



# DWB COPPER WATER BOILER

## CCB COMBI CHB HEATING



### 85% AFUE EFFICIENCY

The DWB is a simple, economical, dependable approach to residential heat and domestic hot water.

- Inducer fan and gas valve modulate for operation between 33% and 100% of capacity for fuel economy
- Chimney and Horizontal vent
- Advanced Controls - Digital display with temperature indication, diagnostics and status symbols showing heating mode, burner on and burner modulation level
- Durable lightweight one piece steel jacket
- Wall Hung (optional floor base available)
- LABOR SAVER™ Manifold Included
- Warranty Coverage:  
10-Year Limited Copper Heat Exchanger Warranty  
2-Year Limited Parts Warranty

## COMBI & HEAT ONLY MODELS

### CCB-150 Model Combination (Combi) Heating and Domestic Hot Water (DHW)

- Available in 150 MBH
- 3.6 gpm at 70°F Temperature Rise
- Advanced Controls - additional DHW Mode
- Stainless Steel Brazed Plate Heat Exchanger for potable domestic hot water

### CHB-100, CHB-130, CHB-150 Space Heating Only

- Available in 3 sizes: 100, 130, and 150 MBH
- Dedicated DHW connections for adding an Indirect Water Heater



Optional Floor Base Available

LABOR SAVER™ Manifold Included



## DWB SERIES

### Simple...

#### Modern doesn't mean complicated...

Some of the best ideas actually are pretty simple, like the Dunkirk DWB. The DWB Series is a "best of both worlds" alternative to large conventional cast iron boilers and more expensive wall hung condensing boilers. DWB saves on living space, is lightweight and wall hung.

The Dunkirk DWB Series is ideal for both heating only and "combi" or combination heating and domestic hot water applications including:

- Single Family Homes
- Apartments/Multi-Family Dwellings with Individual Appliances
- Retro-fits for High Temperature Systems



The DWB's special copper heat exchanger design with a protective high temperature coating ensures years of reliable operation. The DWB is much smaller and lighter yet transfers heat seven times faster than cast iron.

Copper makes the DWB a compact, lightweight wall hung unit that saves valuable space and protects the boiler from basement flooding by getting it up off the floor. If wall mounting is not practical, an optional floor base is available.

### Economical...

#### Modulation...

The DWB's advanced control system gives you what you want when you need it. Your heating systems' boiler is sized to keep you warm during the coldest days of the year. But in the summer months all that fuel is not required to keep you warm and comfortable. The DWB's advanced modulating control system measures how much fuel is required based on load conditions (how cold it is outside) and delivers only what is needed. This is modulation and it burns less fuel, saves you money and is good for the environment.

The DWB boiler is 85% efficient, however the actual efficiency of a boiler is dependent upon the heating system it is matched with. If your home was designed to minimize the amount of heat emitters (baseboard, radiators etc.) then it was likely designed to run at high temperature water supply which is ideal for a non-condensing boiler.

Conversely, if your home was designed for maximum heat emitters, then it was designed to operate at low temperature water supply and should be matched with a condensing boiler like the Dunkirk VLT 95% model to maximize efficiency

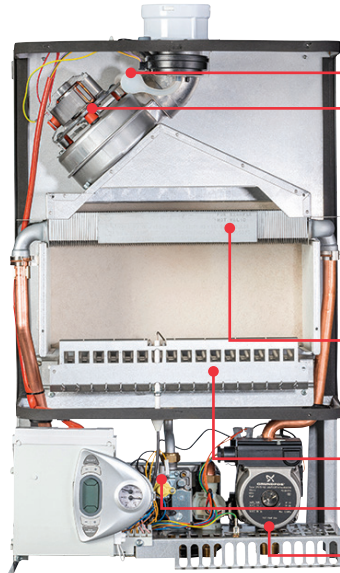
Make sure to consult with your professional contractor to match the right boiler to your heating system to maximize efficiency and make the best choice for your home.

