



AVALONCOMBO+

Assembly instructions

Brief description:

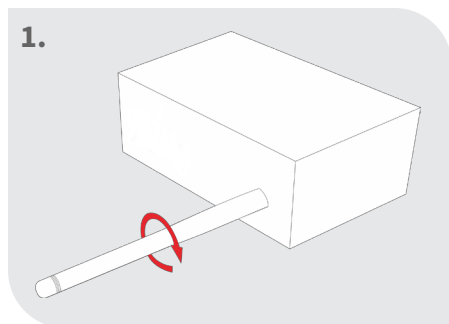
Wireless room thermostat with radiator actuator, M 30x1.5 mm for controlling radiators for installation situations where the sensor is concealed. Can also be used as thermostat with remote sensor. blossom-ic radio and app technology. In combination with Gateway GT-100.

Up to 20 room thermostats can be controlled with one gateway. Up to 10 Avalon Combo+ actuators can be controlled with one room thermostat.

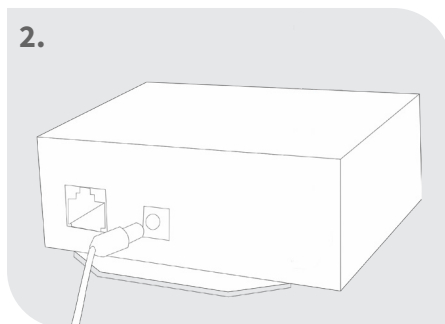
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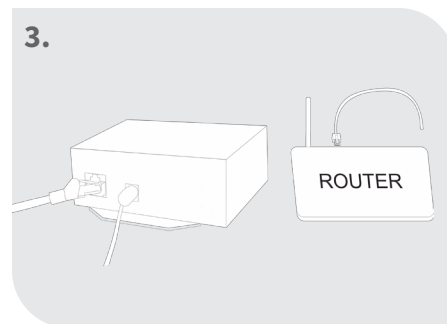
Connection of the Gateway GT-100



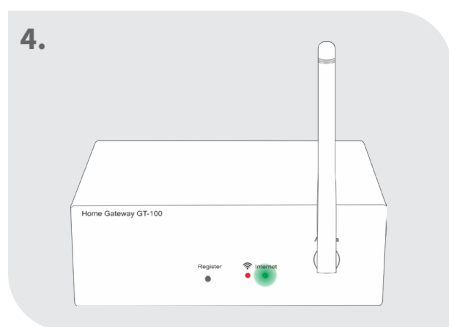
1. Screw on the antenna



2. Connect power supply unit



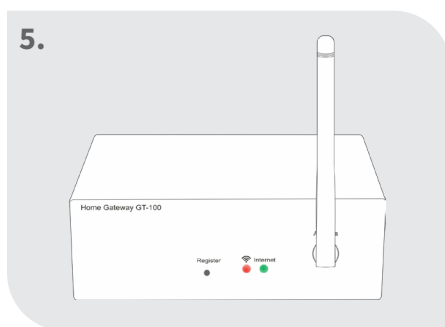
3. Connect the network cable



4. Check status

Green diode flashes: Internet connection is being established

Green diode lights up continuously: Internet connection successfully established



5. Both diodes light up permanently: Gateway active

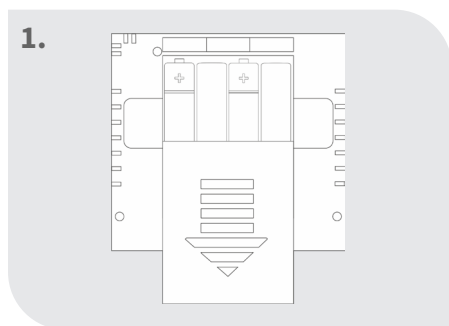
Note:

Functioning in the home-safe area.

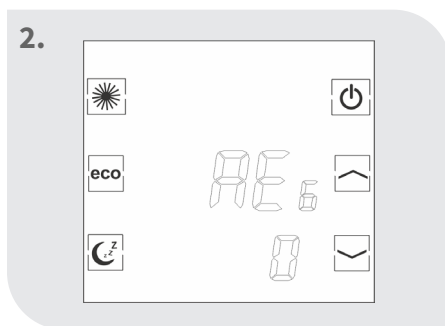
Internet connection is used for convenient setting and control via the smartphone.

The system functionality is also ensured if no internet connection is available.

