

Roth Touchline

Quick and easy user manual



German quality since 1947

Touchline, quick guide

The Roth Touchline underfloor heating system consists of 1 - 5 control devices and a number of room thermostats. The control device can operate functions such as pump stop/start, boiler enable signal, actuator motioning and cooling regulation from heat pumps.

NB! All of the Touchline controller terminal outputs are designed as 24V or 230V potential relay switches.

The Touchline system will therefore work as a switch/distributor for external components, when voltage is added to the terminal outputs.

1. Summary: control device

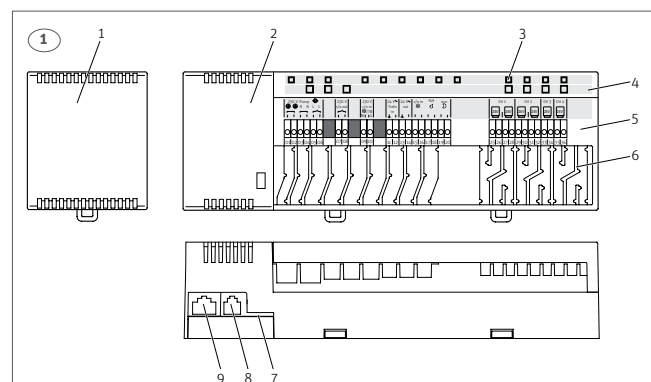
1. Transformer 230V to 24V AC.
2. Wireless control device.
3. The LED illuminates when heating is required and flashes during pairing and connecting.
4. Use pushbuttons for pairing and connecting.
5. Terminals/outputs.
6. Stress relief for wiring.
7. Micro SD card reader for firmware updates.
8. External antenna input.
9. LAN cable input (optional).

The thermostats are available with and without floor sensors (IR). The Roth Touchline system is easy to use and can be controlled with an Android or iOS app. The most commonly used settings are listed below.

If you need the complete user manual, this is available to download at www.roth-uk.com

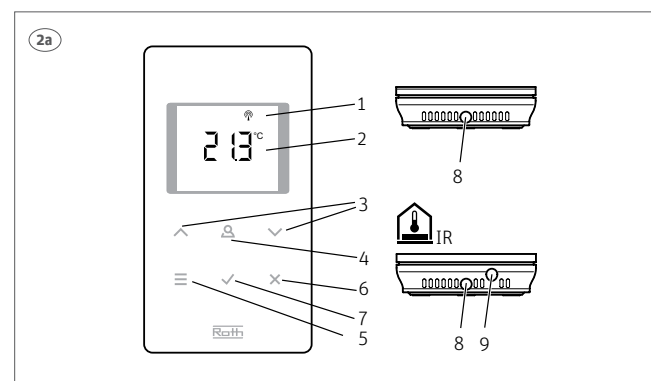
Content:

- › Quick start (Installer)
- › User settings (user)
- › Extended settings (Installer)



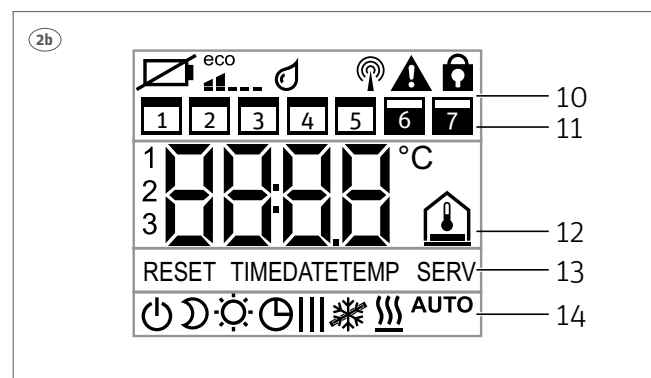
2a. Summary: Touchline thermostat

1. Wireless system connection symbol (ON).
2. Temperature setpoint and actual temperature value, time setting, week program and floor temperature setting on display.
3. Arrow tabs for time and date setting and other value changes.
4. New multi function tab.
5. Menu tab, mode and parameter selection.
6. Back tab.
7. OK tab.
8. Opening: To open the wireless room thermostat, use a 5 mm Phillips screwdriver.
9. IR sensor (IR model only).

