



APOLLO

Wi-Fi Thermostat



APOLLO WI-FI THERMOSTAT

The APOLLO Thermostat puts advanced climate control at your fingertips. With seamless WiFi connectivity, intuitive touchscreen operation, and multiple applications, this thermostat delivers precision temperature management from anywhere. Enjoy energy-saving scheduling, remote control via app, and sleek modern design — all in one smart device.

Upgrade your comfort. Take control with APOLLO.



Wi-Fi BACnet IP • Wired BACnet MSTP • Wi-Fi MQTT API • Wi-Fi Android iOS APP

APOLLO WI-FI THERMOSTAT

MAIN FEATURES

Bespoke Versatility

- ① Supports both 12-24VAC/DC or 110-240VAC power sources, providing flexibility in installation

Intuitive Touch Interface

- ② Features a 3.5" Power-Saving TFT color touch screen for user-friendly and responsive control.

Easy Connectivity

- ③ Offers Wi-Fi connectivity option for remote control, monitoring, and easy IoT integrations. And Google Home integration for monitoring.

Location-Based Behaviour

- ④ Advanced GEO-fence technology for intelligent automation based on the user's location.

Environmental Awareness

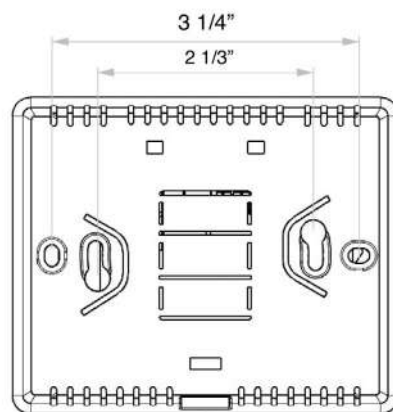
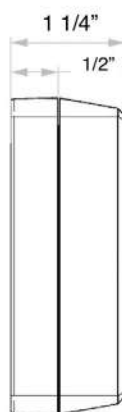
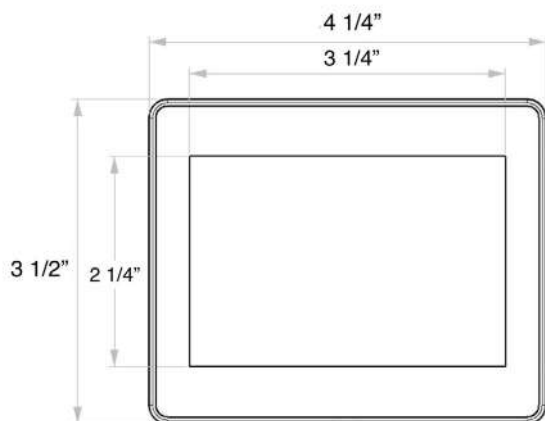
- ⑤ Equipped with ambient light and humidity sensors for environmental monitoring.

Built For Global Operations

- ⑥ Multilingual UI translated into 7 languages.



DIMENSIONS



1. APOLLO WI FI THERMOSTAT- FAN COIL APPLICATION

This thermostat offers precise temperature control and monitoring through features such as variable fan speed control, 0-10VDC damper, fan speed, and valve control, external sensor and humidity management, external sensor temperature shutdown, hold ventilation for humid areas, and programmable scheduling.

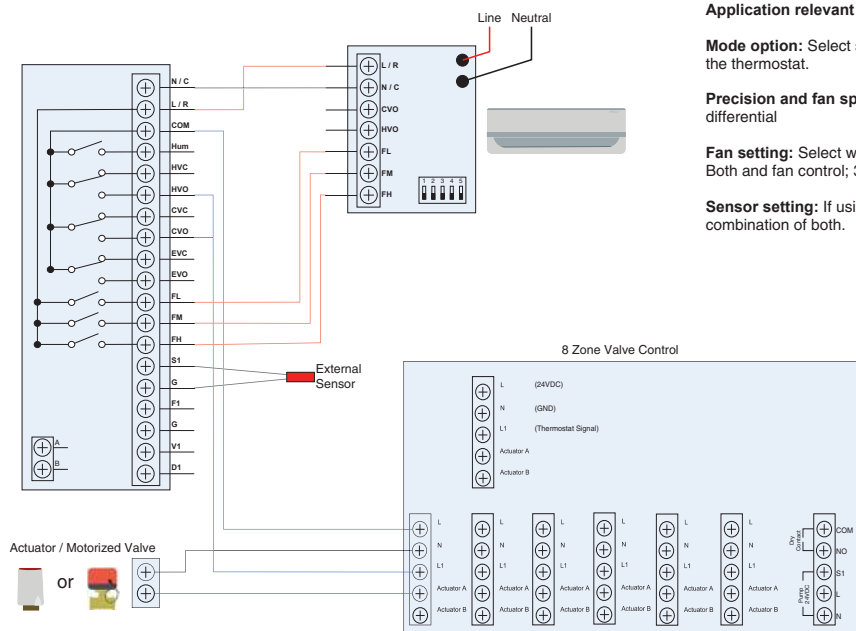
The thermostat can be controlled via a phone app over the internet and uses normally open relays to send the signal back to the normally closed valves/manifold actuators.

Different types of installations are supported through thermostat settings for holidays, schedules, auto mode, hold to maintain a specific temperature, and hold ventilation for humid areas.

The thermostat features built-in temperature and humidity sensors, and supports an additional external sensor (a 20ft sensor is included in the packaging).

