

EVO 299, 399 & 599 TECHNICAL INFORMATION

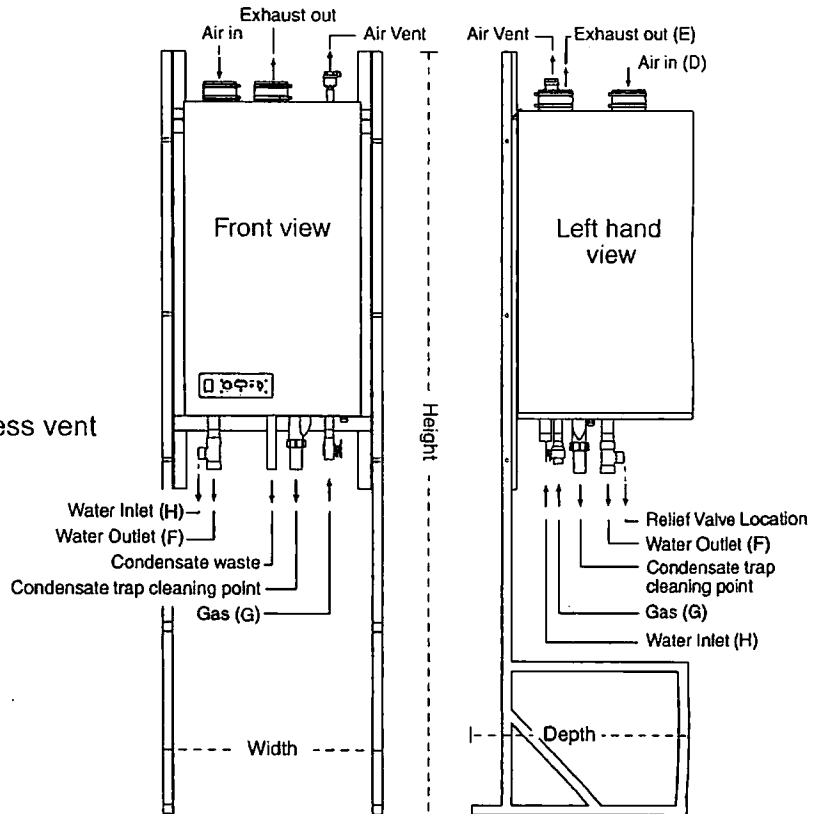


Standard Equipment

- 316L Stainless steel heat exchanger
- Modulating stainless steel burner
- Self diagnostic microprocessor controls
- Externally adjustable thermostat
- Sealed combustion, PVC or AL 29C stainless vent
- Stainless steel cover
- Water flow switch
- Pressure relief valve
- Dual high limit sensors
- All bronze circulating pump
- Blocked flue/blocked condensate drain pressure switch
- 24/7 customer service

Optional Equipment

- Rack Pack™ & Back Pack™ include rack and water piping
- Rack Pack Six Pack™ includes the above, plus:
 - Cascade Controls
 - Common Venting
 - Individually switched electrical power
 - Common condensate drain neutralizer



Model	Width	Height	Depth	D	E	F (FPT)	G	H (MPT)
299	25"	79"	27"	4"	4"	1.5"	0.75"	1.5"
399	25"	79"	27"	4"	4"	2.0"	0.75"	1.5"
599	25"	79"	34.5"	5"	5"	2.0"	1.0"	1.5"

*Dimensions are from free standing legs. For cabinet measurements refer to manual.

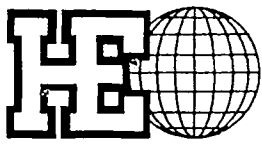
Model	Input BTU/hr	Water Heater* Output BTU/hr	Boiler** Output BTU/hr	GPH Recovery @100°FΔT	GPH Recovery @80°FΔT	GPH Recovery @60°FΔT	Water Flow rate & Pressure Drop DHW	Heating	Shipping Weight
HW 299	300,000	up to 291,000	up to 285,000	360	450	600	17@31'	12@16'	111 lbs.
HW 399	399,999	up to 387,999	up to 379,999	466	582	776	27@24'	19@14'	194 lbs.
HW 599	630,000	up to 611,100	up to 598,500	734	917	1223	40@21'	28@14'	234 lbs.

*At 97% thermal efficiency with 86°F incoming water to heat exchanger

**At 95% thermal efficiency with 140°F incoming water to heat exchanger

- Dimensions are approximate. Please consult factory before installation.
- Maximum amperage draw at 230 volts and one phase is less than 3 amps.