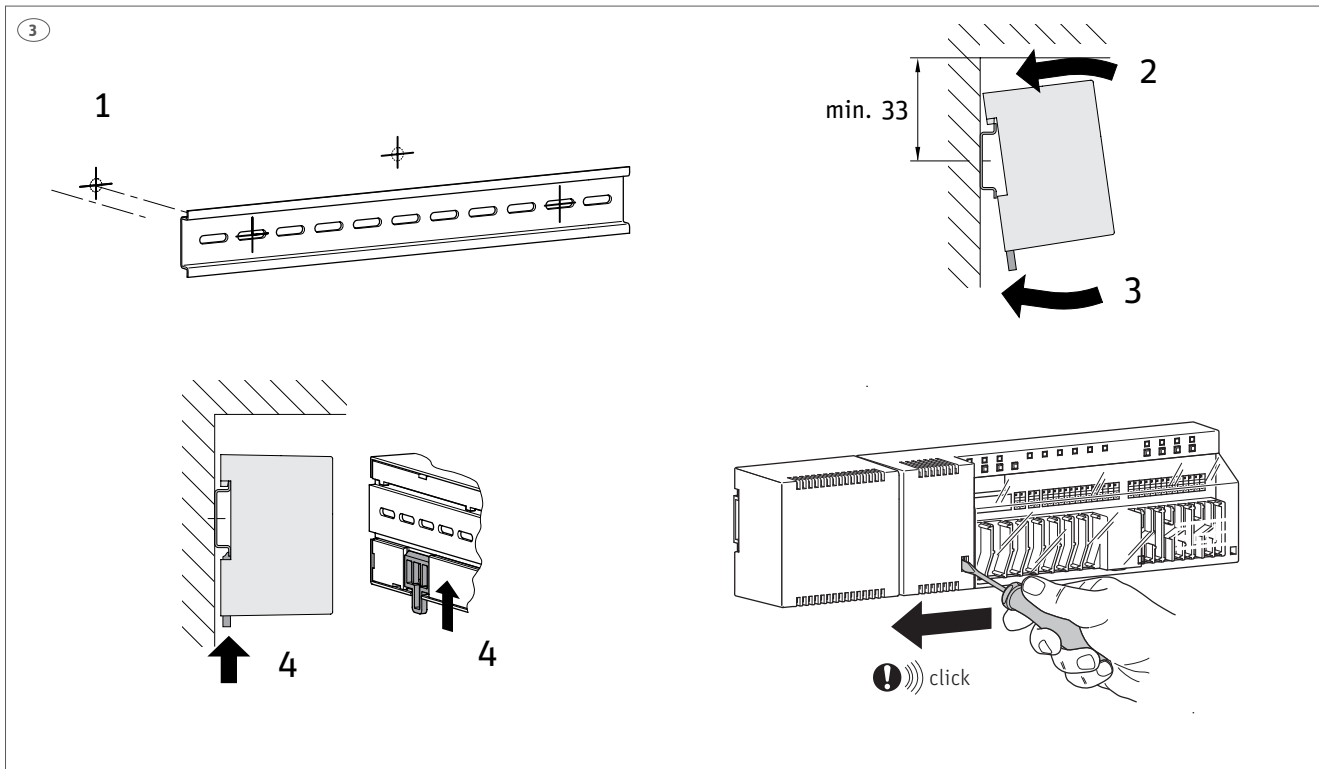


2b. Summary: Touchline display

10. Battery alarm, eco-indicator, dew point, general alarm and lock.
11. Days of the week for time schedule settings.
12. Room/floor temperature.
13. Help text for configuration.
14. Modes and setting.

