

CERTIFIED TO ANSI Z21.13 — CSA 4.9

#### CONDENSING WALL-MOUNTED, GAS-FIRED COMBIBOILER (CENTRAL HEATING AND DOMESTIC HOT WATER)

<b>Models</b>	IP175199C, IP199199C
<b>Appliance</b>	Wall-Mounted, Gas-Fired Combi Boiler
<b>Installation</b>	Indoor
<b>Gas Types</b>	Natural Gas (or Propane with field conversion)
<b>Standard Features</b>	<ul style="list-style-type: none"> <li>• Factory Installed Pump</li> <li>• Outdoor Reset Control System with Sensor</li> <li>• Priority/Proportional DHW Standard</li> <li>• Built-in DHW Plate Heat Exchanger</li> <li>• Modulating Burner</li> <li>• Stainless Steel Water Tube Condensing Heat Exchanger</li> <li>• Direct Vent Sealed Combustion</li> <li>• Approved for Room and Closet Installations</li> </ul>
<b>Included with Purchase</b>	<ul style="list-style-type: none"> <li>• Condensing Gas Boiler with Integrated Pump</li> <li>• Wall Mounting Bracket</li> <li>• CH Pressure Relief Valve (30 PSI)</li> <li>• Outdoor Temperature Sensor</li> <li>• Vent Top with Integrated 2 in. PVC or 3 in. x 5 in. Concentric Vent Adapter</li> <li>• Documentation: Installation and Operation Manual, User Manual</li> </ul>
<b>Optional Accessories</b>	Primary-Secondary Heating Kit (PN: 807000212), Condensate Neutralizer (PN: 804000074), ScaleCutter (PN: 103000038), ScaleCutter Refill Cartridge (PN: 103000039), and Isolation Valve Kit (PN: MIVK-T-LW)
<b>Venting Options</b>	<ul style="list-style-type: none"> <li>• Direct Vent (Concentric and Twin Pipe)</li> <li>• Room Air</li> <li>• Ubbink Flex Vent</li> <li>• Materials: Polypropylene, Stainless Steel, PVC, CPVC</li> </ul> Refer to the Boiler Installation and Operation Manual for approved venting.

#### Maximum Equivalent Vent Lengths

Concentric, Twin Pipe, and Room Air:

Vent Sizes	• 2 in. PVC	• 3 in. PVC
	• 2 in. (60 mm) PP	• 3 in. (80 mm) PP
	• 2 in. x 4 in. Concentric	• 3 in. x 5 in. Concentric
Vent Lengths	75 ft (23 m)	160 ft (49 m)

Flex:

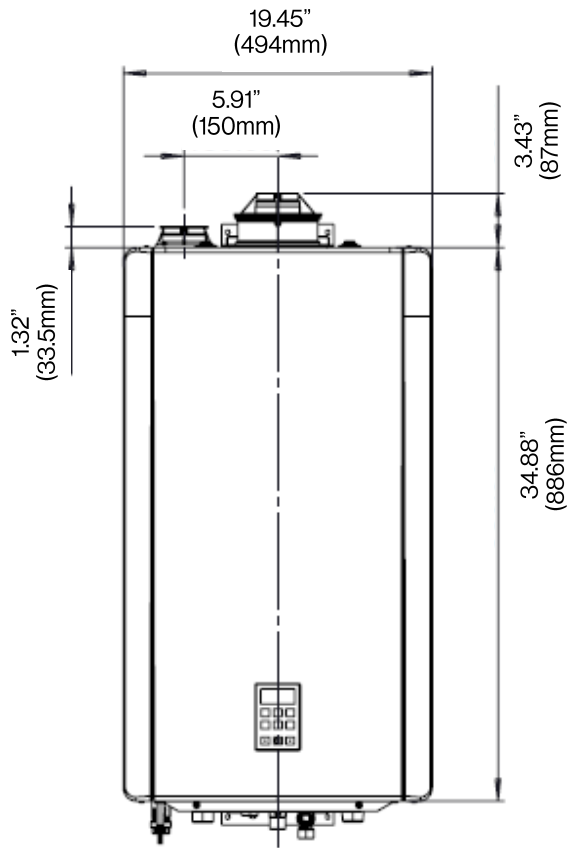
Vent Sizes	2 in. PP
Vent Lengths	50 ft (15 m)

For detailed venting information, refer to the Boiler Installation and Operation Manual.

