# IEC Appliance Inlet C14 with Filter, Circuit Breaker TA35 (recessed)







Screw-on with IP67 and IP54 cord connection

Screw-on with IP67

Screw-on A





70° C

# **Description**

- Panel mount :

Screw-on or snap-in mounting front side

- 3 Functions:

Appliance Inlet protection class I or II, Circuit breaker type TA35 2-pole , Line filter in standard and medical version

- Quick connect terminals 6.3 x 0.8 mm

# **Unique Selling Proposition**

- With sealing: IP54 under load, IP67 towards housing
- Recessed rocker switch
- Various mounting options
- V-Lock cord retaining

# See below:

### **Approvals and Compliances**

#### **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

- Other rocker marking
- Medical Version (M80)
- Capacitance CX1
- Filter version with high inductance

# References

Alternative: version without line filter DG11

# Weblinks

pdf data sheet, html datasheet, General Product Information, Approvals, Distributor-Stock-Check, Accessories, Detailed request for product

Inlet Connector C14 / C18 also available without seal. The V-Lock cord latching system prevents against accidental removal of the power supply and allows IP54 under load.

Technical Data		
Ratings IEC	1 - 10 A @ Ta 40 °C / 250 VAC; 50 Hz	Appliance
Ratings UL/CSA	1 - 15 A @ Ta 40 °C / 250 VAC; 60 Hz	
Leakage Current	standard < 0.5 mA (250 V / 60 Hz) medical < 5 µA (250 V / 60 Hz)	
Dielectric Strength	> 1.7 kVDC between L-N > 2.7 kVDC between L/N-PE Test voltage (2 sec)	Circuit Br
Allowable Operation Temperature	-25 °C to 60 °C	
Climatic Category	25/060/21 acc. to IEC 60068-1	
IP-Protection	Front Side IP40 / IP65 / IP67 acc. to IEC 60529	Line Filter
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140	MEDE
Terminal	Quick connect terminals 6.3 x 0.8 mm	MTBF
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5 Nm : S =1.0/1.2/1.5/2.0/2.5/3.0 mm	
Material	Thermoplastic, black, UL 94V-0	

Appliance inlet/-outlet	C14 C18 acc. to IEC 60320-1 UL 60320-1, CSA C22.2 no. 60320-1 (for cold conditions) pin-temperature 70 °C, 10 A, Protection Class I or II
Circuit Breakers	Acc. IEC/EN 60934, UL 1077, CSA 22.2 no. 235 2-pole rocker switch, illuminated or non-illuminated. Optional with undervoltage release Short circuit capacity Icn: 2000 A
Line Filter	Standard and Medical Version, IEC 60939, UL 60939-3, CSA C22.2 no. 8 Technical Details
MTBF	> 100'000h acc. to MIL-HB-217 F

### **Approvals and Compliances**

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about

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: DG12

Approval Logo	Certificates	Certification Body	Description
10	VDE Approvals	VDE	Certificate Number: 40049092
c <b>SU</b> °us	UL Approvals	UL	UR File Number: E495089
Cac	CQC Approvals	CQC	CQC Certificate Number: CQC19001233482

#### **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
<u>IEC</u>	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
<u>IEC</u>	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
(I)	Designed according to	UL 60320-1	Standard for Attachment Plugs and Receptacles
(I)	Designed according to	UL 60939-3	Passive filters for suppressing electromagnetic interference
GF Group	Designed according to	CSA C22.2 no. 60320-1	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices
CSA Group	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
<u>IEC</u>	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
<u>IEC</u>	Suitable for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

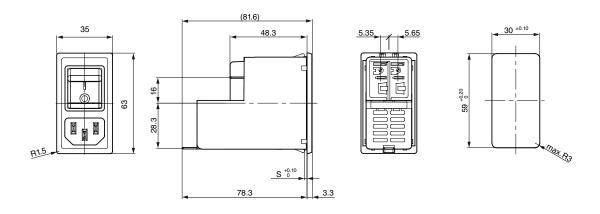
# Compliances

The product complies with following Guide Lines

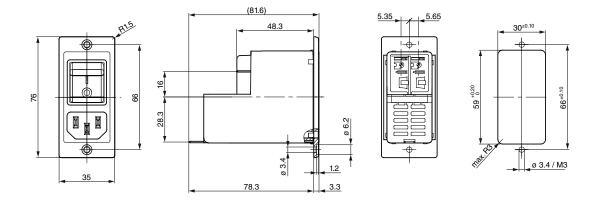
Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration 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	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
<b>5</b> 0	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	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.
<b>V</b> -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.
T	Medical Equipment	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1 (1 MOOP, 1 MOPP)