1.1 Apollo Wall FCU

APOLLO Wall FCU Wiring Schematic



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

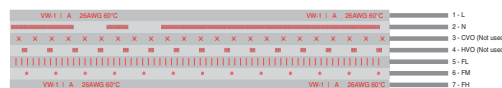
Precision and fan speed: Start differential and Ramp differential

Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed (120V) or 0-10VDC.

Sensor setting: If using external sensor or a combination of both.

Notes:

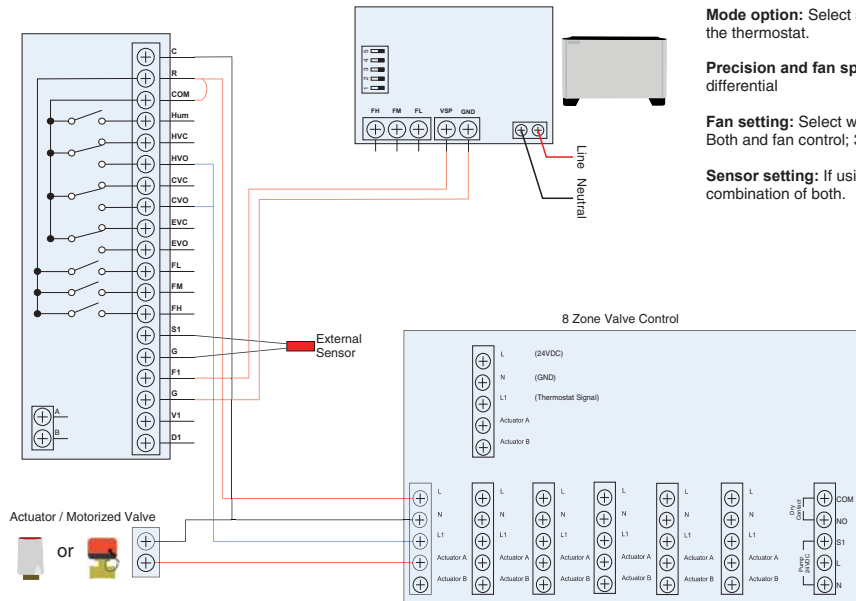
1. All the wiring must be done with AWG #18, as #16 can be too big.
2. You can refer to the following wiring, if thermostat doesn't turn on, try reversing the wires (1 becomes 7; 2 becomes 6; and so on.)



FAN COIL APPLICATION

1.2 Apollo Floor FCU

APOLLO Floor FCU Wiring Schematic



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

Precision and fan speed: Start differential and Ramp differential

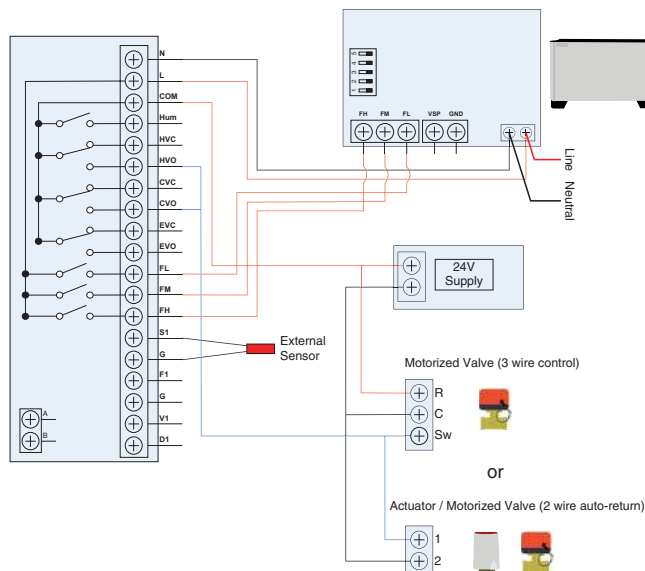
Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed (120V) or 0-10VDC.

Sensor setting: If using external sensor or a combination of both.

Notes:

1. All the wiring must be done with AWG #18, as #16 can be too big.

APOLLO Floor FCU Wiring Schematic 120V Thermostat



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

Precision and fan speed: Start differential and Ramp differential

Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed (120V).

Sensor setting: If using external sensor or a combination of both.

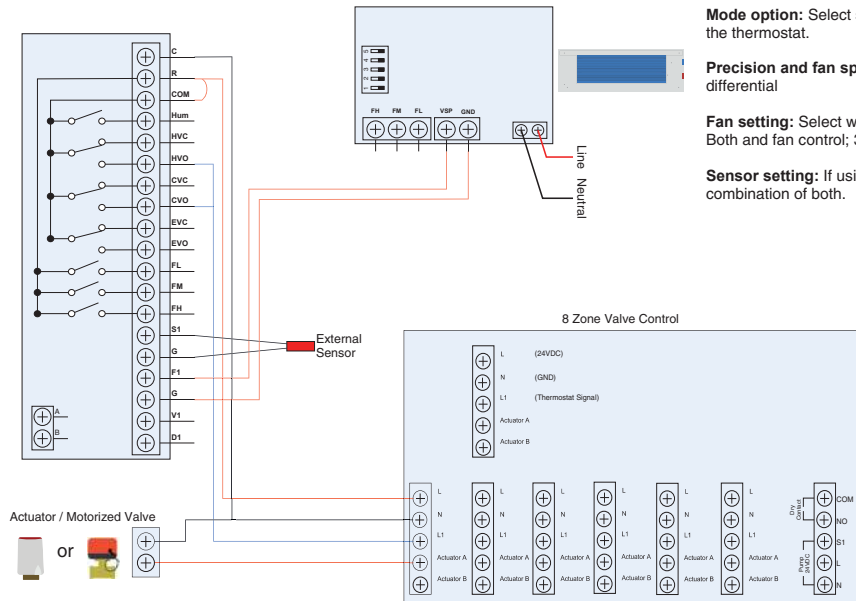
Notes:

