BRINK 616880 Wireless Controller with humidity sensor Installation Guide

Installation regulations
Wireless Controller with humidity sensor

User manual
Dear client,
Thank you for buying the Wireless Controller with humidity sensor. This user's manual contains all required information to quickly become familiar with the product. We kindly request you to carefully go through this information before using the product. This user's manual is intended for the Wireless Controller with humidity sensor installer and end user.
Take good care of this user's manual! For more information or ordering manuals, please contact: Brink Climate Systems B.V.
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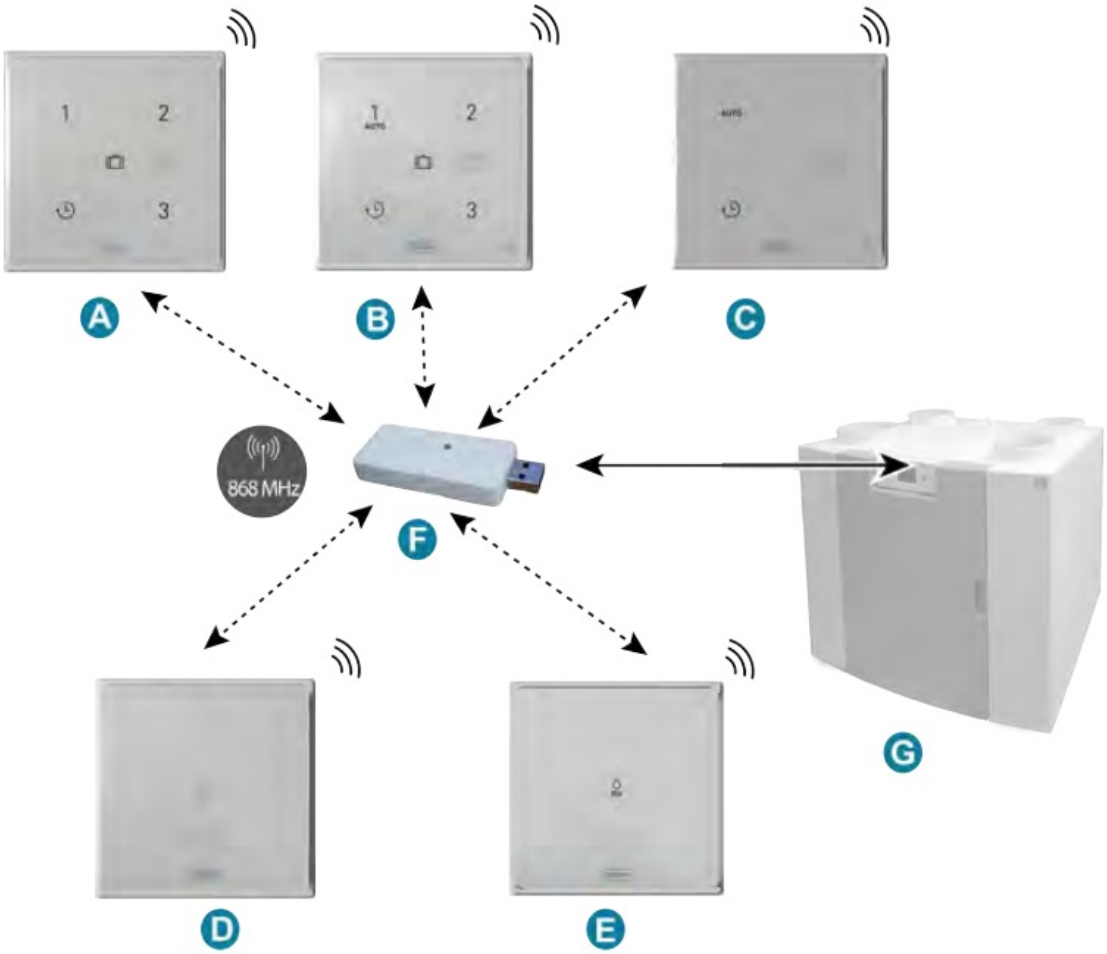
1.1 Description Wireless Controller with humidity sensor

Intended and unintended use
This manual is about the Wireless Controller with humidity sensor (See C in image below).
The Wireless Controller with humidity sensor should only be used in combination with products that have been approved by Brink Climate Systems B.V.
The Wireless Controller with humidity sensor can only be used with a HRU appliance which is equipped with a USB connection! The Wireless Controller with humidity sensor is a wireless remote control to operate your ventilation system. This remote control also displays when the filter(s) needs to be replaced/ cleaned or when the ventilation system is malfunctioning. Brink supplies a range of wireless remote controls/sensors that make contact with a heat recovery unit by means of a USB transceiver. This range consists of the 5 following types of wireless controls/ sensors:



A. Wireless Controller
B. Wireless Controller with build in CO2-sensor
C. Wireless Controller with build in RH (humidity) sensor
D. Wireless CO2 – sensor
E. Wireless Humidity – sensor
F. USB transceiver
G. Appliance with USB connection (for example HRU appliance type Flair)