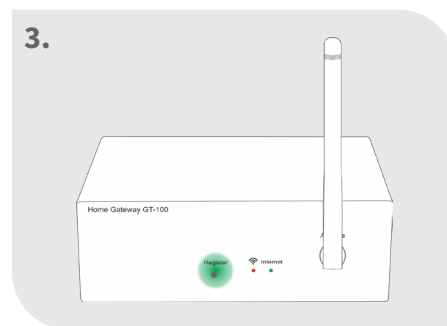
Registration of the thermostat



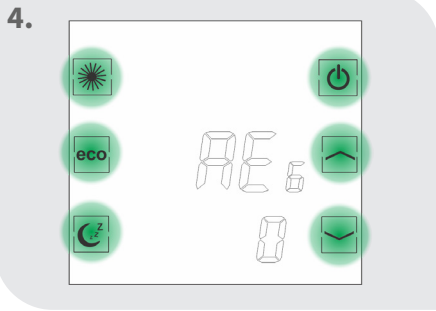
1. Insert batteries



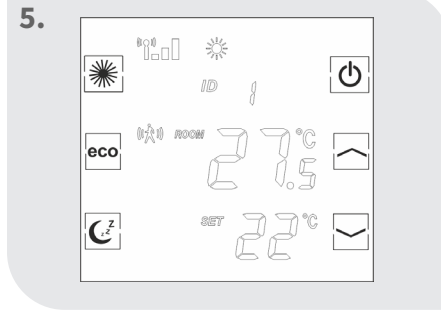
2. "REG" appears in the display



3. Press the „Register“ button on the gateway

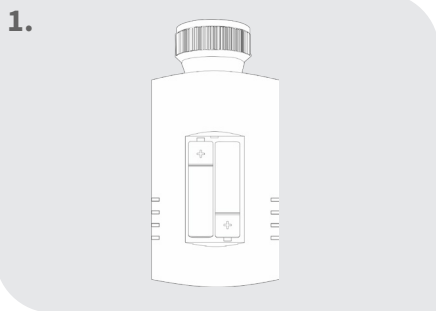


Press any button on the Avalon Combo+ thermostat within 30 seconds

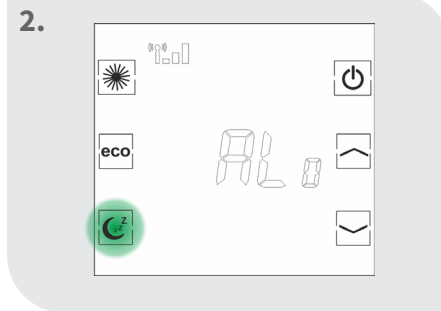


Thermostat shows the current room temperature etc. -> Registration was successful

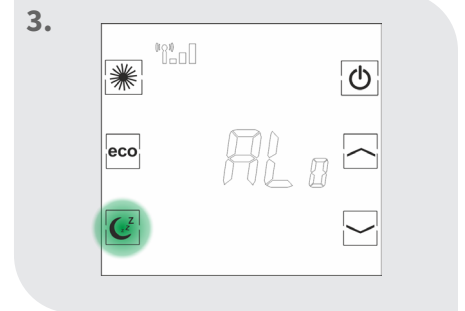
Coupling of the actuator



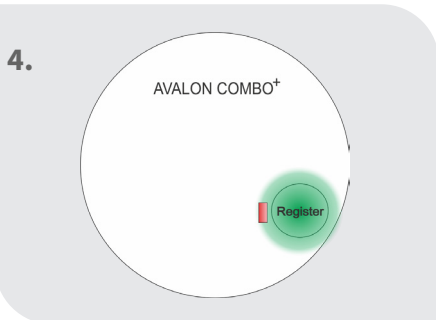
Insert batteries



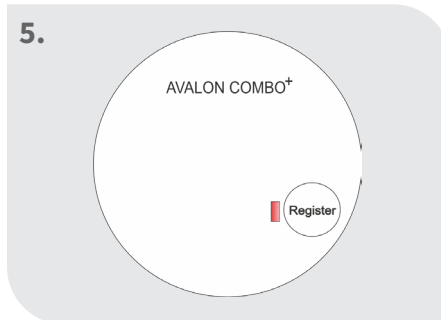
Press the SLEEP button on the radio room thermostat until the display shows "Alo"



Press sleep button again, "Alo" starts flashing



Press the register button on the actuator for 3 seconds. Diode starts flashing and seeks connection to thermostat



Diode on actuator lights up continuously for 10 seconds -> Registration was successful

Mount the actuator to the valve and tighten. Place the Avalon Combo+ room thermostat in a suitable location or mount it on the wall

Download of the blossomic App

The blossomic app is available for both iOS and Android. You can find the app by entering „blossomic“ in the App or Google PlayStore. Alternatively, you can scan the QR code below with your smart-phone. This leads you directly to the download page of the blossomic app.