1. All the wiring must be done with AWG #18, as #16 can be too big.
2. Using 120-240VAC Thermostat, terminal COM and valves can be

FAN COIL APPLICATION

1.3 Apollo Concealed FCU

APOLLO Concealed FCU Wiring Schematic



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

Precision and fan speed: Start differential and Ramp differential

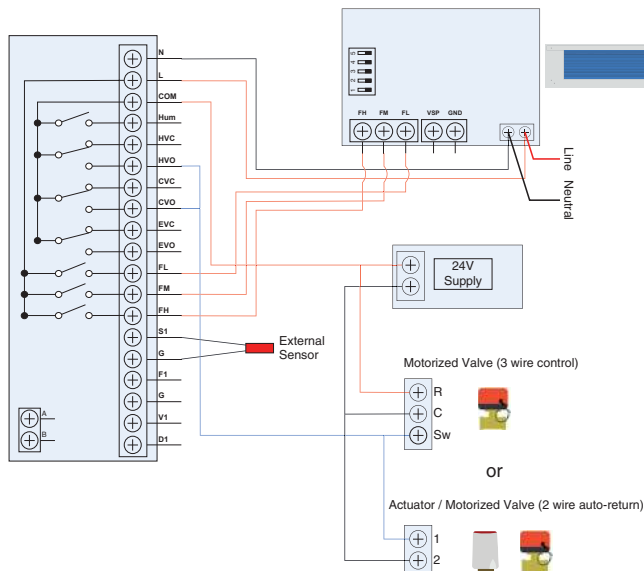
Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed (120V) or 0-10VDC.

Sensor setting: If using external sensor or a combination of both.

Notes:

1. All the wiring must be done with AWG #18, as #16 can be too big.

APOLLO Concealed FCU Wiring Schematic 120V Thermostat



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

Precision and fan speed: Start differential and Ramp differential

Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed (120V).

Sensor setting: If using external sensor or a combination of both.

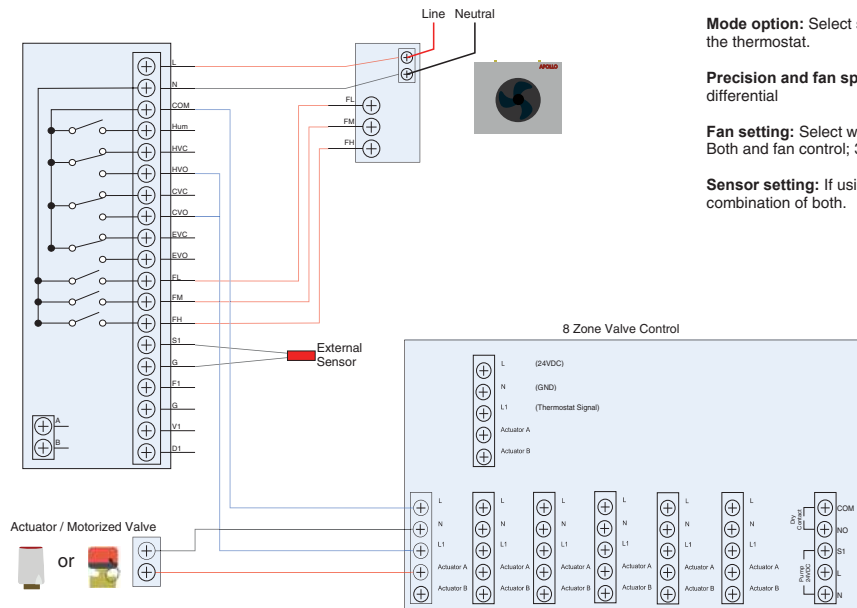
Notes:

1. All the wiring must be done with AWG #18, as #16 can be too big.
2. Using 120-240VAC Thermostat, terminal COM and valves can be isolated to handle low voltage (CVC, CVO, HVC, HVO, EVC, EVO).

FAN COIL APPLICATION

1.4 Apollo Commercial FCU

APOLLO Commercial FCU Wiring Schematic



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

Precision and fan speed: Start differential and Ramp differential

Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed or 0-10VDC.