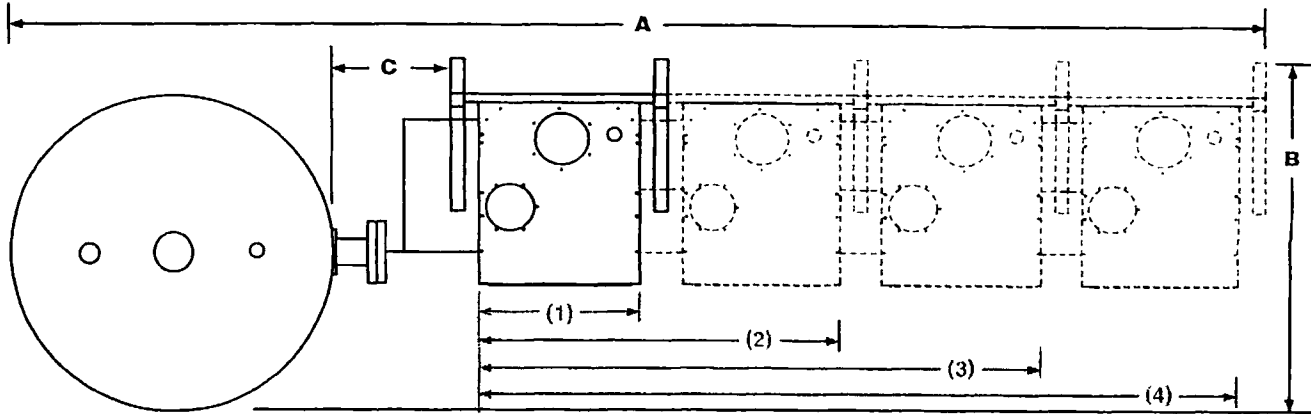




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**EVO 299, 399 & 599 STANDARD
PRE-PLUMBING CONFIGURATIONS**



Model	Piping to tees only			120 gallon tank (28")			175 & 200 gallon tank (32")			220 & 257 gallon tank (30")			275 & 350 gallon tank (36")			432 & 500 gallon tank (42")		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
(1) HW 299	5'4"	2'8"	3"	5'4"	2'8"	1'0"	6'0"	3'0"	1'4"	5'6"	2'10"	1'0"	6'0"	3'4"	1'0"	6'6"	3'10"	1'0"
(2) HW 299	7'3"	2'8"	3"	7'3"	2'8"	1'0"	7'11"	3'0"	1'4"	7'5"	2'10"	1'0"	7'11"	3'4"	1'0"	8'5"	3'10"	1'0"
(3) HW 299	9'2"	2'8"	3"	9'2"	2'8"	1'0"	9'10"	3'0"	1'4"	9'4"	2'10"	1'0"	9'10"	3'4"	1'0"	10'4"	3'10"	1'0"
(4) HW 299	11'2"	2'8"	3"	11'2"	2'8"	1'0"	11'10"	3'0"	1'4"	11'4"	2'10"	1'0"	11'10"	3'4"	1'0"	12'4"	3'10"	1'0"
(1) HW 399	5'4"	2'8"	1'0"	5'4"	2'8"	1'0"	6'0"	3'0"	1'4"	5'6"	2'10"	1'0"	6'0"	3'4"	1'0"	6'6"	3'10"	1'0"
(2) HW 399	7'3"	2'8"	1'0"	7'3"	2'8"	1'0"	7'11"	3'0"	1'4"	7'5"	2'10"	1'0"	7'11"	3'4"	1'0"	8'5"	3'10"	1'0"
(3) HW 399	9'2"	2'8"	1'0"	9'2"	2'8"	1'0"	9'10"	3'0"	1'4"	9'7"	2'10"	1'0"	9'10"	3'4"	1'0"	10'4"	3'10"	1'0"
(4) HW 399	11'2"	2'8"	1'0"	11'2"	2'8"	1'0"	11'10"	3'0"	1'4"	11'4"	2'10"	1'0"	11'10"	3'4"	1'0"	12'4"	3'10"	1'0"
(1) HW 599	5'4"	3'4"	1'0"	5'4"	3'4"	1'0"	6'0"	3'8"	1'4"	5'6"	3'6"	1'0"	6'0"	4'0"	1'0"	6'6"	4'6"	1'0"
(2) HW 599	7'3"	3'4"	1'0"	7'3"	3'4"	1'0"	7'11"	3'8"	1'4"	7'5"	3'6"	1'0"	7'11"	4'0"	1'0"	8'5"	4'6"	1'0"
(3) HW 599	9'5"	3'4"	1'3"	9'5"	3'4"	1'3"	10'1"	3'8"	1'7"	9'7"	3'6"	1'0"	10'1"	4'0"	1'3"	10'7"	4'6"	1'3"
(4) HW 599	11'5"	3'4"	1'3"	11'5"	3'4"	1'3"	12'1"	3'8"	1'7"	11'7"	3'6"	1'0"	12'1"	4'0"	1'3"	12'7"	4'6"	1'3"

Note:
Piping to tees only is generally used for replacement to an existing tank, or replacement heating system.
*Dimensions are approximate. Please consult factory before installation.