# Dimension [mm]

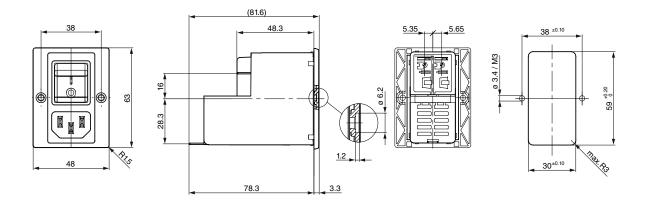
Snap-in version IP40



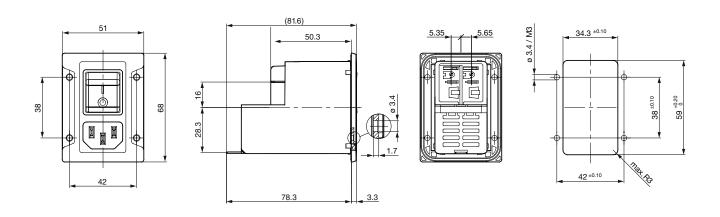
# Screw-on A



# Screw-on B



# Screw-on with IP67



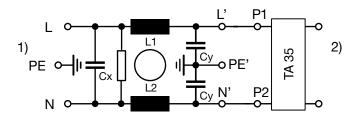
# **Technical Data of Filter-Components**

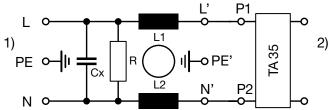
Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	<b>R</b> [ <b>M</b> Ω]
1	Standard version	2 x 12	220	2.2	1
2	Standard version	2 x 5.2	220	2.2	1
3	Standard version	2 x 4	220	2.2	1
4	Standard version	2 x 2	220	2.2	1
6	Standard version	2 x 0.8	220	2.2	1
8	Standard version	2 x 0.6	220	2.2	1
10	Standard version	2 x 0.4	220	2.2	1
15	Standard version	2 x 0.1	220	2.2	1
10	Standard version with high inductance	2 x 0.65	220	2.2	1
15	Standard version with high inductance	2 x 0.2	220	2.2	1
6	Medical Version (M5)	2 x 0.4	220	2.2	1
10	Medical Version (M5)	2 x 0.4	220	-	1
15	Medical Version (M5)	2 x 0.1	220	-	1
10	Medical version (M5) with high inductance	2 x 0.65	220	-	1
15	Medical version (M5) with high inductance	2 x 0.2	220	-	1