### DEPENDABLE

The DWB Series features proven copper heat exchanger technology that has been in use for decades and reliable direct spark ignition. Dunkirk's quality construction is backed by a full 10 year limited copper heat exchanger warranty and a 2 year limited parts warranty.

The DWB is a simple, economical, dependable approach to residential heat and domestic hot water.

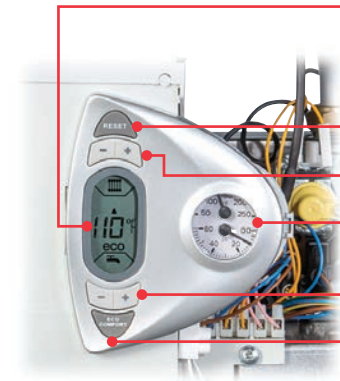
**DWB Combi Unit (CCB-150)**



**FRONT OF BOILER**

- Cold Climate Operation**  
Condensate collector keeps condensation from impacting the pressure switch operation.
- Modulating Fan With Air Pressure Sensor**  
Automatically adjusts the fan speed according to the flue draft.
- Copper Heat Exchanger**  
Features high temperature corrosion resistant protective film.
- Stainless Steel Burners**
- Modulating Gas Valve**
- 3-Speed Pump with Anti-Seize**  
Every 24 hours, pump will run for 5 seconds.

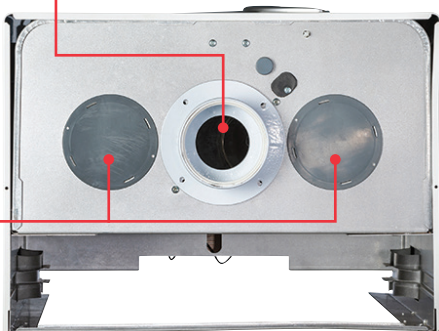
**CONTROL DISPLAY**



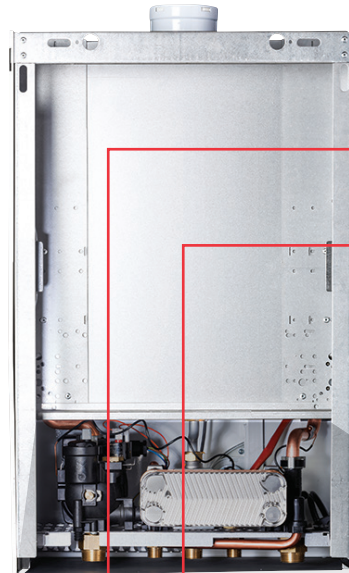
- LCD Display**
  - DHW Request
  - CH Request
  - Operating Temp.
  - Eco/Comfort
  - Burner On
  - Burner Power
- Reset**
- Central Heating Settings**
- Water Pressure and Temperature Gauge**
- Domestic Hot Water Settings**
- ON/OFF & Comfort Mode Key**

**TOP OF BOILER**

- Air Intake**  
2 Alternate Locations
- Flue Exhaust**
- Boiler Venting Options**  
Category I – Chimney Venting  
Category III – Sidewall

