INSTALLATION INSTRUCTIONS / SOCKET OUTLETS GENERAL INFORMATION



Installation instructions

Tool size for processing BERKER products



- The products have combination screws that can be processed with cross-head as well as flatblade screwdrivers. Tool sizes for contact screws:
- Cross-head bits: Pozi-Drive, size 2
- Cross-head screwdrivers:
- Pozi-Drive, size 2
- Slot screwdrivers: blade thickness 1 mm

International socket outlets



Use in: AF/AM/AT/AZ/BA/BE/BF/BG/BI/BJ/BY/CF/CS/CZ/DE/ EE/EG/ER/ES/FI/GE/GL/GR/HR/HU/ID/IR/IS/IT/KR/ KZ/LB/LT/LU/LV/MD/MK/MR/MZ/NL/NO/PE/PT/PY/ RO/RU/RW/SA/SE/SI/SM/SO/SR/SY/TJ/TR/UA/UY/UZ

Fig. 1: SCHUKO socket outlet* - 2-pin + earth, 250 V ~, 16 A



Use in: AD/BE/CG/CI/CM/DJ/DZ/FR/GF/GN/GP/KH/KM/MA/ MG/ML/PL/SK/SN/SY/TD/TG/TN/VN

Fig. 2: Socket outlet with earthing pin FRANCE/BELGIUM* – 2-pin + earth, 250 V~, 16 A

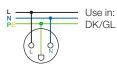


Fig. 3: Socket outlet with earthing contact DENMARK – 2-pin + earth, 250 V~, 13 A



Fig. 4: Socket outlet with earthing contact SWITZERLAND – 2-pin + earth,

type 13: 250 V~, 10 A; type 23: 250 V~, 16 A



Fig. 5: Socket outlet with earthing contact ITALY* – 2-pin + earth, 250 V~, 16 A

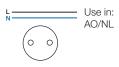


Fig. 6: Socket outlet without earthing contact NETHERLANDS* – 2-pin, 250 V~, 16 A



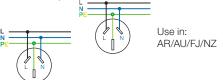
Use in: AE/AG/BN/BW/CY/GB/GD/GH/GM/HK/IE/IQ/KE/KW/ LR/MT/MW/MY/OM/SL/TZ/YE/ZA/ZW Tool sizes for fixing screws:

- Cross-head bits: Pozi-Drive, size 1
- Cross-head screwdrivers: Pozi-Drive size 1.
- Slot screwdrivers: Blade thickness 0.8 mm.
- When using cordless screwdrivers a maximum torque of 0.5 Nm should be used.
- Fig 7: Socket outlet with earthing contact BRITISH STANDARD, standard: BS 1363 Part 2 2-pin + earth, 250 V~, 13 A



 Use in:
CA/GT/GY/HN/HT/KP/LA/MX/PA/PH/PR/SV/TH/TW/ US/VE

Fig. 8: Socket outlet with earthing contact USA/CANADA NEMA 5–15 R – 2pole + earth, 125 V~, 15 A



Use in:

Fig. 9: Socket outlet with earthing contact AUSTRALIA – 2-pin + earth, 250 V~, 10 A (left Fig.); 250 V~, 15 A (right Fig.)



CA/GT/GY/HN/HT/KP/LA/MX/PA/PH/PR/SV/TH/TW/ US/VE

- Fig. 10: Socket outlet without earthing contact EURO-AMERICAN STAN-DARD* – 2-pin, 250 V~, 10 A
- * Non-polarised system without specification for the connection of the external wire and neutral wire)