The connected ventilation unit is operated by pressing one of the buttons on the Wireless Controller with humidity sensor with your finger.
For explanation of the buttons of the Wireless Controller with humidity sensor see ® Overview operational controls page 7.
The Wireless Controller with humidity sensor must always be used with a transceiver on the HRU appliance; a combination of multiple remote controllers on 1 USB transceiver is possible.
In total, a maximum combination of 12 controllers /sensors can be connected to 1 transceiver (Max. 4 controllers / max. 4 CO2-sensors and max 4 humidity sensors).
Note: A controller with a build in CO2- sensor is seen as an CO2-sensor and a controller with a build-in humidity sensor will be seen as an humidity sensor.
When one or more sensors are connected to the HRU appliance, it will ventilate according to the set conditions of the connected sensor(s).
If multiple controllers /sensors are used, the controller / sensor that requests the highest ventilation level always has priority.
Boost function ( ):
The boost function can be canceled at any time by pressing another button of the Wireless Controller with humidity sensor. When the boost button is pressed again during use of the boost function, the timer is reset and the connected ventilation device will run on ventilation level 3 again for 30 minutes. For position “Boost button” see ® Overview operational controls page 7.
The air flow quantities associated with the ventilation settings must always be set on the connected appliance and cannot be adjusted on the Wireless Controller with humidity sensor. For ventilation settings, see the installation manual of the relevant connected HRU appliance.

1.2 Delivery content

Check that delivered Wireless Controller with humidity sensor is complete and not damaged.
The scope of delivery includes 2 boxes; one for the Wireless Controller with humidity sensor with frame and wall bracket and one for the USB transceiver.
The delivery content of the Wireless Controller with humidity sensor consists of the following components:

1. Wireless Controller with humidity sensor
2. Frame
3. Wall bracket
4. Double-sided adhesive tape
5. Mounting screws
6. USB transceiver
7. Short information with QR- code to on line manual

Contents

Technical specification

2.1 General product specification
Product description

Name:	Wireless Controller with humidity sensor

Technical product specifications

Operating voltage:	3 V
Protection class:	IP21
Type of battery :	CR2032.MRF Lithium (preferred manufacturer Renata or Panasonic CR- 2032/BS) Not applicable if a permanent power connection is used!
Frequency	868 MHz

Ambient conditions

Ambient temperature:	0 °C to 50 °C
Storage temperature:	-20 °C to 60 °C
Humidity:	0% to 90%
Other:	For indoor use
Max distance between USB transceiver an d Wireless Controller with humidity sensor	300 m (open field; 1 meter height)

2.2 Environment influences
The Wireless Controller with humidity sensor should be placed and used in a space with the correct ambient conditions for proper operation. The Wireless Controller with humidity sensor may only be mounted indoors, but not close to a heat source, a radiator, in a extreme humid environment. The Wireless Controller with humidity sensor may also not be exposed to direct radiation heat (sun light). The Wireless Controller with humidity sensor may also not be mounted close to a magnetic field. This could damage internal components.

2.3 Overview operational controls
The Wireless Controller with humidity sensor has four (capacitive) buttons (two visible and two invisible buttons). Each button is equipped with a LED.

1. Button 1 – Automatic ventilation position in accordance with build in humidity sensor
2. Button 2 – boost function
3. Button 3 – Not visible but available for “note ID”
4. Button 4 – Not visible but available for “note ID”
5. Filter/fault indication LED

Button 1 (auto)
When button 1 is operated, the HRU appliance will be set to ventilation level 1 or the HRU appliance will be ventilate automatically conform set requirements of the build in humidity sensor; the white LED next to button 1 will flash once as “button press” confirmation.

Button 2 ( )
When button 2 is operated, the HRU appliance will run for 30 minutes at ventilation level 3 (boost function) and then again at ventilation position 1; the white LED placed next to button 2 will flash once as “button press” confirmation.

Button 3 & 4
When the (not visible) buttons 3 & 4 are operated for a note ID (see ® Connecting with USB Tranceiver (Pairing) page 13) the white LED placed next to these buttons will flash once as “button press” confirmation.

Filter/ fault LED
This LED indicates when filter (s) must be cleaned / replaced or when a malfunction has occurred in the connected HRU appliance.

1 = LED Filter notification

Filter notification
The filter(s) in the HRU appliance, connected to the Wireless Controller with humidity sensor, should be cleaned or replaced when the red LED on the Wireless Controller with humidity sensor appears.
This LED is on for 10 seconds every 3 hours or for 300 seconds if any of the buttons are operated (Wireless Controller with humidity sensor with battery power supply).
When the Wireless Controller with humidity sensor is equipped with a permanent power supply (optional) this LED is permanently on.
Resetting of the filter notification is not possible with the Wireless Controller with humidity sensor!
Consult the manual of the device connected to the Wireless Controller with humidity sensor for resetting filter notification

1 = LED fault indication (flashes 1Hz)

Fault notification
If there is a fault in the HRU appliance, connected to the Wireless Controller with humidity sensor, the red LED on the Wireless Controller with humidity sensor flashes with frequency of 1 Hz (1 blink per second).
This LED flashes for 10 seconds every 3 hours or for 300 seconds if any of the buttons are operated (Wireless Controller with humidity sensor with battery power supply).
When the Wireless Controller with humidity sensor is equipped with a permanent power supply (optional) this LED flashes permanently. See the installation instructions of the device connected to the Wireless Controller with humidity sensor for troubleshooting for the error notifications indicated on the Wireless Controller with humidity sensor.

1 = LED (flash 0.5 sec on - 60 sec off)

Lost connection
When the Wireless Controller with humidity sensor lost connection with the USB-transceiver the fault LED will also flash.
The LED flashes 3 times 0,5 seconds ON and 60 seconds OFF or flashes for 300 seconds if any of the buttons are operated (Wireless Controller with humidity sensor with battery power supply).
Filter and fault notifications are overruled.