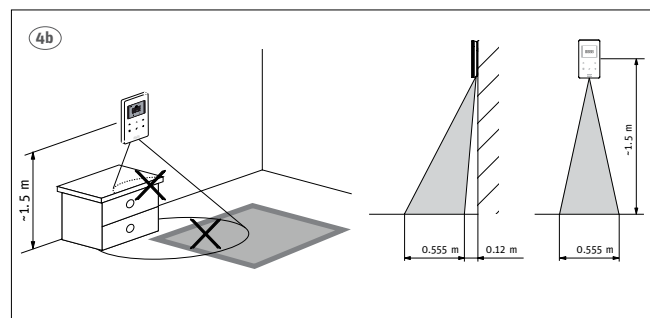
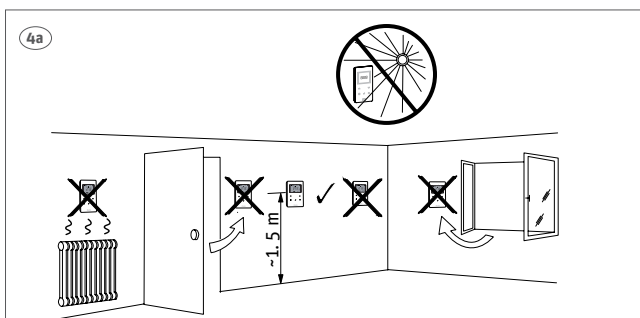
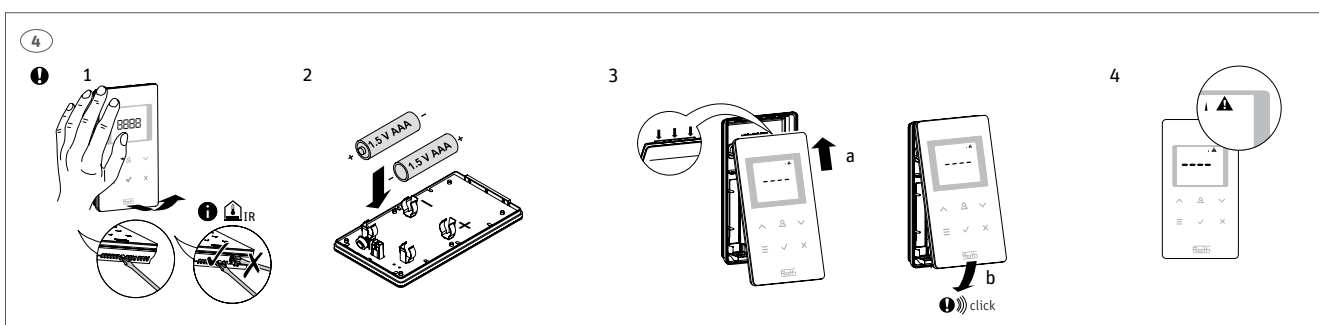


3. Install the Touchline control device and connect the actuators (24V).



4. Insert the batteries in the thermostats and mount the thermostats on the wall.

- A: Applicable to all thermostats.
- B: Applicable to IR thermostats only.



5. Pump and boiler wiring diagrams, for the 24v Touchline controller.

Image 5.a Pump connection diagram

Main, 230V Input on terminals 1, 3, 5 and Pump output supply from terminals 2, 4, 6 on the Touchline controller. (Functioning as an On/Off switch when heating is required from the Touchline thermostat).

Image 5.b Boiler connection diagram

Main, 230V Input blue wire on terminal 7, and Boiler output supply blue wire from terminal 8, on the Touchline controller. (Functioning as an On/Off switch when heating is required from the boiler).

NB! If 230V is added on terminal 7 and 8, brown and blue wire, this will enable cooling mode and the Touchline system will operate in reversed actuator mode. This is only recommended if the system is designed for cooling not as an boiler On/Off switch.

