



# Polaris® High-Efficiency Commercial Gas Water Heater

## The perfect choice for combi systems

Polaris® has a high grade 444 stainless steel tank with brass connections for years of dependable, trouble-free service - no anode required. A submerged combustion chamber with spiral flue provides up to 96% thermal efficiency and ultra-low standby heat loss of approximately 1%.

### **SEALED COMBUSTION WITH WOVEN FIBRE PREMIX BURNER**

- Metal fibre burner is designed for homogenous combustion in high-intensity blue flame mode. Manufactured with refractory steel that resists corrosion. Excellent resistance to thermal and mechanical shock, even at extreme temperatures. Uniform combustion provides excellent heat transfer.

### **WHISPER QUIET OPERATION**

- Ultra quiet blower and burner minimize noise. Requires 120 volt 60Hz power supply. Draws less than 5 Amps.

### **POWER/DIRECT VENT USING 2" OR 3" PLASTIC PIPE**

- Direct vents up to 120' using ULC S636 PVC or CPVC pipe either Thru-the-Wall or Thru-the-Roof. Optional concentric vent kit available for use Thru-the-Roof or Wall.

### **PLUG AND PLAY TECHNOLOGY**

- No special adjustments are required at initial start up. Connect air inlet, exhaust outlet, water, electricity, and gas, set the temperature and the system functions properly.

### **EXTERNAL TEMPERATURE ADJUSTMENT KNOB UP TO 185°F**

### **SELF-DIAGNOSTIC CONTROL SYSTEM**

- Three external LED lights indicate operational status of water heater. Microprocessor monitors nine critical functions. An LED troubleshooting light, visible through view port, signals heater operation status.

### **FULL SERVICEABILITY FROM THE FRONT**

- Removal of two front-located access panels exposes all serviceable components. Modular components are easily removed.

### **MULTIPLE 1" TANK CONNECTIONS - BRASS**

### **CSA INTERNATIONAL CERTIFIED TO CURRENT EDITION ANSI Z21.10.3/CSA 4.3**

### **OTHER FEATURES**

- Thermister Temperature Sensor
- 24-Volt Thermostat Control
- Hot Surface Ignition
- Full Flow Brass Drain Valve
- ASHRAE 90.1-1999 Compliant
- Zero Clearance to Combustibles
- Factory Installed T&P Valve
- Factory Provided Condensate Trap
- Lightweight with Small Footprint

### **WARRANTY**

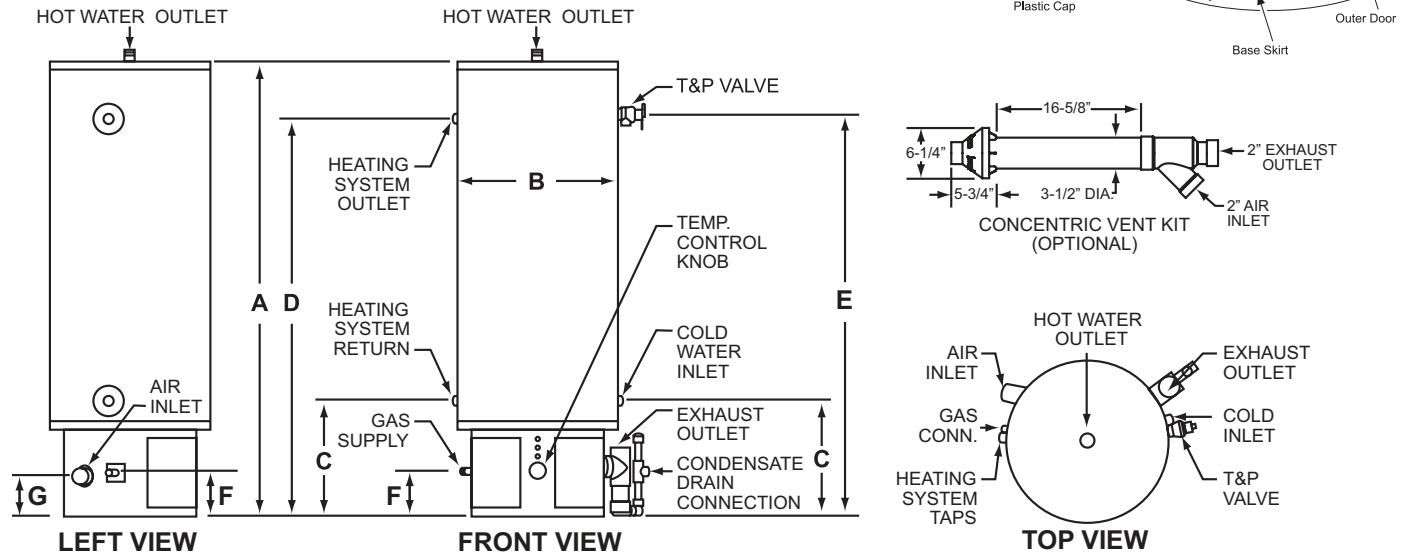
- 3 years limited tank warranty, 1 year parts





