

Operating instructions

Push button sensor 3 Plus 2-gang F100

Art. no. 2042 ..

Push button sensor 3 Plus 3-gang (1+2) F100

Art. no. 2043 ..

Push button sensor 3 Plus 6-gang (2+4) F100

Art. no. 2046 ..



Table of contents

1 Safety instructions 3

2 Device components 3

3 Intended use 3

4 Product characteristics 4

5 Operation 4

6 Information for electrically skilled persons 8

 6.1 Mounting and electrical connection 8

 6.2 Commissioning 10

7 Technical data 11

 7.1 Product information in accordance with the Ecodesign Directive (ErP 2009/125/EC) 12

8 Accessories 14

9 Warranty 14

1 Safety instructions

To avoid potential damage, read and follow the following instructions:



Electrical devices may be mounted and connected only by electrically skilled persons.

Instructions are part of the product. So keep them in a safe place.

2 Device components

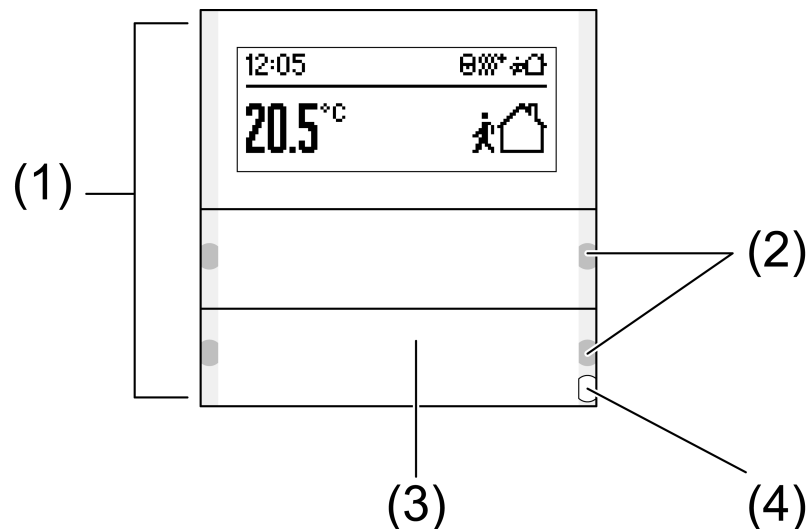


Figure 1

- (1) Operating rockers
- (2) Status LED
- (3) Inscription panel
- (4) Operation LED

System information

This device is a product of the KNX system and complies with the KNX directives. Detailed technical knowledge obtained in KNX training courses is a prerequisite for proper understanding.

The function of the device depends on the software. Detailed information on software versions and the respective scope of functions as well as the software itself can be obtained from the manufacturer's product database. The device is planned, installed and commissioned with the aid of KNX-certified software. The latest versions of product database and the technical descriptions are available on our website.

3 Intended use

- Operation of loads, e.g. light on/off, dimming, blinds up/down, brightness values, temperatures, calling up and saving light scenes, etc.
- Measurement and feedback control of the room temperature

- Installation on bus coupling unit 3 in appliance box according to DIN 49073

4 Product characteristics

- The push-button sensor functions switching, dimming, controlling blinds, value transmitter, calling up moods, etc.
- Three-colour status LED per operating element, which can be switched together or separately per rocker according to the equipment and programming
- Indication of values and texts
- Integrated room temperature sensor
- Room temperature control with setpoint value specification
- Integrated heating timer
- Display of room and setpoint temperature
- Display of outdoor temperature – with external sensor, e.g. weather station
- Operation LED as orientation light

5 Operation

Operating a function or load

Depending on the programming, a control rocker can have up to three functions assigned to it – left, right, entire surface. Operation depends on the specific function.

- Switch: Short press on button.
- Dim: Long press on button. The dimming process ends when the button is released.
- Move Venetian blind: Long press on button.
- Stop or adjust Venetian blind: Short press on button.
- Call up light scene: Short press on button.
- Save light scene: Long press on button.
- Set value, e.g. brightness or temperature setpoint: Short press on button.

Display icons and operating modes

The device compares the current room temperature with the setpoint temperature and controls heating or cooling devices according to the current demand. The setpoint temperature depends on the current operating mode and can be changed by the user, depending on the programming. The operating modes and the current controller status are shown in the display.

 Operating mode Comfort

 Operating mode Standby

 Operating mode Night

 Operating mode Frost/heat protection

 Comfort extension

 Room temperature setpoint manually shifted

 Dew point. Controller disabled

 Controller operation disabled

 Push-button sensor disabled

 Fan controller with fan level display

Auto/Man.: Automatic or manual fan control

 Heating mode

 Cooling mode

 Heating timer is active

! Warning message

The function of the display buttons is visible in the display in each case:

 , **OK** Apply setting, jump to following menu

 ,  **Abort**, exit menu

 ,  Move up/down in the list

 ,  Move to the left/right in the list

 ,  Increase/reduce setting

 The display changes for individual operation steps. The system returns to the basic display automatically after approx. 15 seconds after the last operation or when any other button is pressed.

