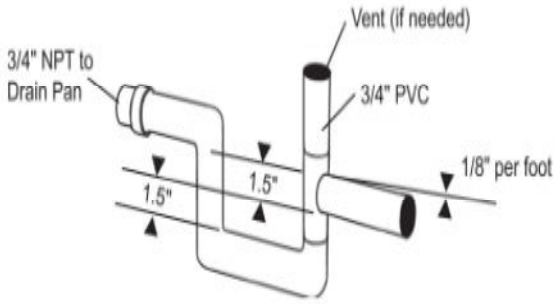
has a female flare nut and is attached to the suction line at the coil. Install the
TXV bulb to the suction line using the bulb clamp furnished with the kit. The bulb should be installed on a horizontal run of the suction line if possible. On a line less than 7/8" OD, the bulb may be installed on top of the line. With 7/8" OD or over, the bulb should be installed in a position of about 4 or 8 o'clock. If the bulb installation is made on a vertical run, the bulb should be located at least 6 inches from any bend and on the tubing side opposite the plane of the bend. On vertical bulb installations, the bulbs should be positioned with the bulb capillary tube at the top. **The bulb must be insulated using thermal insulation to protect it from the effects of the surrounding ambient temperature.**

J. CONDENSATE DRAIN



The air handler drain pan has ¾" FPT primary and secondary connections whether used in an upflow or horizontal configuration. Piping from each stub is to have a 1½" minimum trap and each run pitched so as to provide for adequate drainage and secondary fittings together into a common drain. When an air handler is installed above a finished ceiling, an auxiliary drain pan must be provided under the unit as required by most local building codes. The secondary drain must be piped to a location that would provide the occupant a warning if the primary drain is blocked.

K. AIR FILTER

Air handlers are factory equipped with an air filter. If the return grille has its own filter, the filter installed in the air handler should be removed. Air filter should be inspected and cleaned or replaced as often as is necessary to prevent restriction of air flow. (minimum every three months for normal installations). Always replace the filter with the same type originally furnished

L. CHECK TEST AND START UP

The unit should be tested after the system has been completely installed to determine proper operation.

NOTE:

HEATING SYSTEM SHOULD NOT BE SWITCHED ON UNTIL SYSTEM IS FILLED AND HOT WATER COIL IN THE AIR HANDLER AND SUPPLY AND RETURN LINES ARE VENTED.

1. Fill and pressurize the water heater and air handler.
2. Vent air from the water tank by opening a hot water spigot.

Energize the unit by switching on the line voltage source and the thermostat. Depending on how the AHG was interfaced with the heat supply, hot water should start flowing through the water to air coil and 30-45 seconds after a call for heat the blower will energize.

⚠WARNING

UNITS ARE RATED AT TEMPERATURES OF 130°-180° F. SET ENTERING WATER TEMPERATURE AT DESIGN TEMPERATURE AND TAKE PROPER SAFEGUARDS FOR WATER USAGE AT SUPPLY POINTS, AS PER LOCAL CODES AND SAFETY CONSIDERATIONS.

M. SYSTEM SHUTDOWN

For short periods of time during freezing temperatures if the system is to be left unused, to prevent freezing of the air handler and piping, do the following: Do not turn the system off. Leave the air handler's thermostat on heat setting. If the water and air handler must be shut down for extended periods, a qualified service technician needs to be contacted to ensure the air handler and piping are drained of all water as to prevent freeze damage.

N. PERIODIC MAINTENANCE

Inspect and clean or replace filters at least every three months to ensure good airflow and optimum system capacity, efficiency and life. This equipment should NEVER BE RUN WITHOUT AN AIR FILTER in place (see Section AIR FILTER). The blower motor is permanently lubricated**.** ALWAYS disconnect power before removing access doors!

O. LOW TEMPERATURE PROTECTION - HOT WATER COIL

The unit is equipped with two low temperature protection thermostats located on the discharge face of the hot water coil. These thermostats provide protection as follows:

CFP - Stops the outdoor unit (condensing unit of AC system) if the discharge air becomes sufficiently low to cause possible freezing of the water in the hot water coil. Cycling of this thermostat is an indication of a problem. Possible causes are inadequate air flow, blocked filter, or blocked air system.

HFP - Provides power to the heating terminal (W) of the unit terminal strip to start the heating equipment in the event the air temperature above the coil becomes sufficiently low to cause possible freezing of the water in the hot water coil.

