

Version 1.0





### **Brief description:**

Radio-controlled radiator thermostat for controlling radiators with digital dynamic hydraulic balancing. In conjunction with Gateway GT-100.

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# Scope of delivery & introduction



THE AVALON TRES SET CONTAINS ALL DEVICES NECESSARY FOR THE USE. NO OTHER ACCESSORIES ARE REQUIRED.



controller



Avalon radiators Thermostatic Gateway GT-100 and connec- blossomic iOS and Android App tion accessories ASG-101

All heating programs and parameters, such as temperature and heating time settings, can be set and controlled easily and conveniently via the app. Even a basic setting of the heating programs via the thermostat is possible at any time.

### Connection of the Gateway GT-100



In the third step, please screw the included

### Step 1 Step 2

#### Connect the network cable

Please connect the supplied network cable to the gateway and router.

#### **Connect power supply unit**

Now connect the power supply unit (230 V) to the gateway.

#### Step 3

antenna to the gateway.

Antenna

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### 



#### Green diode on the gateway

Display of the radio connection

• green diode flashes: The device is being searched and is establishing a radio connection.

• green diode lights up continuously: Radio connection has been established.

#### Step 5

#### Red diode on the gateway

Display of the Internet connection

• **red diode flashes**: The Internet connection is established.

• red diode lights up continuously: The Internet connection has been established.

#### Connection diagram, Gateway GT-100 to the Internet



### Mounting the Avalon



#### Step 1

Old thermostat and Avalon thermostatic controller

If not already done, please unscrew the old thermostat first.

Now screw on the Avalon thermostatic controller.

Important: Please ensure appropriate use (see page 11).

#### Step 2

Installation location of the Avalon thermostat

Now mount the Avalon on the valve and tighten it firmly.

#### **Please note:**

To ensure that the sensor function of the Avalon is not impaired, please refer to the notes and installation diagram on page 11.

If the installation situation does not allow any other installation, please deactivate the sensor via the app. This does not affect the basic functions of the controller.

# Registration of the thermostat controller

**Please note:** The thermostats are already registered at the factory for ready-made sets, so there is no need to register. To register additional thermostats, please proceed as follows:

Step 1 | When the batteries are inserted in the Avalon, the label "REG" flashes = Search connection to GT-100

Step 2 | Press the "Register" key on the gateway. Please register all devices within 30 seconds

Step 3 | Press any key on the Avalon Thermostatic Controller

•) The thermostat stops flashing and displays the antenna symbol, the heating programs and the room temperature at the top left.

the registration was successful

Step 4 | Thermostat controller still flashing (registration was not successful) - Possible error sources

- Please make sure that your WLAN and Internet connection is active
- Please repeat steps 1 to 3

• In the event of a power failure, the thermostats go into standby mode and display REG. The system reconnects automatically after 2 hours. By pressing any button on the thermostat, they are directly reconnected.

Up to 16 Avalon thermostats can be connected to one gateway.



## Download 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.

#### Setting up the blossomic app

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For initial registration, use the MAC address of the gateway (12 digits, attached at the back). The MAC address serves as user name and password.

After successful login, you will be asked to provide individual access data.

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



- User data	9
Gateway Mac: 00059EF40735	
New username	
Set new passwort	
Confirm new passwort	
E-Mail address	
<ul> <li>Lagree to my details to answer my request collected and processed.</li> <li>Note: You can enail your consert at any time for the future to viderrulphotomic de movie, hou can find detailed information on handling user data in our <b>data protection declaration</b>.</li> </ul>	
I have read and understood the terms and conditions of biossom-ic GmbH & Co. KG and agree to it.           Submit	

Automatic IP address recognition and automatic Voice recognition. There is no need to set daylight savings time, daylight savings time or date and time.



#### Important notice:

In order to be able to guarantee smooth functionality of all thermostats and devices as a unit, all components (including the devices that are added later) as described on page 5 below ("Registering the radiator thermostat" - steps 2 to 3), are registered via the gateway.

# Technical data

Technical data - Avalon Thermostatic Controller	
Setpoint range	6~30°C
Ambient temperature	0~50°C
Ambient humidity	max. 90% (non-condensing)
Mains Voltage	230V AC / 50Hz
Dimension	L86 x W86 x H44 (mm)
Wireless frequency	2.4GHz, ISM Band, 16 channels
Protection class/type	IP 30
RF Test	R&TTE Directive 1999/5/EC
•) CE	Available
• RoHs	Available
Type of antenna	PCB Antenna

Technical data - Gateway GT-100	
Interface	TCP/IP 10/100M, RJ45
Ambient temperature	0 ~ 50°C
Ambient humidity	90% (non-condensing)
Mains Voltage	230VAC / 50/60Hz
Dimension	L110 x W72 x H42 (mm)
Wireless frequency	2.4GHz, ISM Band, 16 channels
Protection class/type	IP 30
• RF Test	R&TTE Directive 1999/5/EC
•) CE	Available
• RoHs	Available
Type of antenna	2.4GHz Monopole 2 dB

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# Settings & key functions

Radiator thermostat controller, blossomic radio and app technology.



