

IEC Appliance Inlet C14 with Filter, Circuit Breaker TA45 (recessed)



Screw-on from front side
 Rocker non-illuminated
 white



Screw-on from front side
 Rocker illuminated
 orange



See below:
[Approvals and Compliances](#)

Description

- Panel mount :
 Screw-on mounting 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

Characteristics

- All single elements are already wired
- Circuit Breaker non-illuminated or illuminated
- Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)
 For applications according IEC/UL 62368-1 we recommend variants with bleed resistor

Other versions on request

- Unwired versions
- Other rocker marking
- Medical Version (M80)
- Capacitance CX1
- Variant with notch for V-Lock mating Cordsets

References

Alternative: version without line filter [DF11](#)
 Substitute for type [5145](#)
 Alternative: Standard version

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

Technical Data

| | | | |
|---------------------------------|---|-------------------------|--|
| Ratings IEC | 1 - 10A @ Ta 40 °C / 250VAC; 50Hz | Appliance inlet/-outlet | C14 acc. to IEC 60320-1 UL 60320-1, CSA C22.2 no. 60320-1 (for cold conditions) pin-temperature 70 °C, 10A, Protection Class I |
| Ratings UL/CSA | 1 - 15A @ Ta 40 °C / 250VAC; 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 Icn: at In < 3A/240VAC : 10 x In at In ≥ 3A/240VAC : 300A |
| Leakage Current | standard < 0.5mA (250V / 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 | > 1.7kVDC between L-N > 2.7kVDC between L/N-PE Test voltage (2 sec) | MTBF | > 100'000h acc. to MIL-HB-217 F |
| Allowable Operation Temperature | -10°C to 55°C | | |
| Climatic Category | 10/055/21 acc. to IEC 60068-1 | | |
| IP-Protection | front side IP40 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 0.5Nm | | |
| Material | Thermoplastic, black, UL 94V-0 | | |

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: DF12

| Approval Logo | Certificates | Certification Body | Description |
|--|---------------|--------------------|------------------------------|
|  | VDE Approvals | VDE | Certificate Number: 40012935 |
|  | UL Approvals | UL | UR File Number: E72928 |



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 | IEC 60939 | Passive filters for suppressing electromagnetic interference |
|  | Designed according to | IEC 61058-1 | Switches for appliances. Part 1. General requirements |
|  | Designed according to | UL 60320-1 | Standard for Attachment Plugs and Receptacles |
|  | Designed according to | UL 1283 | Electromagnetic interference filters |
|  | Designed according to | CSA C22.2 no. 60320-1 | General Use Receptacles, Attachment Plugs, and Similar Wiring Devices |
|  | Designed according to | CSA C22.2 no. 8 | Electromagnetic interference (EMI) filters |








Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--|--------------------------------|----------------|--|
|  | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |
|  | Suitable for applications acc. | IEC 60601-1 | Medical electrical equipment - Part 1: General requirements for basic safety and essential performance |

Compliances

The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|--|--|-------------|--|
|  | 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. |
|  | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 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. |
|  | | 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. |
|  | Medical Equipment | SCHURTER AG | Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP) |

Dimensions [mm]
 Screw-on mounting



* --- 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 | 2 x 11 | 100 | 2.2 | 1 |
| 2 | Standard | 2 x 4 | 100 | 2.2 | 1 |
| 3 | Standard | 2 x 2.5 | 100 | 2.2 | 1 |
| 4 | Standard | 2 x 1.6 | 100 | 2.2 | 1 |
| 6 | Standard | 2 x 0.7 | 100 | 2.2 | 1 |
| 8 | Standard | 2 x 0.6 | 100 | 2.2 | 1 |
| 10 | Standard | 2 x 0.4 | 100 | 2.2 | 1 |
| 15 | Standard | 2 x 0.1 | 100 | 2.2 | 1 |
| 2 | Medical (M5) | 2 x 4 | 100 | - | 1 |
| 3 | Medical (M5) | 2 x 2.5 | 100 | - | 1 |
| 4 | Medical (M5) | 2 x 1.6 | 100 | - | 1 |
| 6 | Medical (M5) | 2 x 0.7 | 100 | - | 1 |
| 8 | Medical (M5) | 2 x 0.6 | 100 | - | 1 |
| 10 | Medical (M5) | 2 x 0.4 | 100 | - | 1 |
| 15 | Medical (M5) | 2 x 0.1 | 100 | - | 1 |