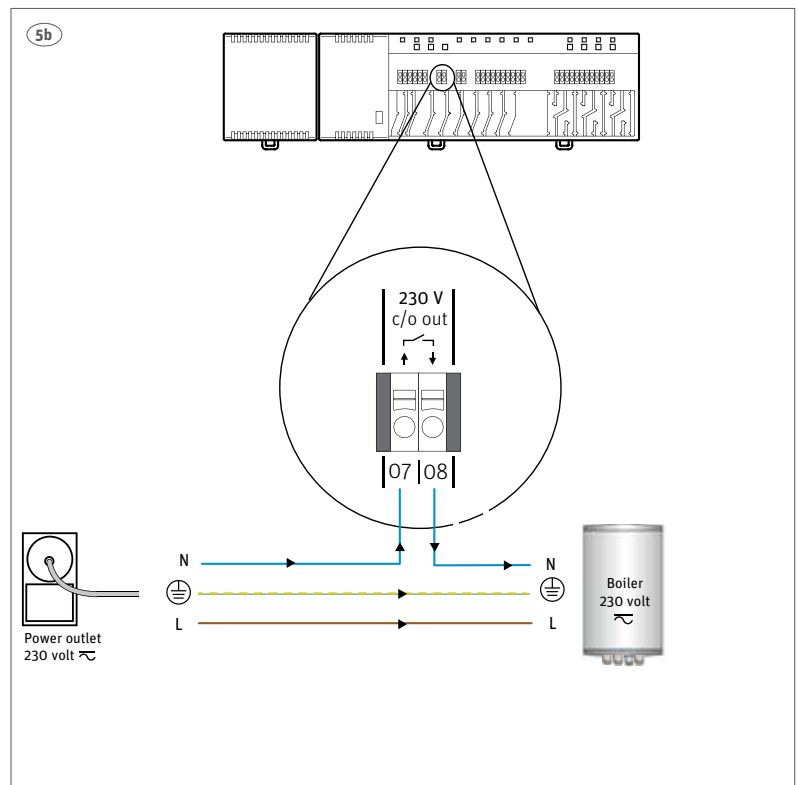
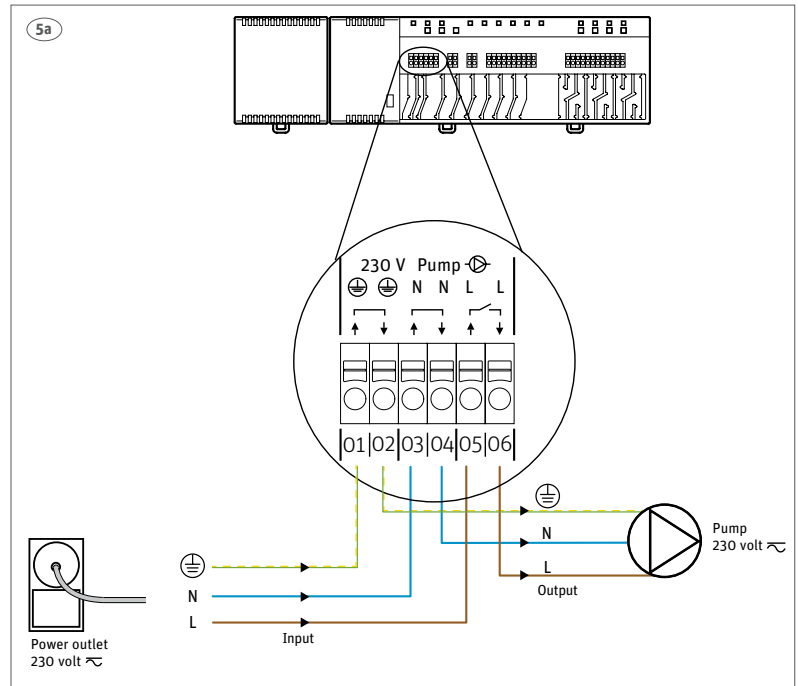
For the boiler to start when heating is required, please check the setting in service menu P-51 on a random Touchline thermostat and set it to setting (1). To do so please follow the steps below.

1. Enter the thermostat menu by pressing the menu tab and holding it down, P-01 will show on the display.
2. Use the menu tab again, and go to menu P-SE, Enter by pressing the (OK) check mark tab.
3. Service menu code is now needed, use the arrow up tab to set the code 1-2-3-4, Enter by pressing the (OK) check mark tab.
4. Menu P-20 is now shown, use the thermostat menu tab, and go to menu P-50, Enter by pressing the (OK) check mark tab.
5. Menu P-51 is now shown, Enter by pressing the (OK) check mark tab.
6. Default setting (0) is now shown, Use the arrow up tab to set the setting up to (1) Enter by pressing the (OK) check mark tab.
7. Setting is now saved, use the (X) back tab to return to main display view on the Touchline thermostat. The boiler will start right away if heating is required.

Don't forget to activate the 24v actuator thermo element properly, after all terminal and thermostat connections are done.


This is done by setting all thermostats up to 30 degrees Celsius for 6 - 8 minutes.


When the setting is done and thermostat temperature is set down again, the 24v actuators will fully close down and the blue line on the top will disappear.



6. Pairing a Touchline room thermostat with the control device

6.A: Briefly press the preferred channel or several channels that you want to pair with the Touchline room thermostat. The channel now flashes continuously and is ready for pairing.

The Touchline room thermostat is now ready for pairing and displays: 








6.B: To pair the Touchline room thermostat, hold the sensor button  down for approx. 5 seconds until the room thermostat shows (PAIR). When you see this, release the sensor buttons.

