

# Master Specification: Model CR

\_\_\_\_\_  
JOB NAME

\_\_\_\_\_  
ENGINEER

\_\_\_\_\_  
REPRESENTATIVE

\_\_\_\_\_  
CONTRACTOR

## GENERAL

Provide a quantity of \_\_\_\_\_ packaged type instantaneous electric circulation heater(s) Model No. \_\_\_\_\_ as manufactured by HUBBELL Electric Heater Co., Stratford, CT. The pressure vessel section, including the electrical control panel, shall be mounted on structural supports and be suitably insulated, jacketed, painted, and provided with proper lifting lugs. The entire unit is to be packaged ready for plumbing and electrical service connections and shall bear the UL listing mark certifying the entire unit.

## PRESSURE VESSEL

The pressure vessel shall be all welded Type 304 Stainless Steel. ( **Optional Specifications:** Carbon steel, galvanized steel, Type 316L Stainless Steel, 90/10 Copper-nickel, Copper-silicon) and rated for a maximum allowable working pressure of 150 psi. Units rated over 58KW shall be ASME Code Section IV stamped and approved. The pressure vessel is to be completely covered with 2" thick "E" type energy conservation fiberglass blanket insulation and enclosed in a heavy gauge galvanized steel metal jacket finished in gray hammertone enamel. The vessel shall be protected by a factory installed ASME rated combination temperature and pressure relief valve set at 150 psi and 210°F.

## RECOVERY

The recovery section shall be rated at \_\_\_\_\_ KW which will heat \_\_\_\_\_ GPM of water at \_\_\_\_\_ °F rise ( \_\_\_\_\_ ° to \_\_\_\_\_ °F).

## ELECTRICAL

The heater shall be designed to operate at \_\_\_\_\_ volts, \_\_\_\_\_ phase, \_\_\_\_\_ Hz, with a fused low voltage transformer providing 120 volt to all operating controls. The immersion heating element shall be low watt density, high quality copper sheathed ( **Optional Specifications:** Incoloy, Type 304 or 316 Stainless Steel, Steel, Monel, Inconel, Teflon, Titanium ) and sized to obtain the rated recovery. Each element circuit is to be independently operated through a definite purpose magnetic contactor having a resistive load rating equal to or exceeding the ampere rating of that particular circuit and shall be protected by individual fuses rated at approximately 125% of the ampacity of the circuit. Multiple circuit elements shall be provided with a master terminal block for connecting of the incoming power feeds ( **Optional Specification:** Built-in non-fused On/Off disconnect switch, Built-in circuit breaker with On/Off handle). A safety door interlock switch shall interrupt power to the control circuit when the control panel door is opened. The operating thermostat shall be immersion type and shall be consistent with the recovery rate of the heating element as to the number of steps required. A Hi-Limit control with a manual reset button shall be factory installed to disconnect all ungrounded conductors to the heating element in the event of an over-temperature condition. A paddle-type flow switch shall be factory installed to disengage the control circuitry when there is insufficient flow through the heater.

In addition, the circulation heater shall be supplied with the following optional features:

- Option \_\_\_\_\_
- Option \_\_\_\_\_
- Option \_\_\_\_\_

## WARRANTY

Hubbell shall warranty all electrical components against defects in workmanship and material for a period of one (1) year from date of start-up, and the pressure vessel for a full five (5) years Non Pro-Rated from date of start-up, provided that the unit is started within three (3) months of date of shipment and installed and operated within the scope of the vessel design and operating capability. Each heater shall be shipped with a complete set of installation and operating instructions including spare parts list and approved drawings.



*Committed to continuous improvement..*

Continuing research results in product improvement; therefore specifications are subject to change without notice. For the most updated information, consult the factory directly.

