

VERTEX™ 96% THERMAL EFFICIENCY **CONTINUOUS HOT WATER** VERSATILE POWER DIRECT VENT

Today's homes demand more hot water than ever before, and the 96% efficient Vertex power direct vent gas water heater offers unprecedented levels of performance to meet the need. The 50-gallon Vertex delivers hot water output that exceeds a 75-gallon atmospheric gas water heater. In fact, the fully condensing Vertex design is so advanced, it can deliver "continuous hot water for shower after shower" ... a constant flow of over 4 gallons per minute.* Yet Vertex is easy to install, with height, diameter and installation requirements similar to standard power direct vent units.

HELICAL INTERNAL HEAT EXCHANGER

- Spiral heat exchanger keeps hot combustion gases in the tank longer lengthen the heat transfer cycle
- Positioned in the center of the tank for more even heat distribution
- Operates at 96% thermal efficiency, which saves money on operating costs compared to a standard 78% efficient gas water heater

POWER DIRECT VENT DESIGN

- Uses inexpensive PVC, CPVC or ABS pipe for intake and exhaust. Canadian installations require ULC S636 listed PVC or CPVC pipe for venting
- Can be vented vertically thru-the-roof or horizontally thru-the-wall
- 2" pipe, vents up to 45 equivalent feet
- 3" pipe, vents up to 128 equivalent feet
- Optional concentric vent kit available

CONDENSING DESIGN

- 96% efficient condensing design
- Equipped with condensate drain tee

SIDE-MOUNTED HOT AND COLD RECIRCULATING TAPS

 Allows Vertex to be installed as part of combination space heating/water heating applications or any system requiring a recirculating hot water loop, including radiant floor heating

ADVANCED ELECTRONIC CONTROL

- Large LCD display
- Precise temperature control
- Advanced diagnostics
- iCOMM[™] Compatible and can be monitored from remote locations. Call 1.888.WATER02 for more information.

COMMERCIAL GRADE GLASS LINING

- A. O. Smith PermaGlas® Ultra Coat[™] process provides superior protection against corrosion
- Protects all interior tank surfaces including inside and outside of helical heat exchanger

TWO HEAVY-DUTY ANODE RODS

■ Provides even more protection against corrosion

TOP FIRED LOW NOX GREEN CHOICE ® GAS BURNER

■ "Eco-Friendly" design reduces NOx emissions and complies with ultra-low NOx emission standards

CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE

AVAILABLE IN NATURAL GAS OR PROPANE

MAXIMUM HYDROSTATIC WORKING PRESSURE: 150 PSI

* 4.31 GPM continuous flow, based on 65°F inlet water temperature, 110° outlet temperature.





Series 124/125





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CODES AND STANDARDS

- Design-certified by UL (Underwriters Laboratories) according to ANSI Z21.10.3 4.3 CSA Standards
- This model meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition ASHRAE/IESNA 90.1.
- Approved for Canada

SIX-YEAR LIMITED TANK AND PARTS WARRANTY

■ For complete warranty details, consult written warranty shipped with heater or contact A. O. Smith

MODEL NUMBER	or		FIRST HOUR DELIVERY GALLONS or LITRES	RECOVERY GALLONS or LITRES 90°F/50°C RISE	SHIPPING WEIGHT LBS/Kg
GDHE-50	100,000	50	164	129	255
		189	621	488	115.7

DIMENSIONS IN INCHES

GDHE-50	Α	В	С	D	E	F
INCHES	66-3/4	49-1/4	22	15-3/4	3	8
CM	169.5	125.09	55.88	40	7.62	20.32

Inlet and outlet connections: 3/4" male Circulation loop connections: 3/4" female

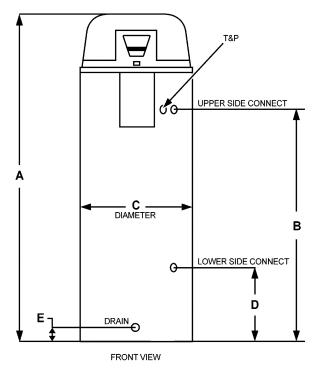
Gas inlet:1/2"

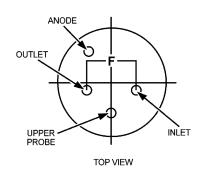
Maximum Supply Pressure: 14 inches W.C. (3.48kPa)

Minimum Supply Pressure for Natural Gas: 3.50 inches W.C. (.87kPa) Minimum Supply Pressure for Propane Gas: 8.00 inches W.C. (1.99kPa)

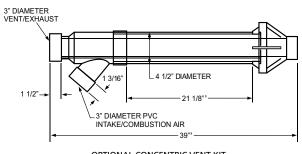
Minimum pressure must be maintained under both load and no load (dynamic and static) conditions.

Electrical Characteristics - 120V, 60Hz, Amperes <5





INSTALL IN ACCORDANCE WITH LOCAL CODES.



OPTIONAL CONCENTRIC VENT KIT

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.

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