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MODEL NUMBER	GAL CAP.	INPUT BTU PER HR.	GPH RECOVERY 100° RISE	EXTERIOR		VENT DIAMETER	1" WATER CONNECTIONS		T&P HEIGHT E	GAS SUPPLY* F	THERMAL EFFICIENCY	APPROX. SHIP WEIGHT (LBS)
				A	B		C	D				
PC130-34-2NV	34	130,000	151	48-1/2	22	2 OR 3	15-3/4	40-1/2	41	6-1/8	96	150
PC130-50-2NV	50	130,000	150	62-1/2	22	2 OR 3	15-3/4	54-1/2	55	6-1/8	95	176
PC175-50-3NV	50	175,000	204	63-3/4	22	3	15-3/4	55-3/4	56-1/4	6-1/8	95	180
PC199-50-3NV	50	199,000	232	63-3/4	22	3	15-3/4	55-3/4	56-1/4	6-1/8	95	180

For propane, substitute "P" for "N" in the model number. 3" Concentric Vent Part #6911089 or 2" Concentric Vent Part #6911088. Specifications are subject to change without notice in accordance with our policy of continuous improvement. Input, output and recovery may vary depending upon air inlet and exhaust outlet installations. Length and number of bends in inlet and outlet pipes may reduce input and output. Consult installation, operation and service manual for details. Dimensions on all charts shown in inches. \*1/2" gas supply line can be used for up to 150,000 BTU units, units over 150,000 BTUs require a 3/4" gas supply line.

### SPECIFICATIONS

Commercial- gas-fired water heater(s) shall be a direct/power vent Polaris model \_\_\_\_\_ as manufactured by American Water Heaters and shall have a 3-year limited tank warranty and a 1-year limited parts warranty, as outlined in the written warranty. Units shall be designed to burn \_\_\_\_\_ (natural/propane) gas and be CSA International certified to the latest edition of ANSI standard Z21.10.3/CSA 4.3. Water heater(s) shall have a nominal storage capacity of \_\_\_\_\_ gallons and a recovery rate of \_\_\_\_\_ GPH @ 100°F rise with a rated input of \_\_\_\_\_ BTU/Hr. Water heater(s) shall be condensing type with a minimum thermal efficiency of 95-96%, power vented with ULC 5636 pipe. Water heater(s) shall have combined vent capabilities of up to 120' to the exhaust outlet with up to 120' to the air inlet. Water heater(s) shall have a low noise combustion system with a woven fibre steel burner capable of low NOx (less than 40 ng/j) in the blue flame mode and shall be manufactured of refractory steel, resistant to thermal and mechanical shock. The gas valve shall be a Honeywell CV1-r1 series gas valve with a matching 45.900 series venturi manifold using a 1:1 air/gas ratio. The combustion system shall be factory adjusted and require no field adjustment on startup. The tank shall be constructed of 444 stainless steel with a submerged combustion chamber and rated for 150 PSI working pressure and 300 PSI test pressure. The tank shall be surrounded by two inches of non-CFC foam insulation covered by an enamel coated metal jacket. Operating controls shall have a 24-volt integrated control circuit, an immersed thermistor temperature sensor, a recycling energy cut-off switch, external temperature adjustment, and shall have LED lights that continuously indicate the operational status of the water heater(s). A microprocessor shall automatically monitor nine critical operating functions and signal the status of each. A factory installed temperature and pressure relief valve shall be provided on all models. A factory provided water thermostatic tempering valve shall be provided with all models.