

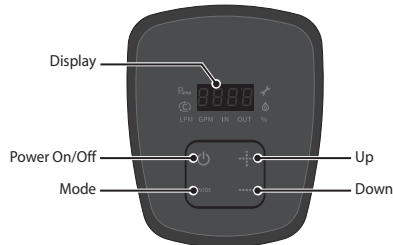


HYBRID WATER HEATER

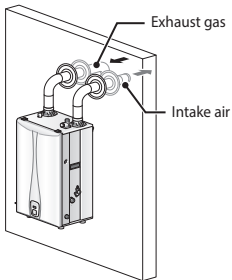
VH - 199

Specification Sheet

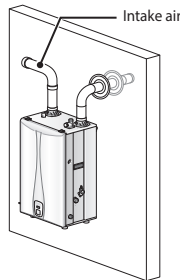
VH Model (Tankless Water Heaters)



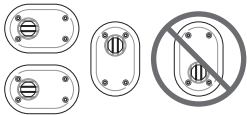
Indoor Venting Options



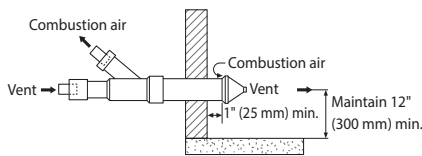
Direct Vent



Non-Direct Vent

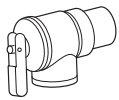


Direct Vent Termination

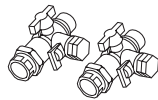


Direct Vent Concentric Termination

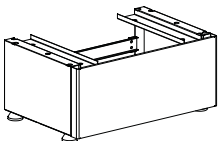
Optional accessories



Pressure Relief Valve



Plumb easy valve set (2040172)



VH Stand Kit

- Certified design according to ANSI Z21.10.3 – CSA 4.3-2015 standards.
- Compatible with ½" gas pipe up to a length of 24 ft* (*see Installation manual for additional information)
- Compatible with 2" PVC vent up to 50ft** and 100 ft** using 3"PVC v ent (**with no elbows)
- Gas Input Range s
VH 199 - 199,000 to 38,000 BTU/h
- Hot Water Flow Ra te Capacity (* based on 35°F temperature rise)
VH 199 - 10.8 GPM
- High Altitude (NG/ LP) - Certified for use altitudes up to 10,100ft in accordance to the latest CAN/CGA 2.17 High Altitude Installation procedures at normal manifold pressure.
- The 316L Stainless Steel Fire Tube Heat Exchangers for optimum efficiency and durability.
- Built-in Control Panel - allows adjustment of temperature setting and displays the operating status and error codes
- VH model come included with 3 gallon storage tank
- The water heater is programmed to preheat and automatically maintain the temperature set point of the water heater.
- Temperature Options - available temperature settings for range from 98°F up to 140°F with high temperature commercial mode capable of up 160°F.
- Water heater sensors provide highly accurate temperature and flow monitoring to assure accurate system control.
- Uniform Energy Factor Ratings for NG and LP units
VH 199 - 0.91 UEF
- Compatible with Natural Gas(NG) and Propane (LPG)*** (**requires installation of included Field Conversion Kit by a qualified service agency)
- Approved for Installation on Mobile / Manufactured Homes
- Certified by CSA, NSF5, NSF372, AHRI, AB1953 CA Low Lead, S CAQMD (Rule 1146.2 type 1 - Complies with 14 ng/J or 20ppm Nox @ 3% O2)
- 15-Year Heat Exchanger and 5-Year Parts Warranty (Residential)
8-Year Heat Exchanger and 3-Year Parts Warranty (Commercial)



Certified to NSF/ANSI 5 & 372



Job Name: _____

Location: _____

Engineer: _____

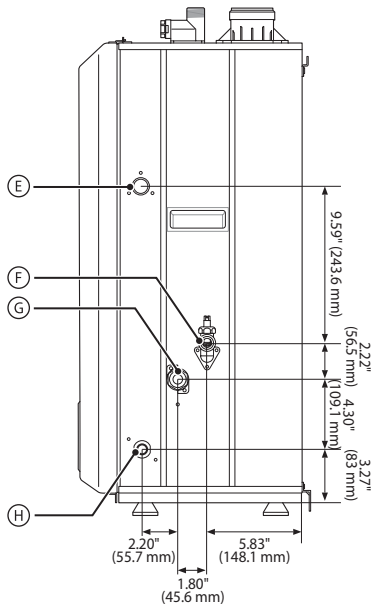
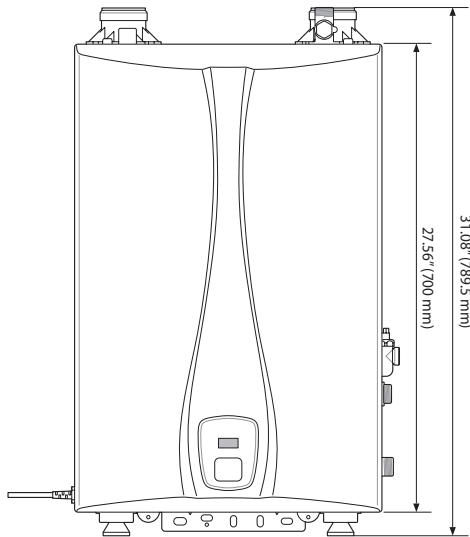
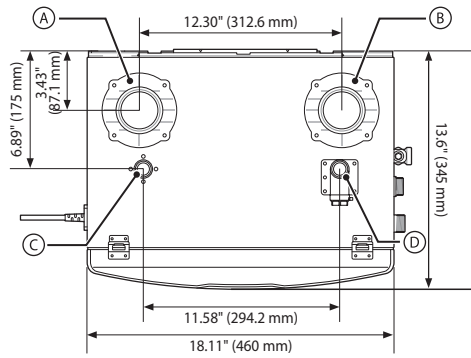
Wholesaler: _____