Country abbreviations in accordance with ISO 3166

AD=Andorra; AE=United Arab Emirates; AF=Afghanistan; AG=Antigua; AL=Albania; AM=Armenia; AO=Angola; AR=Argentina; AT=Austria; AU=Australia; AZ=Azerbaijan; BA=Bosnia and Herzegovina; BE=Belgium; BF=Burkina Faso; BG=Bulgaria; BI=Burundi; BJ=Benin; BN=Brunei; BW=Botswana; BY=Belarus; CA=Canada; CF=Central Africa Republic; CG=Congo; CH=Switzerland; CI=Côte d'Ivoire; CL=Chile CM=Cameroon; CS=Serbia and Montenegro; CY=Cypress; CZ=Czech Republic; DE=Germany; DJ=Djibouti; DK=Denmark; DZ=Algeria; EE=Estonia; EG=Egypt; ER=Eritrea; ES=Spain; ET=Ethiopia; FI=Finland; FJ=Fiji; FR=France; GB=United Kingdom; GD=Grenada; GE=Georgia; GF=French Guiana; GH=Ghana; GL=Greenland; GM=Gambia; GN=Guinea; GP=Guadeloupe; GR=Greece; GT=Guatemala; GY=Guyana; HK=Hong Kong; HN=Honduras; HR=Croatia; HT=Haiti; HU=Hungary; ID=Indonesia; IE=Ireland; IQ=Iraq; IR=Iran; IS=Iceland; IT=Italy; KE=Kenya; KH=Cambodia; KM=Comoros; KP=North Korea; KR=South Korea; KW=Kuwait; KZ=Kazakhstan; LA=Laos; LB=Lebanon; LR=Liberia; LT = Lithuania; LU = Luxemburg; LV = Latvia; LY = Libya; MA = Morocco; MD=Moldavia; MG=Madagascar; MK=Macedonia; ML=Mali; MR=Mauritania; MT=Malta; MW=Malawi; MX=Mexico; MY=Malaysia; MZ=Mozambique; NL=Netherlands; NO=Norway; NZ=New Zealand; OM=Oman; PA=Panama; PE=Peru; PH=Philippines; PL=Poland; PR=Puerto Rico; PT=Portugal; PY=Paraguay; RO=Rumania; RU=Russia; RW=Ruanda; SA=Saudi Arabia; SE=Sweden: SI=Slovenia: SK=Slovakia: SL=Sierra Leone: SM=San Marino: SN=Senegal; SO=Somalia; SR=Surinam; SV=El Salvador; SY=Syria; TD = Chad; TG = Togo; TH = Thailand; TJ = Tajikistan; TM = Turkmenistan; TN=Tunisia; TR=Turkey; TW=Taiwan; TZ=Tanzania; UA=Ukraine; US=USA; UY=Uruguay; UZ=Uzbekistan; VE=Venezuela; VN=Vietnam; YE=Yemen; ZA=Zambia; ZW=Zimbabwe

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Berker Integro

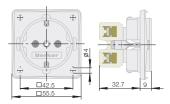
Module inserts

Flat-head screws, size M3 or M3.5 must be used to fasten the inserts.

socket outlets

Dimensional drawing

Socket outlets of international plug-and-socket systems have insertion depths that are different from those of SCHUKO socket outlets (Table 1).



Socket outlet system	Insertion depth
SCHUKO socket outlet	32.7 mm
Socket outlet with earthing contact, USA/CANADA, NEMA 5-15 R	19.5 mm
Socket outlet with earthing contact, USA/CANADA, NEMA 6-20 R	19.5 mm
Socket outlet with earth contact AUSTRALIA	16.5 mm
Socket outlet with earthing contact DENMARK	27.5 mm
Socket outlet with earthing contact ITALY	34.0 mm
EinbauöffnungSocket outlet with earthing contact, SWITZERLAND, type 13	28.0 mm
EinbauöffnungSocket outlet with earthing contact, SWITZERLAND, type 23	28.0 mm
Socket outlet with erath contact BRITISH STANDARD	20.5 mm
Socket outlet with earthing pin FRANCE/BELGIUM	29.5 mm
Socket outlet without earth contact NETHERLANDS	29.6 mm
Socket outlet without earthing contact EURO-AMERIKANISCHER STANDARD	21.3 mm

Table 1: Installation depth of different plug and socket systems

Audio/video modules

Cinch modules

Cinch (RCA) is the designation of standardised connectors for transmitting electrical signals, primarily via coaxial cables. Use of other cable types is not widespread, however it is possible.

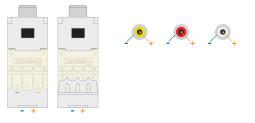
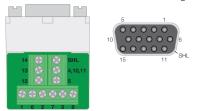


Figure 1: Pin assignments for cinch modules

VGA modules

The VGA module is used to connect display devices on a graphic card. Depending on the quality, VGA cables can be susceptible to interference at lengths of under 5m, or they can still transmit a good signal at lengths in excess of 30 m. Cables suited for high frequency with a coaxial structure for the colour channels are advantageous.



2 Green Coaxial wire З blue Coaxial wire 4* Monitor ID bit 2 Twisted pair wire (optional connection) 5 Ground Twisted pair wire 6 red ground Coaxial shielding 7 green ground Coaxial shielding 8 Coaxial shielding blue ground 9 10* Synchronous ground Twisted pair wire 11* Monitor ID bit 0 or digital ground Twisted pair wire (optional connection) 12 Monitor ID bit 1 Twisted pair wire (optional connection) 13 Horizontal synchronisation Wire 1 14 Vertical synchronisation wire 2 15 Monitor ID bit 3 SHL Housing shielding External shielding

wire

Coaxial wire

*Are connected together on one terminal.