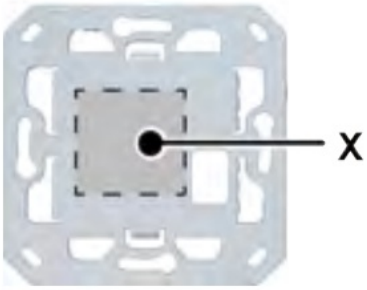
Assembly

3.1 Mounting Wireless Controller with humidity sensor on the wall

You should perform the step1 to step 4 to assemble the Wireless Controller with humidity sensor.

An example of a wireless controller is shown in this section, but other wireless controllers/sensors are assembled in the same way.

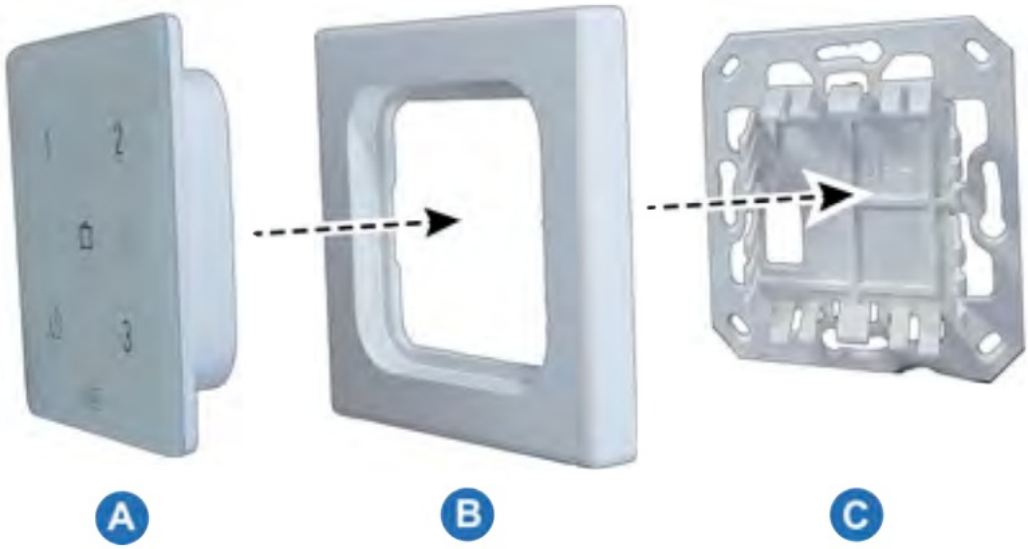
Step 1
The wall bracket can be attached to a flush mount electrical box (Ø 55 mm) or can be directly mounted on the wall with supplied double sided adhesive tape. Mounting on a electrical box is only necessary when a permanent power supply (option) is used. The Wireless Controller with humidity sensor should be placed at a height of approximately 1.65 meters above the floor.
Screw or glue the wall bracket onto the wall in the correct position.



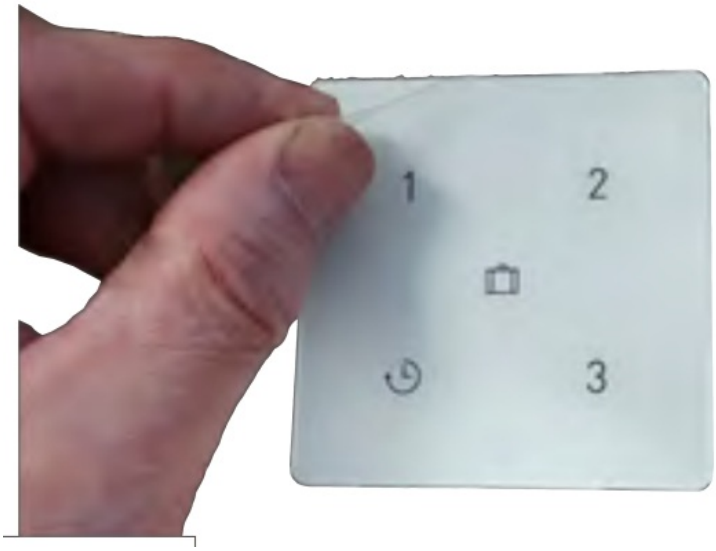
Backside wall bracket with position double sided adhesive tape

Take note!
The up arrow on the wall bracket must point upwards!

Step 2
Remove the plastic isolation strip from the battery.



Step 3
Click the Wireless Controller with humidity sensor (A) together with supplied frame (B) on the wall bracket (C).



After mounting the Wireless Controller with humidity sensor on the wall bracket remove the foil from the front.

