

Gas Performance Data												
WJ-75-G (60Hz-2017)		1	2	3	4	5	6	7	8	9	10	11
% Burner output		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Heat input	MMBtu/hr	8.3	15.7	23.1	30.5	38.0	45.4	52.8	60.2	67.7	75.1	82.5
Gas Flow	SCFH	8,250	15,675	23,100	30,525	37,950	45,375	52,800	60,225	67,650	75,075	82,500
	M <sup>3</sup>	234	444	654	864	1,075	1,285	1,495	1,705	1,916	2,126	2,336
Gas Mod. valve position (Smartlink)	%	0	20	24	29	35	41	46	50	56	65	100
Gas Pressure in Train	PSI	5.90	5.77	5.70	5.36	5.41	5.26	5.46	5.07	5.40	5.28	5.30
	kPa	40.7	39.8	39.3	37.0	37.3	36.3	37.6	35.0	37.2	36.4	36.5
Gas Pressure in gas manifold	"w.c"	1.5	2.5	8.2	13.0	18.3	23.8	32.8	42.4	50.0	62.0	67.0
	Pa	374	623	2,042	3,238	4,558	5,928	8,170	10,561	12,454	15,443	16,688
Dp at gas orifice (4.6" bore)	"w.c"	0.21	0.23	0.62	0.98	1.37	1.85	2.56	3.20	3.80	4.87	5.40
	Pa	52	57	154	244	341	461	638	797	947	1,213	1,345
Damper Position		0	0.75	1.5	2	2.25	2.7	3	3.5	4.5	5.25	9
Blower Body Pressure	"w.c"	21.00	21.30	21.20	21.20	21.10	21.10	20.80	20.70	19.90	19.70	19.30
	Pa	5,231	5,305	5,281	5,281	5,256	5,256	5,181	5,156	4,957	4,907	4,807
Burner Body Pressure	"w.c"	0.31	0.64	1.50	3.00	4.27	6.90	8.80	10.80	14.60	17.10	18.80
	Pa	77	159	374	747	1,064	1,719	2,192	2,690	3,637	4,259	4,683
Combustion Air Motor Power	HP	49.2	50.0	53.1	62.1	65.6	71.1	74.2	76.0	81.2	81.9	83.3
Combustion Air Motor Current	Amp.	54.7	56.1	61.1	66.3	70.0	74.9	78.0	80.3	83.8	85.4	87.0
Main Air Flow	SCFH	235,929	253,713	359,005	456,075	533,129	623,215	706,870	787,070	878,313	947,913	1,017,313
	M <sup>3</sup>	6,681	7,184	10,166	12,915	15,097	17,647	20,016	22,287	24,871	26,842	28,807
Flame Length	Feet	4	4	4.5	4.5	5	5	5.5	6.5	8	8	8
Flame Diameter	Feet	3	3	3	3.5	3.5	3.5	3.5	4	4.5	4.5	4.5
Excess air	%	184%	61%	54%	49%	40%	37%	33%	30%	29%	26%	23%

Match orifice meter differential pressure with blower body pressure. The chart below shows this graphically. To use it, find the fuel flow on the horizontal axis, then move vertically to the curve and then horizontally to the left to find the required blower body pressure. 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.