Changing the room temperature

For short-term manual modification of the setpoint temperature.

- Press button to the right or left next to the display.
- Acknowledge indication "setpoint" with .
- Increase or reduce the setpoint temperature with  or .
- Depending on the programming: Accept setting with **OK**.

The  icon in the display shows that the setpoint temperature was adjusted.

With appropriate programming, manual changes to the setpoint temperature are cancelled by changing the operating mode.

Settings menu.

In the "Settings" menu, the following menu items are available in sequence. Some items are not visible, depending on the programming of the device.

- Fan controller

- Switch-over of the operating mode
- Setting setpoint temperatures
- Setting the heating timer
- Deleting the heating timer
- Set display contrast

Opening and operating the Settings menu

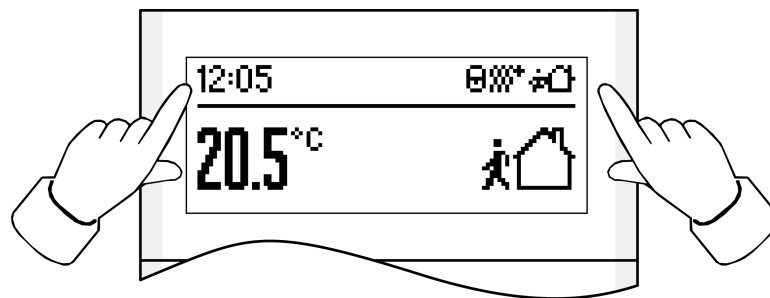


Figure 2

- Press both buttons next to the display simultaneously (see figure 2).
- Confirm display "Settings" with **✓**.
The "Settings" menu is displayed.
- Select desired menu item with **▲** or **▼** and confirm with **OK**.

Heating timer: set switching time

The heating timer selects the operating mode of the room thermostat independently of the day of the week and time – and thus the setpoint temperature of the room. A total of 28 program slots are available for switching times.

- Open menu "Settings", select "Set heating timer" and press **OK**.
The display shows the first program slot.
 - Select program slot with **▲/▼** and press **OK**.
 - Set hours and press **OK**.
 - Set minutes and press **OK**.
 - Select week Mon...Son, Mon...Fri, weekend Sat...Son or an individual week-day and press **OK**.
 - Select operating mode for the switching time and press **OK**.
For the next 15 seconds the display summarises the settings for the selected program slot.
 - Confirm with **OK**.
- i** After 15 seconds elapse – or when any other button is pressed – the setting procedure is aborted without saving.

Heating timer: deleting the switching time

- Open menu "Settings", select "Delete heating timer" and press **OK**.
The display shows the first program slot.
- Select the program slot to be deleted with ▲/▼ and press **OK**.
- If you really want to delete the program slot, then press ✓ once again.
- If you do not want to delete the program slot, then press ✕ or any other button, or wait for approx. 15 seconds.

6 Information for electrically skilled persons

6.1 Mounting and electrical connection



DANGER!

Electrical shock on contact with live parts in the installation environment.

Electric shocks can be fatal.

Before working on the device, disconnect the power supply and cover up live parts in the working environment.