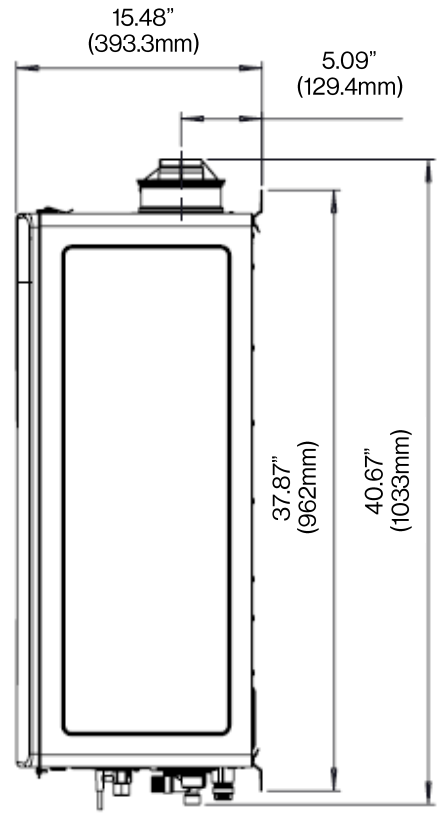
**DIMENSIONS**

Measurements: in. (mm)

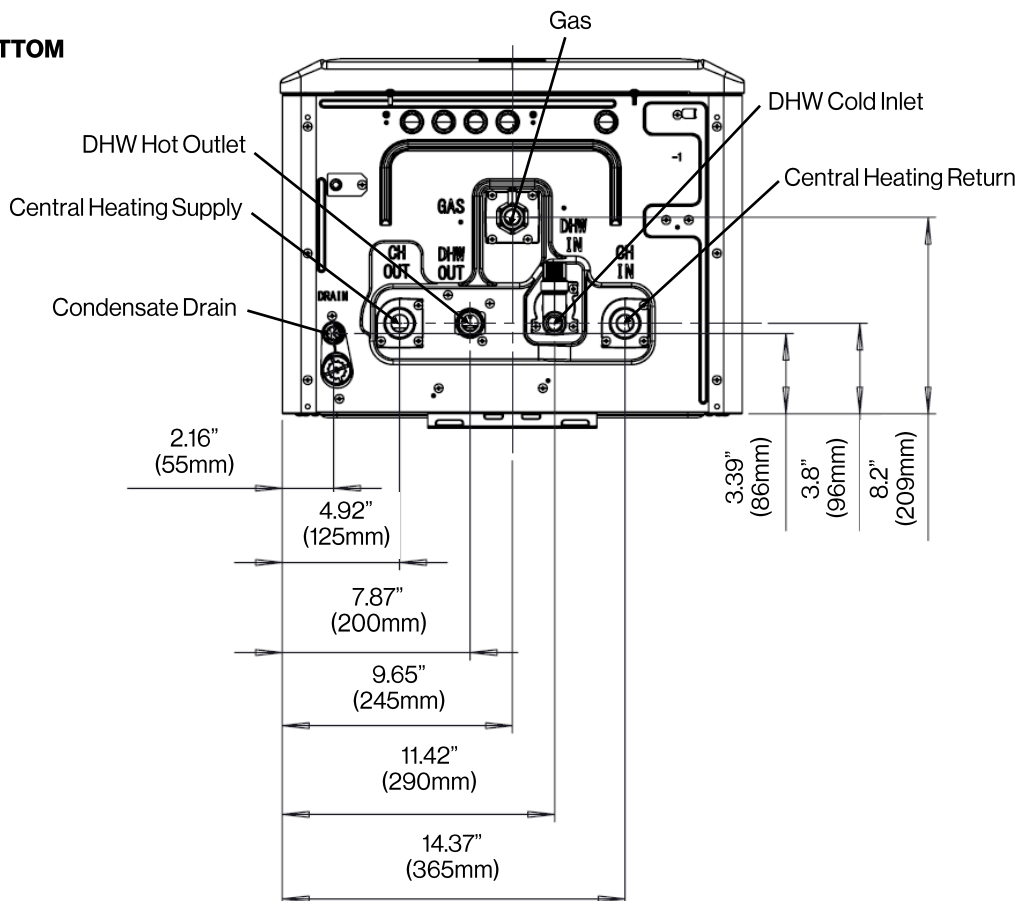
**FRONT**



**SIDE**



**BOTTOM**

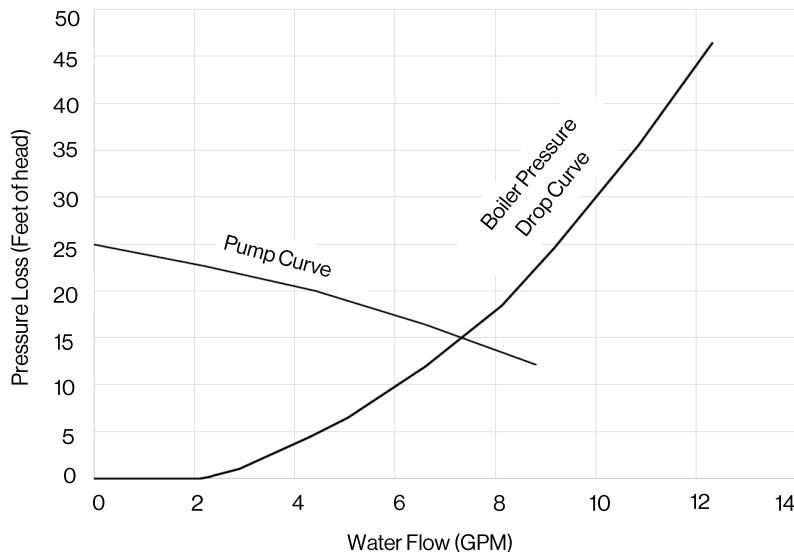


## TECHNICAL SPECIFICATIONS

Model		IP175199C	IP199199C
Dimensions - w, h, d	Unit	189.45 in. x 34.88 in. x 15.48 in. (494 mm x 886 mm x 393 mm)	
	Shipping	23.6 in. x 45.3 in. x 19.7 in. (600 mm x 1,150 mm x 500 mm)	
Weight	Unit	123.5 lb (56 kg)	
	Shipping	138.6 lb (63 kg)	
Ignition System		Direct Electronic Ignition	
Heat Exchanger Surface Area		15.6 sq ft	
Gas Consumption (Btu/hr)	Minimum	15,000	
	Maximum (CH)	175,000	199,000
	Maximum (DHW)	199,000	199,000
Heating Capacity (MBH)		160	181
DHW Specification	Minimum Activation Flow Rate	0.4 GPM (1.5 L/min)	
	Minimum Operation Flow Rate	0.26 GPM (1.0 L/min)	
	Maximum Flow Rate	7.9 GPM	9.8 GPM
	Flow Rate at 70°F (39°C) rise	4.1 GPM	5.1 GPM
Temperature Setting	CH	(Minimum - Maximum) 86°F - 180°F (30°C - 82°C)	
	DHW	(Minimum - Maximum) 98°F - 140°F (37°C - 60°C)	
Water Content	CH	2.4 gal	
	DHW	0.05 gal	
Water Pressure	CH	Minimum: 13 PSI (90 kPa) Maximum: 45 PSI (310 kPa) Recommended: 17-26 PSI (117-180 kPa)	
	Pressure Relief Valve for CH (included with system)	30 PSI (207 kPa)	
	DHW	Minimum: 20 PSI (138 kPa) / Maximum: 150 PSI (1,034 kPa) (Recommend 30-80 PSI for Maximum Performance)	
Grundfos Pump Model		Grundfos UPS 15-78	
Sound Level		42dB(A)	
Electrical Data	Normal (CH)	207W	
	Standby	8 W	