7. Setting the time and date

Setting the time and date is necessary so that the system works correctly.

The system automatically asks you to set the time and date when you pair the first wireless room thermostat with a wireless control device. If you skip this procedure, it will be repeated the next time you pair a wireless room thermostat.




When connecting the Touchline controllers to your LAN internet connection, the time and date in the thermostats will auto adjust.

- › The hour value flashes  
- › Press the sensor button  or  to set the actual timer value
- › Press the sensor button  to confirm. The hour value flashes.
- › Set minutes, year, month and day as described for the timer 
- › When the time and date has been set, press the sensor button  .
The display shows active display




8. Setting the comfort temperature

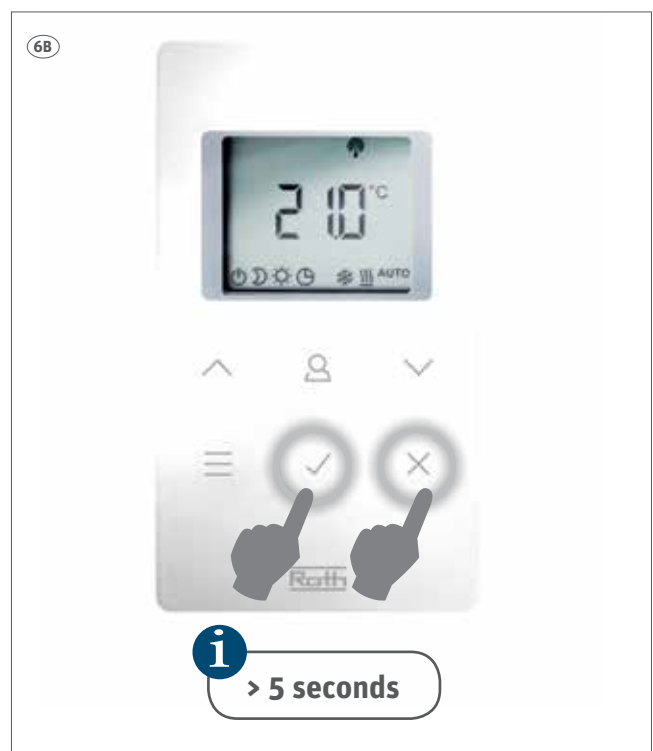
The thermostat goes to sleep after 10 seconds without being touched. Press and hold down any key for 5 seconds to wake it up.

Setting the room temperature

- › Press  or  to change the setpoint, i.e. the preferred room temperature.
- › Press  to confirm the new setpoint. The new setpoint is saved automatically after 5 seconds if you do not confirm it.

Accessing the Parameter menu:









1. Wake up the thermostat.
2. Hold down  for 10 seconds.
3. Then press  until you see the required P number.
4. Select the preferred menu by pressing  .



Parameter	Description
P-01	Set the display to standby: actual temperature or time
P-02	Set the setpoint for minimum floor temperature (for versions with integrated IR sensor only)
P-03	Set the maximum and minimum values for room temperature setpoint
P-04	Change time programs
P-05	Reset time programs to factory settings
P-06	Set the display for standby (max. battery saving mode)
P-07	Activate or deactivate sensor button sounds
P-08	Show ID number for wireless room thermostat
P-09	Show ID number for wireless control device
P-10	Multi-function menu, switch in-between cooling and party mode.
P-SE	Access with access code only, factory settings "1234"
P-21	Show software version for wireless room thermostat
P-22	Show software version for wireless control device
P-23	Show actual status of wireless control device and I/O box
P-24	Reset parameter to factory settings. To reset a control device or room thermostat, see parameter P-24 on page 7
P-32	Set temperature to frost protection function
P-51	Boiler enable via C/O Output potential volt-free relay, see parameter P-51 on page 9 or wiring diagram on page 4
P-66	Activate or deactivate "optimised thermomotor control" function

Setting the minimum floor temperature



Floor temperature setting is only available on the type of room thermostat with a floor temperature sensor (IR). The factory setting is 15°C. Setting range 15 - 30°C.


- › Hold  down for 5 seconds to access the user menu. The display shows **P-01**.
- › Press  until the display shows **P-02**.
- › Press , the display shows the floor temperature setpoint and the symbol .
- › Press  or  to change the setpoint.
- › Press  to confirm the new setpoint. The display shows **P-03**.
- › Press  to leave the user menu

9. Carrying out a link test



Pairing test (link test)

The pairing test allows you to view channel placement.

