4782 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4782 |
| 4022 Mounting: Power Supply Cord, 3 x 1.5 mm ² , Screw clamps, Connector: IEC C13 | 4022 |
| 4785 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4785 |
| 4300-06 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4300-06 |
| 4012 Mounting: Power Supply Cord, 3 x 1.5 mm ² , Screw clamps, Connector: IEC C13 | 4012 |

Connector further types to 5145

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