Mounting and connecting the device

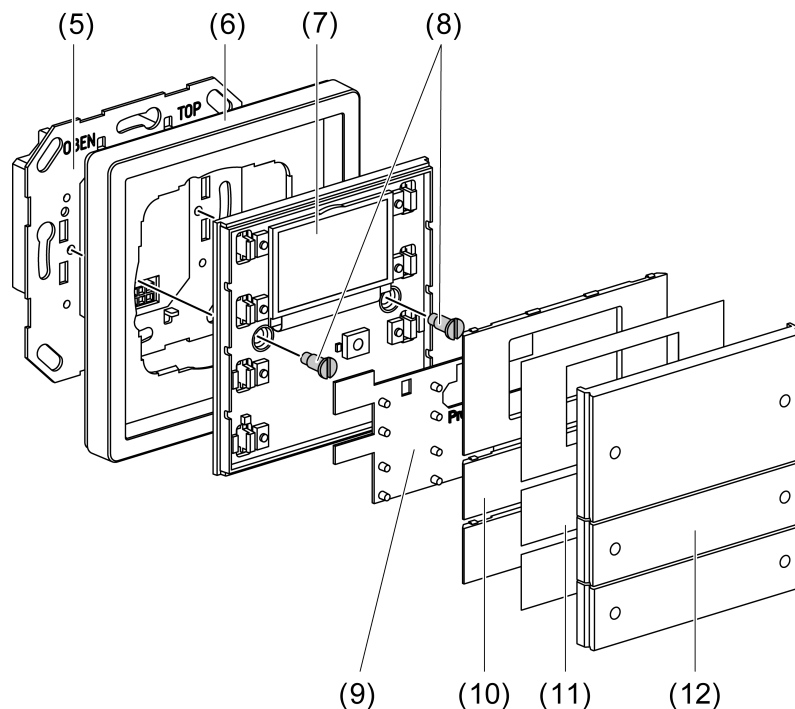


Figure 3

- (5) Bus coupler 3
- (6) Cover frame
- (7) Push-button sensor
- (8) Locking screws
- (9) ESD protection mat
- (10) Rocker support
- (11) Inscription panel
- (12) Rocker cover

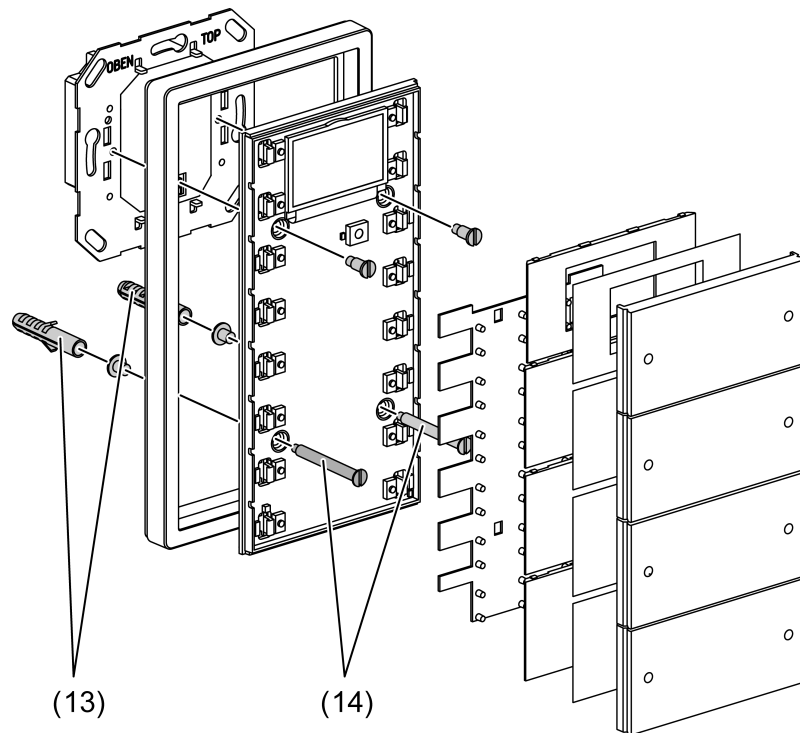


Figure 4

- (13) Anchor
(14) Fastening screws

The bus coupler 3 is connected to the bus and mounted in an appliance box.

Use only bus coupler 3 – without a programming button. It is not possible to combine it with other bus couplers.

Mount the double-height push-button sensors on two appliance boxes with a second supporting frame (see accessories). For mounting on an appliance box, use the enclosed screw/anchor set.

- Carefully remove the rocker supports (10) and the rocker covers (12) from the push button sensor (7).
- Plug the cover frame (6) onto the bus coupling unit (5).
- Carefully attach the push-button sensor (7) to the bus coupler (5).
- Screw the push-button sensor to the supporting frame of the bus coupler module. To do this, use the locking screws (8) provided.
- Screw the double-height push-button sensors to the lower supporting frame or the anchors (13). Use the screws (14) provided.
- If possible, load the physical address into the device before the final mounting (see Commissioning).
- If necessary, label the inscription signs (11).
- Lock the rocker support (10), inscription signs (11) and rocker covers (12) onto the push-button sensor.

6.2 Commissioning

Loading the physical address and application software

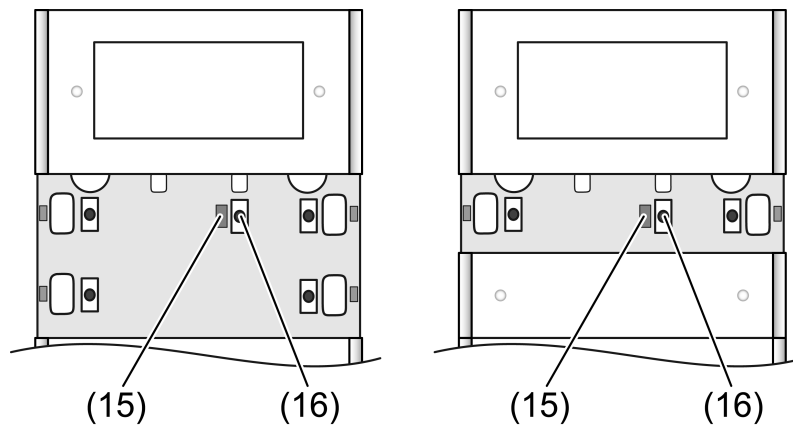


Figure 5

- (15) Programming LED
(16) Programming button

The programming button and LED are located under the rocker covers (see figure 5).

