SAVE THESE INSTRUCTIONS

GENERAL INFORMATION

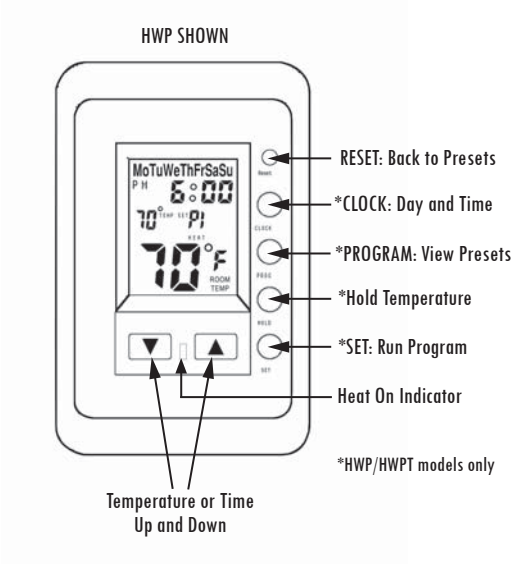
king

HW - HWP - HWPT
120 or 230 Series

⚠ DANGER ⚠

ELECTRIC SHOCK OR FIRE HAZARD

READ ALL WIRE SIZING, VOLTAGE REQUIREMENTS AND SAFETY DATA TO AVOID PROPERTY DAMAGE AND PERSONAL INJURY



SPECIFICATIONS (HW,P, T 120 and 230):
Temperature range: 40° to 95°F
Temperature Default: Program temperatures
Display Format: Liquid Crystal Display (LCD)
Display size: Large Format
Sample Rate: Every 60 seconds
Delay on or off - 1st relay: 3 minutes
Delay on 2nd relay: 1 minute from 1st relay
Illumination: Green LED
Heat indicator: Red LED
Relays Rating: 16 Amps before derating
Accuracy: ± 1.2°F
Maximum Amps: 12.5 resistive continuous
Maximum Watts:
3000 HW, P, T 230 per contact
1500 HW, P, T 120
Minimum Watts: 0
Power Supply: 120 Volt HW, P, T 120
208/240 Volt HW, P, T 230

GENERAL INFORMATION:

This thermostat is designed to provide the best temperature control for residential hot water fan heating. There are 120 and 208/240 Volt versions available. Most fan-forced hot water systems are 120 Volt. It is very rare to find a 240 Volt hot water installation. Check your Voltage to make sure you have the right thermostat for your heater Voltage. A 2 pole, or double wide circuit breaker, at the panel would indicate you should use the 240 Volt model; a single pole, or single wide breaker, would indicate a 120 Volt circuit. There are some exceptions to this rule so checking with a voltmeter is the only way to know for sure.

Be safe and smart! Electricity can cause severe injury or death if not treated with respect and caution. If you are uncomfortable hire an electrician for this project.

This thermostat will provide years of comfort control for your family for small fan-driven hot water circulation or electric heaters, baseboards, radiant ceiling or wall panel heaters, cove heaters, or any line voltage resistance heating systems that do not have an electric motor over 1/8 hp. The thermostat will be warm to the touch on top. This is the electronics operating and also helps provide air currents across the face of the sensor that better help it determine room temperature. The thermostat may display a temperature that is at least 3° off from a room thermometer placed next to it. This is normal and is an offset for heat generated inside the thermostat.

OPERATION:

This precision electronic thermostat will sense the room air at the bottom of the thermostat by a thermistor. This very sensitive thermistor will send information on to the microprocessor. As the temperature drops, the information sent will indicate if heat is needed. The processor has a 2 to 3 minute delay built in and a 1 minute delay on the second fan relay to verify if heat is really required and to reduce any undesirable fast on/off cycles. This saves energy and provides the best temperature control of a space. This thermostat does not require batteries and has a back-up for the program if the power goes out.

HWP - HWPT only: The default setting is 62°F set back, 70°F set up and a standard work week timing in memory, easily changed by tapping the SET and PROG buttons at the same time on the inside of the thermostat cover. Day and time of day can be adjusted by selecting the CLOCK button and using the arrow keys. For an override, the Up arrow increases temperature and the Down arrow reduces temperature when needing to readjust the temperature.

HWPT: This model adds a timer for the pump. As you connect the wires the timer is activated turning the pump on in 12 hours for 15 minutes. After this it will turn the pump on for 15 minutes every 24 hours to flush the system's lines.

Backlighting is provided and can be turned off/on by a small switch under the left corner of the thermostat. This light allows the thermostat to be seen in low light or at night. The thermostat may take a few hours to temperature stabilize the room temperature; Do not be alarmed when the thermostat does not show the correct temperature immediately after installation. A system switch is located under the right corner.

INSTALLATION:

This line voltage device should be installed and serviced by a qualified electrician. The thermostat has been designed to mount to a standard 2" x 4" electrical outlet box. Leveling of the thermostat is not required. #6-32 Phillips head mounting screws are provided.

Mount the thermostat in an open area about 5 feet above the floor. A good rule of thumb is to place the thermostat above the wall switch for that room. This works well for most bedrooms, making it very convenient to turn the heat lower upon leaving. Avoid mounting the thermostat where there may be plumbing pipes in the wall, or placing a lamp or TV too close to the thermostat. Heat from such items negatively effects the thermostat's performance.

KING ELECTRICAL MFG. CO. · 9131 10TH AVENUE SOUTH · SEATTLE, WA 98108 · PH: 206.762.0400 · FAX: 206.763.7738 · www.king-electric.com