

G334X- 73/92/116/132 Conventional Gas Boilers

Engineering
Submittal
Sheet

Buderus

Boiler Overview



Engineering Specifications

There shall be provided and installed a quantity of ____ Buderus G334X-____ floor standing hot water boiler(s), suitable with natural gas or propane.

Boiler(s) shall have a thermal efficiency rating of:

- G334X-73 = 81.2%
- G334X-92 = 81.6%
- G334X-116 = 81.7%
- G334X-132 = 81.7%

Boiler(s) shall utilize GL180M cast iron sectional heat exchanger.

Boiler(s) shall be constructed, tested and labeled in accordance with ASME Section IV and shall bear the ASME stamp. Boilers shall be CSA approved and have an applicable Canadian Registration number.

Heat exchanger shall be labeled for 58psig maximum working pressure rating.

Standard equipment shall include a 90° elbow, safety relief valve, drain valve, vent damper, pressure gauge, 30psig relief valve, and technical documentation.

Minimal clearances shall be integral to the boiler cabinet design; a removable door shall be used to access heat exchanger, burner components, gas valve and sensors.

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Performance Data					
	Unit	G334X-73	G334X-92	G334X-116	G334X-132
Gas input	MBtu/h	301	378	476	541
Gross rated output	MBtu/h	249	314	396	450
IBR Rating	MBtu/h	217	273	344	392
Boiler horsepower	H.P	7.43	9.38	11.82	13.44
Thermal efficiency	%	81.2	81.6	81.7	81.7
Combustion efficiency	%	82.7	83.1	83.2	83.2

General Data					
	Unit	G334X-73	G334X-92	G334X-116	G334X-132
Boiler category	-	Atmospheric			
Heat exchanger construction	-	GL180M Cast Iron			
Maximum allowable working pressure	PSIG	58			
Water content	Gallons	9.2	11.4	13.5	15.6
Weight - shipping (approx.)	Lbs	758	930	1093	1265
Weight - operating (approx.)	Lbs	835	1021	1205	1395
Standard relief valve size (inlet x outlet)	Inch	3/4 x 3/4			
Standard relief valve pressure rating (other capacities available upon request)	PSI	30			
Minimum capacity of safety relief valve	Lb / hr	249	314	396	450
Number of burner tubes	Qty	5	6	7	8
Venting category	-	I			

Operational Data					
	Unit	G334X-73	G334X-92	G334X-116	G334X-132
Maximum supply water temperature	°F	194			
Minimum return water temperature	°F	> 120° F			

