

Packaged Hot Water Boilers/Calorifiers - Specifications

1.0 Scope

Supply an electrically heated hot water boiler/calorifier complete with standard equipment and options as indicated in the following specification.

2.0 General

- 2.1 The boiler/calorifier shall be electric resistance type VWB/VC/etc. as manufactured by CCI Thermal Technologies Inc.
- 2.2 The boiler/calorifier shall be constructed to the latest edition of the ASME code with the design registered in _____.

3.0 Capacity

- 3.1 The minimum boiler/calorifier output shall be _____ Btu's/hr.
- 3.2 The boiler/calorifier shall be rated at _____ volts, _____ phase, _____ kW, _____ HZ.
- 3.3 The boiler/calorifier shall be suitable for operating under the following conditions:
 - flow rate: _____ USGPM (l/s)
 - inlet temperature: _____ °F (°C)
 - outlet temperature: _____ °F (°C)
- 3.4 The boiler/calorifier vessel shall be designed for an operating pressure of _____ psig (kPa) maximum.

4.0 Controls

- 4.1 The boiler/calorifier shall be fully equipped with all electrical and mechanical controls so that it is complete and ready to operate.
- 4.2 Standard mechanical components provided shall include a pressure gauge with isolating stopcock, a temperature gauge, drain blowdown valve(s) as required, temperature controller, high temperature controller c/w manual reset and pressure relief valve(s).
- 4.3 Standard electrical components provided shall include a control circuit ON/OFF switch, fused control transformer, fused magnetic contactors derated to a maximum of 90% of their rated capacity, electronic low water controller, pilot lights for "Power ON", "Heat ON", "Low Water", and "High Temperature", and connection lugs for incoming power supply.
- 4.4 In addition to the standard components itemized in articles 4.2 and 4.3, the boiler/calorifier shall come equipped with the following optional features: (specify - see pages E26 and E28 for options)

5.0 Flange Heaters

- 5.1 The boiler/calorifier shall be equipped with flanged immersion heaters as manufactured by CCI Thermal Technologies Inc.
- 5.2 The flange heaters shall be Incoloy® sheathed and of low watt density.
- 5.3 (For VWB Boilers) The flange heaters shall be mounted vertically through the top of the vessel so as to minimize the build-up of solids on the heating elements.

or
- 5.3 (For Calorifiers) The flange heater shall be mounted horizontally as close as practical to the bottom of the vessel.

6.0 Enclosure

- 6.1 The hot water boiler/calorifier shall be equipped with a full structural steel base supporting the vessel, control panel and sheet metal enclosure.
- 6.2 The entire enclosure shall be finished with a baked on epoxy finish (ASA-61 gray).
- 6.3 The boiler/calorifier dimensions shall be approximately _____ high x _____ wide x _____ deep.
- 6.4 (For Calorifiers) The vessel storage volume shall be _____ U.S. gallons (litres).

Specifications