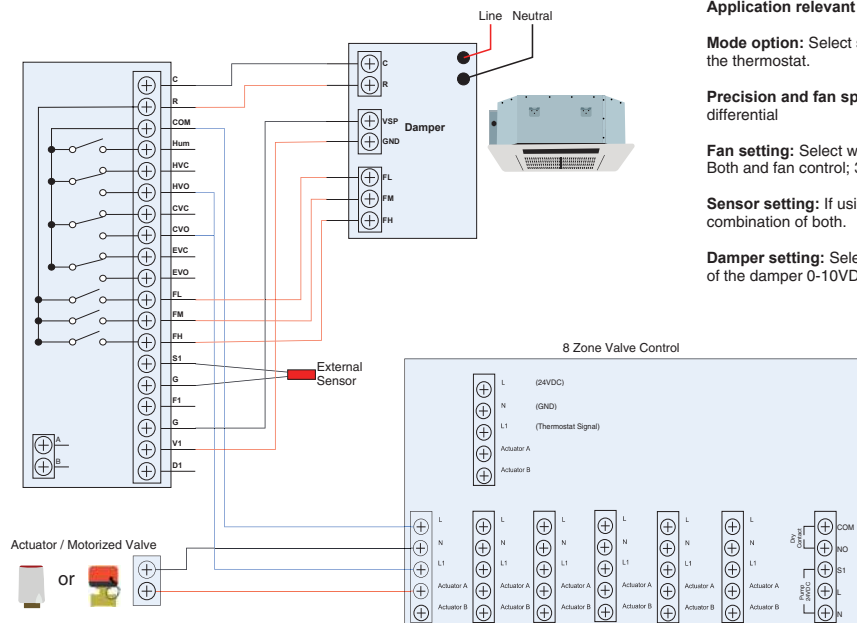
Sensor setting: If using external sensor or a combination of both.

Notes:

1. All the wiring must be done with AWG #18, as #16 can be too big.

1.5 Apollo Ceiling FCU

APOLLO Ceiling FCU Wiring Schematic



Application relevant parameters:

Mode option: Select specific mode you want to use with the thermostat.

Precision and fan speed: Start differential and Ramp differential

Fan setting: Select whether you want to use Heat, Cool, Both and fan control; 3-speed (120V) or 0-10VDC.

Sensor setting: If using external sensor or a combination of both.

Damper setting: Select the percentage for the opening of the damper 0-10VDC

Notes:

1. All the wiring must be done with AWG #18, as #16 can be too big.

2. APOLLO WI FI THERMOSTAT - POOL AQUASTAT APPLICATION

This unit controls and maintains the desired water temperature in a pool. It uses an external temperature probe wired directly into the thermostat and placed within the pipe to measure the temperature and achieve optimal temperature control. The thermostat features built-in intelligent control algorithms and presets specifically designed for heat pumps. It offers versatile communication options, including MQTT, Wi-Fi, and BACnet. Additionally, it includes a thermistor NTC10K, a heavy-duty external temperature sensor designed for precise water temperature control.

2.1 Schematic

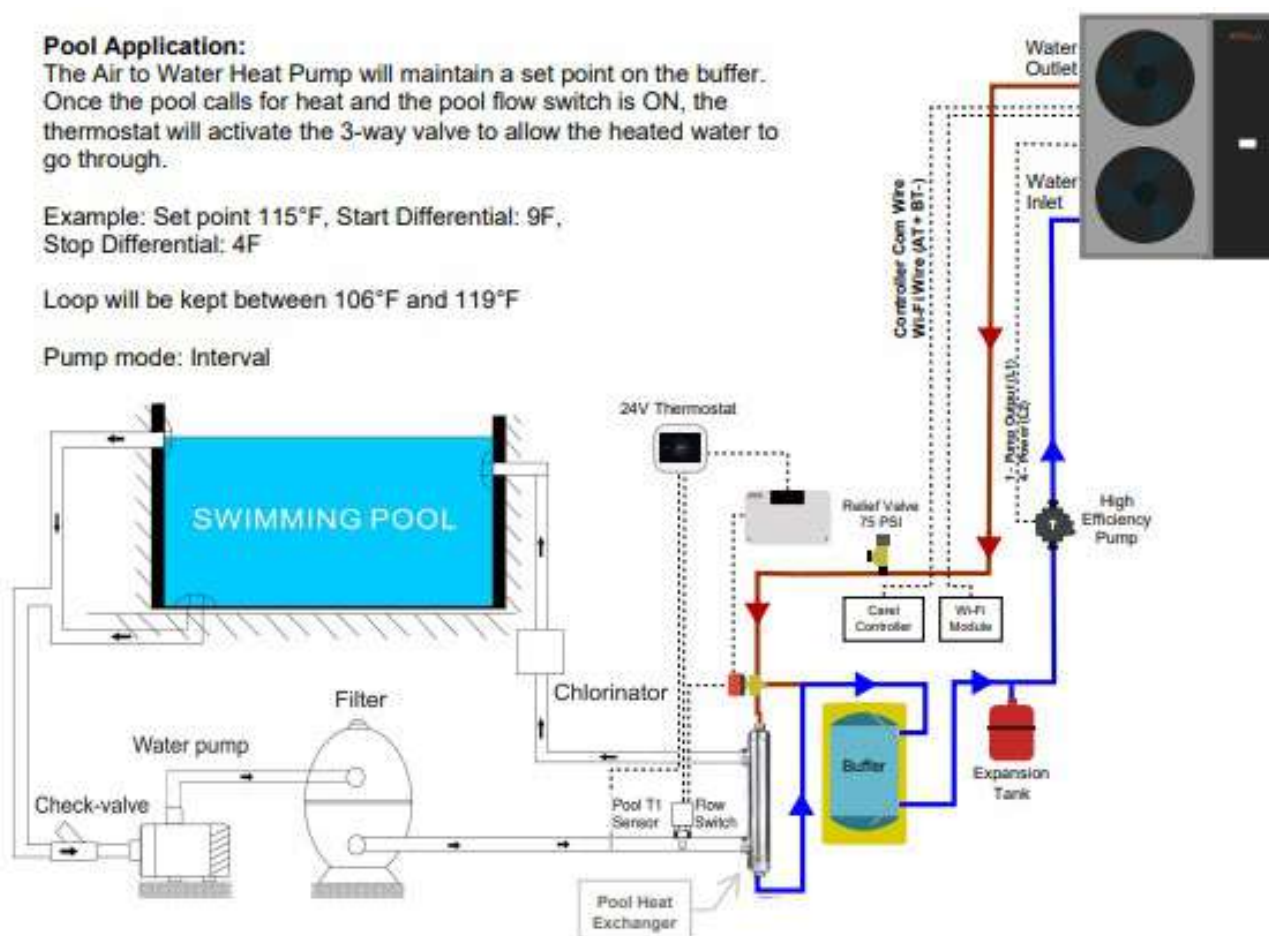
Pool Application:

The Air to Water Heat Pump will maintain a set point on the buffer. Once the pool calls for heat and the pool flow switch is ON, the thermostat will activate the 3-way valve to allow the heated water to go through.