Contractor: _____

Model No.: _____

Submittes to: _____

Dimensions (VH Model)



	Description	Diameter
(A)	Air intake connector	2"
(B)	Flue connector	2"
(C)	Hot water outlet	3/4"
(D)	Cold water inlet	3/4"
(E)	Pressure relief valve connector	3/4"
(F)	Drain valve	3/4"
(G)	Condensate outlet	3/4"
(H)	Gas inlet	3/4"

Specification

Item		VH-199
Heat Capacity (Input)	Natural Gas	38,000–199,000 BTU/H
	Propane Gas	38,000–199,000 BTU/H
Thermal Efficiency	Natural Gas	94
	Propane Gas	97
Flow Rate (DHW)	35°F (19°C) Temp Rise	10.8 GPM (41 LPM)
	45°F (25°C) Temp Rise	8.2 GPM (31 LPM)
	77°F (43°C) Temp Rise	4.8 GPM (18 LPM)
Dimensions (W x H x D)		18.1" x 27.6" x 13.6" (460 mm x 700 mm x 345 mm)
Weight		92 lbs (42 kg)
Installation Type		Indoor wall-hung or stand
Venting Type		Forced draft direct vent
Ignition		Electronic ignition
Water Pressure (Max.)		150 psi
Natural Gas Supply Pressure		3.5"–10.5" WC
Propane Gas Supply Pressure		8"–13" WC
Natural Gas Manifold Pressure (Min. – Max.)		-0.02" WC – -0.70" WC
High Altitude Manifold pressure		-0.02" WC – -0.65" WC
Propane Gas Manifold Pressure (Min. – Max.)		-0.02" WC – -0.15" WC
High Altitude Manifold pressure		-0.02" WC – -0.12" WC
Reserve Tank		3 Gallons (11 Liters)
Minimum Flow Rate		0.1 GPM (0.4 LPM)
Connection Sizes	Cold Water Inlet	3/4" NPT
	Hot Water Outlet	3/4" NPT
	Gas Inlet	3/4" NPT
Power Supply		120V AC, 60 Hz / use less than 5 AMP
Maximum Power Consumption		95 W
Materials		Heat Exchangers Stainless steel
Venting	Exhaust	2" or 3" PVC, CPVC, Polypropylene 2" or 3" Special gas vent type BH (Class II, A/B/C)
	Intake	2" or 3" PVC, CPVC, Polypropylene 2" or 3" Special gas vent type BH (Class II, A/B/C)
	Vent Clearances	0" to combustibles
Safety Devices		Flame rod, APS, Over heat preventer, Exhaust temperature high limit sensor, Power surge fuse, Surge pressure regulation valve, Low water cut off switch

Gas-fired, tankless, condensing, wall-mounted or stand type water heater(s) shall be direct vent VH Model as manufactured by VESTA.DS, Inc. and are certified by CSA Group to the latest edition of ANSI standard Z21. 10.3 CSA 4.3. Water heater(s) shall have a 15-year limited Heat Exchanger warranty and 5-year limited Parts warranty (8 year Heat Exchanger and 3-year Parts for Commercial use) per VESTA Limited Warranty. Unit(s) shall be designed to burn natural gas and can be for use with propane when a Field Conversion Kit is installed. Water heater(s) shall have a nominal flow rate capacity of _____ GPM/GPH at _____ °F rise with rated input of _____ BTU/hr. Water heater(s) shall be vented with 2" PVC/CPVC vent pipe at a distance not to exceed 50' (or equivalent) with each elbow equal to 8' of pipe length or 3" PVC/CPVC vent pipe at a distance of 100' (or equivalent) with each elbow equal to 5' of pipe length. Water heater(s) is rated for 150 PSI working water pressure and 300 PSI test pressure. Gas supply pressure shall be 3.5" to 10.5" WC for natural gas and 8.0" to 13.0" WC for propane. Unit(s) shall have a steel case, stainless steel heat exchangers, eco premixed burner, negative pressure gas valve, 3/4" inlet gas connection, 3/4" brass inlet/outlet water connections, water holding capacity of 3 gallons for the VH model, and a condensate collector. The VH model weighs 92 lbs. Unit(s) shall include features such as an adjustment for installations at high elevation, and temperature options from 98–120°F in 2°F intervals and 120–140°F in 5°F intervals. The unit(s) shall include additional temperature options of 140–160°F in 10°F intervals for high temperature commercial applications. The water heater(s) shall be controlled by an internal circuit board that monitors the inlet and outlet temperatures with installed thermistors, sensing and controlling flow rate to set point temperature with air-fuel ratio controls in order to maintain thermal combustion efficiency. Unit(s) shall include safety features such as flame sensor system, high limit sensors, overheating prevention device, freeze protection mode, fan motor rotation detector, and low water cut off switch. The water heater(s) is listed by SCAQMD rule 1146.2 (Type1) for Low Nox that complies with 14ng/J or 20ppm Nox requirements @ 3% O₂.

* VESTA.DS reserves the right to change specifications at any time without prior notice.