Dunkirk Royal Series

RESIDENTIAL
CONDENSING GAS FIRED BOILERS

Advanced Home Heating For Dependable Comfort

The **Royal Boiler Series** is designed for optimal performance to reduce energy use and provide years of reliable operation.

10 Year Heat Exchanger Limited Warranty
5 Year Parts Limited Warranty

TAKE ADVANTAGE OF REBATES with 95+% AFUE

Stainless Steel Water-Tube Heat Exchanger
Intuitive Control for Easy Use and Setup
95.2% AFUE with up to 10:1 Turndown
Designed for Easy Install and Service
Combi Models Offer Domestic Hot Water
Advanced Safety Features for Peace-of-Mind
Natural Gas - Easily Converted to Propane

Dunkirk®

ECO Friendly

ENERGY STAR

Innovative. Efficient. Dependable. Dunkirk.

www.dunkirk.com
PN 240013861 Rev. [10/01/26]

Leading Innovation For Modern Heating Systems

State-of-the-art technology and materials are used for durability, superior heating, corrosion resistance and quiet operation. Cold burner door technology improves efficiency and lowers surface temperature.

Advanced Combustion Design provides high efficiency with up to a 10:1 turndown ratio and the stainless steel pre-mix burner ensures efficient and cleaner combustion. BlueJet burner improves flame stability and reduces Nox.

Combination (COMBI) models also offer domestic hot water and home heating in one appliance, eliminating the need for a traditional tank-style water heater.

Flexible Installation with adjustable 3 in 1 vent connector to adapt to different vent materials. Direct venting up to 150 feet. Light weight wall hung design.

Sized Right for any application with a range of 8 models with inputs from 80,000 Btu/h - 200,000 Btu/h with built in cascade functionality for larger installs.

The Right Heating Solution For Your Home & Family

Enjoy Modern Comfort when paired with radiant floor heating or radiators.

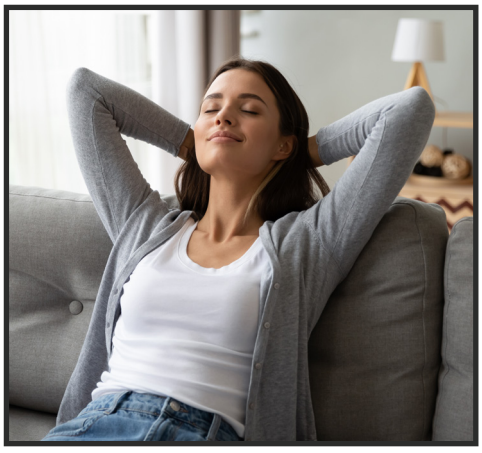
Additional Safety Features ensure reliable worry free operation.

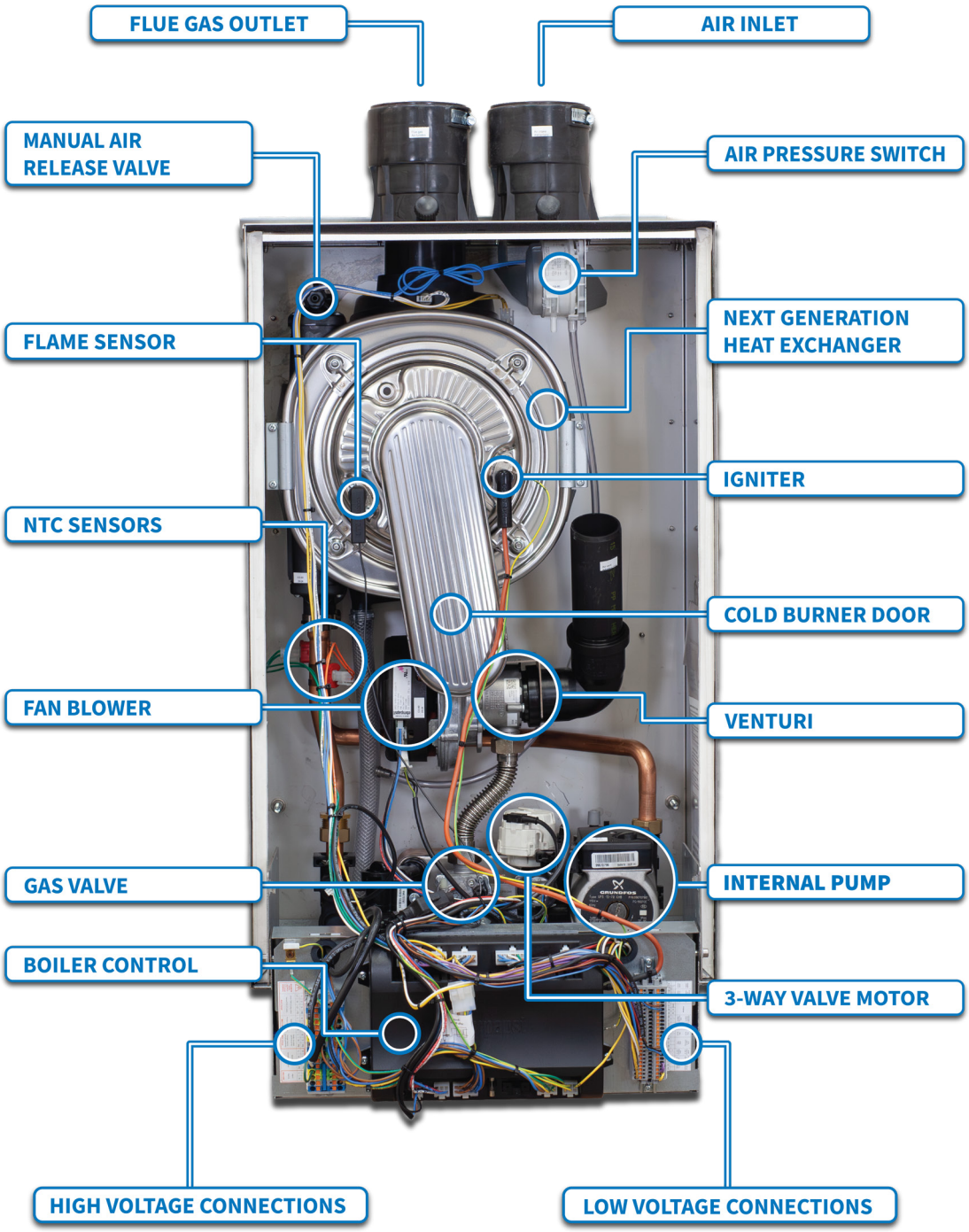
Heat Only models pair with our optional H2O indirect hot water heaters available in 30 - 115 Gallon sizes.

