



Burner Capacity Information, BBG 1010/2010

NATURAL GAS, AMBIENT COMBUSTION AIR OPERATION

SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	2,220,000	9,460,000	13,220,000	16,310,000	19,110,000
	(kW)	590	2,500	3,500	4,310	5,050
Air Capacity	(scfh)	23,000	98,000	137,000	169,000	198,000
	(nm ³ /hr)	616	2,625	3,670	4,527	5,304
Air Inlet Pressure	(in.w.c.)	0.3	6.9	13.9	20.8	27.7
	(mbar)	0.7	17.2	34.5	51.7	68.9
Gas Inlet Pressure	(in.w.c.)	0.1	1.2	2.2	3.0	3.7
	(mbar)	0.2	3.1	5.3	7.4	9.3
Flame Length (at 10% Excess Air)	(in)	72	108	120	132	144
	(mm)	1830	2740	3050	3350	3660
Flame Diameter (at 10% Excess Air)	(in)	36	42	48	48	48
	(mm)	910	1070	1220	1220	1220
Maximum Operating Excess	(Air)	300%	500%	500%	600%	600%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	3,250	14,250	N/R	N/R	N/R
	(nm ³ /hr)	87.1	381.7	N/R	N/R	N/R
Minimum Ignition Gas	(scfh)	600	1,700	N/R	N/R	N/R
	(nm ³ /hr)	16.1	45.5	N/R	N/R	N/R