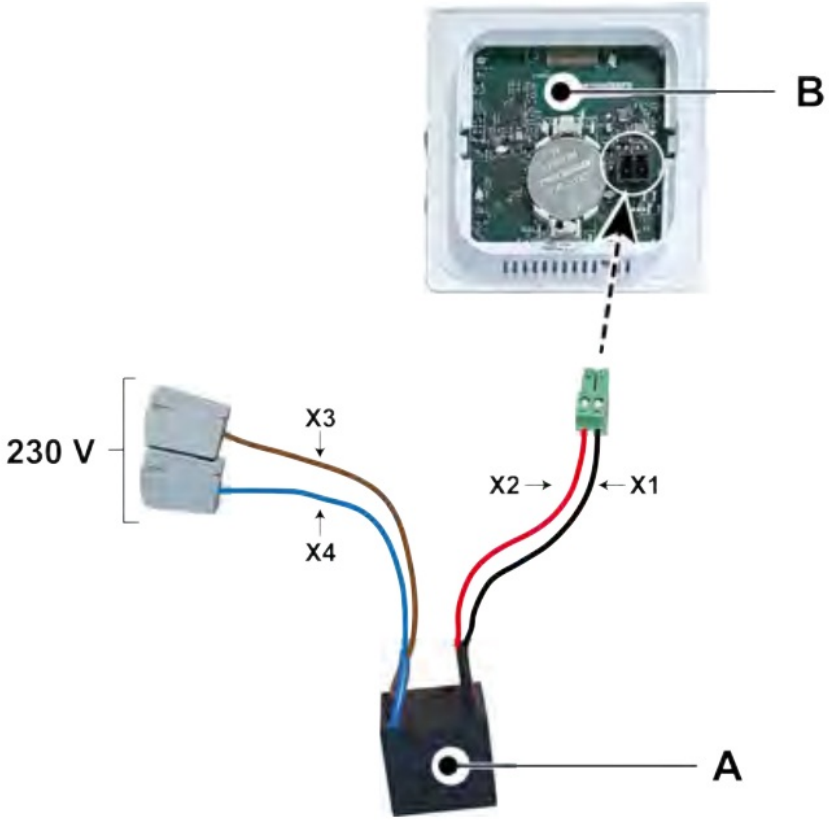
Step 4
When the Wireless Controller with humidity sensor has been fitted on the wall the USB transceiver can be placed in the USB port of the appliance which must be connected with the Wireless Controller with humidity sensor. To connect the USB transceiver with HRU appliance see ® Connecting with USB Tranceiver (Pairing) page 13, Connecting additional RF sensor with USB Tranceiver (Pairing) page 16 .

3.2 Remove Wireless Controller with humidity sensor from wall bracket

For removing the Wireless Controller with humidity sensor from the wall bracket grasp the front of the Wireless Controller with humidity sensor by edges and gently pull away from wall.
An example of a wireless controller is shown in this section, but other wireless controllers/sensors can be removed from the wall bracket in the same way.

3.3 Connecting the AC/DC converter (option)

Warning!
At all times disconnect the 230 V. power supply when connecting the AC/DC converter.
When using the optional AC/DC converter, the wall bracket must be attached to a electrical wall box (Ø 55 mm).
Connect the optional AC/DC converter (A) with the Wireless Controller with humidity sensor (B) conform the wiring diagram.
The following actions should be performed to connect the optional 5V AC/DC converter:



Step 1

- Place the converter in the wall box.

- The 230V power supply must be connected to the factory mounted gray connectors. Strip the wire over a length of approx. 7 mm.

Step 2

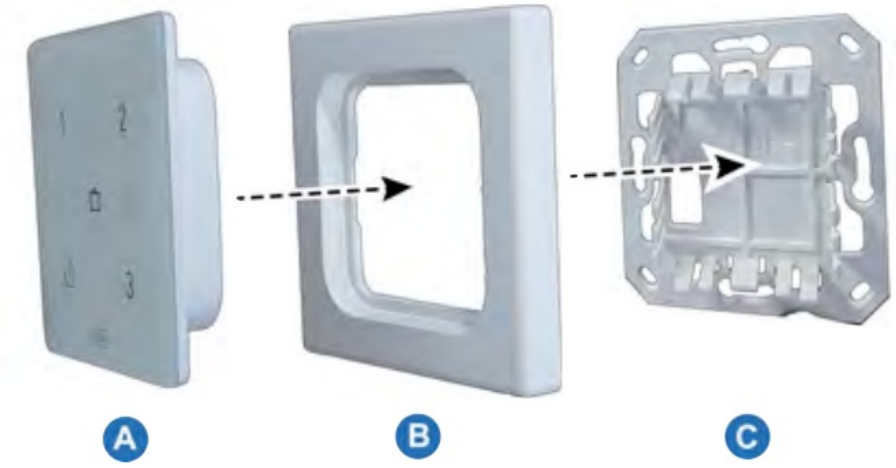
- Screw the wall bracket on the wall box and feed the red and black wires including mounted green connector through the square hole in the in the mounting plate.

Take note!
The up arrow on the wall bracket must point upwards!

Step 3

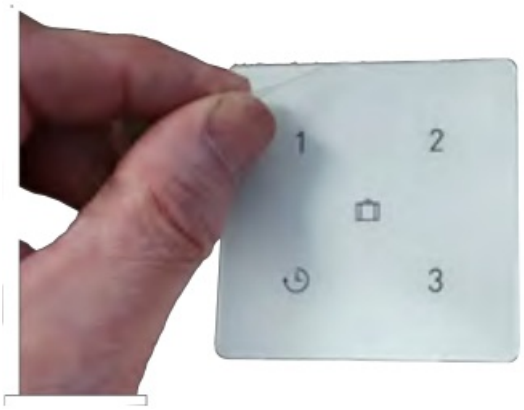
- After feed the red and black wire with the green connector through the frame connect this to the connector on the back side of the Wireless Controllerwith humidity sensor.
- Removal of the battery is not required but recommended.