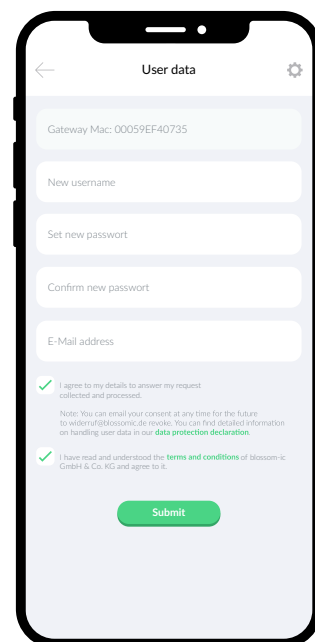
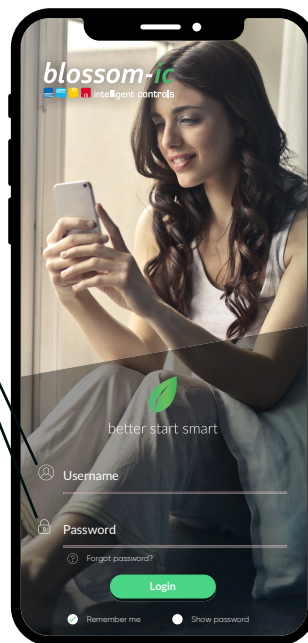
Set up the blossomic app



For the first registration, use the Mac address of the gateway (12 digits, attached on the back). The Mac address serves as a username and password.

After successful login, you have to assign individual access data.

As soon as you have assigned this data, all heating programs and other parameters can be set easily and conveniently via the app.



Automatic recognition of the IP address and automatic speech recognition. It is not necessary to set the winter and summer time or the date and time.



Important notice:

In order to guarantee the smooth functionality of all thermostats and devices as a unit, all components (including the devices that will be added later) must be registered via the gateway as described on page 5 (“Registration of the radiator thermostat”).

Technical data

Technical data - Avalon Combo+ Thermostat

• Setpoint range	6 ~ 30°C
• Ambient temperature	0 ~ 50°C
• Ambient humidity	90% (non-condensing)
• Battery intake	4x Micro AAA 1.5V, Battery
• Dimension	L86 x W86 x H42 (mm)
• Wireless frequency	2.4GHz, ISM Band, 16 channels
• Protection class/type	IP 30
• RF Test	RED 2014/53/EU
• CE	Available
• RoHs	Available
• Type of antenna	PCB Antenna