Diagrams

Standard version



1) Line
2) Load

Medical Version (M5)

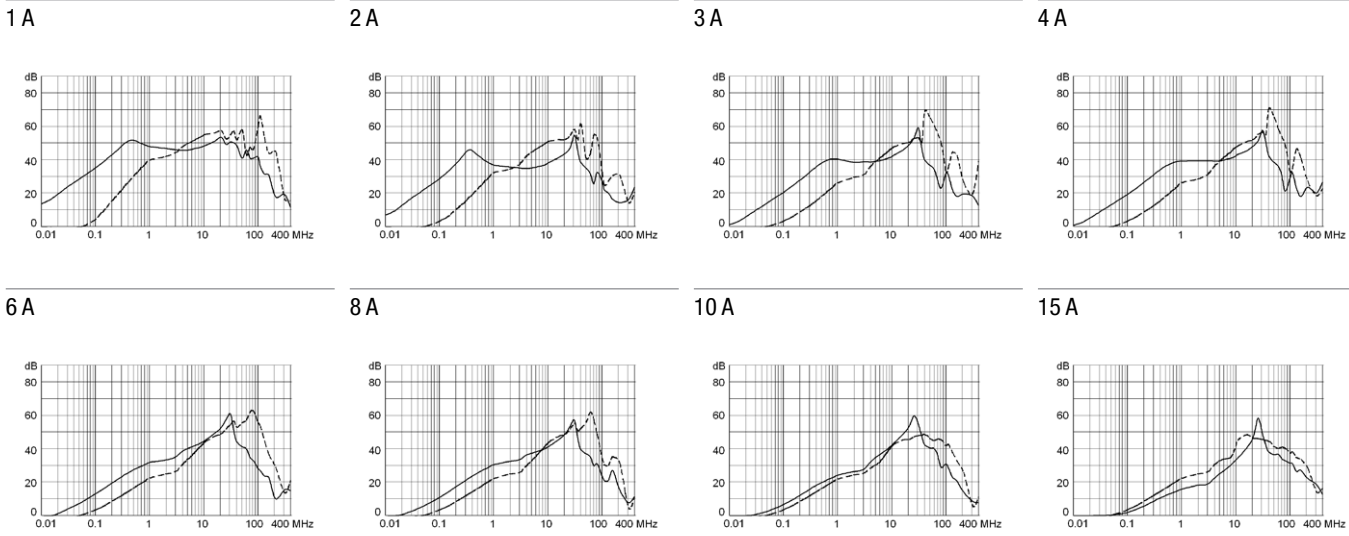


1) Line
2) Load

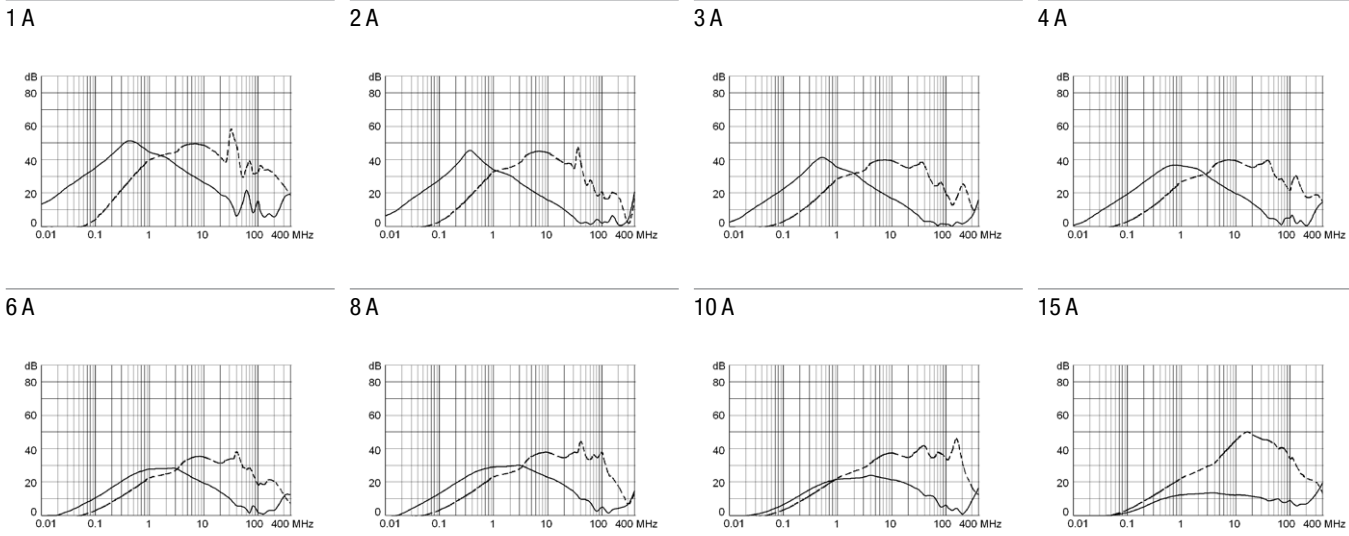
Attenuation Loss

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

Standard version



Medical version (M5)



Effect of ambient temperature

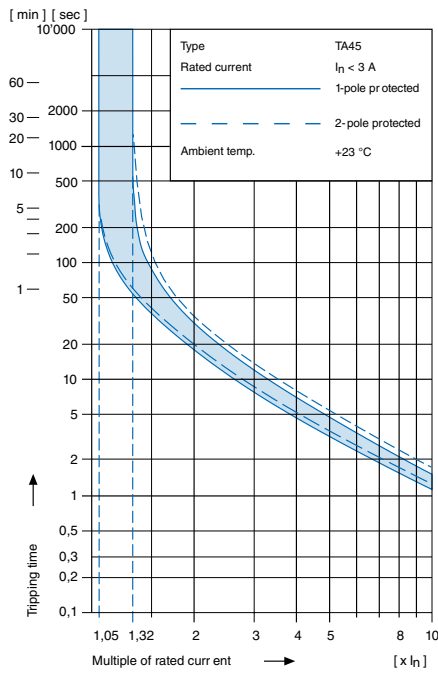
The units are calibrated for an ambient temperature of +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

| 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 |

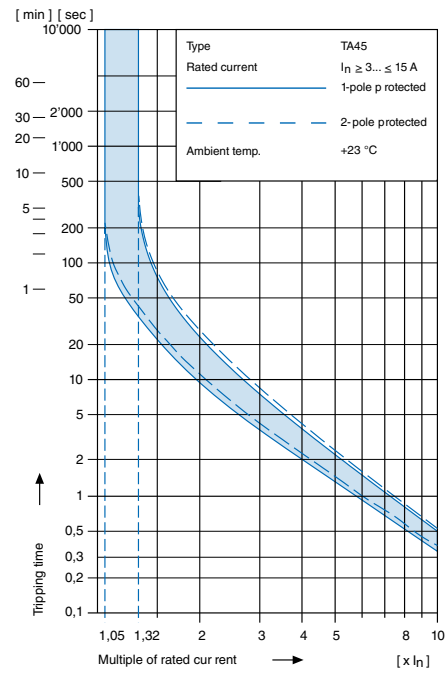
Example: With a nominal current of 5A and an ambient temperature of 40°C, a correction factor of 1.08 results. This results in a nominal current of 5.5 A, which is rounded up to the next higher nominal current 6 A.