Burner Capacity Information, BBG 3010

NATURAL GAS, 900°F/482°C PREHEATED COMBUSTION AIR OPERATION

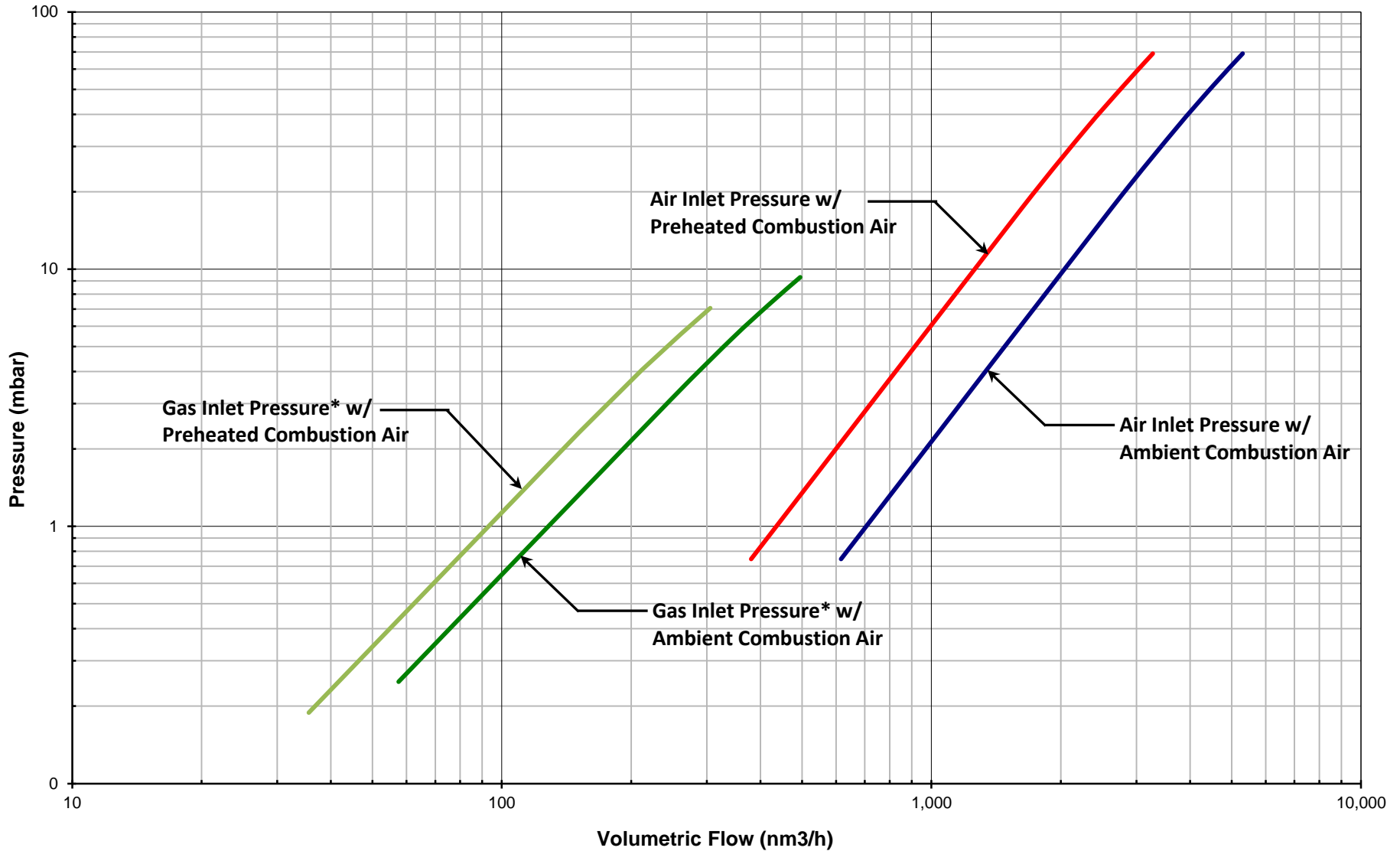
SPECIFICATIONS		OPERATIONAL INFORMATION				
Capacity (at 10% Excess Air)	(BTU/hr)	1,370,000	5,850,000	8,170,000	10,090,000	11,800,000
	(kW)	360	1,550	2,160	2,670	3,120
Air Capacity	(scfh)	14,205	60,575	84,650	104,600	122,315
	(nm ³ /hr)	381	1,623	2,268	2,802	3,277
Air Inlet Pressure	(in.w.c.)	0.3	6.9	13.9	20.8	27.7
	(mbar)	0.7	17.2	34.5	51.7	68.9
Gas Inlet Pressure	(in.w.c.)	0.1	0.9	1.6	2.3	2.8
	(mbar)	0.2	2.3	4.1	5.6	7.1
Flame Length (at 10% Excess Air)	(in)	60	84	90	96	108
	(mm)	1520	2130	2290	2440	2740
Flame Diameter (at 10% Excess Air)	(in)	36	42	42	48	48
	(mm)	910	1070	1070	1220	1220
Maximum Operating Excess	(Air)	250%	400%	400%	500%	500%
	(Fuel)	30%	30%	30%	30%	30%
Maximum Ignition Gas	(scfh)	2,050	8,800	N/R	N/R	N/R
	(nm ³ /hr)	54.9	235.7	N/R	N/R	N/R
Minimum Ignition Gas	(scfh)	450	1,300	N/R	N/R	N/R
	(nm ³ /hr)	12.1	34.8	N/R	N/R	N/R

NOTES:

- Capacities based on Natural Gas with HHV of 1034 BTU/ft³ (Standard), and LHV of 10.21 kWh/nm³ (Metric), 0.59 S.G., and a stoichiometric ratio of 9.74:1 with burner firing into chamber under no pressure at 10% excess air.
- Air and fuel flows based on STP operating conditions at sea level and industry standard air and gas piping practices.
- Gas inlet pressure given for reference only and should not be used for measuring fuel flow to the burner.
- Flame lengths measured from end of the combustion tile.
- Flame detection via UV scanner or flame rod (1000 series only).
- Ignition limits are established with (1) IPG5413 gas pilot, (2) IPE50 spark igniter, and (3) ZMI 16 gas pilot; with metered air and fuel flows and 5kV/15mA spark ignition transformer; for limits listed as N/R ignition is Not Recommended at this capacity.
- Burner is suitable for use on gaseous fuels other than Natural Gas and with combustion air other than ambient temperature, consult Hauck.