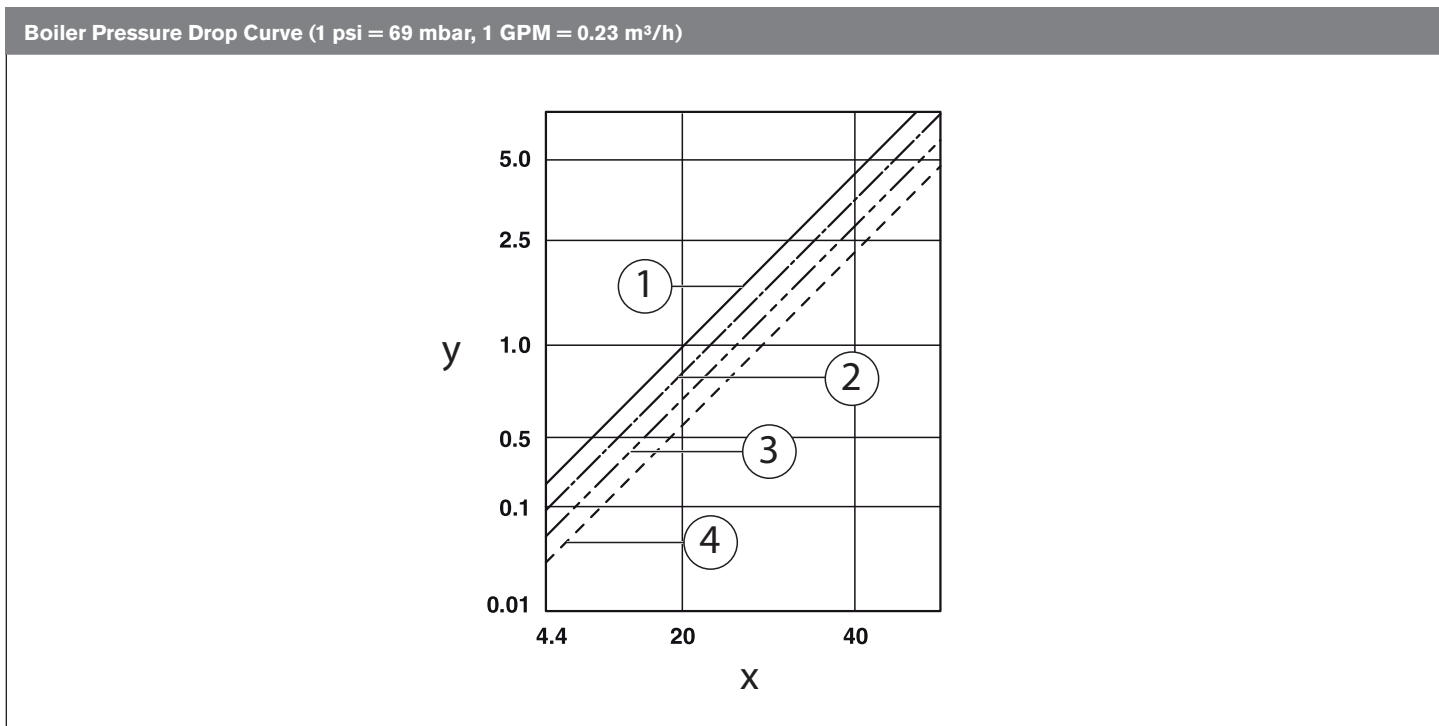
Electrical Data					
	Unit	G334X-73	G334X-92	G334X-116	G334X-132
Electrical voltage mains	VAC	120			
Power consumption max load	Watts	30			
Power consumption partial load	Watts	20			
Max. permissible fuse rating	Amps	15			

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Burner Data					
	Unit	G334X-73	G334X-92	G334X-116	G334X-132
Allowable fuels	-	Natural gas, LP			
Min Static Inlet Gas Pressure - NG	Inch W.C.	7.0			
Max Static Inlet Gas Pressure - NG	Inch W.C.	10.5			
Min Static Inlet Gas Pressure - LP	Inch W.C.	11.0			
Max Static Inlet Gas Pressure - LP	Inch W.C.	13.0			

Approval Data				
Approval description	G334X-73	G334X-92	G334X-116	G334X-132
Massachusetts Approval #	G3-0106-184			
New York MEA #	217-98-E			
CRN #	7169.7C			