Example: Set point 115°F, Start Differential: 9F, Stop Differential: 4F

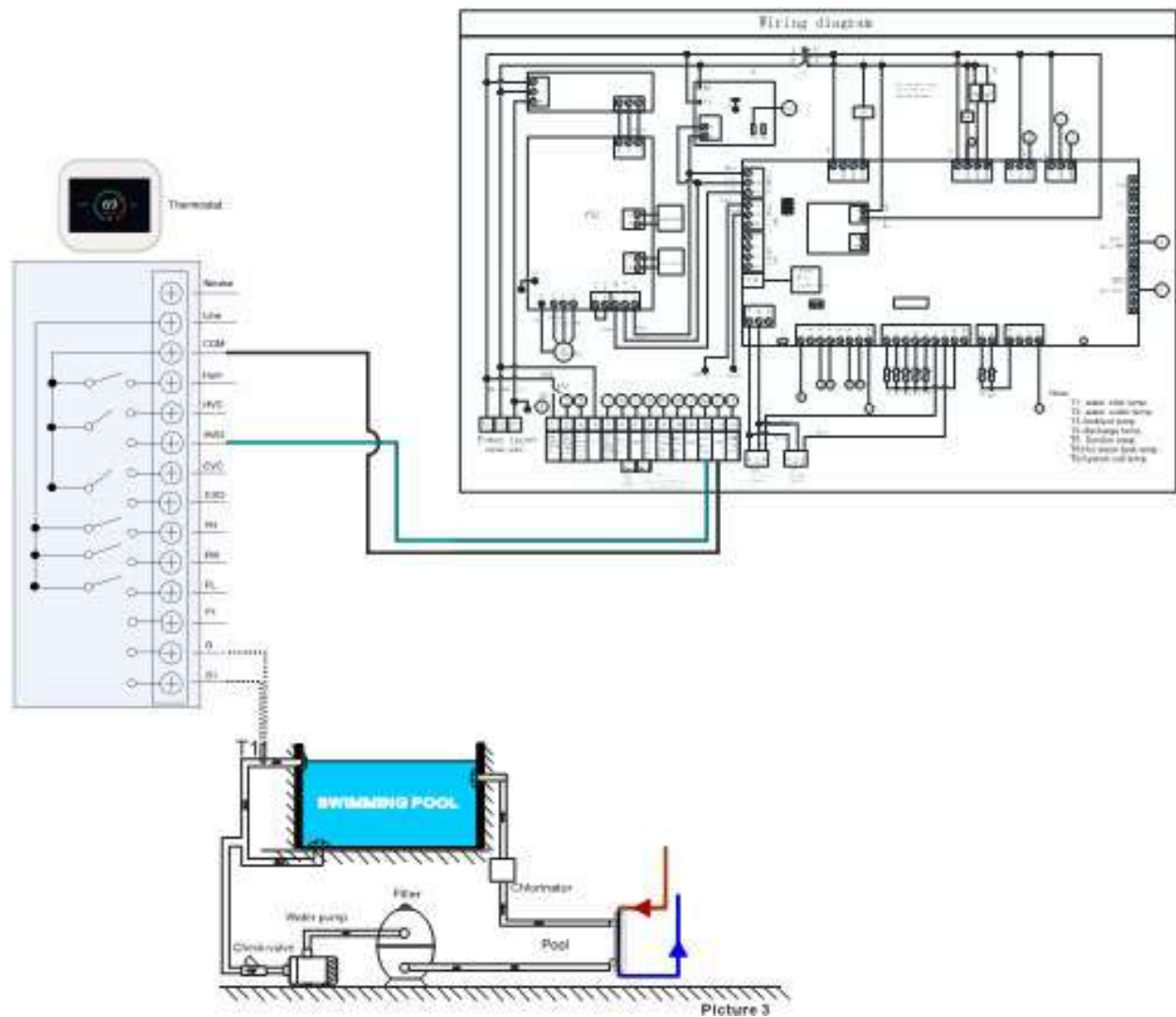
Loop will be kept between 106°F and 119°F

Pump mode: Interval



POOL AQUASTAT APPLICATION

2.2 Wiring

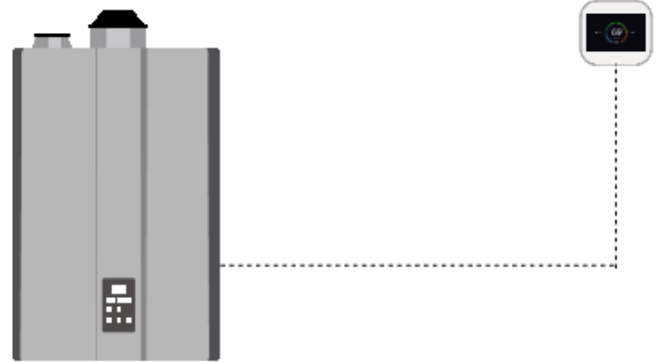


3. APOLLO WI FI ELECTRIC HEATER APPLICATION

This unit works with an electric heater to control air, and is compatible with gas or oil furnaces. It provides both 1-stage heating and 1-stage cooling, with multiple fan speeds.

