

Innovative. Efficient. Dependable. Dunkirk.

## Q90-200 Series II

90% AFUE Gas Fired Condensing Hot Water Boiler

- High Efficiency Cast Aluminum Monoblock Heat Exchanger with low pressure drop.
- Fuel Smart Hydrostat Control: 3 functions in 1 Control.
  - Temperature Limit Control with easy dial settings and function indicator lights.
  - Low Water Cut-Off (LWCO), protects the boiler from damaging low water conditions.
  - Boiler Reset, lowers the boiler temperature to save fuel without sacrificing comfort. Set-up is quick with no need to install an outdoor sensor, just dial in the number of heating zones.
- Integrated Microprocessor Control.
- Sealed Combustion, Direct Vent Forced Draft System.
- Utilizes economical CPVC, PVC and Polypropylene venting.
- Integral Combustible Floor Plate.
- Casting Temperature Safety Switch & Air Flow Pressure Switches.
- Limited 15 Year Warranty.



## Dunkirk Q90-200 Series II Natural or Propane Gas-Fired Condensing Hot Water Boiler

| Dimensions/Weights  |             | Model   | Boiler Input Rate<br>(MBH) <sup>(1)</sup>  |  | Ca   | eating<br>pacity<br>BH) <sup>(1)(2)</sup> | Net AHRI<br>Rating, Water<br>(MBH) <sup>(1) (3)</sup> | AFUE % (2) |  |
|---|-------------|---|--|--|--|---|---|------------|--|
| Combustion Air Intake   |             | Q90-125   | 125  |  |  | 113                                       | 98  | 90.0       |  |
| Fitting (2" PVC) Junction Box for 120 VPower 8 24 V Thermostat Leads  |             | Q90-150   | 150  |  |  | 134                                       | 117   | 90.0       |  |
|   |             | Q90-175   | 175  |  |  | 158                                       | 137   | 90.0       |  |
|   |             | Q90-200   | 200  |  |  | 180                                       | 157   | 90.0       |  |
|   |             | (1) 1000 Btu/hr (British Thermal Units Per Hour)  |  |  |  |   |   |            |  |
|   |             | (2) Heating Capacity and AFUE (Annual Fuel Utilization Efficiency) are based on DOE (Department of Energy) test procedures.   |  |  |  |   |   |            |  |
| Vent Tee<br>(2" CPVC)   |             | (3) Net AHRI Ratings based on piping and pickup allowance of 1.15. Contact Technical Support before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc. |  |  |  |   |   |            |  |
| <b>7</b> [L]  |             | General Information (See Installation, Operation and Maintenance Manual for complete instructions)  |  |  |  |   |   |            |  |
| Condensate Drain Fitting (1/2" PVC) Front   |             |   | Тор  |  | Combustible Materials<br>(Required) <sup>(4)</sup> |   | Service <sup>(5)</sup>                                |            |  |
| Opening for Relief Valve Discharge Pipe Opening for Air Vent and Expansion Tank Connection  |             | Clearances (4) Required distances measured from boiler. (5) Service, proper operation clearance recommendation. Note: May be installed on combustible flooring (No Carpets).  |  |  | 1" (25 mm)   |   | 8" (203 mm)   |            |  |
|   |             |   | Left Side  |  | 8" (203 mm)  |   | 24" (610 mm)  |            |  |
|   |             |   | Right Side   |  | 1" (25 mm)   |   | N/A   |            |  |
|   |             |   | Base   |  | 1" (25 mm)   |   | N/A   |            |  |
|   |             |   | Front  |  | 0" (0 mm)  |   | 24" (610 mm)  |            |  |
|   |             |   | Back   |  | 1" (25 mm)   |   | N/A   |            |  |
|   |             |   | Combustion Air/Vent Piping   |  | 0" (0 mm)  |   | N/A   |            |  |
| Standard Supply & Return Openings 1 1/4 NPT Connections Provided Inside Boiler Cabinet  Top  32 5/16  Right  Right  Leveling Feet  Leveling Feet  Leveling Feet  Leveling Feet  Right |             | Combustion Air<br>& Vent Pipe<br>Equivalent<br>Length   | Min. & Max. Vent Lengths - refer to the Installation Manual based on Natural or Propane Gas and Altitude.  |  |  |   |   |            |  |
|   |             |   | Vent Pipe - First 5' (1.6 m) is Schedule 80 2" CPVC (provided), then Schedule 40 2" or 3" PVC.   |  |  |   |   |            |  |
|   |             |   | Air Intake - Schedule 40 3" PVC  |  |  |   |   |            |  |
|   |             |   | Notes: 1 - 90° Elbow = 5 Ft. (1.6 m), 1 - 45° Elbow = 3.5 Ft. (1.1 m), 1 - 2" x 3"<br>Adapter = 0 Ft. (0 m), Concentric Vent Kit = 5 Ft. (1.6 m) equivalent length.  |  |  |   |   |            |  |
|   |             | Connections   | Return/Supply G<br>Water   |  | as In  | Condensate Drain                          |   |            |  |
|   |             | 125/150/175/200   | 1-1/4" NPT 1/2" NPT  |  |  | '   | 1/2" PVC  |            |  |
|   |             | Electrical  | 120 Volts AC, 60 hertz, 1 phase, Less than 12 amps (15 amp circuit recommended)  |  |  |   |   | ded)       |  |
|   |             | Water Content   | 125/150/175/200 - 2.6 Gallons  |  |  |   |   |            |  |
|   |             | Standard<br>Equipment   | Boiler Control Module: Integrated Microprocessor Control, Hi-Limit Control, Boiler Reset Control, Automatic Reset LWCO, Diagnostic Indicator Lights.  Heat Exchanger: Cast Aluminum Monoblock.  Combustion: Completely installed and wired safety control system with Stainless Steel Pre-Mix Gas Burner, Automatic Gas Valve, Hot Surface Igniter, Forced Draft Blower, Air Vent.  Electrical: Transformer, Service Switch & Outlet.  Other: Assembled boiler with pre-painted steel jacket, Combination Temperature/Pressure Gauge, 30 psi ASME Relief Valve, Casting Temperature Safety Switch, Air Flow Pressure Switches, Boiler Drain. |  |  |   |   |            |  |
|   |             | Options   | Taco or Grundfos Circulator  |  |  |   |   |            |  |
| Model Ship  | Wgt.        | Certifications  |  |  |  |   |   |            |  |
| Q90-125 284 (128.8  |             |   |  |  |  |   |   |            |  |
| Q90-150 284 lbs. (128.8 kg.)  |             |   | LEARN MORE AT energy stategov  So psi MAWP   |  |  |   |   |            |  |
| Q90-175 (128.8  | (128.8 kg.) |   |  |  |  |   |   |            |  |
| Q90-200 284 (128.8  |             |   | 30 partier   |  |  |   |   |            |  |
| All ratings and specifications subject to change. PN 240005047 Rev. 10/1  |             |   |  |  |  |   |   |            |  |



Contractor







