# Dunkirk Q90-100

### Innovative. Efficient. Dependable. Dunkirk.

## Q90-100

#### 90% AFUE Gas Fired Condensing Hot Water Boiler

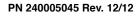
- High Efficiency Cast Aluminum Heat Exchanger with low pressure drop.
- Honeywell 2012 Compliant High Limit/Direct Spark Ignition (DSI) Control.
  - Recessed under the boiler's protective jacket.
  - Digital temperature display with easy setpoint adjustments and diagnostics.
  - Direct Spark Ignition for reliability.
  - Plug in connection for the Inducer Fan. Control monitors the water temperature and delays the burner starting until residual heat has been transferred. This maximizes efficiency by turning on the burner only when needed.
- Small compact design is ideal for low clearance/limited space installations.
- · Stainless Steel Premix Burner for corrosion resistance.
- Induced Draft Blower with adjustable exhaust (front, right side or rear) and compact condensate collection fitting.
- · Easy to Install & Service.
- Junction Box provided.
  - Removable control panel for quick access.
- Low profile condensate trap reduces internal plumbing of condensate drain lines.
- Limited 15 Year Warranty.



### Dunkirk Q90-100 Natural or \*Propane Gas-Fired Condensing Boiler

Dimensions/Weights	s Model		er Input Ra (MBH) <sup>(1)</sup>	te Heating Capacity (MBH) <sup>(1)(2)</sup>		Net AHRI Rating, Water (MBH) <sup>(1)(3)</sup>	AFUE % <sup>(2)</sup>	
	Q90-050		50		45	39	90.0%	
	Q90-075		75		68	59	90.0%	
	Q90-100*		100		90	78	90.0%	
	(1) 1000 Btu/hr (British	Thermal Units Per Ho	our)					
	(2) Heating Capacity ar	(2) Heating Capacity and AFUE (Annual Fuel Utilization Efficiency) are based on DOE (Department of Energy) test procedures.						
	piping and pickup requi	(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.						
		*The 90-100 Series II model is certified for natural gas only. The 90-100 Series III model is certified for natural gas and propane. General Information (See Installation, Operation and Maintenance Manual for complete instructions)						
Тор	General Infor	mation (See Ins	stallation, Operation	n and Maintenance	Manual for comp	lete instructions)		
28 3/4"	-			Combustible Materials (Required) <sup>(4)</sup>		Service <sup>(5)</sup>		
	Clearances	Тор		1" (26 mm)		8" (204 mm)		
17 1/4"	(4) Required distances	Left Side		1" (26 mm)		-		
	measured from	Right Side		11" (280 mm)		_		
	boiler. (5) Service, proper	Base		1" (26 mm)		-		
	operation clearance recommendation.	Front		1" (26 mm)		24" (610 mm)		
		Back		1" (26 mm)		-		
RETURN WATER		Combustion A	Combustion Air/Vent Piping		mm)	_		
ELECTRICAL JUNCTION BOX	Combustion	Min. Length		2" Pipe 050/075	2" Pipe 100	3" Pipe 050/075	3" Pipe 100	
2" COMBUSTION AIR 2" COMBUSTION AIR 1/2" PVC CONDENSATE DRAIN CONNECTION	Combustion Air & Vent Pipe Equivalent			2 Ft. (0.61 m)	2 Ft. (0.61 m)	20 Ft. (6.09 m)	15 Ft. (4.57 m)	
	Length (Schedule 40	Max. Length		26 Ft. (7.92 m)	21 Ft. (6.40 m)	112 Ft. (34.14 m)	92 Ft. (28.04 m)	
	PVC)	<b>Notes:</b> 1 - 90° Elbow = 5 Ft. (1.6 m), 1 - 45° Elbow = 3.5 Ft. (1.1 m), 1 - 2" x 3" Adapter = 0 Ft. (0 m), Concentric Vent Kit = 5 Ft. (1.6 m) equivalent length.						
	Connections	Return/Supply	y Water	Gas In	Gas In Condensate Drain			
	050/075/100	1-1/4" NPT 1/2" NPT 1/2"				1/2" NPT		
	Electrical	120 Volts AC, 60 hertz, 1 phase, Less than 12 amps (15 amp circuit recommended)						
Left ALTERNATE	Water Content	050/075/100 - 2.6 Gallons						
ALTERNATE 1 1/4" NPT SUPPLY WATE		Boiler Control Module: Honeywell Integrated Boiler Control, Electronic Hi-Limit Aquastat, Boiler Temperature Reset, Removable Control Panel, LED Display with easy to read and adjust setpoints, parameters and diagnostic codes. Heat Exchanger: Cast Aluminum Heat Exchanger Combustion: Stainless Steel Premix Burner, Direct Spark Ignition, Induced Draft Blower with adjustable exhaust (front, right side or rear), 5' schedule 80 2" CPVC and CPVC Tee. Electrical: Junction Box, Transformer. Other: Temperature/Pressure Gauge, 30 PSI Safety Relief Valve, Low Profile Condensate Trap, Air Vent, textured painted steel jacket. Note: 90-100 Series III also features an Inducer Motor Assembly, (2) Pressure Switches and a new Wiring Harness.						
	Options	Taco or Grund	lfos Circulator					
	hip Certifications							
	lbs. ) kg)							
090-075	lbs. ) kg)	LEARN MORE AT energystar.gov	CERTIFIED	C C	US F		ww.ahridirectory.org	
	lbs. ) kg)							

All ratings and specifications subject to change.





P.O. Box 4729 Utica, New York 13504 tel: 315.797.1310 • fax: 315.797.3762 www.dunkirk.com

