

Installer and User Guide Non Programmable Low Voltage Electronic Thermostat OTH24



PARTS INCLUDED

- One (1) thermostat
- Two (2) 6-32 mounting screws
- Two (2) wall anchors

ABOUT YOUR THERMOSTAT

The OTH24 non programmable low voltage electronic thermostat is designed to control any 24-Vac heating load. It has a terminal to connect a temperature sensor to read the floor temperature. (Floor temperature sensor not included.)

The thermostat has two (2) low-voltage outputs that can be connected using a 24-volt relay and a transformer to control electric baseboard heaters, convectors (short cycle) or forced-air convectors (long cycle), electric heating floors, water pumps and boilers.

The thermostat can run using a single output or two outputs. The second output, or auxiliary output, can activate an additional heating source if the first heating source activated by the main output is unable to reach the temperature setpoint. This is ideal for rooms where the floor is the main heating source and a second heating source (such as electric baseboards) is used for colder days.

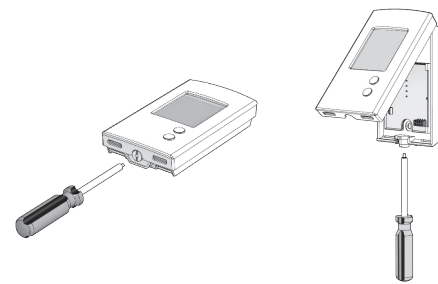
Each output's control cycle length can be configured separately. For example, the floor heating system could be on a 15-minute cycle using a mechanical relay and the baseboard would be on a 15-second cycle using an electronic relay (SSR).

INSTALLATION

Installation must be carried out by a certified electrician and must comply with local and national electrical codes in effect.

As you are a valuable Ouellet Canada Inc. customer, we ask that you please cut the power of the heating system from the main power panel to avoid any risk of electric shocks.

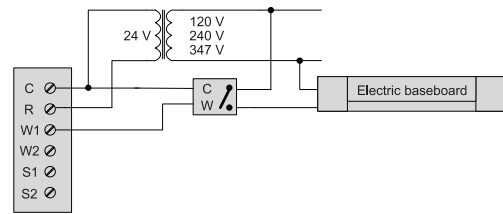
Using a Robertson #1 (square) or Phillips #2 (cross) screwdriver, loosen the screw a quarter turn and separate the thermostat faceplate.



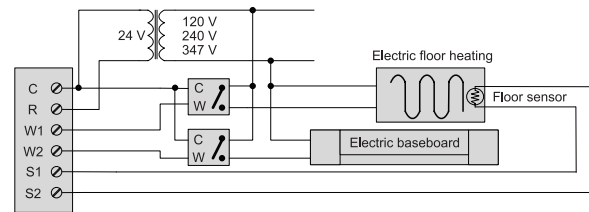
Remove thermostat faceplate

CONNECTING YOUR THERMOSTAT

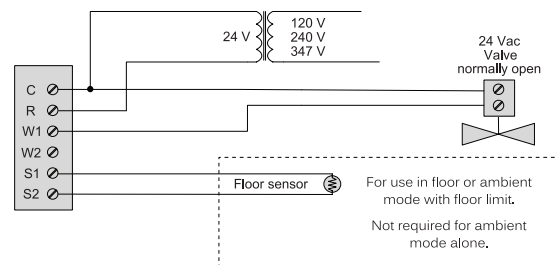
Insert each wire into its terminal according to the heating system and screw firmly. (See connection layouts outlined below.)



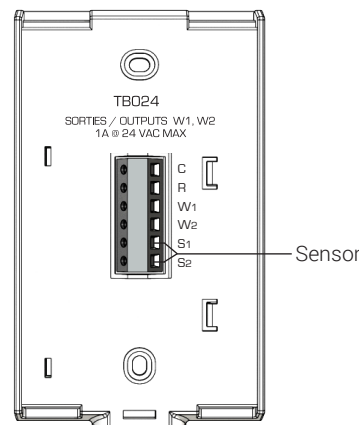
Connection layout for an electric baseboard



Connection layout for an electric floor heating with electric baseboard on the 2nd heating stage



Connection layout for a hot water valve



Connection of the floor sensor (optional)

USER SETTINGS

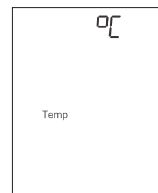
- To access the settings of the thermostat, lower the setpoint and press and hold the \downarrow button for 3 seconds to access the menu.
- Press the \uparrow button to change the setting.
- Press the \downarrow and \uparrow buttons simultaneously to select the next setting.
- To exit the menu, press the \downarrow and \uparrow buttons simultaneously until the end of the settings.