# **Diagrams**

Standard Version, medical Version M80

Medical version M5, protection class I

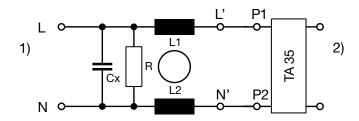




1) Line, 2) Load

1) Line, 2) Load

Medicalversion (M5), Protection Class II



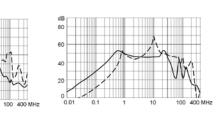
1) Line 2) Load

# **Attenuation Loss**Standard version

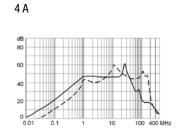
3 A

- - - -  $50\Omega$  differential mode \_\_\_\_\_  $50\Omega$  common mode

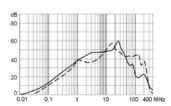
1 A



60 60 0 0.01 0.1 1 10 100 400 MHz

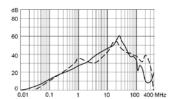


6 A

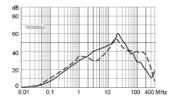


8 A

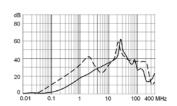
2 A

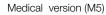


10 A

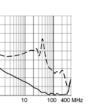


15 A

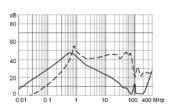




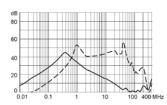




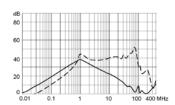
2 A



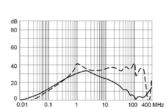
3 A



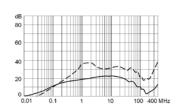
4 Δ



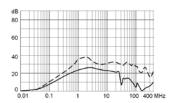
6 A



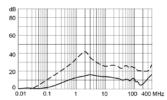
8 A



10 A



15 A

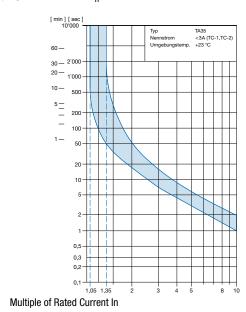


# Effect of ambient temperature

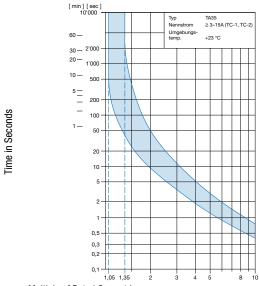
Ambient Temperature [°C]	Correction factor
-30	0.76
-20	0.81
0	0.90
+23	1.00
+40	1.03
+50	1.04
+60	1.06

