### **Power Entry Modules with Line Filter** https://www.schurter.com /PG06

# IEC Appliance Inlet C14 or C18 with Filter, Circuit Breaker TA35 2-pole



Screw-on with IP67 and IP54 cord connection



Screw-on with IP67



Screw-on A

C14	C18		
70° C	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 - 10A @ Ta 40 °C / 250 VAC; 50 Hz
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)
Allowable Operation Tempe- rature	-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
Protection Class	Suitable for appliances with protection class I or II 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 : 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, 10A, 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.
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 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: DG12

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

### **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
IEC	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
IEC	Designed according to	IEC 60939	Passive filters for suppressing electromagnetic interference
IEC	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
(H)	Designed according to	UL 60320-1	Standard for Attachment Plugs and Receptacles
(H)	Designed according to	UL 60939-3	Passive filters for suppressing electromagnetic interference
CSA 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
IEC	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
IEC	Suitable for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

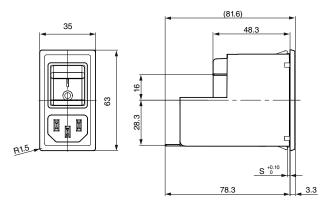
### Compliances

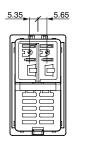
The product complies with following Guide Lines

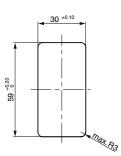
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UK CA	UKCA declaration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

Dimension [mm]

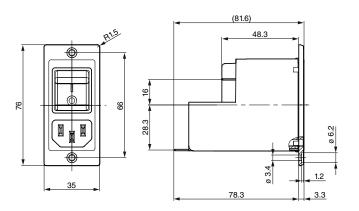
Snap-in version IP40

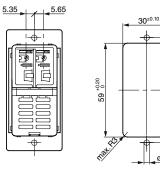






# Screw-on A

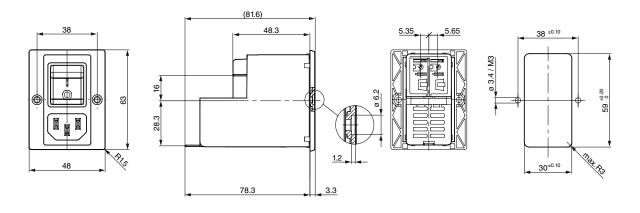




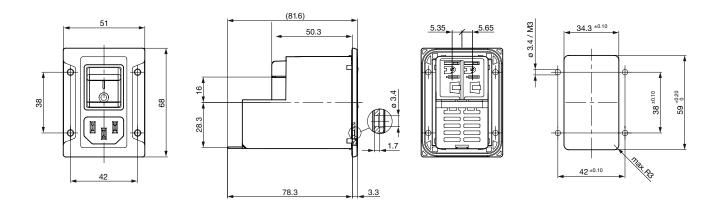
66<sup>±0.10</sup>

ø 3.4 / M3

### 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 [Μ</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

2)

# Diagrams

Standard Version, medical Version M80

Medical version M5, protection class I

C

LO

PE O

Ν

1) Line, 2) Load

Ľ

• PE'

N'