A. AC/DC converter (230V~/5V=)
B. Wireless Controller with humidity sensor
X1 = Black
X2 = Red
X3 = Brown
X4 = Blue



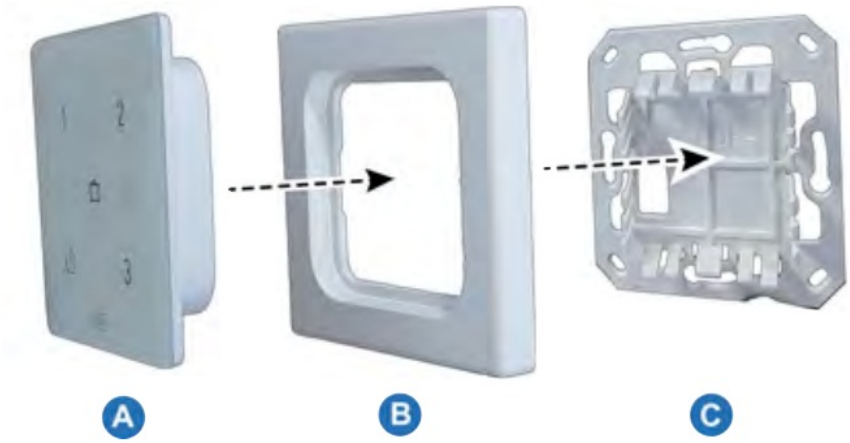
Step 4

- Click the Wireless Controller with humidity sensor (A) together with connected red and black wires and the frame (B) on the wall bracket (C).



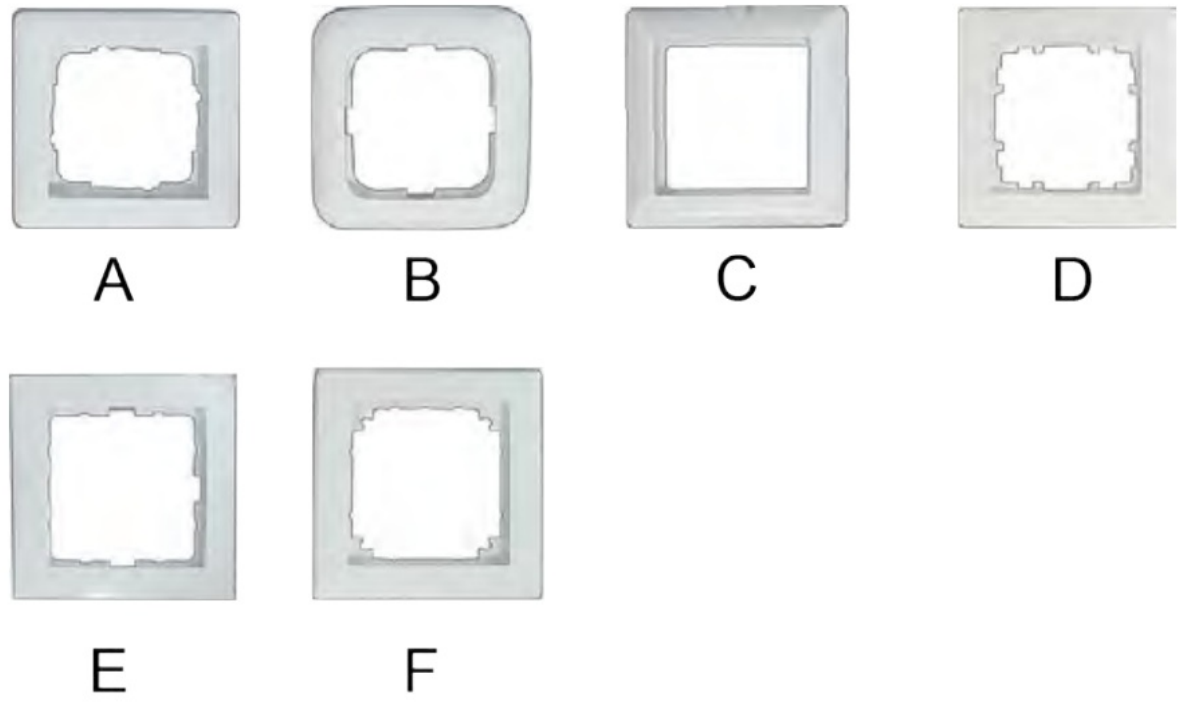
- After mounting the Wireless Controller with humidity sensor on the wall bracket, remove the foil from the front.

Step 5
When the Wireless Controller with humidity sensor has been fitted on the wall the USB transceiver can be placed in the USB port of the appliance which must be connected with the Wireless Controller with humidity sensor. To connect the USB transceiver with HRU appliance see ® Connecting with USB Tranceiver (Pairing) page 13, Connecting additional RF sensor with USB Tranceiver (Pairing) page 16 .



3.4 Using another frame (option)
The Wireless Controller with humidity sensor consists of a wall bracket (C), a frame (B) and the wireless controller (A). The wall bracket (C) is designed in such a way that a large number of frames from other vendors also can be used.

The following types of frames can also be used instead of the standard frame:



A. Gira – System 55
B. Busch Jaeger Reflex S1
C. Jung AS
D. Siemens Delta
E. Berker S.1
F. Merten System M
The above mentioned alternative frames are not included in the Brink delivery program!