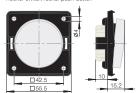
Table 2: Contact pinouts of the VGA modules

Fig. 2: Pinout of the VGA modules

Rocker switch/rocker push-button

Dimensional drawing

Rocker switch/rocker push-butto



Rotary dimmer with setting knob

Dimensional drawing

400W,

order no. 9 2871 ...



PIN

1

Transmission signal

Red

APPENDIX

DIMENSIONAL DRAWINGS / INSTALLATION INSTRUCTIONS BERKER INTEGRO



1 Luminance (Y) earth

2 Chrominance (C) earth

3 Intensity (luminance) Y

4 Colour (chrominance) C

S-Video module

The S-Video (also known as Separate Video, Y/C) module is used for separate transmission of brightness (luminance) and colour (chrominance or chroma) information.

Cable lengths should not exceed 10 m.

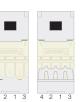
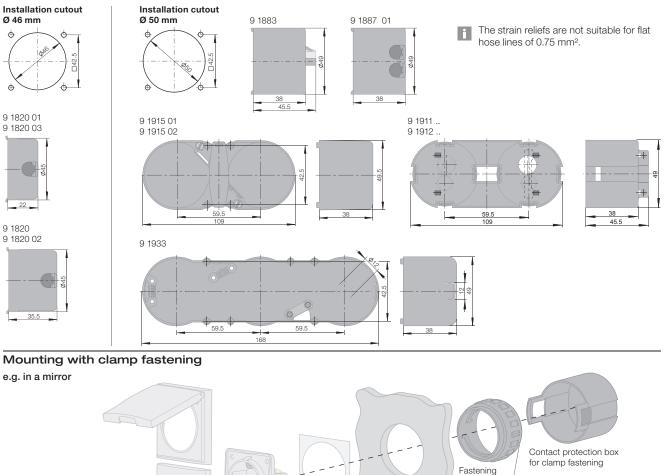


Figure 3: Contact assignment of the S-Video module

clamp ring



Dimensional drawings



Adhesive

Anti-twist

safeguard

foil as

e.g. socket

outlet

frame or

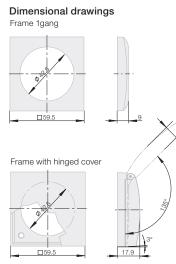
Frame with hinged cover

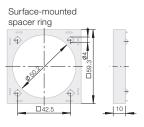
Installation aperture



DIMENSIONAL DRAWINGS FRAMES BERKER INTEGRO

Berker Integro Flow

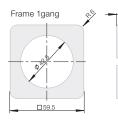








Dimensional drawings

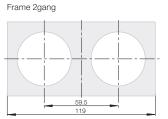


Frame with

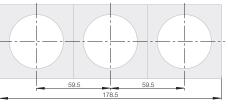
hinged cover

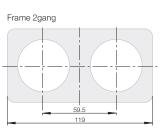
Surface-mounted spacer ring 8 95 8 **4**2 10