	Max Current	14 Amps	
	Fuse	10 Amps x1, 4 Amps x5	
Gas Supply Pressure <sup>1</sup>	Natural Gas	3.5 in. - 10.5 in. W.C. (0.87 - 2.61 kPa)	
	Propane	8.0 in. - 13.5 in. W.C. (1.99 - 3.36 kPa)	
Electric Connections		AC 120 Volts, 60 Hz	
Turndown Ratio (TDR)		11.7:1	13.3:1
AFUE		95.0	90.5
Certifications		ANSI Z21.13, CSA 4.9, ASME	

<sup>1</sup> The maximum gas supply pressure must not exceed the value specified by the manufacturer.

## PRESSURE DROP AND WATER FLOW CURVE



## FEATURES

### Faster, Easier Installation

- Compact & lightweight design
- Convenient mounting bracket
- NPT threads for connection points
- More flexible venting options
- Simplified parameters for commissioning and setup

### Clearances

- Top: 2 in. (51 mm)\*
- Bottom: 12 in. (305 mm)
- Front: 6 in. (152 mm)\*\*
- Back: 0 in.
- Sides: 2 in. (51 mm)
- Vent: 0 in.

\* 0 in. from vent components.  
6 in. (152 mm) for closet installations.

\*\* Clearance for servicing is 24 in. (610 mm) in front of boiler.

### Warranty

Residential:

- Heat Exchanger: 12 Years
- All Other Parts/Components: 5 Years
- Labor: 1 Year

Commercial:

- Heat Exchanger: 5 Years
- All Other Parts/Components: 5 Years
- Labor: 1 Year

### Important

- If the boiler is to be installed in a system that has multiple zones, a Closely Spaced Tee/Manifold Kit is recommended to be installed.

DHW = Domestic Hot Water  
CH = Central Heating  
PRV = Pressure Relief Valve

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