Technical data - Avalon Combo+ Actuator

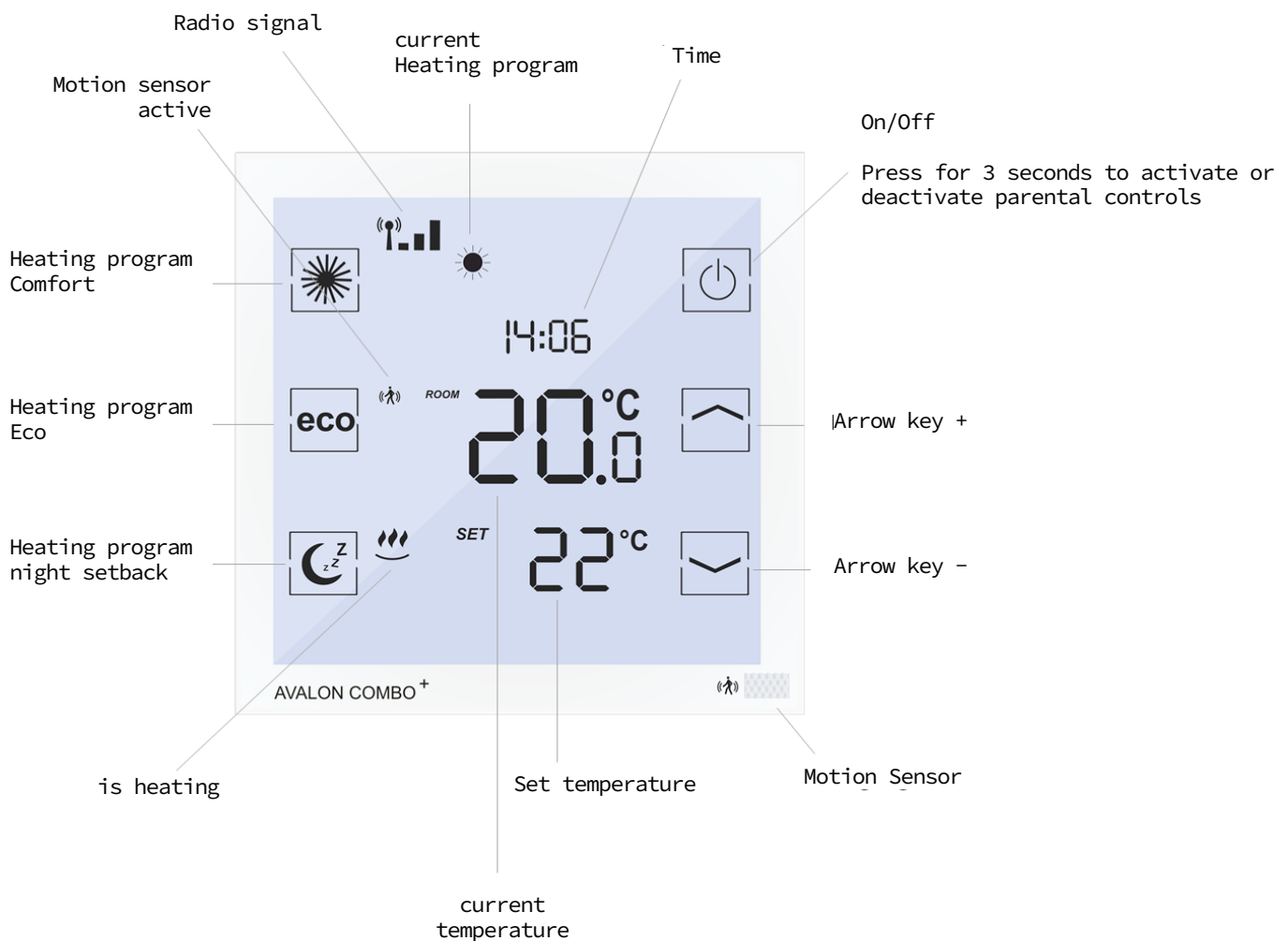
• Ambient temperature	0 ~ 50°C
• Ambient humidity	90% (non-condensing)
• Battery intake	2x Mignon AA 1.5V, Battery
• Dimension	L110 x Ø 58 mm
• Wireless frequency	2.4GHz, ISM Band, 16 channels
• Protection class/type	IP 30
• RF Test	RED 2014/53/EU
• CE	Available
• RoHs	Available
• Type of antenna	PCB Antenna

Technical data - Gateway GT-100 black

• Ambient temperature	0 ~ 50°C
• Operating voltage	DC 12V 1A
• Mains voltage	230 V AC / 50/60Hz
• Dimension	L113 x W73 x H35 (mm)
• Wireless frequency	2.4GHz, ISM Band, 16 channels
• Protection class/type	IP 30
• RF Test	RED 2014/53/EU
• CE	Available
• RoHs	Available
• Type of antenna	Monopole 2.4 GHz

Settings & key functions

Wireless room thermostat in use with radiator actuator, M 30x1.5 mm for controlling radiators for installation situations where the sensor is concealed. Can also be used as thermostat with remote sensor. blossom-ic radio and app technology. In combination with Gateway GT-100.



Explanation of the heating programs



Comfort heating program

With the Comfort program you control your comfort temperature (factory set to 22 °). The desired temperature and program times can be conveniently set using the thermostat and the app. If the Sensor is activated and no people are present within 30 minutes, the system lowers the temperature by 2 ° and switches to eco mode or night reduction after another 30 minutes (depending on the time of day). If the Sensor detects a movement, the program immediately switches to comfort mode. If the Sensor is deactivated (only possible via the app), the temperature remains constant until the next switching phase (eco or night reduction). You can also find detailed instructions in the app description.



Eco heating program

With the Eco program you can set the desired temperature for longer periods of absence (set to 12° in the factory). The desired temperature and program times can be conveniently set using the thermostat and the app. By pressing the Eco button on the thermostat, you can switch directly from Comfort mode to Eco mode. To do this, the motion Sensor is deactivated for 10 minutes. If the Sensor detects movement after 10 minutes, the program switches back to Comfort mode. If the Sensor is deactivated (only possible via the app), the temperature remains constant until the next switching phase (Comfort or night setback). Detailed instructions can also be found in the app description.