> Surface-mounted housing 16



Frame 3gang





Frame 3gang 59.5 59.5 178.5

Berker Integro Pure

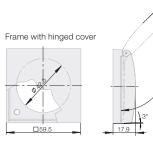
2.6

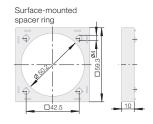
8

Dimensional drawings

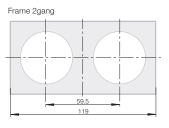
□59.5



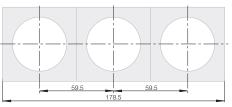








Frame 3gang

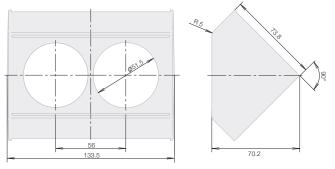


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DIMENSIONAL DRAWINGS / INSTALLATION INSTRUCTIONS BERKER TWIN-BOX

Berker TWIN-Box

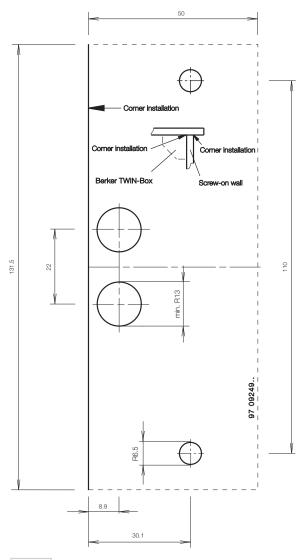
Dimensional drawings



					Dusiness	00.000
Twin-box Combination	Lead (Type H05VV-F)			Light fitting cable (Type H05VV-F)		
	Number of wires	Cross section	Length	Number of wires	Cross section	Length
1948 02	3	1.5 mm ²	1.5 m	-	-	-
1948 08	3	1.5 mm ²	1.5 m	2	0.75 mm ²	1.5 m
1948 12	4	1.5 mm ²	1 m	2	0.75 mm ²	1.5 m
1948 13	3	1.5 mm ²	1.5 m	2	0.75 mm ²	1.5 m
1948 14	3	1.5 mm ²	1.5 m	2	1.5 mm ²	1.5 m
1948 16	3	2.5 mm ²	1.5 m	3	2.5 mm ²	1.5 m
1948 17	3	1.5 mm ²	1.5 m	3	0.75 mm ²	1.5 m
1948 18	3	1.5 mm ²	1.5 m	-	-	-
1948 19	3	2.5 mm ²	1.5 m	-	-	-
1948 20	3	1.5 mm ²	1.5 m	2	0.75 mm ²	1.5 m
1948 21	3	1.0 mm ²	1.5 m	-	-	
1948 22	3	1.5 mm ²	1.0 m	-	-	
1948 23	3	1.5 mm ²	1.0 m	-	-	
1948 24	3	1.5 mm ²	1.0 m	-	-	
1948 25	3	2.5 mm ²	1.5 m	-	-	
1948 26	3	2.5 mm ²	1.5 m	3	1.5 mm ²	1.5 m
1948 27	3	1.5 mm ²	1.5 m	3	1.5 mm ²	1.5 m
1948 28	3	2.5 mm ²	1.5 m	-	-	
1948 29	3	1.5 mm ²	1.5 m	-	-	
1948 30	3	1.5 mm ²	1.5 m	-	-	

Table 3: TWIN-Box pre-assemblies

TWIN-Box assembly aid



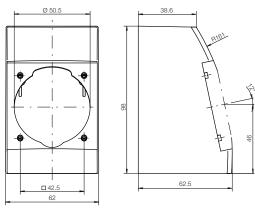
B Berker Business Solutions

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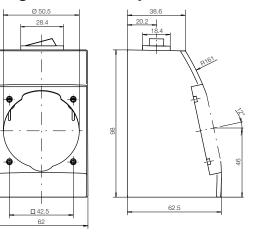


DIMENSIONAL DRAWINGS / INSTALLATION INSTRUCTIONS INTEGRO BOX

Integro Box - assembly set



Integro Box - assembly set with on/off switch



Integro Box - Installation instructions

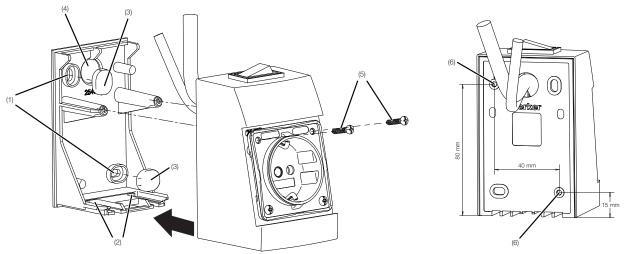


Figure 1: Lower part and cover

- 1 Screw holes for mounting on mirror cabinet rear panel
- 2 Screw holes for mounting on mirror cabinet floor
- 3 Protection covers
- 4 Cable entry
- 5 Screws (supplied)
- 6 Fastening points for mounting the complete device

Mounting Integro Box

- Fasten lower part of the Integro Box to the mirror cabinet rear panel using suitable screws (1).
- Cover screw holes using the protective covers supplied (3).
- or
- Fasten lower part of the Integro Box to the mirror cabinet floor using suitable screws (2).
- Insert cables through the opening provided (4).
- Push cover onto the lower part until it engages.
- Fasten cover to the lower part using the screws supplied (5).

The Integro Box can also be screwed to the rear panel of the mirror cabinet in assembled state using the fastening points (6) provided. Suitable screws are available upon request.