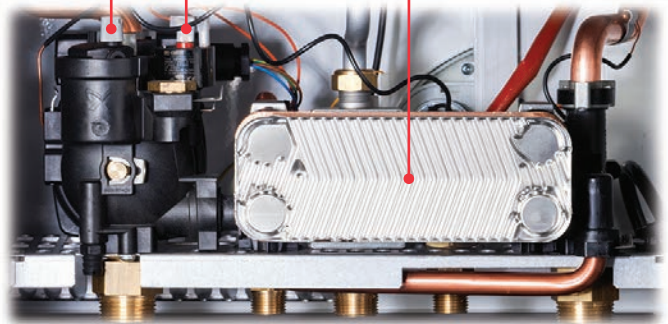


**A CLOSER LOOK DWB**



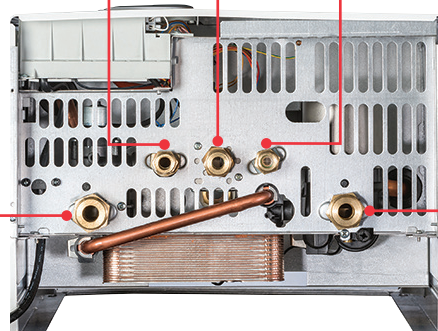
**BACK OF BOILER**

- Air Vent**  
Integrated in the pump block.
- 24-Volt Diverting Valve- Priority for Domestic Hot Water**
- DHW Stainless Steel Brazed Plate Heat Exchanger**



**BOTTOM OF BOILER**

- 3/4" DHW Out**
- 3/4" Gas**
- 3/4" DHW In**
- 3/4" CH Supply**
- 3/4" CH Return**



## RATINGS

MODEL	AHRI CERTIFIED RATINGS <sup>(1)</sup>					DIMENSIONS						
	Max Input MBH	Min Input MBH	Heating Capacity MBH <sup>(2)</sup>	Net Water MBH <sup>(3)</sup>	Efficiency AFUE% <sup>(2)</sup>	Vent Diameter <sup>(4)</sup>		Water Content GAL.	-A- Width	-B- Height	-C- Depth	Weight Lbs.
						Chimney	Sidewall*					
CHB-100	100	31.5	85	73	85%	4"	3"	.211	15-3/4"	27-9/16"	13"	61
CHB-130	130	43.5	110	96	85%	4"	3"	.317	15-3/4"	27-9/16"	13"	65
CHB-150	150	50.0	130	110	85%	4"	3"	.396	17-23/32"	27-9/16"	13"	69
CCB-150	150	50.0	130	110	85%	4"	3"	.396	17-23/32"	27-9/16"	13"	74

### CONNECTIONS

Water Supply & Return	3/4"
Gas Connections	3/4" NPT
DHW Inlet/Outlet/Indirect Tank	3/4" NPT

### ELECTRICAL

120 V ac, 60 hertz, 1 phase, less than 12 amps (15 amp circuit recommended)

### STANDARD EQUIPMENT

Boiler Control Module: High Limit/Electronic Ignition Control.  
 User Display Interface: Digital Temp. Display with diagnostics with programmable settings.  
 Heat Exchanger: Copper Fin Tube. (CCB-150 combination boiler includes a stainless steel brazed plate heat exchanger.)  
 Valve: 3-Way Water Diverting Valve.  
 Combustion: Completely Installed and Wired Modulating Gas Control System (100% to 33%) with Stainless Steel Burners and Manifold consisting of: Automatic Modulating Gas Valve, Direct Spark Ignition Control, 100% Shut Off, Combination Spark Electrode/Flame Sensor.  
 Safety: Pressure Switch (vent safety shutoff).  
 Other: Assembled Boiler with Jacket, Induced Draft Fan, Combination Temperature/Pressure Gauge, Circulator Pump, Gas Shut Off Valve and Field installed - 30lb. ASME Relief Valve

### OPTIONS

LP Gas Conversion Kit, Horizontal Vent Termination Concentric Kit, Indirect Hot Water Tank Sensor, Outdoor Air Temperature Reset Sensor.

\* Horizontal Venting requires field supplied appliance adapter for the boiler flue outlet.

(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.

(3) Net AHRI Water Ratings shown 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) Boiler is provided with an 3" vent connection. An 3" x 4" increaser must be field supplied for chimney vent applications. This does not infer that the connection to the chimney will always be 4". Please refer to IOM, National Fuel Gas Code, ANSI Z223.1/NFPA54, or applicable provisions of the local building codes for details concerning proper chimney connections.

DWB Combi Unit (CCB-150) Shown