Save Energy, Save Money

User Friendly, Quiet Operation

Worry Free Performance





Control Features

The control modulates the gas input with up to a 10:1 turndown ratio to ensure the highest optimization of the boiler's combustion. This results in less energy consumption and safe, reliable operation. The control display can be set to 1 of 18 different languages.

- Full text and graphical interface
- Error logging with time and date stamp
- Anti-cycling time helps prevent short cycling
- Outdoor reset option
- Built in cascade control - up to 16 boilers*
- Circulator exercising every 24 hours
- Frost and flue temperature protection
- Central heating and DHW heating modes
- 0 - 10 Volts Equipped
- BMS Modbus Standard

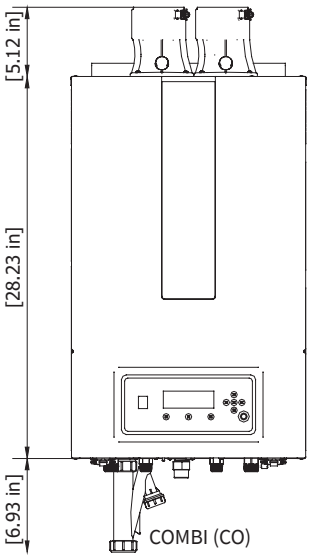
*Cascading units requires a system flow temperature sensor, sold separately.

Product Specifications

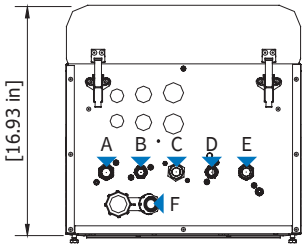
Residential Condensing Gas-fired Water Boiler

MODELS		INPUT MBH[1]				DHW	AHRI RATINGS		
Type		CH Mode MIN	CH Mode MAX	DHW Mode MIN	DHW Mode MAX	Flow Rate GPM[4]	Heating Capacity MBH[1][2]	Net Water MBH[1][3]	Efficiency AFUE[2]
COMBI (CO)	CO-90	9	80	9	90	2.5	74	64	95.2%
	CO-150	15	120	15	150	3.7	110	96	95.2%
	CO-200	20	180	20	200	5.1	167	145	95.2%
HEAT ONLY (CH)	CH-80	8	80				74	64	95.2%
	CH-100	10	100				92	80	95.2%
	CH-120	12	120				110	96	95.2%
	CH-150	15	150				139	121	95.2%
	CH-180	18	180				165	143	95.2%

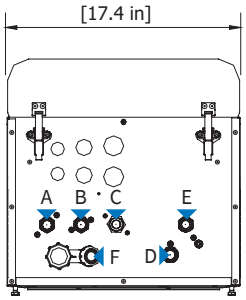
(1) 1000 Btu/h (British Thermal Units Per Hour)
(2) Heating capacity and AFUE (Annual Fuel Utilization Efficiency) are based on DOE (Department of Energy) test procedures.
(3) Net AHRI Ratings based on piping and pickup allowance of 1.15. Consult manufacturer before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.
(4) DHW (Domestic Hot Water) Flow Rate based on 70°F temperature rise.
Electrical: 120 V ac, 60 hertz, 1 phase, 12 amp minimum size circuit (15 amp recommended)
All Specifications Subject to Change Without Notice.



COMBI (CO)



COMBI (CO)



HEAT ONLY (CH)

CONNECTIONS (CH: Central Heating Only, CO: Combi)			
A	Supply	NPT 3/4”	3” Flue Connection. (2” Requires Reducer) Twin Pipe Venting With Adjustable Boiler Vent Connector Collar For Different Vent Materials. (PVC, CPVC, Polypropylene, Stainless Steel) See IOM for full venting details.
B	Indirect DHW (CH)	NPT 3/4”	
	Supply Tap Water (CO)	NPT 1/2”	
C	Gas	NPT 3/4”	
D	Indirect DHW (CH)	NPT 3/4”	
	Return Tap Water (CO)	NPT 1/2”	
E	Return	NPT 3/4”	
F	Condensate	Flexible hose Ø 1.06”	

Exceptional Support

When it comes to **support**, Dunkirk offers service that’s **beyond compare**.
Our **US-based** support team is here for you!

Visit **dunkirk.com** to learn more about our products and find a Dunkirk dealer in your area with our **FIND A DEALER** tool.

www.dunkirk.com

ECR international

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