Figure 2: Dimensions for rear mounting of the complete device

APPENDIX



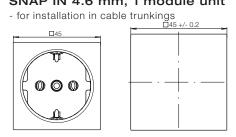
SYSTO

Module inserts

The module inserts are snapped into place in the installation opening using the "SNAP-IN method" and can thus be installed without the need for tools.

Built-in SCHUKO socket outlet

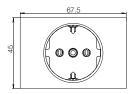
SNAP IN 4.6 mm, 1 module unit

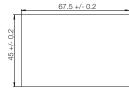


Installation aperture

Built-in SCHUKO socket outlet SNAP IN 4.6 mm, 1.5 module units

- for installation in cable trunkings



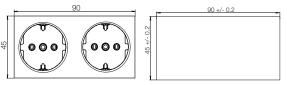


Installation aperture

Built-in SCHUKO double socket outlet

SNAP IN 4.6mm, 2 module units

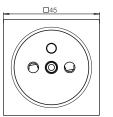
- for installation in cable trunkings



Installation aperture

Built-in socket outlet with earthing contact SNAP IN 4.6 mm, 1 module unit

- for installation in cable trunkings





Installation aperture

Built-in change-over switch SNAP IN 4.6 mm

- for installation in cable trunkings





Installation aperture



INSTALLATION / DISMANTLING INSTRUCTIONS SOCKET OUTLET MODULES DATA COMMUNICATION

Berker Business Solutions

Installation of several socket outlets via connection adapter

Several socket outlets have to be connected via a connection adapter (order no. WS120).

The connection adapter is used for guick installation for the following types:

- WS121, 121E, 121N, 121V
- WS122, 122E, 122N, 122V
- WS172, 172E, 172N, 172V



The connection adapter is inserted into the plug-in terminals of the socket outlet with its contact pins.

The connection bridges must snap into place.

(a) Connection bridge (b) Contact pin

Installation

Dismantling

✓ live parts.

Only in the first socket outlet module is the connection cable inserted into the plugin terminals.





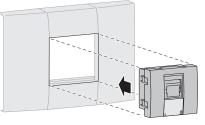
- Insert the connection adapter into the plug-in terminals of the socket outlet module in the correct position.
 - Pay attention to correct polarity (labelling of the terminals).
- i Insert connection adapter with socket outlet module into the plug-in terminals of the next socket outlet module in the correct position.





Installation in installation aperture

- Prepare the installation opening for the corresponding module.
- Connect module.
- Snap module into place in the installation opening (example: FCC module built-in data socket).



Data communication technology **Connection technology**

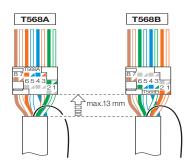
There are two types of connection variants in the data communication:

- T568 A

- T568 B

f

The difference between both variants lies in the assignment of the green/ green-white and orange/orange white wire pair.



The twisted pair wires (twisted pair) must not be drilled more than P 13 mm, as otherwise the transmission properties will change. In the case of shielded cables, apply the shield.

FCC socket outlet 8pole shielded, cat.6 SNAP IN 4.6 mm



45 +/- 0.2



Before dismantling, make sure that no voltage is present. Cover all

To dismantle or separate the socket outlet modules, push in the

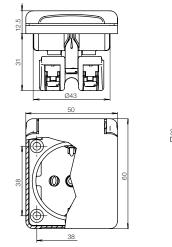
connection bridges on both sides using a slot screwdriver.

APPENDIX

BUILT-IN SCHUKO SOCKET OUTLETS BUILT-IN SOCKET OUTLETS

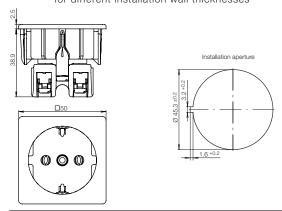


Built-in socket outlets Built-in SCHUKO socket outlets Built-in SCHUKO socket outlet with hinged cover 50 x 60 mm





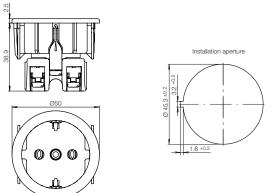
Built-in SCHUKO socket outlet with centre plate 50 x 50 mm, SNAP IN - for different installation wall thicknesses



Built-in SCHUKO socket outlet with centre plate 50 x 50 mm, SNAP IN 0.6 - 1.5 mm - installation depth 33.9 mm

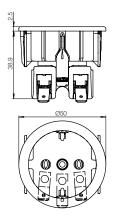
Built-in SCHUKO socket outlet with centre plate Ø 50 mm, SNAP IN