Settings display order

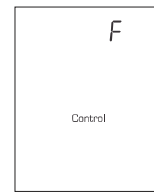
F Mode: 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14.

A Mode: 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14.

1. Temperature display format °C or °F, (Default: °C).



2. Select the control mode: A (ambient) or F (floor) (Default: F).



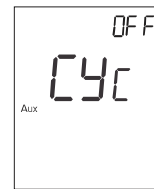
3. Main output cycle length
Select the cycle length according to the connected load
15 seconds, 5, 10, 15, 20, 25, 30 minutes.

The 15-second cycle should only be used if an electronic relay (SSR) activates the load (Default: 15 minutes).



4. Second output cycle length
Select the cycle length according to the connected load
OFF, 15 seconds, 5, 10, 15, 20, 25, 30 minutes.

The 15-second cycle should only be used if an electronic relay (SSR) activates the load (Default: OFF).



5. Minimum Time ON
Defines the minimum time for which the output can be turned ON.
Used for gas or oil system with a purge. The ON time should not be shorter than the purge time.
0, 30 seconds, 1, 2, 3, 4, 5 minutes (Default: 0).



6. Minimum Time OFF
Defines the minimum time for which the output can be turned OFF.
0, 30 seconds, 1, 2, 3, 4, 5 minutes (Default: 0).



7. Minimum temperature setpoint (Default: 5 °C).



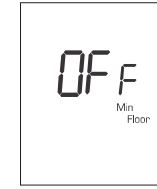
8. Maximum temperature setpoint (Default: 36 °C).



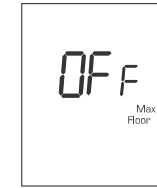
9. Maximum ambient air temperature setpoint (Default: OFF).



10. Minimum floor temperature setpoint (Default: OFF).



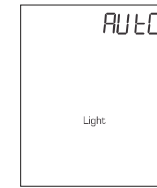
11. Maximum floor temperature setpoint (Default: OFF).



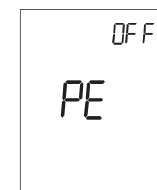
12. Floor sensor 10K or 12K (default 10K)



13. Backlighting (Default: AUTO—activates for 12 seconds after a button is pressed).



14. Pump exercise OFF / ON (Default: OFF)
If this feature is set to ON, the thermostat will activate its main output for 1 minute every 24hr. This can prevent a pump or water distribution system to seize.



POWER FAILURE

Note: The following description applies only if the thermostat was running for at least 2 hours before the power failure.

In the event of a power failure, the screen will turn off and your settings will be saved. When power is restored, the thermostat will return to the operating mode in effect prior to the failure.

TROUBLESHOOTING

Error codes

- E1:** The thermostat temperature sensor is defective (open).
- E2:** The thermostat temperature sensor is defective (short circuit).
- OL:** The thermostat is overheated; make sure the load is less than 15 amperes.
- HH:** The thermostat temperature sensor has detected a temperature above the setpoint range (too hot).
- LL:** The thermostat temperature sensor has detected a temperature below the setpoint range (too cold).
- E1F:** The floor temperature sensor is defective or not connected (open).
- E2F:** The floor temperature sensor is defective (short circuit). Make sure there is no short circuit in the sensor connector.
- HHF:** The floor temperature sensor has detected a temperature above the setpoint range (too hot).
- LLF:** The floor temperature sensor has detected a temperature below the setpoint range (too cold).

TECHNICAL DATA SHEET

Voltage: 24 Vac, 50/60 Hz
Maximum load: 1 A per output
Temperature control range: 5 °C to 36 °C (41 °F to 97 °F)
Temperature display range: 0 °C to 70 °C (32 °F to 158 °F)
Resolution: 0.5 °C or 1 °F
Storage Temperature: -20 °C to 50 °C (-4 °F to 122 °F)

This product must be installed with the floor sensor provided by the manufacturer.

WARRANTY

Three (3) year limited warranty

The manufacturer warrants the components of the product against defects in material and workmanship for a three (3) year period from the date of purchase, under normal use and service, when proof of purchase of such is provided. The obligation of the manufacturer is limited to replacement of the product (device) only and in no way whatsoever includes the cost of connecting or installing the device or replacement parts.

CUSTOMER SERVICE

If you have any questions about this product, please contact our technical support team:

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