Put into use

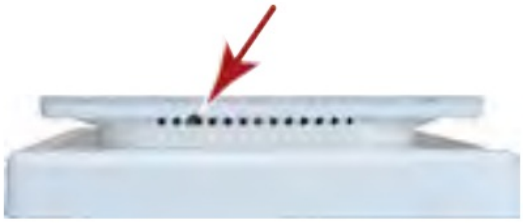
4.1 Connecting with USB Tranceiver (Pairing)

When the Wireless Controller with humidity sensor is mounted on the wall and the USB transceiver is placed in the HRU (see image on the right), the two can be connected (pairing). Follow the steps as described below:

Step 1
Apply main power supply to the HRU appliance.

Step 2
Press the pairing button of the USB transceiver (>2 sec & < 10 sec).
The Green LED on the USB transceiver starts flashing (1x per second). The pairing mode is active for 10 minutes.

Step 3
Press any button on the Wireless Controller with humidity sensor.
The LED's (4 pcs) will flash (0,5 sec. ON and 5 sec. OFF); max time 5 minutes.



Step 4
Press the pairing button (>2 sec & < 10 sec) on the bottom of the controller (through a small hole), for example with the end of a paper clip.

Pairing enabled when the LEDs(4 pcs) light in turn (0.5 sec. ON and next will ON when previous is OFF).

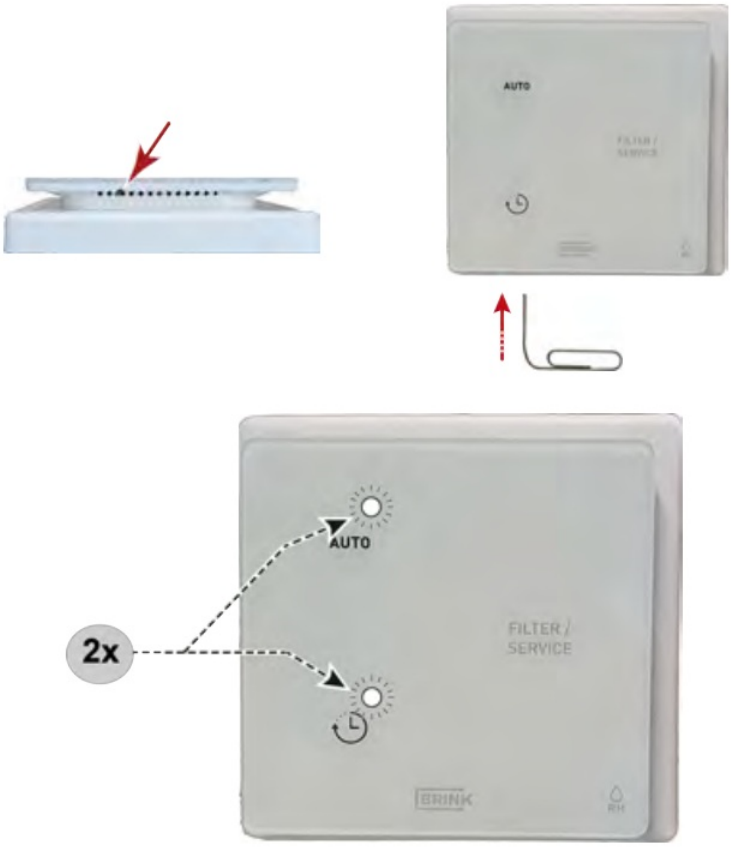
Pairing disabled when Filter/service LED is ON for two seconds; go back to step 3.

Step 5
For configure a “note ID” button 1 on the RF Controller with RH sensor . For example press button 1; LED 1 will flash once.
When there are more RF Controllers or RH sensors to connect with the device, press different button; the number of the button is also the number of connected accessories in the menu of the device. If pairing is not successful go back to Step 4. Check also the USB transceiver. Button 3 & button 4 are not visible but still can be used for configuring a “note ID”.

4.2 Back to factory setting Wireless Controller with humidity sensor
It is possible to set back all the settings of the Wireless Controller with humidity sensor to the factory settings. Perform the following actions for both controller(s) and the USB transceiver:

Factory setting controller

- Press the pairing button (for example with end of a paper clip) for more than 20 seconds.
- To confirm this reset all LED’s will flash two times.
- All the pairing information has been deleted from the
- Wireless Controller with humidity sensor.



Factory setting USB transceiver

- Press the button for more than 20 seconds.
- To confirm this reset the green LED will flash two times.
- All the pairing information has been deleted from the
- USB transceiver.

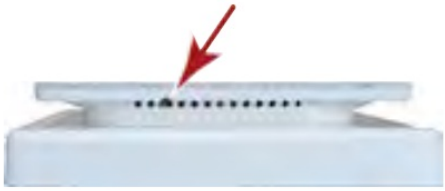
Information additional Wireless Controller with humidity sensor

5.1 Connecting additional RF sensor with USB Tranceiver (Pairing)
For connecting another Wireless Controller with humidity sensor or only an RF humidity sensor follow the steps as described below:

Step 1
Apply main power supply to the HRU appliance.

Step 2
Press the pairing button of the USB transceiver (>2 sec & < 10 sec).
The Green LED on the USB transceiver starts flashing (1x per second). The pairing mode is active for 10 minutes.

Step 3
Press any button on the extra Wireless Controller with humidity sensor or sensor.
The 2 LED's will flash (0,5 sec. ON and 5 sec. OFF); max time 5 minutes.



