# DG12

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



Screw-on with IP67



Screw-on A



Screw-on B

C14	C18	
70° C	70° C	

## Description

- Panel mount :
- Screw-on or snap-in mounting from 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**

- IP67 protection
- 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 equipment according to IEC/UL 60950 Suitable for use in medical equipment according to IEC/UL 60601-1

#### Other versions on request

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

#### References

Alternative: version without line filter DG11

#### Weblinks

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

#### **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-	-25 °C to 60 °C
rature	
Climatic Category	25/060/21 acc. to IEC 60068-1
IP-Protection	from front side IP40 or 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 8mm
	Mounting screw torque max 0.5 Nm
	: S =1.0/1.2/1.5/2.0/2.5/3.0 mm
Material: Housing	Thermoplastic, black, UL 94V-0

appliance inlet/-outlet	C14 C18 acc. to IEC 60320-1 UL 498, CSA C22.2 no. 42 (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. Optional with undervoltage- or remote trip 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 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.

# DG12

## 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>FN</b> us	UL Approvals	UL	UL 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
(ΨL	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
(YL)	Designed according to	UL 60939-3	Electromagnetic interference filters
CSA Group	Designed according to	CSA C22.2 no. 42	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>	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.
IEC	Designed for applications acc.	IEC 60601-1	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance

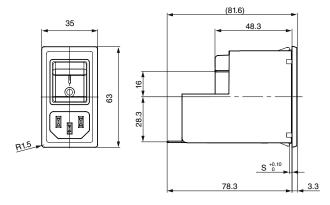
## Compliances

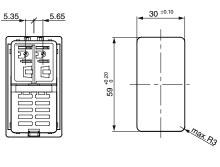
The product complies with following Guide Lines

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.
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.
<b>√</b> -Lock	Landing Page 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 Technology	SCHURTER AG	Suitable for use in medical equipment according to IEC/UL 60601-1

## Dimensions [mm]

Snap-in version IP40





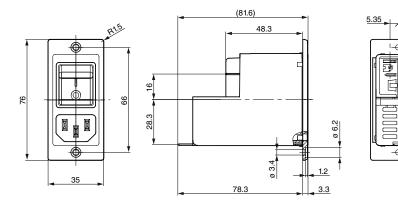
★ | = 5.65

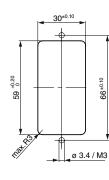
1-----1

-¢

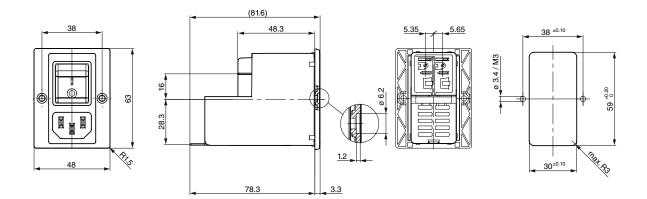
5 Ð

Screw-on A

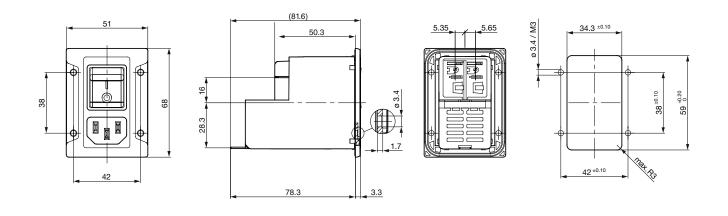




#### Screw-on B



### 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 [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
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

