

Gas Performance Data																						
PP2-50-G (2017)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
% Burner output		0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
Heat input	Btu/hr	5000000	7250000	9500000	11750000	14000000	16250000	18500000	20750000	23000000	25250000	27500000	29750000	32000000	34250000	36500000	38750000	41000000	43250000	45500000	47750000	50000000
Gas Flow	SCFH	5000	7250	9500	11750	14000	16250	18500	20750	23000	25250	27500	29750	32000	34250	36500	38750	41000	43250	45500	47750	50000
Mini-Main State	Off/On	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Gas Mod. valve position	%	13.17	17.53	19.16	21.18	23.33	26.41	28.29	31.14	34.49	37.22	40.32	42.29	44.58	46.57	49.33	53.23	55.30	59.17	62.42	66.51	99.81
Gas Pressure at Train Inlet	PSI	4.70	4.28	4.32	4.36	4.44	4.46	4.49	4.39	4.32	4.26	4.20	4.16	4.11	4.09	4.03	3.90	3.77	3.65	3.52	3.39	3.26
Gas Manifold Pressure	i.w.c	0.8	1.3	1.7	2.4	3.4	4.3	5.8	7.4	8.7	11.7	14.3	16.0	18.3	20.5	23.2	27.5	29.8	34.0	37.0	40.1	47.0
Blower Output	%	12.65	16.09	18.63	22.61	25.67	29.66	33.64	37.43	40.32	44.48	49.37	53.35	58.41	64.38	68.54	73.43	78.67	84.45	88.62	92.41	98.56
Blower Speed	Hz	14.5	16.2	17.4	19.4	20.9	22.8	24.8	26.7	28.1	30.1	32.5	34.5	37	39.9	42.0	44.4	47.0	49.8	51.9	53.7	56.8
Blower Body Pressure	i.w.c	0.6	0.8	0.9	1.1	1.3	1.7	1.9	2.2	2.5	3.0	3.5	3.9	4.5	5.3	5.8	6.4	7.2	8.2	8.9	9.5	10.9
Combustion Air Motor Power	HP	0.97	1.20	1.40	1.78	2.12	2.67	3.25	3.95	4.58	5.55	6.80	8.02	9.80	12.10	14.00	16.50	19.60	23.10	25.80	28.50	34.00
Combustion Air Motor Current	Amp.	21.3	21.5	21.6	21.7	21.9	22.1	22.5	22.9	23.2	23.8	24.5	25.2	26.4	27.7	29.0	30.5	32.7	35.0	37.0	38.7	42.1
Combustion Air Flow	SCFH	150,000	177,881	205,762	233,642	261,523	289,404	317,285	345,165	373,046	400,927	428,808	463,892	498,976	534,060	569,144	604,229	639,313	674,397	709,481	744,565	779,650
Flame Length	Feet	3'-1"	3'-0"	2'-11"	3'-0"	3'-2"	3'-2"	3'-3"	3'-8"	4'-0"	4'-3"	4'-6"	4'-5"	4'-4"	3'-7"	3'-11"	4'-0"	4'-0"	3'-11"	3'-11"	4'-5"	4'-9"
Flame Diameter	Feet	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-4"	2'-7"	2'-8"	2'-9"	2'-10"	3'-2"	3'-2"	3'-2"	2'-11"	2'-8"	2'-9"	2'-10"	2'-7"	2'-4"	2'-7"	2'-9"
Excess air (Calculated)	%	198%	144%	115%	98%	86%	77%	70%	65%	61%	58%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%

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VFD Setup		Air VFD
Min Ref	Hz	8.3
Max Ref	Hz	56.8
Ramp Up Time	Sec	40
Ramp Down Time	Sec	40
Nominal Motor Speed	RPM	1775
Motor Current	A	60.1
Motor Frequency	Hz	60
Motor Voltage	V	480
Motor Power	HP	50

These values were measured using a burner firing into atmospheric conditions. These are to be used as a starting point only. Final Setup must be determined using a combustion analyzer.

