

Technical Data Sheet

Innovation (600N-1350N) Water Heaters

The AERCO Innovation Water Heater utilizes state-of-the-art technology to easily meet highly diverse, demanding commercial and industrial hot water requirements in a compact and reliable condensing design.

The durable, highly reliable AERguard™ stainless steel helical firetube heat exchanger assembly is thermal shockproof and scale resistant for extended life. The all stainless steel construction maximizes longevity in the condensing application and the corrugated tubes increase effective heat transfer surface area for optimal thermal efficiencies. Enhanced waterside flow distribution maintains constant minimum velocities across the heat exchanger; this keeps solids in suspension and greatly reduces scale dropout to maintain high efficiency performance and long life.

The Innovation provides safe, instant hot water while mitigating the risks of Legionella and scalding due to lower set points, continual circulation and minimum water storage as buffer.

The advanced Edge [i] Controller incorporates dynamic feed-forward sensing for precise modulation of its high turndown air/fuel delivery system. The Edge fires the unit to accurately match load requirements and produce tight hot water outlet temperature control. Edge includes onboard multi-unit sequencing logic for up to 16 units, eliminating a need for separate sequencing panel. Wasteful overshooting and cycling are virtually eliminated as is the need for storage tanks, mixing valves and other temperature averaging components in most applications.

The set point is adjustable from 50°F to 190°F and control to $\pm 4^\circ\text{F}$ is easily achieved. Sidewall, through-the-roof, and ducted combustion capabilities provide broad installation flexibility. The small footprint, doorway size and quiet operation make it ideal for retrofit. With its tight temperature control, high efficiency, reliability and longevity the AERCO Innovation is truly a unique and advanced design.



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Features

- Precise temperature control $\pm 4^\circ\text{F}$
- Advanced Edge [i] Controller with 4.5" touchscreen
- Integrated Water Heater Management (WHM) multi-unit sequencing (up to 16 units)
- Fully modulating
- Condensing design
- AERguard stainless steel heat exchanger assembly
- Compact, space efficient design
- Natural gas or Propane
- Outlet water temperature of 50° to 190°F
- UL, cUL listed for closet installation on combustible flooring
- 160 PSIG ASME Working Pressure Certified
- Direct or conventional vent with PVC, CPVC, PP, or AL29-4C materials
- Whisper quiet operation
- Remote alarm contacts
- Ducted combustion air capable
- UL, cUL listed, FM compliant, ASME section IV (HLW) stamped