Time-Current-Curves

Tripping Characteristics $I_n < 3 A$



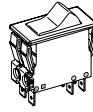
Tripping Characteristics $I_n \geq 3 \dots \leq 15 A$



Order number key

Configuration code TA45

| | | | | | |
|-----------------|-------------------------|------|----|----|--|
| Type | Configuration code TA45 | | | | |
| DF12-ABTWF150C0 | 000 | 1111 | 00 | 21 | |



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

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 |

Rated current circuit breaker of equipment

| 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 | 20,0 | 200 |
| 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 | | |

Rocker legend

| Surface | Illustration | Colour of print | Position of the rocker legend e.g F |
|------------|--------------|-----------------|-------------------------------------|
| 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 | |

Colours

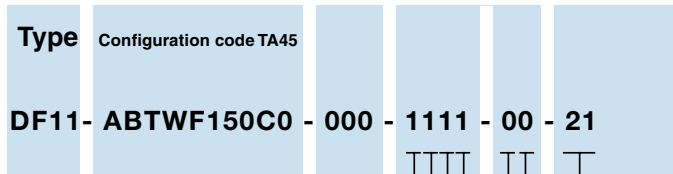
| Switch front | Rocker |
|--------------|------------------|
| W black | white |
| B black | black |
| 6 black | — orange transp. |

Diagram

Thermal overload protection

| | 1-pole | 2-pole |
|----------------------|------------|------------|
| Without illumination | ABT | ABD |
| With illumination | A12 A14 | A32 A34 |

Configuration code (Order example)



Optional Variants

- 00** Standard
- 21** V-Lock notch

Colour

- 0** Black

Mounting

- 0** Screw mounting

Terminal PE

- 1** QC 6.3x0.8

Terminal L and N

- 1** QC 6.3x0.8, without connection to TA45
- 3** Connection to TA45 non insulated

Type of mains filter / capacitor / bleed resistor

- 1** Standard X2, Y2 with bleed resistor
- 3** Medical M5 X2 with bleed resistor

Rated current

- 1** 1 A
- 2** 2 A
- 3** 3 A
- 4** 4 A
- 5** 6 A
- 6** 8 A
- 7** 10 A
- 9** 15 A

The rated current of the mains filter must not be less than the tripping current of the circuit breaker for equipment. Only the rated filter current is shown in the item description on the packaging.

Variants

| Circuit Breakers | | | | Filter | | Connectors | | Internally wired | Config. Code | Order Number |
|-------------------|---------------|-----------------|----------------|-------------------|-------------|------------------|--------|------------------|------------------------|------------------|
| Rated Current [A] | Rocker colour | Illumination | Add-on modules | Rated Current [A] | Filter Type | Protection Class | V-Lock | | | |
| 1 | black | non-illuminated | without | 1 | Standard | I | | prewired | DF12.ABDBLJ10C0.1110.1 | DF12.1310.1110.1 |
| 10 | white | non-illuminated | without | 10 | Standard | I | | prewired | DF12.ABDWF100C0.7110.1 | DF12.0470.7110.1 |
| 15 | white | non-illuminated | without | 15 | Standard | I | | prewired | DF12.ABDWF150C0.9110.1 | DF12.0885.9110.1 |
| 15 | black | non-illuminated | without | 15 | Standard | I | | prewired | DF12.ABDBL150C0.9110.1 | DF12.1089.9110.1 |
| 15 | orange | illuminated | without | 15 | Standard | I | | prewired | DF12.A326F150C0.9110.1 | DF12.2851.9110.1 |

