

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 to 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

- Installations require ULC s636 approved 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

icomm

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

Provide maximum protection against corrosion

TOP-FIRED GAS BURNER

CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE AVAILABLE FOR 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

GDHE-50



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 current edition ASHRAE/IESNA 90.1.
- This model meets the requirements of the BC Energy Efficiency Act

6-YEAR LIMITED TANK AND PARTS WARRANTY

For complete information, consult written warranty or A. O. Smith Water Products Company.

CAPACITY & DIMENSIONS

MODEL	BTU INPUT PER HOUR	GALLON CAPACITY	FIRST HOUR DELIVERY GALLONS	RECOVERY 90°F RISE GALLONS PER HOUR	DIMENSIONS IN INCHES						SHIPPING WEIGHT	BC
					Α	В	С	D	E	F	LBS	COMPLIANT
GDHE 50	100,000	50	164	129	66-3/4	49-1/4	22	15-3/4	3	8	255	√

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

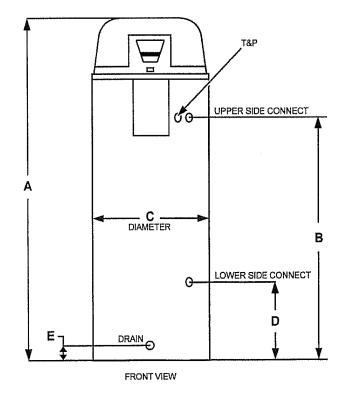
Gas inlet: 1/2"

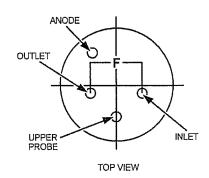
Maximum Supply Pressure: 14 inches W.C. (3.48kPa)

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)

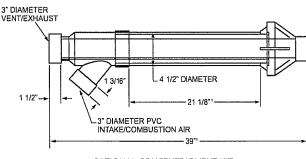
Minimum pressure must be maintained under both load and no load (dynamic and static) conditions.

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





INSTALL IN ACCORDANCE WITH LOCAL CODES.



OPTIONAL CONCENTRIC VENT KIT PART NUMBER: 9006328005

For Technical Information, call 1-888-479-8324. A. O. Smith reserves the right to make product changes or improvements without prior notice.

May 2013