# **Time-Current-Curves**

Tripping Characteristics  $I_{\rm n} < 3~{\rm A}$ 



Tripping Characteristics In ≥ 3 ... ≤ 15 A



Multiple of Rated Current In

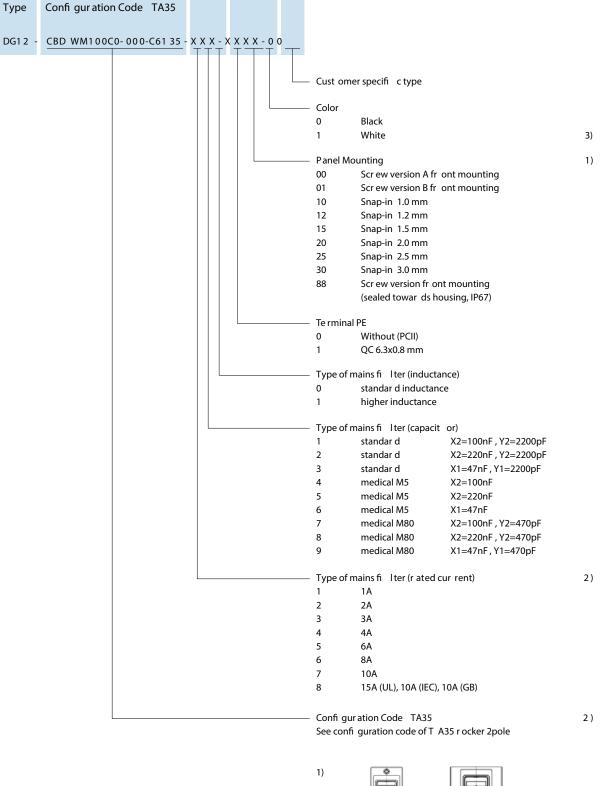
Ambient temperature +23°

Ambient temperature +23°

Time in Seconds

# Order number key

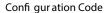
Configuration Code

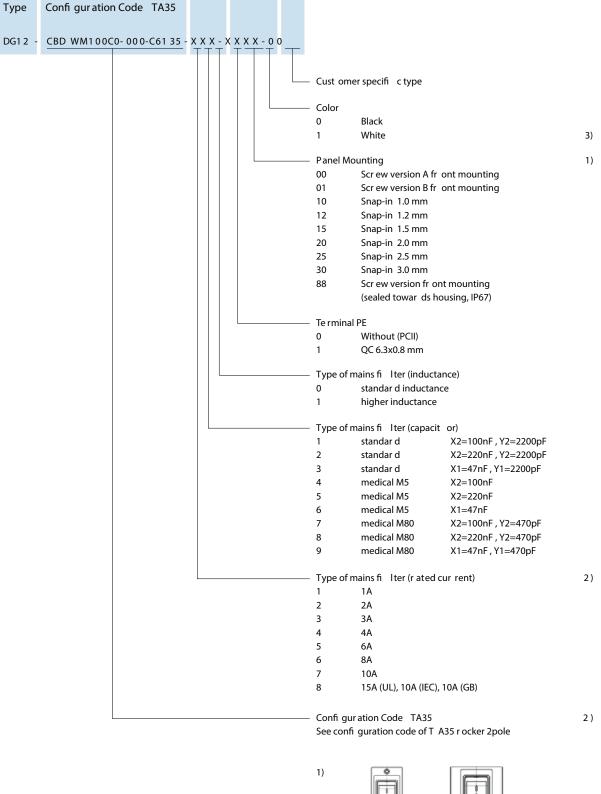






- 2) The rated current of the mains filter must not be less than the tripping current of the circuit breaker for equipment. Only the rated filter current is shown in the item description on the packaging.
- 3) Only on request (approvals pending)





