

Evolution 500 Gas Tankless Water Heater

Engineering Submittal Sheet

Evolution 500 Performance Data

Maximum Gas Input (BTU)	199,000
Minimum Input (BTU)	19,900
Maximum Output (BTU)	160,500
Minimum Output (BTU)	18,300
Thermal Efficiency	83%
Combustion Efficiency	84%

Evolution 500 Operational Data

Weight (lbs.)	67
Min. Inlet Gas Pressure NG("WC) / LP("WC)	3.5 / 8
Max. Inlet Gas Pressure NG("WC) / LP("WC)	10.5 / 13
Maximum Output Temperature (°F)	140°F
Flow Rate at 30°F ΔT (GPM) ¹	9.2
Flow Rate at 45°F ΔT (GPM)	7.2
Max. Working Pressure (psi)	150
Min. Working Pressure (psi)	30
Min. Activation Flow (GPM)	.65
Relief Valve Pressure Rating (psi)	150
Max equivalent exhaust vent length (ft)	26
Max equivalent combustion air vent length (ft)	26
Venting Category	III

¹ To obtain flow rates greater than 9.2 GPM, installation of a tempering valve on the hot water outlet of the heater will permit the blending of cold water which will lower the delta T to 30 degrees, allowing flow rates greater than 9.2 GPM.

Evolution 500 Approved Venting Material

Item	Diameter	Material
Exhaust Vent	3 or 4 inches	Sealed single wall stainless steel (AL29-4C)
Intake Vent	3 or 4 inches	Sealed PVC or any other rigid pipe

Evolution 500 Electrical Specifications

Electrical Voltage Mains	120V/60Hz
Power Consumption Max Load (A)	≤ 2.5
Idle (mA)	40

Evolution 500 Clearances

	Minimum Clearance to Combustibles (Inch)
Front	1
Rear	0
Side	1
Floor	12
Top	12

Additional Information

- Low NOx emissions
- Modulating water valve to improve temperature stability
- Modulating premix burner with constant gas/air ratio
- Direct-vent sealed combustion
- Direct spark ignition
- 150 psi relief valve included
- Concentric termination available
- LCD display with backlight / control buttons
- 100% copper heat exchanger

Options

- Wireless remote control (TSTAT2)
- Cascading kit (TLINK)
- Outdoor kit (PTOK)
- External water filter (8703305356)
- Concentric termination kit (ESHCK)
- Exhaust/Intake bird screen (L2594)
- Horizontal termination hood with flapper (2SVSHTD03)
- Backdraft reducer (2ZVBP03)

Note: Refer to installation and applications manuals for specific information on venting, piping and electrical connections.



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Evolution 500 Piping Specifications

Exhaust Pipe Diameter	3" or 4"
Combustion Air Pipe Diameter	3" or 4"
Gas Connection Size	¾" NPT
Water Connections	¾" NPT

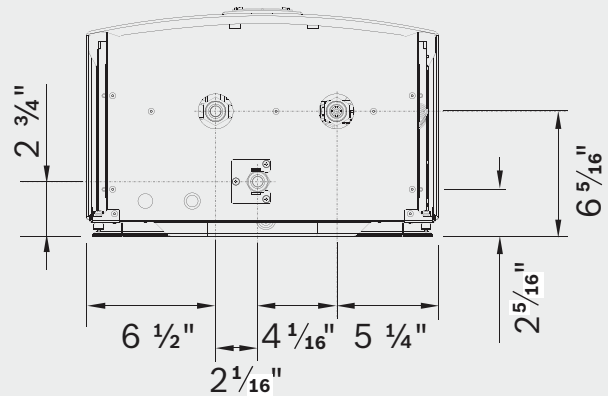
Note: Exhaust and combustion air connection adaptors are 3" diameter.

Evolution 500 Venting Specifications

	Diameter	Approved Terminals
EXHAUST	3" or 4"	"T" terminal
		90° elbow
		3" horizontal terminal
		3" vertical raincap
		Concentric Vent/Air intake with termination tee
INTAKE	3" or 4"	"T" terminal
		90° elbow
		3" horizontal terminal
		3" vertical raincap
		Concentric Vent/Air intake with termination tee

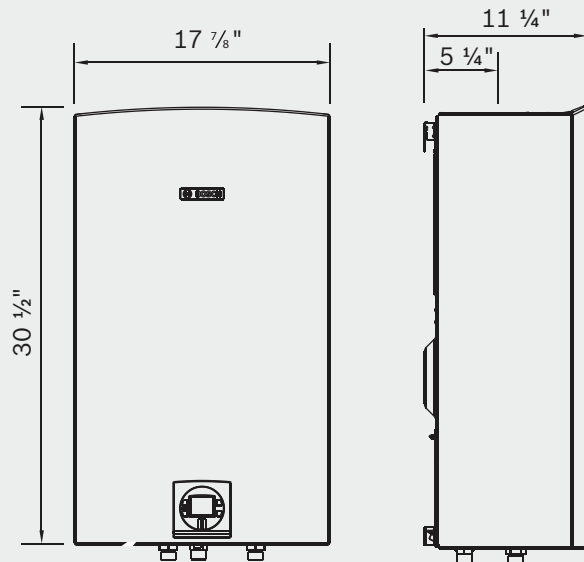
Evolution 500

Bottom View



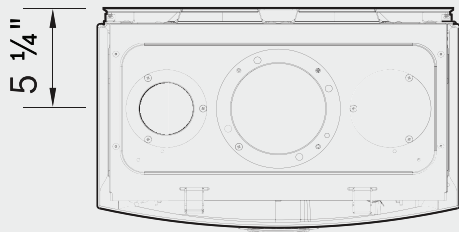
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Front / Side View



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Top View



Note: Intake can be installed on the left or right side of the exhaust.



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