- › Hold down  and  on the wireless room thermostat simultaneously for 5 seconds
- › The display on the wireless room thermostat shows "Pair" – "Test" and the CH LED(s), and the LED for the allocated channel shines on the control device. If the wireless room thermostat has been paired with more than one channel, the LEDs for all paired channels shine.
- › The LED/LEDs goes/go off after 5 seconds. Pairing has been tested.

NOTE: If the display shows the symbol ERR 1,  the radio connection between the wireless room thermostat and the wireless control device has been lost.

10. Mode selection

Press the sensor button  briefly. The  symbol flashes.








› Press the sensor button briefly to switch to the next mode symbol. The symbol for the next mode flashes.




› Press the sensor button repeatedly until the symbol for the preferred mode flashes.


› Press the sensor button  to confirm the new mode.


The Touchline system has an option for night setback with a time program. View the complete guide at www.roth-uk.com


Always check the mode before calling a technician!


Symbol	Description
	The room temperature is kept frost-free at 8°C
	Reduced temperature -3°C
	Comfort temperature (this is the recommended operating temperature)
	Time programs I, II “Pro 2” and III “Pro 3”
	Cooling mode (can only be selected if the wireless room thermostat takes priority over the heating/cooling device)
	Heating mode (can only be selected if the wireless room thermostat takes priority over the heating/cooling device)
	Auto cooling mode (cannot be altered by a wireless room thermostat as this mode is determined by the cooling device via a C/O input)

Problem	Possible cause	How to clear it	To be done by
	Battery almost exhausted	Replace the batteries	User
 -----	Battery critically low. Radio connection between wireless room thermostat and wireless control device is no longer guaranteed	Replace batteries immediately	User
 Err1 No radio signal between wireless room thermostat in sensor mode and wireless control device for more than 30 minutes	Power failure to wireless control device	Restore power supply	Electrician
	Defective internal fuse	› Check electrical connections	Electrician

Problem	Possible cause	How to clear it	To be done by
 Err2 No radio signal between wireless room thermostat in sensor mode and wireless control device for more than 30 minutes	Power failure to wireless control device	Restore power supply	Electrician
	Defective internal fuse	› Check electrical connections	Electrician
	Electrical interference	Troubleshooting	User/specialist

Problem	Possible cause	How to clear it	To be done by
 Err3 Parameters changed cannot be saved	Power failure to wireless control device	Restore power supply	Electrician
	Defective internal fuse	› Check electrical connections	Electrician

Problem	Possible cause	How to clear it	To be done by
 Err4 IR sensor defective	Insufficient battery power	Replace the batteries	User
	IR sensor broken	Replace wireless room thermostats with IR sensors	Specialist

Problem	Possible cause	How to clear it	To be done by
 Roth App lost connection	Inability to connect to control device via app.	Restart control device	User Always make sure you have the latest software update. See www.roth-uk.com for more information.

Parameter	Description
P-24	<p>Reset parameter to factory setting. The parameters are saved in the wireless control device and also in the wireless room thermostat. Which parameters can be reset under which conditions are defined in section 15.3.</p> <p>NOTE</p> <p>If there is no pairing of a wireless room thermostat to a wireless control device, parameters must be reset to factory settings in two steps. First, select options “1” and then options “3” for parameter P-24.</p> <p>Options</p> <ul style="list-style-type: none"> › 0: Inactive, no reset will be executed. › 1: Reset wireless control device to factory setting. The pairing of the wireless room thermostats to the wireless control device will not be deleted. › 2: Reset wireless control device to factory setting. The pairing of the wireless room thermostats, wireless control device and accessories will be deleted. › 3: Reset wireless room thermostat to factory setting. The pairing of the wireless room thermostat or temperature sensor (sensor mode) will not be deleted. › 4: Reset wireless room thermostat to factory setting. The pairing of the wireless room thermostat or temperature sensor (sensor mode) will be deleted. <p>Operation</p> <ul style="list-style-type: none"> › Press the sensor button <input checked="" type="checkbox"/>. The display shows 0. › Press the sensor button <input type="checkbox"/> or <input checked="" type="checkbox"/> to select an option. › Press the sensor button <input checked="" type="checkbox"/>. The display shows no. › Press the sensor button <input type="checkbox"/> or <input checked="" type="checkbox"/> to toggle between no and yes. › Select one of the following options: <ul style="list-style-type: none"> – Press the sensor button <input checked="" type="checkbox"/> to save the changed setting. The display shows the next parameter P-21. – Press the sensor button <input checked="" type="checkbox"/> to cancel the procedure. The display shows the selected parameter.