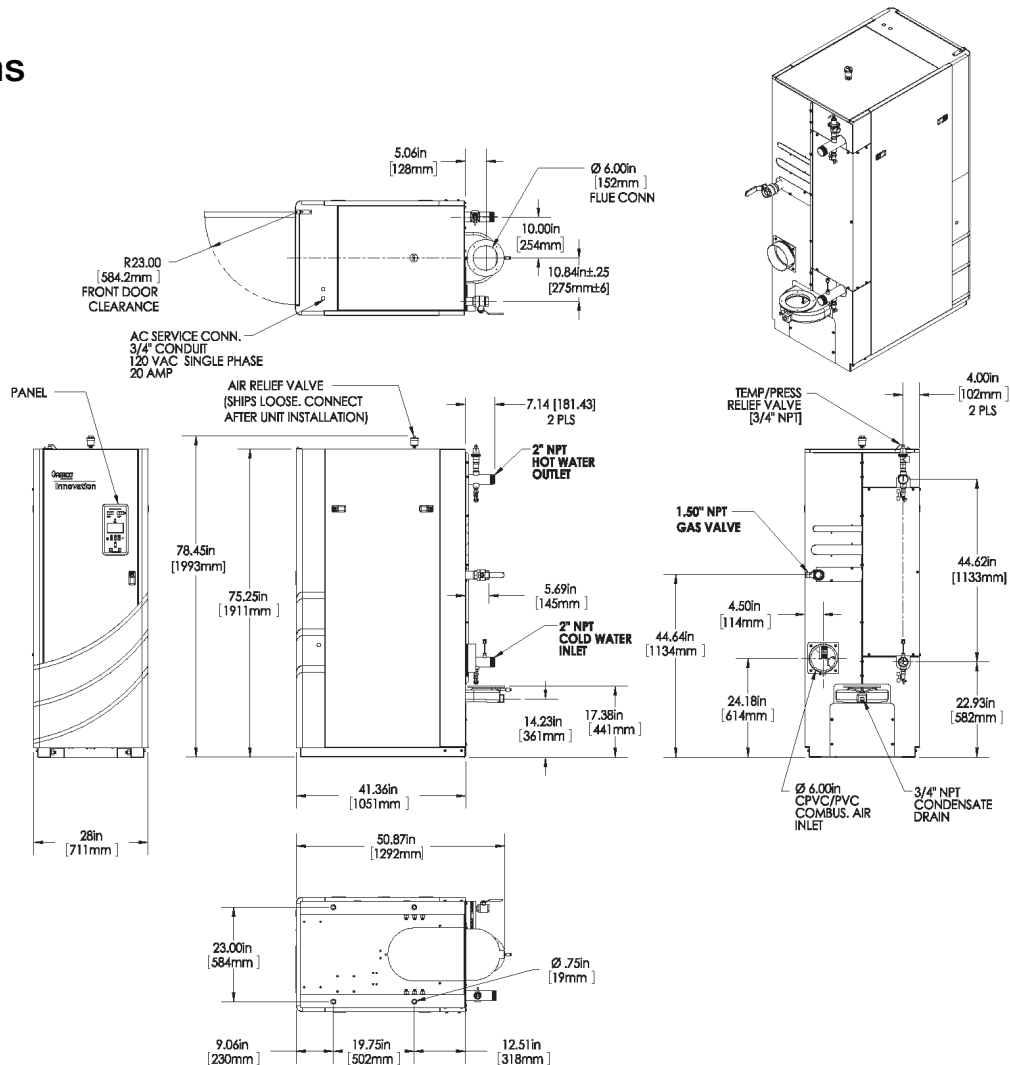
Recovery Capacity*

Innovation 600 (INN 600N)									
Temperature Rise (°F)	60°	70°	80°	90°	100°	110°	120°	130°	140°
Gallons Per Minute	19.3	16.5	14.5	12.8	11.6	10.5	9.6	8.9	8.3
Gallons Per Hour	1158	990	870	768	696	630	576	534	498
Innovation 800 (INN 800N)									
Temperature Rise (°F)	60°	70°	80°	90°	100°	110°	120°	130°	140°
Gallons Per Minute	25.7	22.0	19.3	17.1	15.4	14.0	12.8	11.9	11.0
Gallons Per Hour	1542	1320	1158	1026	924	840	768	714	660
Innovation 1060 (INN 1060N)									
Temperature Rise (°F)	60°	70°	80°	90°	100°	110°	120°	130°	140°
Gallons Per Minute	34.0	29.2	25.6	22.7	20.4	18.6	17.0	15.7	14.6
Gallons Per Hour	2040	1752	1536	1362	1224	1116	1020	942	876
Innovation 1350 (INN 1350N)									
Temperature Rise (°F)	60°	70°	80°	90°	100°	110°	120°	130°	140°
Gallons Per Minute	43.6	37.4	32.8	29.1	26.2	23.8	21.8	20.2	18.7
Gallons Per Hour	2616	2244	1968	1746	1572	1428	1308	1212	1122

*In condensing mode <2000 ft above sea level

Dimensions

(Inches)



Specifications

	INN 600N	INN 800N	INN 1060N	INN 1350N
Adjustable Temperature Control	50°F to 190°F			
Ambient Temperature	0°F to 130°F			
Accuracy	+/-4°F			
Input	625 MBH	800 MBH	1,060 MBH	1,350 MBH
Certified Efficiency (DOE 10 CFR Part 431)	93%	94%	95%	96%
Turndown Ratio (up to)	12:1	16:1	21:1	27:1
Flue and Air Intake	6" Diameter 4" Diameter Optional	6" Diameter		
Flue Material (per local code)	PVC, CPVC, PP or AL29-4C			
Water Inlet and Outlet	2" NPT Male			
Gas Connection - Natural Gas	1.5" NPT Male			
Gas Pressure Requirements (Nat. Gas and Propane)	14" WC Max			
	Nat. Gas: 4" WC Minimum @ Full Load / Propane: 11" WC Minimum @ Full Load			
Maximum Continuous Water Flow	50 GPM			
Condensate Connection	3/4"NPT Female			
Maximum Condensate Flow	4.5 GPH	6 GPH	8 GPH	11 GPH
Pressure Rating	160 PSIG @ 210°F			
NOx Emissions Certifications	SCAQMD, TCEQ			
Standard Listing and Approvals	UL, cUL, ASME, (HLW)			
Gas Train Options	FM Compliant			
Electrical Requirements	120VAC, Single Phase, 60 Hz 20 Amp (11 FLA)			
Water Pressure Drop @ 15 gpm	1.25 psi			
Water Pressure Drop @ 30 gpm	2 psi			
Water Volume	25.3 gallons	25.3 gallons	22.0 gallons	19.9 gallons
Weight, Installed	980 lbs (dry), 1,202 lbs (wet)	980 lbs (dry), 1,202 lbs (wet)	1000 lbs (dry), 1,190 lbs (wet)	1,050 lbs (dry), 1,222 lbs (wet)
Weight Shipping	1,080 lbs	1,080 lbs	1,100 lbs	1,150 lbs



Heating and Hot Water Solutions

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