

# Thermostat and 24 VAC Wiring

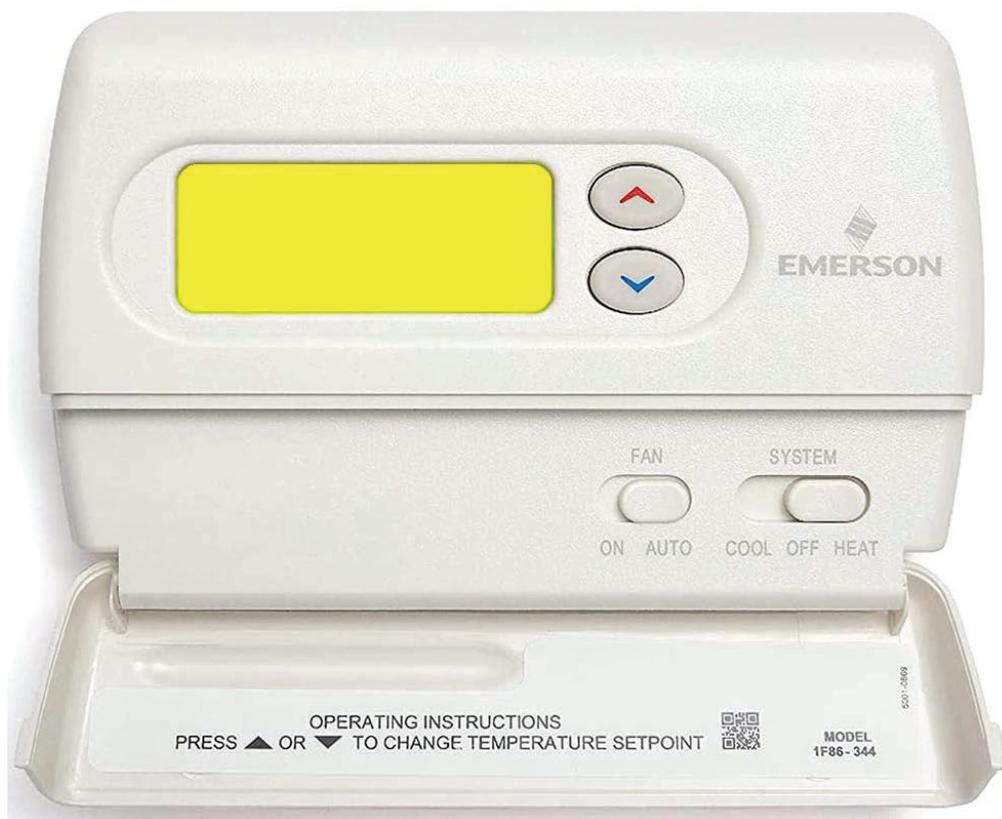
## *Thermostat Operating and Wiring Requirements*

The ELH series air conditioners are designed to be controlled by the 24 VAC thermostat provided in the installation kit or by our optional automatic thermostat.

The thermostat should be mounted on the return air duct mounting bracket (see Figure 1). The air conditioner and thermostat connect using the plug-in extension cable provided in the K/03621 (6531\_625) and K/03622 (6533\_625) Installation Kit.

The chart below details system functions.

SHOWS POSITION OF SWITCH					OPERATION
FAN		SYSTEM			
AUTO	ON	COOL	OFF	HEAT	
■	□	■	□	□	Compressor and blower cycle as required.
■	□	□	■	□	No functions occur.
■	□	□	□	■	Heater and blower cycle as required. Blower runs
□	■	■	□	□	continuously. Compressor cycles as required.
□	■	□	■	□	Blower runs continuously. No heating or cooling function occurs.
□	■	□	□	■	Blower runs continuously. Heater cycles as required.



## Start-Up

1. Before engaging power to any system, insure the following:
  - a) all tools have been removed from the equipment;
  - b) all wiring is attached, routed and properly secured;
  - c) all panels (both mechanical and electrical) are in place;
  - d) the thermostat system switch is placed into the “OFF” position and;
  - e) all co-workers have been warned that the equipment is being energized.
2. System wiring may be checked by referring to the wiring diagram located on the side of the unit.
3. Before beginning the checkout procedure, thoroughly read the checkout instructions.
4. After complying with steps 1 through 3, engage power to all systems and begin checkout procedure.

*Important:* Prior to starting the air conditioner, double check all electrical connections.

### Check out of Cooling Cycle

1. Set the cooling set point temperature on the thermostat to a temperature higher than the ambient temperature. Set the heating set point temperature to a temperature that is lower than the ambient temperature.
2. Set the thermostat system to COOL. Nothing should operate at this time. Slowly lower the thermostat’s cooling set point to a temperature until the switch closes. The compressor and both fans should begin operating at this time.

To stop cooling, slowly raise the set point temperature to a temperature higher than the ambient temperature.

### Check out of Heating Cycle.

1. Raise the heating set point temperature to a temperature which is higher than the ambient temperature. The fan and electric heat should turn on.
2. To stop heating, slowly raise the set point temperature to a temperature lower than the ambient temperature.