Parameter	Description
P-32	<p>Set temperature for frost protection function. The frost protection function will be activated as soon the room temperature measured is below the set frost protection temperature.</p> <ul style="list-style-type: none"> › Factory setting: 8°C › Setting range: 3 - 13°C <p>Operation</p> <ul style="list-style-type: none"> › Press the sensor button <input type="checkbox"/>. The display shows 8.0. › Press the sensor button <input type="checkbox"/> or <input type="checkbox"/> to change the value. › Select one of the following options: <ul style="list-style-type: none"> – Press the sensor button <input type="checkbox"/> to save the changed setting. The display shows the next parameter P-33. – Press the sensor button <input type="checkbox"/> to cancel the procedure. The display shows the selected parameter.
P-51	<p>Set priorities for change-over of heating/cooling and configure output for heating/cooling or burner start.</p> <p>ATTENTION</p> <p>If communication between wireless connection modules has been selected, then the settings of P-51 must be the same at all wireless connection modules with a wireless room thermostat. Otherwise the plant will not function properly.</p> <p>If option “0” or “1” has been selected, then the heating/cooling unit performs the master function and determines the heating/cooling mode. The mode of operation for heating/cooling can not be set by any wireless room thermostat nor be influenced by the wireless connection module.</p> <p>If option “2” has been selected, then the mode of operation for heating/cooling is determined by any wireless room thermostat. The heating/cooling unit has no influence on the mode of operation for heating/cooling. In addition it is possible to set one wireless room thermostat as master for heating/cooling.</p> <ul style="list-style-type: none"> › See parameter description P-48, page 81. › Factory settings: Option “0” › Options: <ul style="list-style-type: none"> – 0: C/O-Input and C/O-Output of the wireless connection module have priority. – 1: Burner start and C/O-Input of the wireless connection module have priority. <p>The C/O-Output is configured as burner start and switches off immediately when heating demand is not required. In cooling mode this output is inactive.</p> <ul style="list-style-type: none"> – 2: The change-over between heating and cooling can only be done with the wireless room thermostat. In cooling mode the C/O-Output of the wireless connection module is active. <p>Operation</p> <ul style="list-style-type: none"> – Press sensor button <input type="checkbox"/>. The display shows 0. – Press sensor button <input type="checkbox"/> or <input type="checkbox"/> to select option 0, 1 or 2. – Select one of the following options: <ul style="list-style-type: none"> – Press sensor button <input type="checkbox"/>, to save the changed settings. The display shows the next parameter P-52. – Press sensor button <input type="checkbox"/>, to interrupt the procedure. The display shows the selected parameter.
P-66	<p>Activate or deactivate “optimised thermomotor control” function.</p> <p>The optimised thermomotor control is a specially developed control that saves energy. This control also replaces semi-proportional control.</p> <p>Initially, the thermomotor will receive a 100% signal for a certain amount of time. After this warmup period, the thermomotor receives pulse/pause signals dependent on the ambient temperature, configured using the options in this parameter (P-66). This control helps to reduce energy consumption considerably.</p> <p>NOTE</p> <p>We recommend deactivating optimised thermomotor control at ambient temperatures below 10°C.</p> <ul style="list-style-type: none"> › Factory setting: Option “0” › Options: <ul style="list-style-type: none"> – 0: Deactivated, ambient temperature below 10°C – 1: Activated, ambient temperature between approx. 10°C and 25°C – 2: Activated, ambient temperature between approx. 25°C and 50°C <p>Procedure</p> <ul style="list-style-type: none"> › Press the sensor button <input type="checkbox"/>. The display shows 0. › Press the sensor button <input type="checkbox"/> or <input type="checkbox"/> to set option 0, 1 or 2. › Select one of the following options: <ul style="list-style-type: none"> – Press the sensor button <input type="checkbox"/> to save the changed setting. The display shows the next parameter P-67. – Press the sensor button <input type="checkbox"/> to cancel the procedure. The display shows the selected parameter.



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