L1

2

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

R

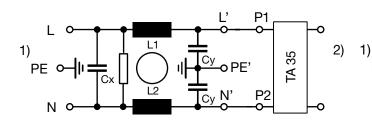
P1

0

P2

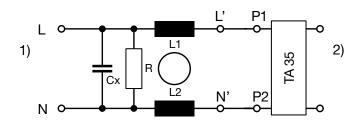
TA 35

 $50\Omega$  common mode



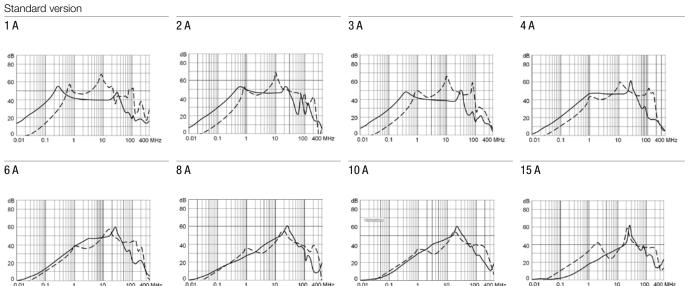
1) Line, 2) Load

Medicalversion (M5), Protection Class II

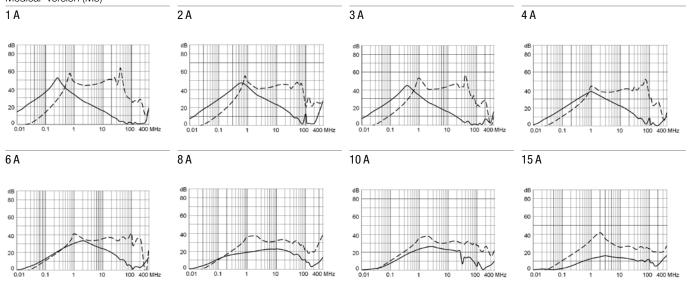


1) Line 2) Load

### **Attenuation Loss**



# Medical version (M5)

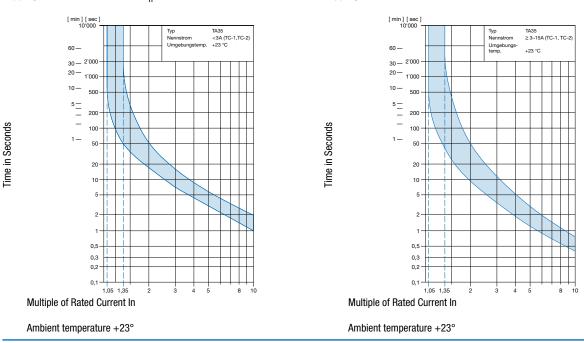


## Effect of ambient temperature

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 thermal $\rm I_n < 3 \ A$



# Tripping Characteristics thermal In $\ge 3 \dots \le 15 \text{ A}$

Type

DG1 2

#### Confi guration Code Confi guration Code TA35 CBD WM100C0-000-C61 35 - X X X - X X X X - 0 0 Cust omer specifi c type Color 0 Black 1 White 3) Panel Mounting 1) 00 Scr ew version A fr ont mounting 01 Scr ew version B fr ont mounting 10 Snap-in 1.0 mm 12 Snap-in 1.2 mm 15 Snap-in 1.5 mm Snap-in 2.0 mm 20 25 Snap-in 2.5 mm 30 Snap-in 3.0 mm 88 Scr ew version fr ont mounting (sealed towar ds housing, IP67) Te rminal PE Without (PCII) 0 QC 6.3x0.8 mm 1 Type of mains fi Iter (inductance) 0 standar d inductance 1 higher inductance Type of mains fi Iter (capacit or) standar d X2=100nF, Y2=2200pF 1 2 standar d X2=220nF, Y2=2200pF 3 standar d X1=47nF, Y1=2200pF 4 medical M5 X2=100nF 5 medical M5 X2=220nF 6 medical M5 X1=47nF 7 medical M80 X2=100nF, Y2=470pF medical M80 X2=220nF, Y2=470pF 8 9 medical M80 X1=47nF, Y1=470pF Type of mains fi Iter (r ated cur rent) 2) 1 1A 2 2A 3 3A 4 4A 5 6A 6 8A 7 10A 8 15A (UL), 10A (IEC), 10A (GB) Confi guration Code TA35 2) See confi guration code of T A35 r ocker 2pole

1)

2)

- 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.
- ٦١ Only on request (annrovals nending)

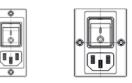
# DG12

# Confi guration Code

/pe	Confi guration Code TA35	
i12 -	CBD WM100C0-000-C61 35	<u>x x x - x x x x - o o</u>
		Cust omer specifi c type
		Color
		0 Black
		1 White
		Panel Mounting
		00 Scr ew version A fr ont mounting
		01 Scr ew version B fr ont mounting
		10 Snap-in 1.0 mm
		12 Snap-in 1.2 mm
		15 Snap-in 1.5 mm
		20 Snap-in 2.0 mm
		25 Snap-in 2.5 mm 30 Snap-in 3.0 mm
		30 Snap-in 3.0 mm   88 Scr ew version fr ont mounting
		(sealed towar ds housing, IP67)
		Terminal PE
		0 Without (PCII)
		1 QC 6.3x0.8 mm
		Type of mains fi Iter (inductance)
		0 standar d inductance 1 higher inductance
		Type of mains fi Iter (capacit or)
		1 standar d X2=100nF , Y2=2200pF
		2 standar d X2=220nF , Y2=2200pF
		3 standar d X1=47nF, Y1=2200pF
		4 medical M5 X2=100nF 5 medical M5 X2=220nF
		6 medical M5 X1=47nF
		7 medical M80 X2=100nF , Y2=470pF
		8 medical M80 X2=220nF , Y2=470pF
		9 medical M80 X1=47nF , Y1=470pF
		Type of mains fi Iter (r ated cur rent)
		1 1A
		2 2A
		3 3A
		4 4A
		5 6A 6 8A
		6 8A 7 10A
		8 15A (UL), 10A (IEC), 10A (GB)
		Confi guration Code TA35
		See confi guration code of T A35 r ocker 2pole