| Circuit Breakers | | | | Filter | | Connectors | | | Config. Code | Order Number |
|-------------------|---------------|-----------------|---------------------|-------------------|--------------|------------------|--------|------------------|--------------------------|--------------------|
| Rated Current [A] | Rocker colour | Illumination | Add-on modules | Rated Current [A] | Filter Type | Protection Class | V-Lock | Internally wired | | |
| 2 | orange | illuminated | without | 2 | Standard | I | | prewired | DF12.A326KJ20C0.2110.1 | DF12.3803.2110.1 |
| 3 | orange | illuminated | without | 3 | Standard | I | | prewired | DF12.A326K030C0.3110.1 | DF12.3635.3110.1 |
| 4 | orange | illuminated | without | 4 | Standard | I | | prewired | DF12.A346K040C0.4110.1 | DF12.3945.4110.1 |
| 5 | black | non-illuminated | without | 6 | Standard | I | | prewired | DF12.ABTWF050C0.5110.1 | DF12.0586.5110.1 |
| 8 | white | non-illuminated | without | 8 | Standard | I | | prewired | DF12.ABTWF080C0.6110.1 | DF12.0423.6110.1 |
| 10 | white | non-illuminated | without | 10 | Medical (M5) | I | | prewired | DF12.ABDWF100C0.7310.1 | DF12.0470.7310.1 |
| 10 | black | non-illuminated | without | 10 | Medical (M5) | I | | prewired | DF12.ABDBL100C0.7310.1 | DF12.2078.7310.1 |
| 12 | black | non-illuminated | without | 15 | Medical (M5) | I | | prewired | DF12.ABDBL120C0.9310.1 | DF12.2420.9310.1 |
| 15 | white | non-illuminated | without | 15 | Medical (M5) | I | | prewired | DF12.ABTWF150C0.9310.1 | DF12.0031.9310.1 |
| 15 | black | non-illuminated | Remote trip release | 15 | Medical (M5) | I | | prewired | DF12.ABDBH150A3.9310.1 | DF12.4051.9310.1 |
| 2 | black | non-illuminated | without | 2 | Medical (M5) | I | | prewired | DF12.ABDWRJ20C0.2310.1 | DF12.3171.2310.1 |
| 3 | black | non-illuminated | without | 3 | Medical (M5) | I | ● | prewired | DF12.ABDBL030C0.3310.121 | DF12.2370.3310.121 |
| 4 | orange | illuminated | without | 4 | Medical (M5) | I | | prewired | DF12.A326H040C0.4310.1 | DF12.0723.4310.1 |
| 6 | black | non-illuminated | without | 6 | Medical (M5) | I | ● | prewired | DF12.ABDBP060C0.5310.121 | DF12.1488.5310.121 |
| 7 | orange | illuminated | without | 8 | Medical (M5) | I | | prewired | DF12.A346R070C0.6310.1 | DF12.3737.6310.1 |

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Packaging unit 20 Pcs

Accessories

Description



Assorted_Covers
Rear Cover

0859.0109



RC320
Rear Cover for Power Entry Module

Mating Outlets/Connectors

Category / Description

[Appliance Outlet Overview complete](#)



| | |
|--|------|
| 4787, Mounting: Screw-on mounting, Appliance Outlet: IEC Solder terminals, 10 A, Suitable for appliances with protection class I | 4787 |
| 4788, Mounting: Snap-in version, Appliance Outlet: IEC Solder / Quick Connect, 10 A, Suitable for appliances with protection class I | 4788 |
| IEC Appliance Outlet F or H, Screw-on Mounting, Front Side, Solder, PCB or Quick-connect Terminal | 5091 |

[Connector Overview complete](#)



| | |
|---|---------|
| 4782 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4782 |
| 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 |
| 4781 Mounting: Power Cord, Cable, Connector: IEC C15 | 4781 |
| 4784 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C15 | 4784 |

...

Mating Outlets/Connectors shuttered



[Connector Overview complete](#)

| | |
|--|------|
| 4783 Mounting: Power Cord, 3 x 1 mm ² / 3 x 18 AWG, Cable, Connector: IEC C13 | 4783 |
|--|------|



[Power Cord Overview complete](#)

| | |
|---|---------|
| VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black | VAC13KS |
|---|---------|