The rocker cover (12) and rocker support (10) over the programming button are dismantled.

- i** If the device does not receive any application software, or the wrong application software, then the operation LED (4) flashes.
- Press the programming button (16).
The programming LED (15) lights up.
 - Assign a physical address.
The programming LED goes out.
 - Load the application software into the device.
 - Mount the rocker support (10), inscription panel (11) and rocker cover (12).

7 Technical data

KNX medium	TP256
Commissioning mode	S mode
Rated voltage	DC 21 ... 32 V SELV (via bus coupler 3)
Power consumption	max. 420 mW (via bus coupler 3)
Protection class	III
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-20 ... +70 °C

Information according to ErP 2009/125/EC

Electronic room thermostat with weekday control	Yes
Power consumption	
In networked standby mode	1 W
In standby mode with information and status display	Yes
This controller fulfils the following control functions	TW(1/2/3/0/0/0/0/0)

7.1 Product information in accordance with the Ecodesign Directive (ErP 2009/125/EC)

Contact details:			
Gira Giersiepen GmbH & Co. KG, Dahlienstraße, 42477 Radevormwald, Germany			
Model identifier:			
Push button sensor 3 Plus 2-gang F100, 2042 ..			
Push button sensor 3 Plus 3-gang (1+2) F100, 2043 ..			
Push button sensor 3 Plus 6-gang (2+4) F100, 2046 ..			
Specification	Icon	Value	Unit
Power consumption			
In the off state	P_0	-	W
In standby mode	P_{sm}	-	W
In idle state	P_{idle}	-	W
In networked standby mode	P_{nsm}	1	W
In standby mode with information or status display		Yes	
Type			
Single-stage heat output, no room temperature control		No	
Two or more manual levels, no room temperature control		No	
Room thermostat with mechanical thermostat		No	
Electronic room temperature controller		No	
Electronic room temperature controller with time-of-day control		No	
Electronic room temperature controller with weekday regulation		Yes	
Other control options			
Presence detection		Yes	
Detection of open windows		Yes	
Remote control option		Yes	
Adaptive control of the start of heating		No	
Operating time limit		No	
Black ball sensor		No	
Self-learning function		No	
Control accuracy		No	

Codes of the control functions

The format of the code is TC (f1/f2/f3/f4/f5/f6/f7/f8), where TC is the code for temperature control and f1 to f8 are the codes for the respective control functions, if available; otherwise "0" must be specified.

		(TC)*	Control functions							
			f1	f2	f3	f4	f5	f6	f7	f8
Type of temperature control	Single-stage heat output, no room temperature control	NC								
	Two or more manual levels, no room temperature control	TX								
	Room thermostat with mechanical thermostat	TM								
	Electronic room temperature controller	HP								
	Electronic room temperature controller with daytime control	TD								
	Electronic room thermostat with weekday control	TW								
Control functions	Presence detection		1							
	Detection of open windows			2						
	Remote control option				3					
	Adaptive control of the start of heating					4				
	Operating time limit						5			
	Black ball sensor							6		
	Self-learning function								7	
	Control accuracy with CA < 2 Kelvin and CSD < 2 Kelvin									8

* Temperature control code

8 Accessories

Bus coupler 3	Art. no. 2008 00
Bus coupler 3 external sensor	Art. no. 2009 00
Remote sensor	Art. no. 1493 00
Second support ring	Art. no. 1127 00
Inscription sheet (21x)	Art. no. 2872 ..
Inscription sheet (48x)	Art. no. 2874 ..

9 Warranty

The warranty is provided by the specialist trade in accordance with statutory requirements. Please submit or send faulty devices postage paid together with a fault description to your responsible salesperson (specialist trade / installation company / electrical specialist trade). They will forward the devices to the Gira Service Center.

Gira
Giersiepen GmbH & Co. KG
Elektro-Installations-
Systeme

Industriegebiet Mermbach
Dahlienstraße
42477 Radevormwald

Postfach 12 20
42461 Radevormwald

Deutschland

Tel +49(0)21 95 - 602-0
Fax +49(0)21 95 - 602-191

www.gira.de
info@gira.de