1)

2)



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)

### **ORDER CODE**

Table 1 Selection for type TA35

Order example

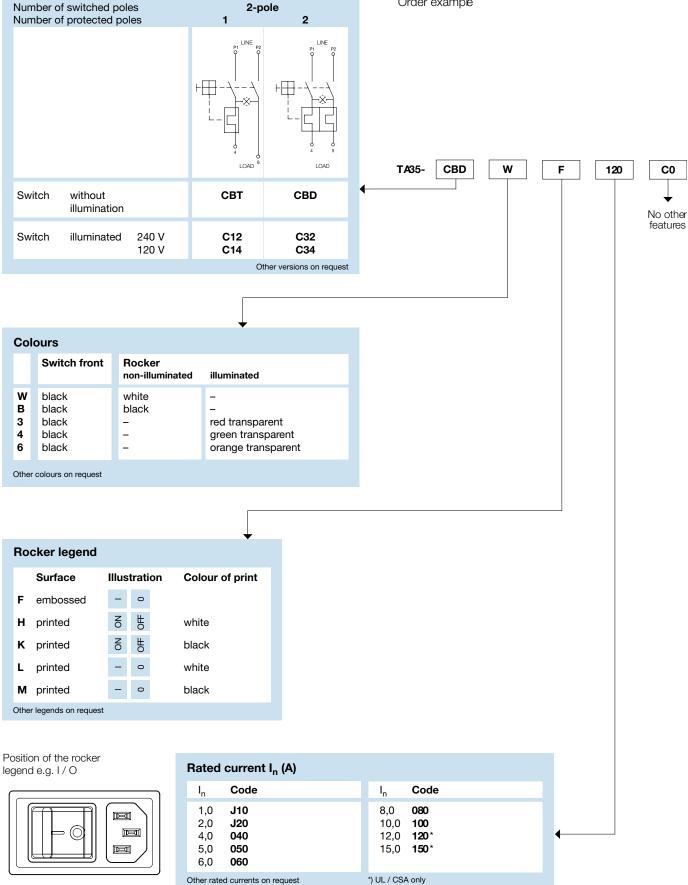


Table 1 Selection for type TA35

# ORDER CODE

Order example Number of switched poles 2-pole Number of protected poles 2 1 LINE LINE P LOAD LOAD TA35-CBD W F 120 **C**0 Switch CBD without CBT illumination No other features Switch illuminated 240 V C12 C32 120 V C14 C34 Other versions on request Colours Switch front Rocker non-illuminated illuminated W black white \_ в black black 3 black red transparent 4 green transparent black \_ 6 \_ orange transparent black Other colours on request **Rocker legend** Surface Illustration Colour of print F embossed \_ 0 н printed NO Щ white NO щ printed black Κ printed \_ 0 white L — 0 black M printed Other legends on request Position of the rocker Rated current In (A) legend e.g. I / O Code Code  $\mathbf{I}_{n}$ I<sub>n</sub> 1,0 J10 8,0 080 2,0 J20 10,0 100 040 4,0 12,0 120\* 5,0 050 15,0 150\* 6,0 060 \*) UL / CSA only Other rated currents on request

### Variants

	Circuit Breaker Filter		ter		Connector				
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	I	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	Ι	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	Ι	black	Screw-on A	IP40	3-109-561
10	white	non-illuminated	10	Standard ver- sion with high inductance	Ι	black	Screw-on A	IP40	3-109-602
15	white	non-illuminated	15	Standard ver- sion with high inductance	Ι	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)	I	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	Ι	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

Availability for all products can be searched real-time: https://www.schurter.com/en/info-center/support-tools/stock-check-distributors

Packaging unit

10 Pcs

### Accessories

Description



RC320 Rear Cover for Power Entry Module

SC54C13KS

VAC13KS

### 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 pro- tection class I	4787
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 <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4785 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 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
--	------



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