Step 4
Press the pairing button (>2 sec & < 10 sec) on the bottom of the controller (through a small hole), for example with the end of a paper clip.

Pairing enabled when two LEDs light in turn (0.5 sec. ON and next will ON when previous is OFF).

Pairing disabled when Filter/service LED is ON for two seconds; go back to step 3.

Step 5

For configure a “note ID” press any of the two buttons on the Wireless Controller with humidity sensor . For example press button 2; LED 2 will flash once. When there are more Wireless Controller with humidity sensor to connect with the HRU appliance, press different button; the number of the button is also the number of connected accessories in the menu of the device. Button 3 and button 4 (see ® Overview operational controls page 7) are not visible but still can be used for configuring a “note ID”. If pairing is not successful go back to Step 4. Check also the USB transceiver.

5.2 RH-sensor general

The Wireless Controller with humidity sensor(s) ensure optimum ventilation in the dwelling by automatically adjusting the air flow rate on the basis of the humidity content. The air flow rate is determined by the humidity sensor that requests the highest level.

Depending on the sensitivity of the humidity sensor, the Wireless Controller with humidity sensor adjusts the air flow proportionally between the setting 1 (set low) and setting 3 (set high). The settings made in the menu of the connected appliance applies to all connected humidity sensors.

5.3 Settings RH-sensor

Renovent 180/ 300/ 400 Excellent

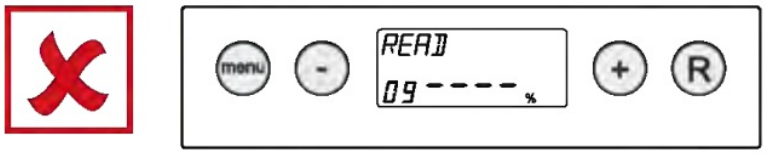
After installing one or more RH sensors it must be activated in the settings menu step number 30 to ON.

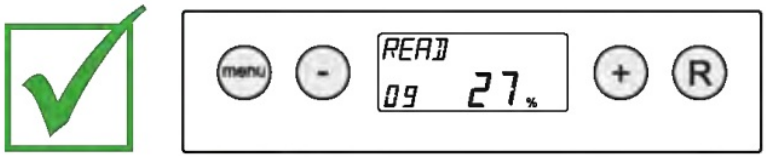
Optionally, the sensitivity of the sensor can be altered by means of step number 31. Process for adjusting the value (s) in the settings menu of the Renovent Excellent, see the installation instructions.

Step no.	Description	Factory setting	Adjusting range
30	RH-sensor	OFF	OFF = RH-sensor not active ON = RH-sensor active
31	Sensitivity	0	+2 = most sensitive 0 = default setting -2 = least sensitive

Check the operation of RH sensor

Select step number 9 in readout menu (See the installation instructions).





Sky Excellent
After installing one or more RH sensors it must be activated in the settings menu step number 29 to ON.
Optionally, the sensitivity of the sensor can be altered by means of step number 30. Process for adjusting the value (s) in the settings menu of the Renovent Sky, see the installation instructions.

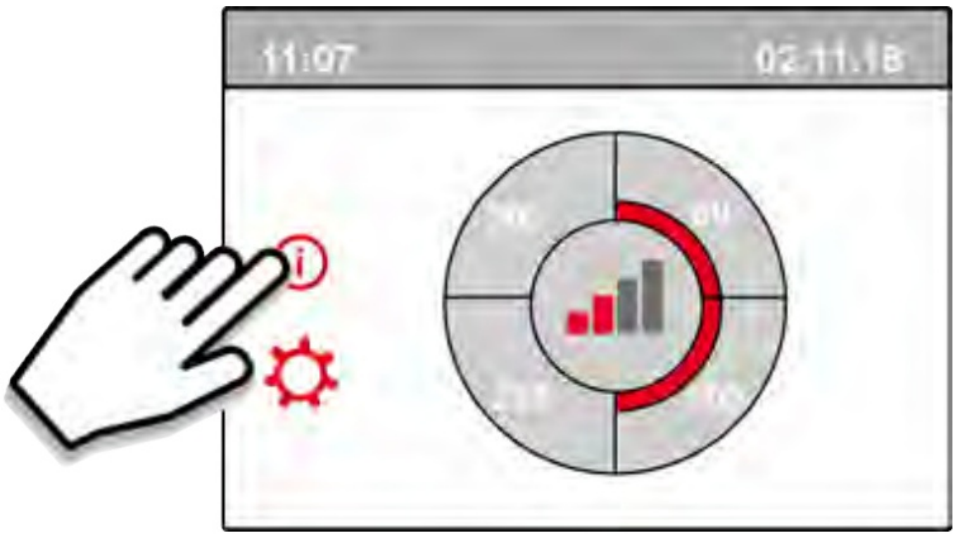
Step no.	Description	Factory setting	Adjusting range
29	RH-sensor	OFF	OFF = RH-sensor not active ON = RH-sensor active
30	Sensitivity	0	+2 = most sensitive 0 = default setting -2 = least sensitive

Check the operation of RH sensor
See RH value Information menu installer (See the installation instructions).

Flair appliance
After installing one or more RH sensors it must be activated in the settings menu step number 7.1 to ON.
Optionally, the sensitivity of the sensor can be altered by means of step number 7.2. Process for adjusting the value (s) in the settings menu of the Flair appliance, see the installation instructions.