⚠ CAUTION

A SEPARATE FREEZE PROTECTION IS RECOMMENDED IF HEATING EQUIPMENT IS TURNED OFF, SOME PART OF THE HEATING EQUIPMENT HAS FAILED, OR THE EQUIPMENT IS UNPROTECTED DURING POWER OUTAGES AND FREEZE DAMAGE COULD OCCURE. ANITFREEZE SOLUTION IS RECOMMENDED EXCEPT ON POTABLE WATER SYSTEMS. BACKUP HEAT MAYBE REQUIRED ON POTABLE WATER SYSTEMS TO AVOID FREEZE DAMAGE.

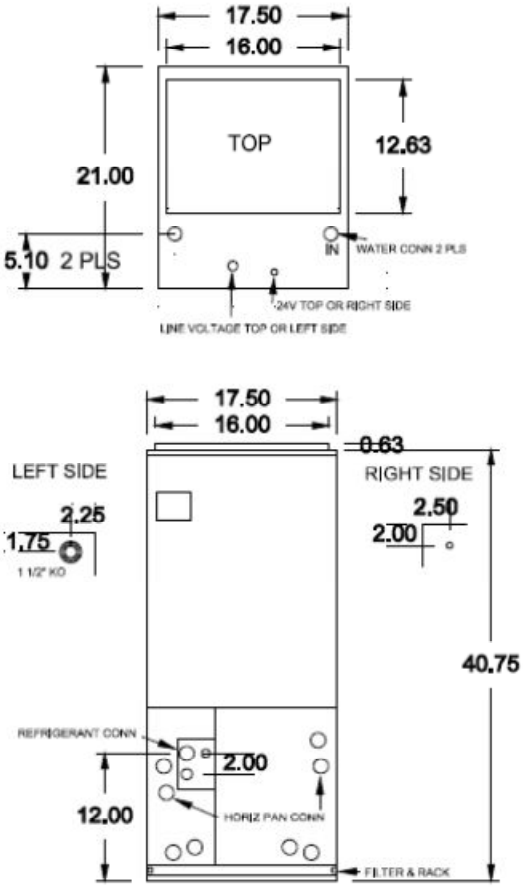
⚠WARNING

UNDER NO CIRCUMSTANCES WILL THE CFP AND / OR HFP DEVICES PROVIDE FREEZE PROTECTION TO ANY EQUIPMENT EXTERIOR TO THE AHG UNIT AND PROTECTION OF THE AHG UNIT IS SUBJECT TO LIMITATIONS DESCRIBED ABOVE UNDER NO CIRCUMSTANCES WILL HEAT CONTROLLER, INC., BE RESPONSIBLE FOR ANY DAMAGE THAT MIGHT RESULT FROM FAILURE OF THESE DEVICES OR OTHER COMPONENTS.

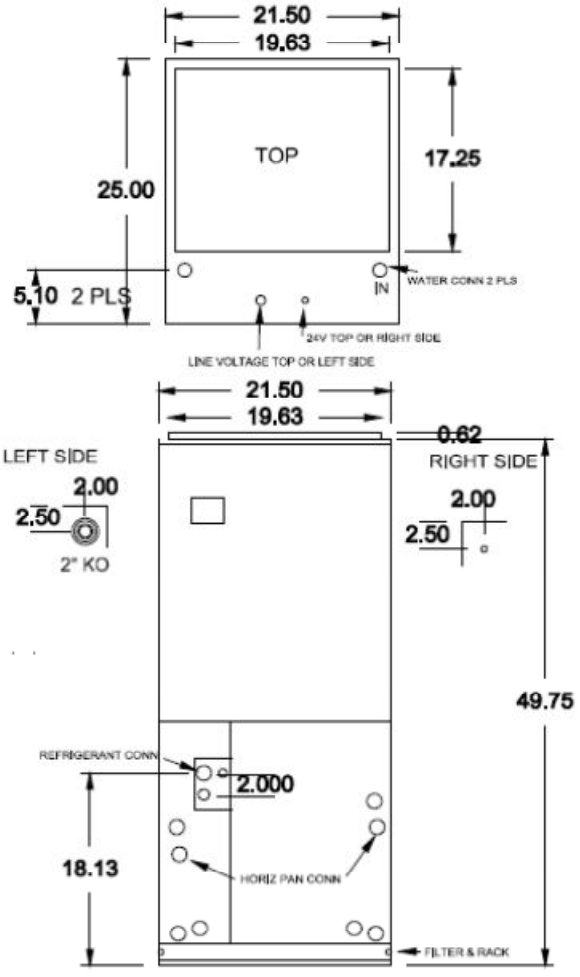
CFP and HFP - Thermostats are located on the discharge of the unit. Access to these thermostats for service replacement will require an opening in the discharge duct with suitable replaceable cover or the discharge duct must be removed temporarily.

DIMENSIONS

AHG24, AHG30



AHG36, AHG48, AHG60



WIRING DIAGRAM