



BUDERUS G115 & G115WS Boiler / Riello

Boiler Model	Input BTU/HR	Vent System	Burner Model	Insertion Depth	Firing Rate GPH	Burner Part No.	Air Tube Comb.	Head Setting	Specified Nozzle Type/Brand	Pump Pressure PSI	Breach Press W.C.	Over-fire Press W.C. Based on Breach Press W.C. Shown	Air Setting		Appx Gross Stack Temp.
									Alternate Nozzle Type/Brand				Air gate	Band	
G115WS Series - Upfired															
G115WS/3	105000	Chimney	R40 F3	6"	0.75	C8511443	LBT*	2	Del. 0,60 x 60°B	145	0 to -0,03	0 to Slightly +	4.00	---	350°F
									Del. 0,60 x 60°W						
G115WS/4	126000	Chimney	R40 F5	6"	0.90	C8512543	LBT*	1	Del. 0,75 x 60°B	145	0 to -0,03	0 to Slightly +	2.50	---	326°F
									Del. 0,75 x 60°A						
G115WS/5	161000	Chimney	R40 F5	10"	1.15	C8512443	LBT*	3	Del. 0,85 x 60°B	165	0 to -0,03	0 to Slightly +	3.00	---	325°F
									Del. 0,85 x 60°A						
G115 Series - Chimney Vent															
G115/21	84000	Chimney	R40 F3	6"	0.60	C8511443	LBT*	0	Del. 0,50 x 60°B	145	0 to -0,03	0 to Slightly +	2.25	---	289°F
									Del. 0,50 x 70°A						
G115/28	112000	Chimney	R40 F5	6"	0.80	C8512543	LBT*	0	Del. 0,65 x 60°B	145	0 to -0,03	0 to Slightly +	2.25	---	297°F
									Del. 0,65 x 60°W						
G115/34	140000	Chimney	R40 F5	10"	1.00	C8512443	LBT*	2	Del. 0,85 x 60°B	145	0 to -0,03	0 to Slightly +	2.50	---	284°F
									Del. 0,85 x 60°W						
G115 Series - Direct Vent															
G115/21	84000	Direct vent	R40 BF3	6"	0.60	C8511343	LBT*	0	Del. 0,50 x 60°W	145	N/A	N/A	3.50	---	316°F
									Del. 0,50 x 60° B						
G115/28	112000	Direct vent	R40 BF3	6"	0.80	C8511344	LBT*	3	Del. 0,65 x 60°W	145	N/A	N/A	5.50	---	304°F
									Del. 0,65 x 60°B						
G115/34	140000	Direct vent	R40 BF5	10"	1.00	C8512343	LBT*	3	Del. 0,85 x 60°W	145	N/A	N/A	4.50	---	310°F
									Del. 0,85 x 60°B						

* Reverse air flow turbolator disk

Actual operating setting on the burner may different from factory settings. Adjust burner settings to obtain a #0 smoke reading with a CO2 value of 11% - 12%

Direct vent models: Drafts pressures will vary due to job site locations

This data sheet is intended to be a setup guide. It is critical that all oil fired heating equipment be installed using combustion efficiency test equipment.



BUDERUS G115 & G115WS Boilers

Boiler Model	Input BTU/HR	Vent System	Burner Model	Firing Rate GPH	Burner Part No.	Air Tube Comb.	Head Setting	Specified Nozzle Type/Brand	Pump Pressure PSI	Breach Press W.C.	Over-fire Press W.C. Based on Breach Press W.C. Shown	Air Setting		Stack Temp.
								Alternate Nozzle Type/Brand				Air Band	Air Boot	
G115WS Series														
G115WS-3	105,000	Chimney	EZ-1HP	0.76	9748611J21	5" EZ-1	.60/.65	.60-60B Delavan	160	-0.03	Slightly +	0.60		390-440°F
								.60-60W Delavan						
G115WS-4	133,000	Chimney	EZ-1HP	0.95	9748611J28	5" EZ-1	0.75	.75-60B Delavan	160	-0.03	Slightly +	0.75		390-440°F
								.75-60B Hago						
G115WS-5	170,000	Chimney	EZ-1HP	1.16	9748611J34	5" EZ-1	0.75	0.85-60B Hago	185	-0.03	Slightly +	1.00		400-460°F
								0.85-60B Delevan						
G115 Series - Chimney Vent														
G115-21	84,000	Chimney	EZ-1HP	0.61	9748611J21	5" EZ-1	0.50	.50-70A Delavan	150	-0.03	Slightly +	0.50		330-360°F
								.50-60W Delavan						
G115-28	112,000	Chimney	EZ-1HP	0.80	9748611J28	5" EZ-1	.60/.65	.65-60ES Hago	150	-0.03	Slightly +	0.65		340-370°F
								.65-70A Delavan						
G115-34	140,000	Chimney	EZ-1HP	1.04	9748611J34	5" EZ-1	.85/1.00	.85-60B Delavan	150	-0.03	Slightly +	0.85		380-420°F
								.85-60W Delavan						
G115 Series - Direct Vent														
G115-21	84,000	Direct Vent	EZ-1HP	0.61	9748512J21	5" EZ-1	0.50	.50-70A Delavan	150	N/A	N/A		0.50	330-360°F
								.50-60ES Hago						
G115-28	112,000	Direct Vent	EZ-1HP	0.80	9748512J28	5" EZ-1	.60/.65	.65-60ES Hago	150	N/A	N/A		0.75	340-370°F
								.65-60A Delavan						
G115-34	140,000	Direct Vent	EZ-1HP	1.04	9748512J34	5" EZ-1	.85/1.00	.85-60B Delavan	150	N/A	N/A		1.00	380-420°F
								.85-60W Delavan						