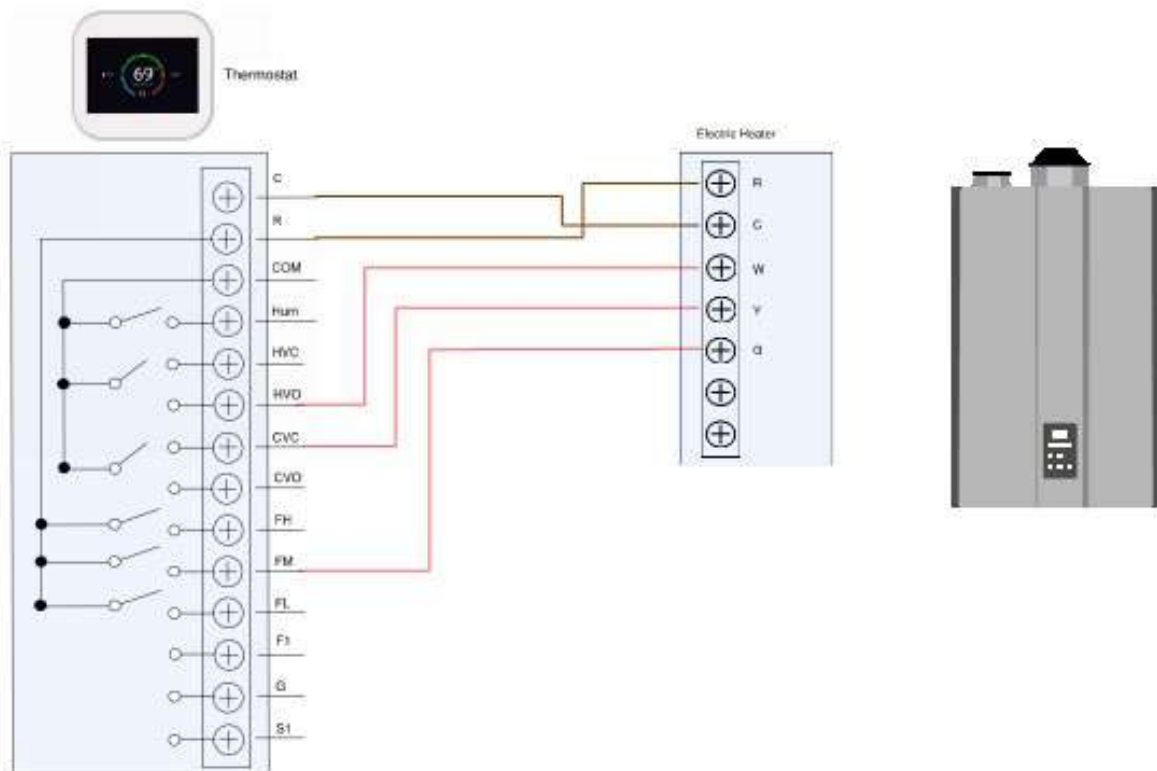
The unit operates based on the room temperature and a differential to engage heating/cooling. The thermostat uses MQTT and Wi-Fi for communication, and also supports BACnet.