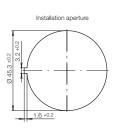
- for different installation wall thicknesses

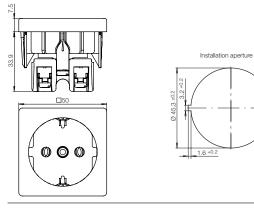


Built-in SCHUKO socket outlet with centre plate Ø 50 mm, SNAP IN 0.6 - 1.5 mm

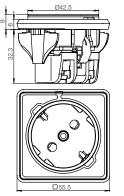
- with flat connection







Built-in 45° SCHUKO socket outlet SNAP IN 1.3 - 2.2 mm

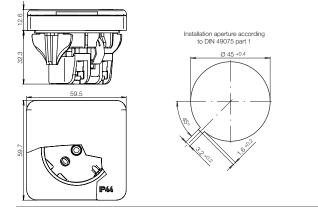






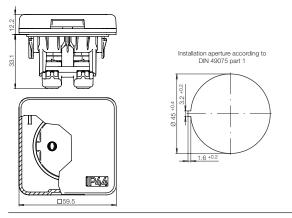
Berker Business Solutions

Built-in SCHUKO socket outlet 45° with hinged Built-in SCHUKO socket outlet with centre cover, SNAP IN 1.3 - 2.2 mm



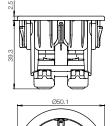
Built-in SCHUKO socket outlet with hinged cover 59.5 x 59.5 mm, SNAP IN, IP44

- for different built-in wall thicknesses



Built-in SCHUKO socket outlet with centre plate Ø 50 mm, SNAP IN

- for different built-in wall thicknesses



0

0

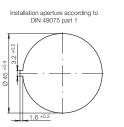
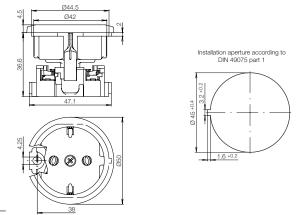
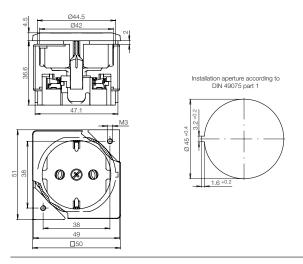


plate Ø 50 mm

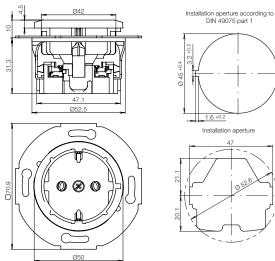


Built-in SCHUKO socket outlet with centre plate 50 x 50 mm and support bracket



Built-in SCHUKO socket outlet with supporting ring, centre plate Ø 50 mm

- with screw terminals

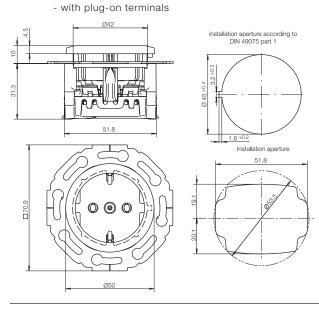


052!

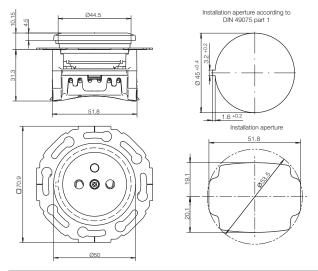
BUILT-IN SCHUKO SOCKET OUTLETS BUILT-IN SOCKET OUTLETS WITHOUT EARTHING CONTACT



Built-in SCHUKO socket outlet with supporting Built-in socket outlet with earthing pint and ring, centre plate Ø 50 mm

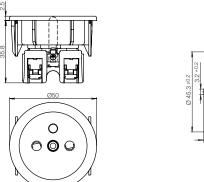


supporting ring, centre plate Ø 50 mm

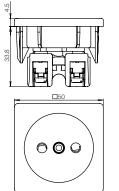


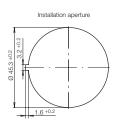
Built-in socket outlet without earthing contact Built-in socket outlet without earth contact with centre plate 50 x 50 mm, SNAP IN 3 mm

Built-in socket outlets with earthing pin Built-in socket outlet with earthing pin and centre plate Ø 50 mm, SNAP IN - for different built-in wall thicknesses









Built-in socket outlet with earthing pin and centre plate50 x 50 mm, SNAP IN

- for different built-in wall thicknesses