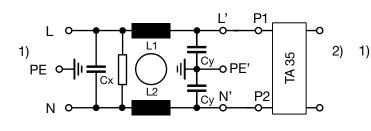
P1

0

P2

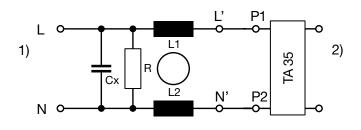
TA 35

 $50\Omega$  common mode



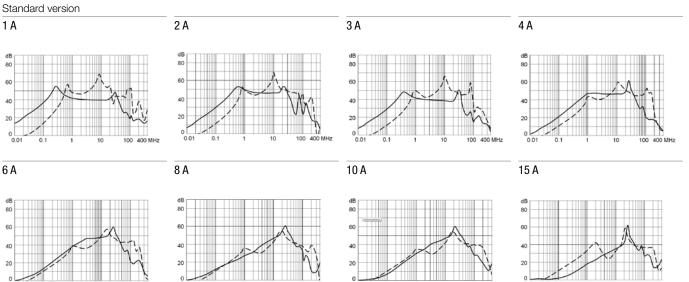
1) Line, 2) Load

Medicalversion (M5), Protection Class II

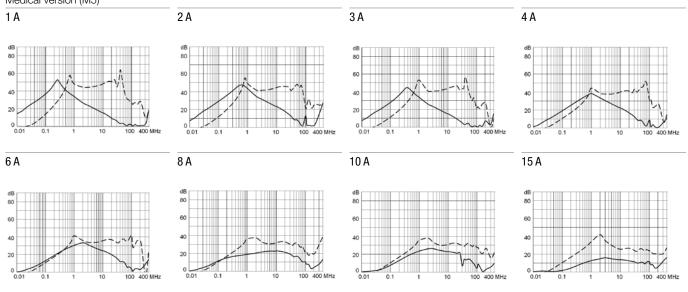


1) Line 2) Load

### **Attenuation Loss**



## Medical version (M5)

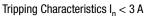


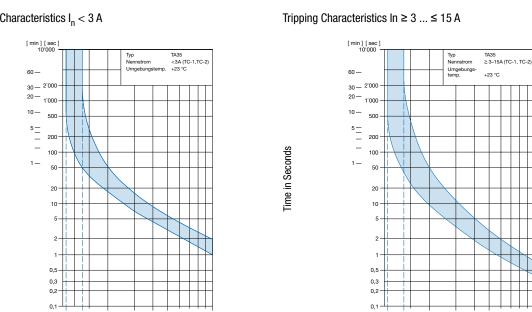
## Effect of ambient temperature

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**

Time in Seconds





1,05 1,35

Multiple of Rated Current In

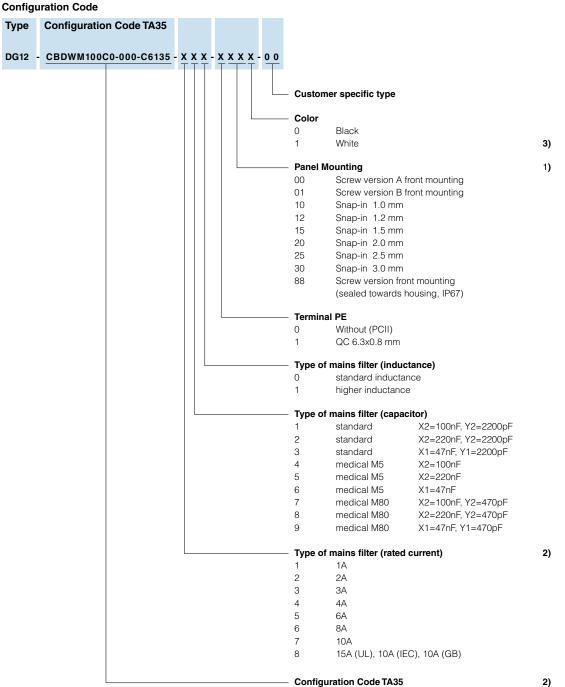
Reference Temperature +23°

1,05 1,35

Multiple of Rated Current In

Reference Temperature +23°

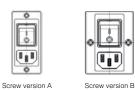
6

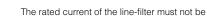


#### **Configuration Code TA35**

1)

See configuration code of TA35 rocker 2pole





2) exceeded in the end application.

3) Only on request (approvals pending)

Table 1 Selection for type TA35

## ORDER CODE

Order example Number of switched poles 2-pole Number of protected poles 2 1 TA35-CBD W 120 C0 F CBD Switch 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 black \_ green transparent 6 orange transparent black \_ Other colours on request **Rocker legend** Surface Illustration Colour of print 0 F embossed NO ЩO printed white н ЩO S black K printed 0 L printed white \_ M printed 0 black Other legends on request Position of the rocker Rated current In (A) legend e.g. I / O Code Code I<sub>n</sub> l<sub>n</sub> 1,0 J10 8,0 080 J20 10,0 100 2,0 Þ 4,0 040 12,0 120\* D 5,0 050 15,0 150\* 6,0 060 \*) UL / CSA only Other rated currents on request

# DG12

## Variants

	Circuit Breaker		Fil	ter		Con	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	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	3-118-974
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	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
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	Ι	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

## **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
4788, Mounting: Snap-in version, Appliance Outlet: IEC Solder terminals or quick connect terminals, 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
Appliance Outlet further types to DG12	

#### Connector Overview complete



4022 Mounting: Power Supply Cord, 3 x 1.5 mm <sup>2</sup> , Screw clamps, Connector: IEC C13	4022
4782 Mounting: Power Cord, 3 x 1 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4782
4012 Mounting: Power Supply Cord, 3 x 1 mm <sup>2</sup> , Screw clamps, Connector: IEC C13	4012
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 mm <sup>2</sup> / 3 x 18 AWG, Cable, Connector: IEC C13	4300-06
Connector further types to DG12	

### Mating Outlets/Connectors shuttered



#### Power Cord Overview complete

VAC13KS, Overview, V-Lock cord retaining, diverse Connector IEC C13, diverse, black VAC13KS
Power Cord further types to DG12