3.1 Schematic



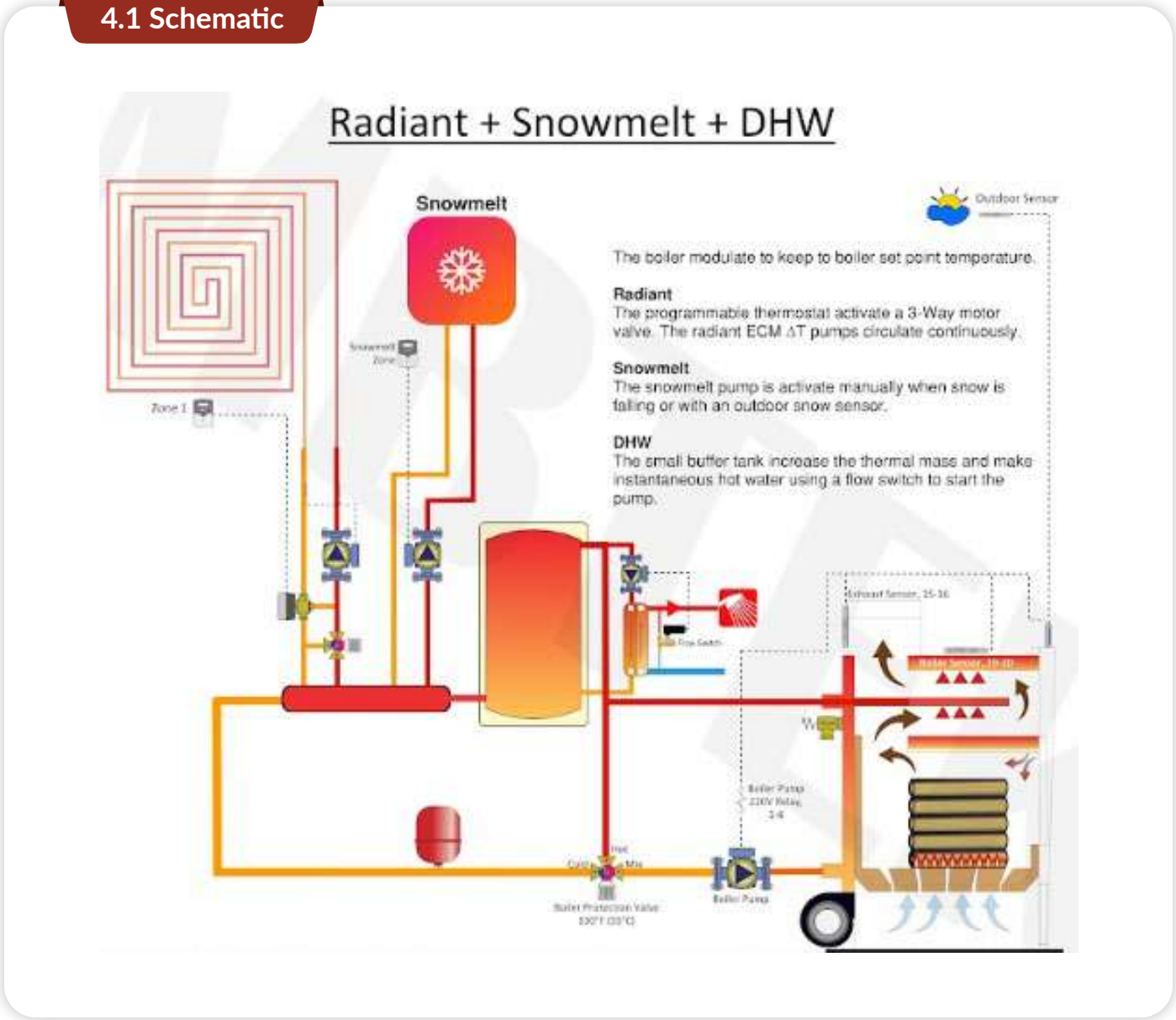
Built-in intelligent control algorithms and presets make the thermostat ideal for controlling room temperature with heat pumps, HVAC, or gas furnaces. An external sensor can be used to measure remote room or outdoor temperature.

3.2 Wiring



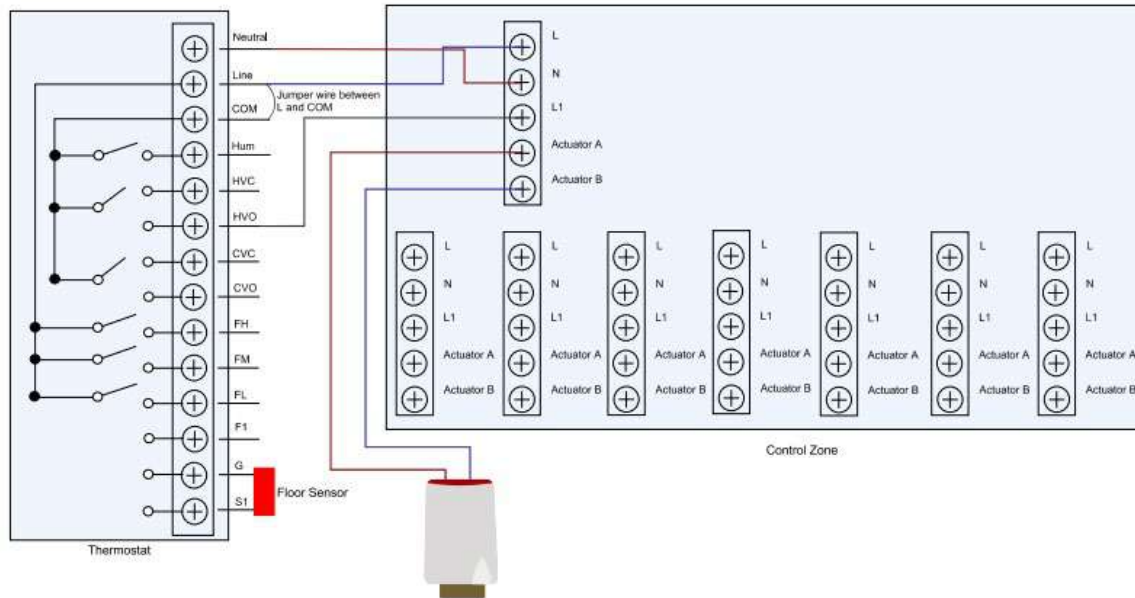
This thermostat can be used for snow melting applications, and is ideal for reducing snow accumulation in driveways through a radiant loop. It can be used in a condo tower, apartment building, or commercial complex. The unit communicates over MQTT and Wi-Fi, and can also use BACnet. It also features an external sensor for remote room or outdoor temperature monitoring.