Step no.	Description	Factory setting	Adjusting range
29	RH-sensor	OFF	OFF = RH-sensor not active ON = RH-sensor active
30	Sensitivity	0	+2 = most sensitive 0 = default setting -2 = least sensitive

Check the operation of RH sensor
Select on touchscreen and go with and to readout value RH sensor.



Maintenance

6.1 General maintenance

Careful!
Clean the screen with a soft cloth.
Never apply water and/or (cleaning) liquid to the screen.

6.2 Replace battery

Replace battery

If there is no response to the operation of the buttons and the LED no longer lights up if buttons are operated, the battery voltage is too low.
(Not applicable if the optional 230 volt power supply interface is used.) Replace battery with correct type CR2032.MRF battery manufacturer Renata (or Panasonic CR- 2032/BS). Pay attention to the position of the battery! The text marked “+” must always be legible after inserting the battery. For replacing battery take Wireless Controller with humidity sensor from the wall bracket (see ® Remove Wireless Controller with humidity sensor from wall bracket page 10).

Environment

Take note!
The Wireless Controller with humidity sensor may not be removed as unsorted urban waste, but should be treated separately.
Make enquiries within your own region, where the Wireless Controller with humidity sensor can be handed in when use has been terminated. Do not throw away electrical devices or parts, but check if (parts of) the Wireless Controller with humidity sensor cannot be handed in, recycled or re-used.

RoHS-compliance
This product meets Directive 2011/65/EU of the European Parliament and the Council of 27 January 2003 regarding using certain environmentally hazardous substances in electronic equipment (RoHS) and the amendments to the directive.

WEEE-notification
The WEEE-directive (Waste Electrical and Electronic Equipment), which came into force, as European law, on 13 February 2003, has resulted in an important change in treating electronic equipment at the end of their use cycle. This directive's objective is, firstly, preventing electronic equipment in waste and moreover promoting re-use, recycling and other forms of recovering such waste in order to limit the amount of waste.
The WEEE-logo on a product or on the packaging indicates that this product may not be disposed of or thrown away with domestic waste. You should dispose of all your old electronic or electrical equipment via special collection points for such dangerous waste. Separate collection and correct treatment of our old electronic and electrical equipment help us to maintain our natural resources.
Moreover, correct recycling guarantees the safety and health of humankind and the environment. For more information on processing electronic and electrical equipment, re- use and collection points, please contact you municipality, your local waste disposal company, the supplier from whom you purchased the device or the device's manufacturer.

WEEE logo

Handing in and recycling
Make enquiries within your own region, where the Wireless Controller with humidity sensor can be handed in when use has been terminated. Do not throw away electrical devices or parts, but check if (parts of) the Wireless Controller with humidity sensor cannot be handed in, recycled or re-used.

Troubleshooting and guarantee

8.1 Guarantee

The Wireless Controller with humidity sensor has been manufactured by Brink Climate Systems B.V. with care and in accordance with high quality standards. The Wireless Controller with humidity sensor operation is guaranteed for a period of two years from the time of delivery. This guarantee is granted in accordance with Brink Climate Systems B.V. General Terms and Conditions.
These can be found on **www.brinkclimatesystems.nl.**
Do you want to claim under the guarantee?
You then have to make that known, in writing, via:
Brink Climate Systems B.V.
P.O. Box 11
NL-7950 AA, Staphorst, The Netherlands

The right to guarantee lapses in case of incorrect or improper use of the Wireless Controller with humidity sensor and failure to follow the user indications in this user's manual.

Warning!
Making changes to the Wireless Controller with humidity sensor hardware or software is not permitted. This can have an effect on the Wireless Controller with humidity sensor proper operation and it that case all guarantees lapse.
You are not permitted to open or repair the Wireless Controller with humidity sensor or parts of the Wireless Controller with humidity sensor by yourself. In that case guarantees lapse.

Conformity declaration

Manufacturer:	Brink Climate Systems B.V.
Address:	P.O. Box 11 NL-7950 AA, Staphorst, The Netherlands
Product:	Wireless Controller with humidity sensor

The product described above complies with the following directives:

- 2014/35/EU (low voltage directive)
- 2014/30/EU (EMC directive)
- 2014/53/EU (Radio equipment directive)

- RoHS 2011/65/EU (substances directive)

The product described above has been tested according to the following standards:

EN 62368-1	: 2020
EN 62479	: 2010
EN 60669-2-5	: 2016
EN 60730-1	: 2016 Safety
EN 60730-2	: 2008 Safety
EN 60950-1	: 2006+A11:2009+A1:2010+A12:2011+A2:2013+ AC:2011:
EN 301 489-1	V2.2.0 EMC
EN 301 489-3	V2.2.1 EMC
EN 300 220-1	RED V3.1.1
EN 300 220-2	RED V2.1.1

The product bears the CE label
Staphorst,
04-06-2021

A. Hans
Managing Director
Wireless Controller with humidity sensor 616880-B

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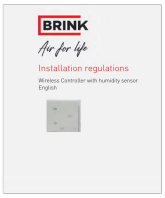
Documents / Resources

	**BRINK 616880 Wireless Controller with humidity sensor** [pdf] Installation Guide 616880 Wireless Controller with humidity sensor, 616880, Wireless Controller with humidity sensor, Controller with humidity sensor, humidity sensor, sensor

References

- **Brink Climate Systems - Breathe Excellence, Flourish in Life**
- **Brink Climate Systems - Breathe Excellence, Flourish in Life**