EVO 79, 129, 179 & 199 TECHNICAL INFORMATION

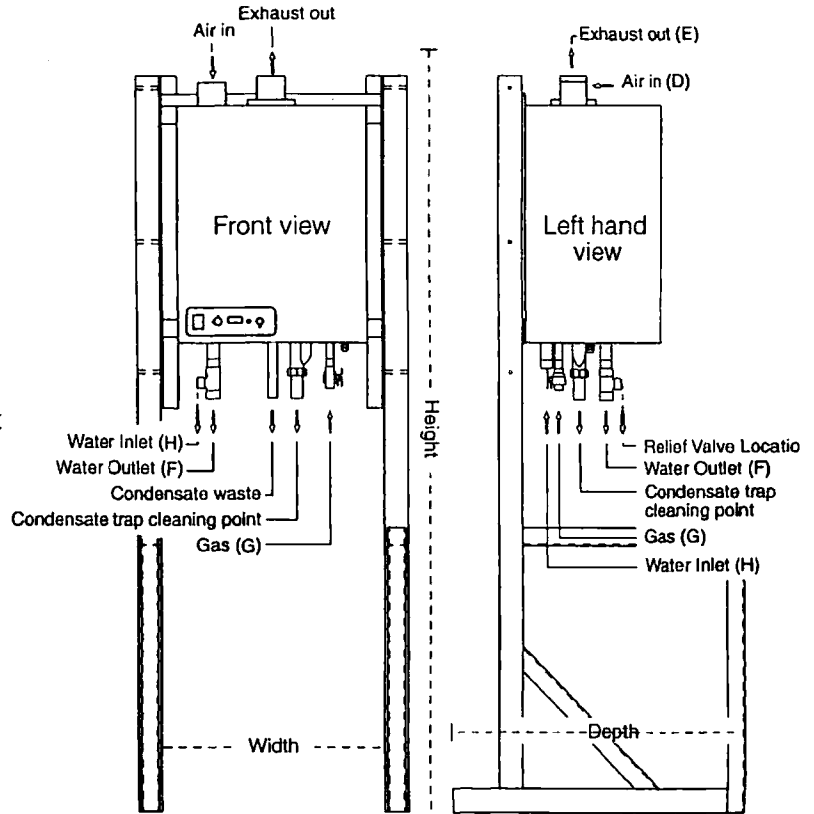


Standard Equipment

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- Self diagnostic microprocessor controls
- Externally adjustable thermostat
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Optional Equipment

- Rack Pack™ & Back Pack™ include rack and water piping
- Rack Pack Six Pack™ includes the above, plus:
 - Cascade Controls
 - Common Venting
 - Individually switched electrical power
 - Common condensate drain neutralizer



Model	Width	Height	Depth	D	E	F (FPT)	G	H (MPT)
79	19"	62"	25.5"	3"	3"	1.0"	0.75"	1.0"
129	19"	62"	25.5"	3"	3"	1.0"	0.75"	1.0"
179	19"	62"	25.5"	3"	3"	1.0"	0.75"	1.0"
199	19"	62"	25.5"	3"	3"	1.0"	0.75"	1.0"

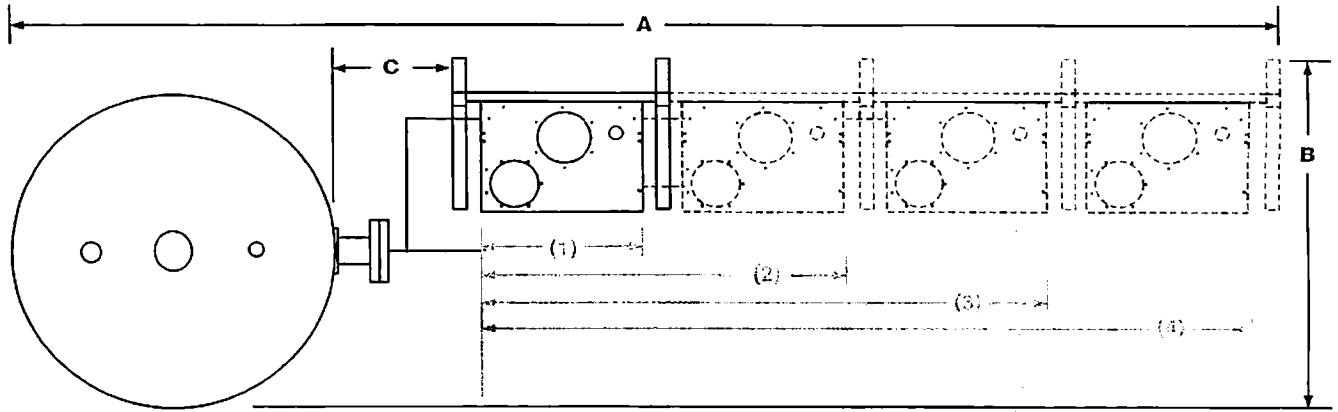
*Dimensions are from free standing legs. For cabinet measurements refer to manual.