### Explanation of the heating programs



#### Comfort heating program

With this program you control the heating times of your comfort temperature. Factory set to 22°. You can easily set the desired temperature and program time using the thermostat and app. If the sensor is activated and no movement is registered within 30 minutes, the system lowers the temperature by 2° and switches to eco mode or night setback mode after another 30 minutes without any further movement signal, depending on the time of day. If the sensor registers 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-time reduction). A detailed description can also be found in the app description

### Eco heating program

In the eco-program you set the desired temperature for longer periods of absence. Factory set to 12°. The desired Temperature and program time can be conveniently set using the thermostat and 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 registers a movement after 10 minutes, the program switches back to Comfort mode. At When the sensor is deactivated (only possible via the app), the temperature remains until the next switching phase (comfort or night-time reduction) constant. A detailed description can also be found in the App description.

**By the way:** If you press and hold the "eco" button for 3 seconds, the current temperature is displayed for about 3 seconds.



#### Night Setback heating program

This program lowers the temperature at night to save energy. Factory set to 16°. You can easily set the desired temperature and program time using the thermostat and app. When the sensor is activated and registers a movement, the system switches to Comfort mode. If the sensor is activated and motion is registered within 30 minutes, the system reduces the temperature by 2° and switches to night setback mode after another 30 minutes without any further motion signal. By pressing the night setback button on the thermostat, you can switch directly from Comfort mode to night setback mode. To do this, the motion sensor is deactivated for 10 minutes. When the sensor is deactivated (only possible via the app), the temperature remains constant until the next switching phase (eco or Comfort). A detailed description can also be found in the app description.

#### Adjustment phase Avalon System

In the first 2-3 days after commissioning, the valves are operated by the Avalon System automatically adjusted and set.

This process is repeated several times as required. Through this process, the system adapts to the individual conditions in the premises.

### Settings via the thermostat

At wake-up time (e.g. 7:00 a.m.) the boiler starts to heat up. The controller automatically switches to Comfort mode. (The settings on the thermostat are optional. With the app, all heating programs and settings can be made more easily and conveniently)

**Please note:** These thermostats only control the individual rooms (temperature and times).

#### Heating time setting

By pressing the night setback button on the thermostat twice, you can set the time from which your heating is to switch to Comfort mode in the morning. Set the desired time and confirm the setting by pressing the night setback button again. You can also conveniently set the desired temperature and program time via the app. A detailed description can also be found in the app description.

Please note to which times the boiler is set. ("Night setback" and "Heat in the morning"). When selecting the heating times in rooms, you must pay attention to the boiler heating times. You can also use our **Magelan** or **Magelan Combo** boiler controllers.

All heating programs and settings can also be made easily and conveniently with the blossomic app.

### Further information

#### Note:

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When the batteries are empty and the thermostat switches off, the heater continues to run in Comfort mode to prevent the heater from freezing and unwanted cooling of the rooms.

#### Please note:

This is a security measure, as all our devices are individually controllable and functional, regardless of Internet and app access.

#### What is to be done?

To restore normal operation, please change the batteries immediately. The system has a memory function that automatically restores the last heating program set.

#### Valve protection function:

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.

#### Attention!

Before removing an existing thermostat controller or installing one of our controllers and thermostats, it is essential to switch off the mains supply.

#### **Further Note:**

Please also note that the set room temperature is reached more quickly in the area where the Avalon Thermostatic Controller is installed. Small temperature adjustments may be necessary.

### Mounting on the valve

The Avalon controller fits valves with a connection M 30 x 1.5. Suitable makes: Heimeier, Junkers, Landys & Gyr, MNG, Honeywell 30 x 1.5, heart 30 x 1.5 and Oventrop 30 x 1.5.

#### Adapter:

To mount the Avalon 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)

Use the following adapters for niches or radiators with integrated valve insert (if the sensor is not within the detection range of the 110° functional cone):

•) Angle adapter: Make Oventrop: white, No. 1011450 Connection to M 30 x 1.5

For all other valves, please use the different adapters of the respective manufacturers. These are available from specialist dealers on request.

### Declaration of conformity

Hereby blossom-ic GmbH & Co. KG hereby declares that the following product: Avalon Tres Set CTS-3559 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The complete declaration of conformity can be found at the following address: www.blossomic.de/downloads.





# 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. is shown on the display or other defects occur, return the thermostat to the dealer.

This appliance may be used by children aged 8 years and older 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 heating thermostat is only suitable for controlling radiators, convectors or heating bars heated by heat transfer media. The regulation of e.g. cooling circuits, underfloor heating, etc. is not permitted and can lead to damage.









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