



BOILER DESCRIPTION

Horizontal fire tube boiler constructed of welded, hydrostatically tested, 1/4" ASME quality steel boiler plate, except front plate, rear plate, and inner head are 5/16" steel. Horizontal tubes are 2.38" OD by 1/4" wall ASME quality steel tubing.

Heating Process: The combustion chamber is surrounded by water on all sides except the bottom and the burner side. The combustion gas follows the curved upper wall of the combustion chamber and enters the 24 horizontal tubes which are surrounded by water. The water absorbs heat from the flue gas. Flue gas then exits the boiler vessel and is exhausted out the flue assembly.

Boiler vessel has room at the top for two domestic copper coil heat exchanger for heating potable process water. Connections are 3/4" NPT.

- Mounting Base: 8" x 48" x 28", concrete blocks or 1/4" steel frame (not included)
- Height including Base and Relief Valve: 52"
- Width including Controls: 28"
- Depth including Burner: 65"
- Additional Spacing for Installation:
 - Top and Piping: 6"
 - Burner Side (front): 24"
 - Sides: 6"
 - Back Side, and Flue Connections: 18"
- Flue size: 10" diameter, 10" x 10" x 9" flue tee with 9" barometric damper included
- Boiler Water Capacity: 52 Gallons
- Low Water Cutoff: ITT McDonnell & Miller 750P-MT-120 Manual reset per UL and ASME Codes
- Triple Aquastat Relay: Honeywell L8124A or C
- Honeywell Manual Reset High Limit per UL and ASME Codes Operating
- Water Pressure: 30 PSI max
- Operating Temperature: 230° F max
- Domestic Hot Water Coil Rating: 8.0 GPM
- Domestic Coil Connections: 3/4" NPT
- Complete System is UL Tested and Listed
- Boiler is ASME Certified
- Boiler Canadian Registration No. K3088
- Shipping Weight with Burner: approx 1,300 lbs
- Wet Weight: approx 2,000 lbs

COMBUSTION SPECIFICATIONS

- Atomizing Air Pressure: 13-15 PSI
- Fuel Flow Rate: 3.50 GPH max
- Input btuh: 500,000 max - Heating Capacity approx 13,000 sq. ft. with 16 ft. ceilings
- Input Voltage: 120 VAC/60 Hz
- Control Voltage: 24 VAC
- Operating Current: 11 Amps (burner, oil pump, and controls)
- UL Approved Fuels: Used Crankcase Oil, Used ATF, #2 Fuel Oil

BOILER PIPING CONNECTIONS

- 2.5" NPT Supply Port, see drawing for location on top boiler panel.
- 2.5" NPT Return Port, see drawing for location on back boiler panel.
- Control Aquastat Port: 1/2" NPT
- Low Water Cutoff Port: 3/4" NPT
- Temperature and Pressure Relief Valve Port: 3/4" NPT
- High Limit Control Port: 1/2" NPT