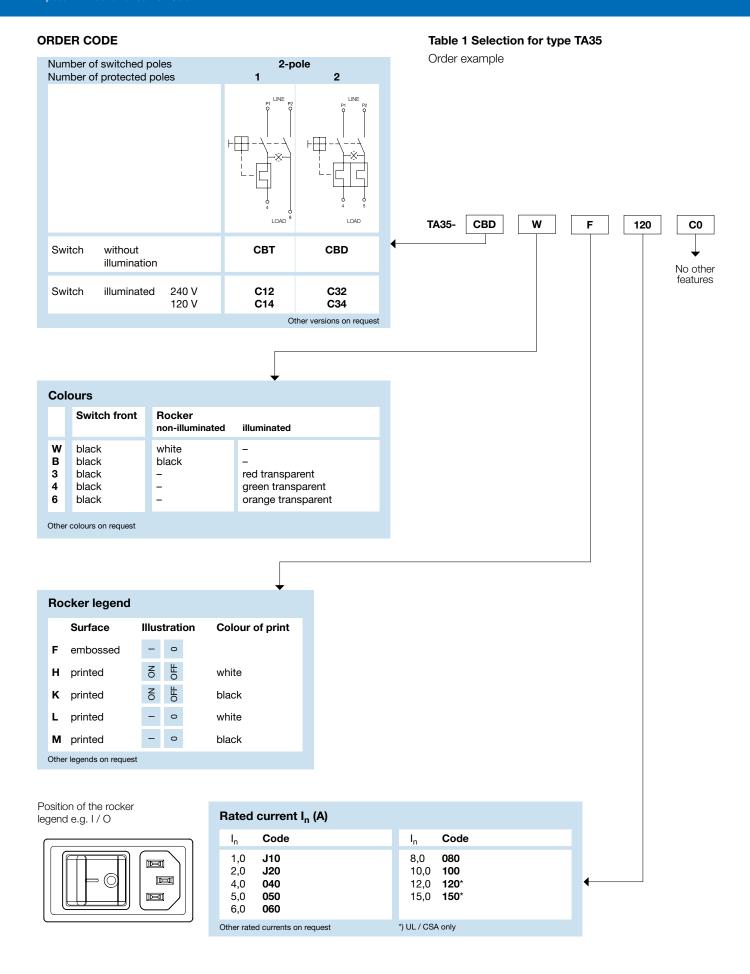


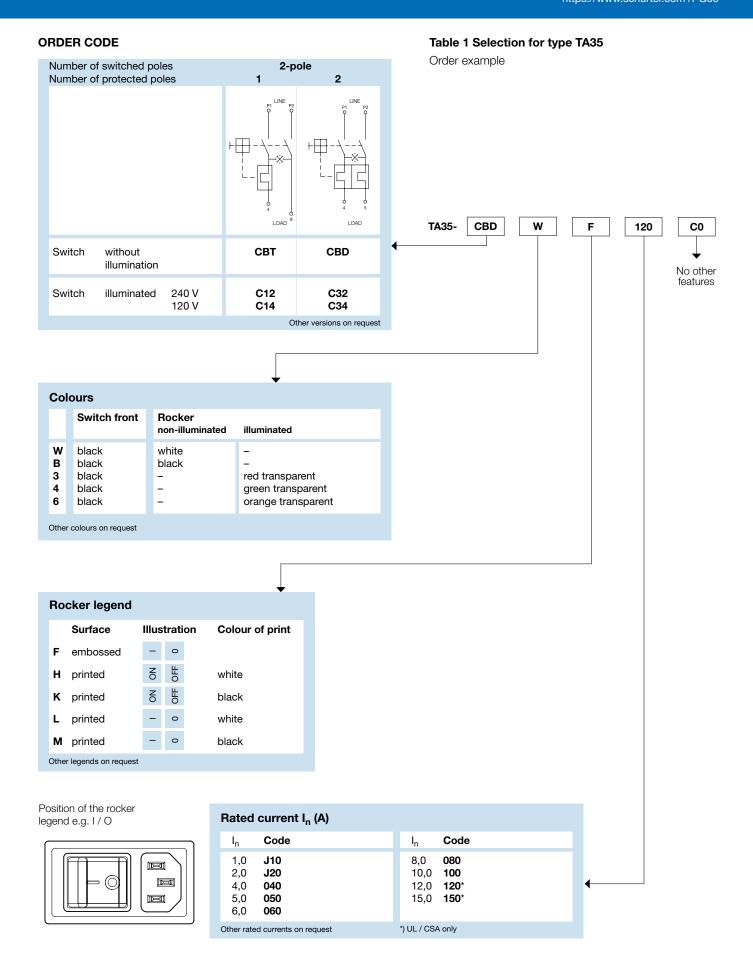


Scr ew version A

Sc rew version B

- 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.
- 3) Only on request (approvals pending)





# **V**ariants

	Circuit Breaker		Fil	ter		Cor	nector			
Rated Current [A]	Rocker colour	Illumination	Rated Current [A]	Filter Type	Protection Class	Color	Mounting	IP-Protection	Order Number	
1	black	non-illuminated	1	Standard ver- sion	1	black	Screw-on A	IP40	3-108-854	
10	white	non-illuminated	10	Standard ver- sion	I	black	Screw-on A	IP40	3-109-572	
10	white	non-illuminated	10	Standard ver- sion	I	black	Snap-in 1.5	IP40	3-109-575	
10	white	non-illuminated	10	Standard ver- sion	I	black	Screw-on B	IP40	3-109-698	
10	white	non-illuminated	10	Standard ver- sion	I	black	Screw IP67	IP67 / IP54	3-118-974	
10	white	non-illuminated	10	Standard ver- sion	I	white	Screw IP67	IP67 / IP54	3-141-342	
15	white	non-illuminated	15	Standard ver- sion	I	black	Screw-on A	IP40	3-109-573	
2	white	non-illuminated	2	Standard ver- sion	I	black	Screw-on A	IP40	3-109-557	
3	white	non-illuminated	3	Standard ver- sion	I	black	Screw-on A	IP40	3-109-558	
4	black	non-illuminated	4	Standard ver- sion	I	black	Screw-on A	IP40	3-109-559	
6	white	non-illuminated	6	Standard ver- sion	I	black	Screw-on A	IP40	3-109-560	
8	white	non-illuminated	8	Standard ver- sion	I	black	Screw-on A	IP40	3-109-561	
10	white	non-illuminated	10	Standard ver- sion with high inductance	I	black	Screw-on A	IP40	3-109-602	
15	white	non-illuminated	15	Standard ver- sion with high inductance	I	black	Screw-on A	IP40	3-109-603	
10	white	non-illuminated	10	Medical Version (M5)	I	black	Screw-on A	IP40	3-108-465	
10	white	non-illuminated	10	Medical Version (M5)	I	black	Screw-on B	IP40	3-118-982	
15	white	non-illuminated	15	Medical Version (M5)	1	black	Screw-on A	IP40	3-109-588	
6	white	non-illuminated	6	Medical Version (M5)	II	white	Screw IP67	IP67 / IP54	3-141-343	
10	white	non-illuminated	10	Medical version (M5) with high inductance	I	black	Screw-on A	IP40	3-109-606	
15	white	non-illuminated	15	Medical version (M5) with high inductance	I	black	Screw-on A	IP40	3-109-607	

Most Popular.

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

Packaging unit

10 Pcs

# **Accessories**

Description



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 mm² / 3 x 18 AWG, Cable, Connector: IEC C13	4785
4300-06 Mounting: Power Cord, 3 x 1 mm² / 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 <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C15	4784

# Mating Outlets/Connectors shuttered

### Connector Overview complete

4783 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4783
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# Power Cord Overview complete

SC54C13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black	SC54C13KS
VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black	VAC13KS