Actual operating settings on the burner may differ from factory settings. Adjust burner settings to obtain a #0 smoke reading with a CO₂ value of 11%-12%.

EZ-1 Models: During operation of burner if flame is pulsating or losing retention, install extra (larger) head bar that is provided with burner and readjust burner settings.

Direct Vent models: Drafts pressures will vary due to job site locations.

Electrodes settings	Up	Ahead	Gap
EZ-1, 2, 3	5/16	Flush to 1/16	1/8 - 5/32

This data sheet is intended to be a setup guide. It is critical that all oil fired heating equipment be installed using combustion efficiency test equipment.

Boiler Model	Input BTU/HR	Vent System	Burner Model	Firing Rate GPH	Burner Part Number	Air Tube Combina- tion	Head Setting	Specified Nozzle Type/Brand	Pump Pressure PSI	Breech Press W.C.	Over-fire Press W.C. Based on Breech Press W.C. Shown	Air Setting		Stack Tem- perature
								Alternate Nozzle Type/Brand				Shutter	Band	
G115WS Series - Chimney Vent - NX														
G115WS\3	105,000	Chimney	NX ¹	0.75	BU2304	NX70LC ³	2.5	0.60x60°W Delavan	150	-.04	.015	N/A	N/A	412
								0.60x60°W Hago						
G115WS\4	133,000	Chimney	NX	0.95	BU2305	NX70LC ³	3.25	0.75x60°B Hago	165	-.045	.025	N/A	N/A	406
								0.75x60°B Delavan						
G115WS\5	161,000	Chimney	NX	1.15	BU2306	NX70LB ³	4.00	0.85x60°W Delavan	175	-.04	.03	N/A	N/A	387
								0.85x60°W Hago						
G115 Series - Chimney Vent - NX														
G115\21	84,000	Chimney	NX ¹	0.60	BU2301	NX70LC ³	1	0.50x60°W Delavan	150	-.03	.035	N/A	N/A	379
								0.50x60°AS Danfoss						
G115\28	112,000	Chimney	NX ¹	0.80	BU2302	NX70LC ³	2.5	0.60x60°B Delavan	175	-.035	.025	N/A	N/A	319
								0.60x60°B Hago						
G115\34	140,000	Chimney	NX	1.00	BU2303	NX70LB ³	2.25	0.75x60°B Delavan	175	-.025	.045	N/A	N/A	330
								0.75x60°B Hago						
G115 Series - Direct Vent - NX														
G115\21	84,000	Direct Vent	NX ¹	0.60	BU2301	NX70LC ³	1	0.50x60°W Delavan	150	.005	.065	N/A	N/A	417
								0.50x60°AS Danfoss						
G115\28	112,000	Direct Vent	NX ¹	0.80	BU2302	NX70LC ³	2.5	0.60x60°B Delavan	175	.035	.09	N/A	N/A	418
								0.60x60°B Hago						
G115\34	140,000	Direct Vent	NX	1.00	BU2303	NX70LB ³	2.25	0.75x60°B Delavan	175	.04	.135	N/A	N/A	412
								0.75x60°B Hago						
G115 Series - Chimney Vent - AFG														
G115\21	84,000	Chimney	AFG ¹	0.60	BU2101	AFG90M- PASN ²	N/A	0.50x45°B Hago	150	-.02	.03	9	0	349
								0.50x60°B Hago						
G115\28	112,000	Chimney	AFG	0.80	BU2102	AFG90M- PASN ²	N/A	0.65x60°B Hago	150	-.02	-.01	8	0	302
								0.65x60°B Delavan						
G115\34	140,000	Chimney	AFG	1.00	BU2103	AFG90M- PASN ²	N/A	0.85x60°B Hago	140	-.035	.07	10	2	398
								0.85x60°B Delavan						

¹ Low fire baffle installed

² Electrode tip settings: 1/4" above nozzle center line; 1/8" in front of nozzle; 1/8" gap; 'Z' dimension 1-3/4"; 6-1/4" insertion depth

³ 4-7/8" insertion depth