Model	Input BTU/hr	Water Heater* Output BTU/hr	Boiler** Output BTU/hr	GPH Recovery @100°FAT	GPH Recovery @80°FAT	GPH Recovery @60°FAT	Water Flow rate & Pressure Drop PHW Heating	Shipping Weight
HW 79	80,000	up to 77,600	up to 76,000	93	116	155	10@34' 6@18'	69 lbs.
HW 129	136,300	up to 132,890	up to 130,150	160	199	265	10@34' 6@18'	77 lbs.
HW 179	186,600	up to 181,002	up to 177,270	217	272	362	12@24' 7@15'	91 lbs.
HW 199	199,999	up to 193,999	up to 189,999	233	291	388	12@24' 7@15'	112 lbs.

- *At 97% thermal efficiency with 86°F incoming water to heat exchanger
- **At 95% thermal efficiency with 140°F incoming water to heat exchanger
- Dimensions are approximate. Please consult factory before installation.
- Maximum amperage draw at 230 volts and one phase is less than 3 amps.



EVO 79, 129, 179 & 199 STANDARD PRE-PLUMBING CONFIGURATIONS



	Piping to tees only			120 gallon tank (28")			175 & 200 gallon tank (32")			220 & 257 gallon tank (30")			275 & 350 gallon tank (36")			432 & 500 gallon tank (42")		
Model	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
(1) HW 79	5' 1"	2' 1"	3"	5' 1"	2' 1"	1' 0"	5' 9"	2' 5"	1' 4"	5' 3"	2' 3"	1' 0"	5' 9"	2' 9"	1' 0"	6' 3"	3' 3"	1' 0"
(2) HW 79	6' 3"	2' 1"	3"	6' 9"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(3) HW 79	8' 5"	2' 1"	3"	8' 5"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(4) HW 79	10' 2"	2' 1"	3"	10' 2"	2' 1"	1' 0"	10' 10"	2' 5"	1' 4"	10' 4"	2' 3"	1' 0"	10' 10"	2' 9"	1' 0"	11' 4"	3' 3"	1' 0"
(1) HW 129	5' 1"	2' 1"	3"	5' 1"	2' 1"	1' 0"	5' 9"	2' 5"	1' 4"	5' 3"	2' 3"	1' 0"	5' 9"	2' 9"	1' 0"	6' 3"	3' 3"	1' 0"
(2) HW 129	6' 3"	2' 1"	3"	6' 9"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(3) HW 129	8' 5"	2' 1"	3"	8' 5"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(4) HW 129	10' 2"	2' 1"	3"	10' 2"	2' 1"	1' 0"	10' 10"	2' 5"	1' 4"	10' 4"	2' 3"	1' 0"	10' 10"	2' 9"	1' 0"	11' 4"	3' 3"	1' 0"
(1) HW 179	5' 1"	2' 1"	3"	5' 1"	2' 1"	1' 0"	5' 9"	2' 5"	1' 4"	5' 3"	2' 3"	1' 0"	5' 9"	2' 9"	1' 0"	6' 3"	3' 3"	1' 0"
(2) HW 179	6' 3"	2' 1"	3"	6' 9"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(3) HW 179	8' 5"	2' 1"	3"	8' 5"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(4) HW 179	10' 2"	2' 1"	3"	10' 2"	2' 1"	1' 0"	10' 10"	2' 5"	1' 4"	10' 4"	2' 3"	1' 0"	10' 10"	2' 9"	1' 0"	11' 4"	3' 3"	1' 0"
(1) HW 199	5' 1"	2' 1"	3"	5' 1"	2' 1"	1' 0"	5' 9"	2' 5"	1' 4"	5' 3"	2' 3"	1' 0"	5' 9"	2' 9"	1' 0"	6' 3"	3' 3"	1' 0"
(2) HW 199	6' 3"	2' 1"	3"	6' 9"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(3) HW 199	8' 5"	2' 1"	3"	8' 5"	2' 1"	1' 0"	7' 5"	2' 5"	1' 4"	6' 11"	2' 3"	1' 0"	7' 5"	2' 9"	1' 0"	7' 11"	3' 3"	1' 0"
(4) HW 199	10' 2"	2' 1"	3"	10' 2"	2' 1"	1' 0"	10' 10"	2' 5"	1' 4"	10' 4"	2' 3"	1' 0"	10' 10"	2' 9"	1' 0"	11' 4"	3' 3"	1' 0"

Note:

Piping to tees only is generally used for replacement to an existing tank, or replacement heating system.

*Dimensions are approximate. Please consult factory before installation.