Night Setback heating program

This program lowers the temperature at night to save energy (set to 16° at the factory). You can easily set the desired temperature and program time using the thermostat and the app. The motion Sensor is deactivated during the night setback. By pressing the night setback button on the thermostat, you can switch directly from Comfort mode to night setback. When the Sensor is deactivated (only possible via the app), the temperature remains constant until the next switching phase (Eco or Comfort). Detailed instructions can also be found in the app description.

Heating time setting

By pressing the night setback button on the thermostat twice, you can set the time at which morning comfort is to be activated. Set the desired time and confirm the setting by pressing the night setback button again. All settings of the heating programs and temperatures can be made easily and conveniently with the app. Detailed instructions can also be found in the app description.

Setting phase Avalon Combo+ System

In the first heat-up phases after commissioning, the valves are automatically adjusted and set by the Avalon Combo+ System. This process is repeated several times as required. This process allows the system to adapt to the individual conditions in the premises.

Settings via the thermostat

At wake-up time (e.g. 7:00 a.m.) the radiator starts heating from 7:00 a.m. The thermostat automatically switches to comfort mode. (The settings on the thermostat are optional. With the app all settings of the heating programs and temperatures can be made easily and conveniently) Please note The Avalon Combo+ thermostats only control the individual rooms (temperature and times). Please note which times the boiler is set to.

Window opening detection

The window opening detection in blossom-ic is activated by a temperature drop of 2°C in 5 minutes and puts the thermostat in frost protection mode (6°C). As soon as this function is activated, "OPEN" appears on the display. If the window is closed within 30 minutes and the temperature in the room rises again, the thermostat automatically returns to the last activated mode.

If the window is open for more than 30 minutes or the temperature does not rise, the thermostat remains in frost protection mode and must be manually reactivated on the thermostat.

Reset thermostat to factory setting

Switch off the thermostat -> Press the up arrow key until SET and a number appears -> Select „0“ with the arrow keys -> Confirm with the comfort key -> Switch the thermostat on again („REG“ appears in the display), it must then be registered again.

Further information

Note:	What is to be done?	Valve protection function:
When the batteries are empty and the thermostat switches off, the heating continues to run in the mode last activated, to prevent the heating from freezing and the rooms from cooling down unintentionally, the frost protection (6°C) is activated.	To restore normal operation, please replace the batteries immediately. The system has a memory function that automatically restores the last heating program set.	The system opens and closes the valves automatically once a week, thus ensuring that the valves do not get stuck or block.

Safety Instructions

Attention! Important notice:

Installation and assembly of electrical devices may only be carried out by a qualified electrician. Failure to observe the assembly and installation instructions can result in fire or other dangers.

Mounting on the valve

The Avalon Combo+ actuator fits valves with an M 30 x 1.5mm connection. Suitable makes: Heimeier, Junkers, Landys & Gyr, MNG, Honeywell 30 x 1.5, Herz 30 x 1.5 and Oventrop 30 x 1.5.

Adapter:

To mount the Avalon Combo+ actuator on Danfoss valves you need an adapter (e.g. from Heimeier):

- Heimeier 9700-24.700 (Adapter for Danfoss RAV/L-valves)
- Heimeier 9702-24.700 (Adapter for Danfoss RA-valves)
- Heimeier 9800-24.700 (Adapter for Danfoss RAV-valves)

For all other valves, please use the different adapters of the respective manufacturers. These are available from specialist dealers on request. We recommend metal adapters for exact functionality!

Declaration of conformity

Herewith blossom-ic GmbH & Co. KG hereby declares that the following product: Avalon Combo+ ACSE-3979 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. The complete declaration of conformity can be found at the following address: [www.blossomic.de/downloads/Declaration of conformity](http://www.blossomic.de/downloads/Declaration_of_conformity).

Warning notice

The thermostat is not suitable for children and must not be used as a toy. Store and dispose of packaging materials in a child-resistant manner. Do not disassemble the thermostat, as it does not contain any user-serviceable parts. If the error code E1, E2, etc. appears on the display or if other defects occur, please return the thermostat to the dealer.

This appliance may be used by children over 8 years of age and by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, provided they have been supervised or instructed in the safe use of the appliance and understand the hazards involved. Children must not play with the device. Cleaning and user maintenance must not be performed by children without supervision.

Appropriate use

The Avalon Combo+ actuator in combination with the Avalon Combo+ radio room thermostat is only suitable for controlling radiators, convectors or heating bars heated by heat transfer media. The control of e.g. cooling circuits, underfloor heating, etc. is not permitted and may lead to damage.



blossom-ic

 intelligent controls

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