4.1 Schematic



SNOW MELT CONTROLLER APPLICATION

4.2 Wiring



5. GENERAL SETTINGS

Access Level Code

Installer: 0907 (All options available)

User: 0403

Guest: N/A

Lock: 0104

Access Levels

Guest

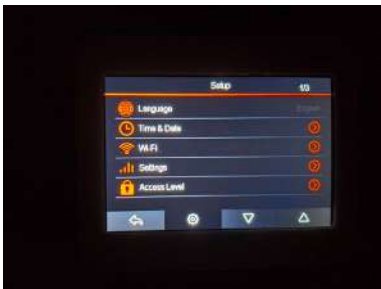
Main screen
Mode Selection
Fan Selection

Setup Menu

Settings
Access Level
System Information

Setting

Temperature format



User (0403)

Main screen
Mode Selection
Fan Selection
History Chart
Hold mode
Precision
Schedule

Setup Menu

Language
Time & Date
Wi-Fi
Settings
Access Level
Holiday
Schedule
Backlight
Standby Screen
System Information

Time & Date

Time Zone Selection
Clock Setting
Daylight Saving Time (DST)

Wi-Fi

Wi-Fi Setup
QR Code
Mac Address

Setting

Temperature format
Mode Option
Precision / Fan Speed
Humidification
Dehumidification
Temperature Limit

Installer (0907)

Main screen
Mode Selection
Fan Selection
History Chart
Hold mode
Precision
Schedule

Setup Menu

Language
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Time Zone Selection
Clock Setting
Daylight Saving Time (DST)

Wi-Fi

Wi-Fi Setup
QR Code
Mac Address

Setting

Temperature format
Mode Option
AUTO Mode Switch
Precision / Fan Speed
Fan Speed Min / Max
Fan Settings
Heat Valve 0-10VDC
Cool Valve 0-10VDC
Sensor Settings
Sensor Read Speed
External Sensor Shutdown*
Humidification
Dehumidification
Temperature Limit
Temperature Calibration
Humidity Calibration
Freeze Protection
Delay Between Start
Damper Position

Note 1: External Sensor Shutdown only appears if you have enabled both internal and external sensor under "Sensor Setting"

Note 2: "Lock" access level only prevents the user from changing any setting.

6. OPTIONS DESCRIPTIONS

1. **Temperature Format:** Celsius or Fahrenheit
2. **Mode Option:** Heat, Cool, Vent, Dehumid, Auto (You can select the ones that you will be using)
3. **Precision / Fan speed:** Precision is the temperature difference to start the low speed and heating or cooling. Fan Speed is the temperature difference to start Med and High speed.
4. **Fan Speed Min / Max:** Set your minimum and maximum speed for the fan (30% - 100%)
5. **Heat Speed:** Set specific voltage for low, medium and high speed for 0-10VDC output.
6. **Cool Speed:** Set specific voltage for low, medium and high speed for 0-10VDC output.
7. **AUTO Mode Switch:** Temperature differential to start heating or cooling when is on AUTO Mode
8. **Fan Settings:** set your fan control settings between 3-Speed & 0-10VDC, 3 Speed or 0-10VDC. And Fan Always OFF, Fan in Heat Mode, Fan in Cool Mode, or Fan in Heat and Cool Mode
9. **Sensor Settings:** Select what sensor will be used for main temperature and if using auxiliary sensor (display only or 11.External Sensor ShutDown, appears after selecting any auxiliary), or external only for installing on remote room, radiant floor, pool and spa.
10. **Sensor Read Speed:** Select the sensor speed depending on Standard or Real Time update.
11. **Humidification:** Enable/Disable humidification output, setpoint, precision (Hum %) and mode (Heat, Cool, Heat Cool)
12. **Dehumidification:** Set the setpoint to start cooling and the fan in low speed OFF differential prevents the house from cooling down.
13. **Temperature Limit:** Set minimum and maximum temperature for the thermostat, minimum 32 °F (0 °C), maximum 210 °F (99 °C)
14. **Temperature Calibration:** Manually calibrate the temperature sensor.
15. **Humidity Calibration:** Manually calibrate the humidity sensor (%).
16. **Freeze Protection:** Set the temperature for freeze protection
17. **Delay Between Starts:** Set a delay between starts.
18. **Damper Position:** Damper 0-10VDC Output

THERMOSTAT

Troubleshooting

Issue	Caused By	Remedy
Can't connect to Wi-Fi	Old firmware	Go to System information, update available should show, press update. Once the update is completed try the Wi-Fi setup again
	System Bug	Go to Setup Menu (Gear icon) > Access Level > Press Installer > Put the installer code > Press the lock button. This will take you to the Setup Menu again, press down until you find "RESET" and wait for the unit to restart and try once again.
The thermostat won't turn on	Power Supply	Disconnect everything and make sure only Line and Neutral (R and C for 24V) are connected, check if you are receiving proper voltage (Can be 120 up to 240 or 12 up to 28 if AC voltage or 12 - 24 if DC voltage).
The sensor is not reading correctly / not showing proper temperature	Settings configuration	Please check sensor settings, if using external or internal sensors.
The external sensor is reading slowly	Settings configuration	Please check the Sensor settings, make sure that the reading speed to be on Real Time
The fan coil is not starting	Wiring	Please verify if you are using 0-10VDC or 3-speed fan and the mode that the thermostat is currently on. The fan will not start if there is no call for heat or call for cool, unless it is on "Vent" mode.
Thermostat is on but the Fan is not working	Wiring	Try swapping R-C or L-N and try again. If still not running contact support.
Fan works in heating but not in cooling	Settings configuration	Put the thermostat in Installer mode (0907 code) then go to fan settings, make sure that shows Fan on in Heating and Cooling.
Heating/Cooling is not working	Wiring	Check if you have the jumper between R and COM, or L and COM. Contact support for more information.
Main screen just shows a few options and settings as well	Configuration	In the main screen check if in the bottom right corner says Guest, change the mode by going to Settings, Access level, Select User and use the code 0403.

APOLLO

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