x Flow Rate in GPM

y Pressure drops in psi

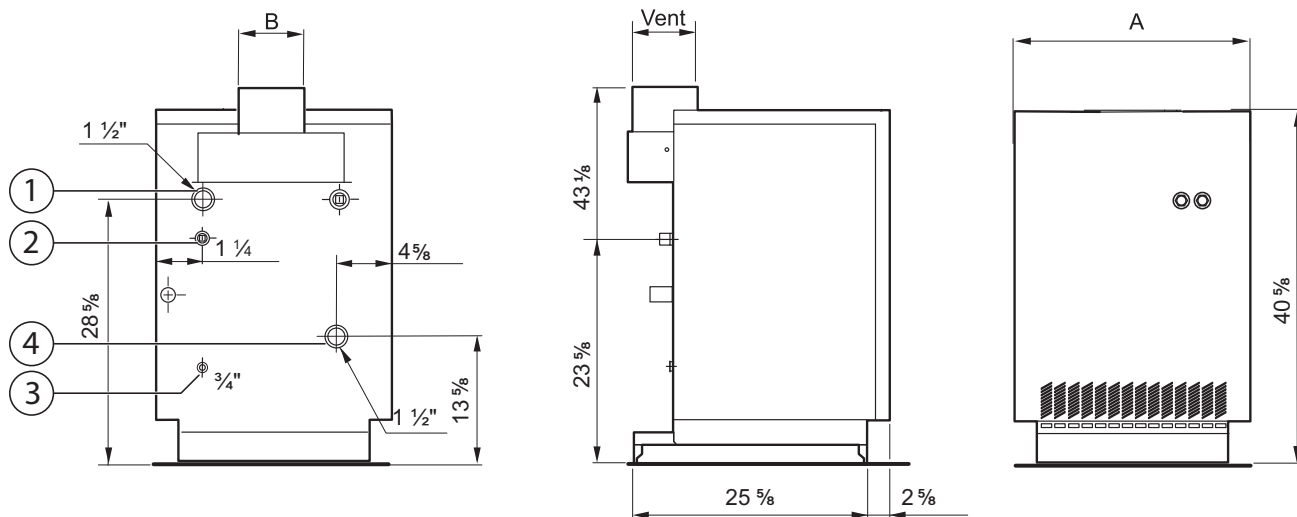
[1] 301,200 BTU/hr (boiler rating 73)

[2] 378,300 BTU/hr (boiler rating 92)

[3] 476,000 BTU/hr (boiler rating 116)

[4] 541,500 BTU/hr (boiler rating 132)

Boiler Dimensions and Connections

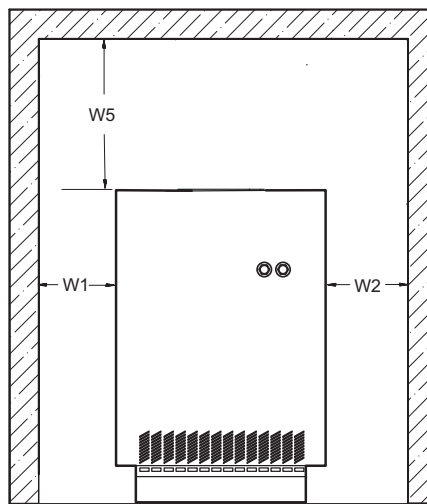
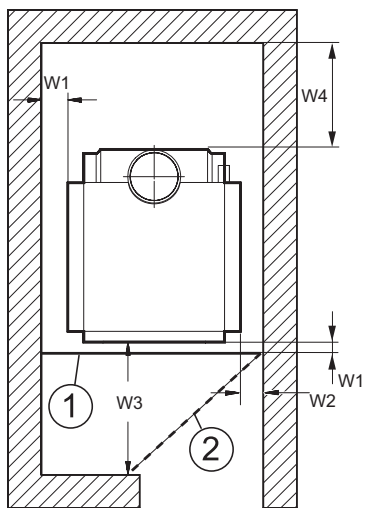


Tolerances are $\pm 1/4"$ (6.35mm)

Boiler Dimensions / Connections Data

Item	Description	Unit	G334X-73	G334X-92	G334X-116	G334X-132
A	Boiler width	Inch	34.5	41.7	48.8	56.9
1	Boiler supply / storage tank supply	Inch	1 1/2 FPT			
2	Boiler gas connection + main shutoff valve	Inch	1 1/4 FPT			
3	Return safety line / draining	Inch	3/4			
4	Boiler return	Inch	1 1/2 FPT			
B	Vent diameter	Inch	8	9	10	10

Boiler Clearances



- 1 Closed door
- 2 Open door

Description	Unit	Minimum Clearance (All Models)
Wall clearance W1	Inch	2
Wall clearance W2	Inch	2
Wall clearance W3	Inch	33
Wall clearance W4	Inch	6
Top clearance W5	Inch	30

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