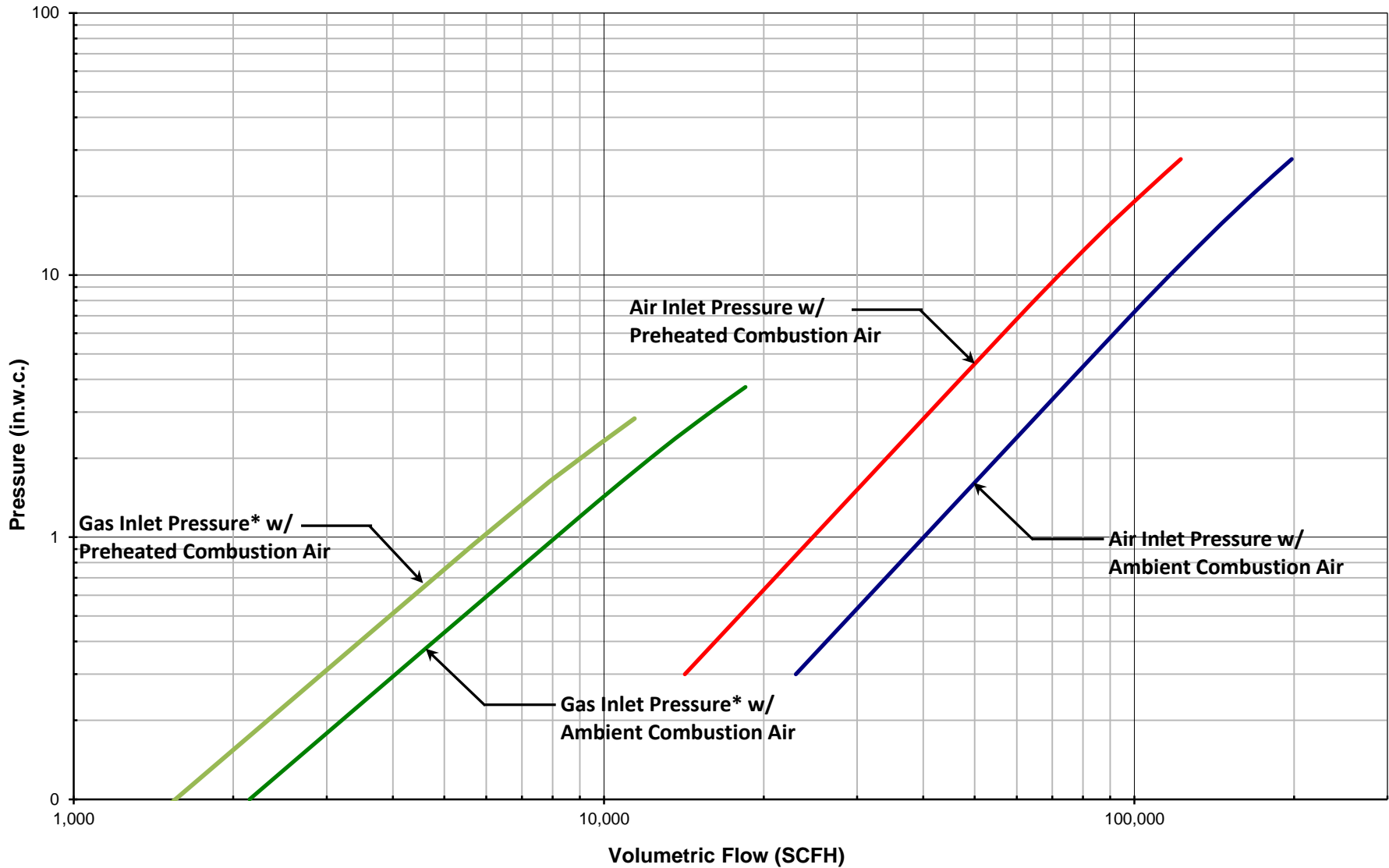
2013-08-21

BBG 1010/2010/3010 Pressure Curves
Natural Gas 1034 BTU/ft³ (HHV Standard) / 10.21 kWh/nm³ (LHV Metric), 0.59 S.G.
and Ambient and Preheated Combustion Air



*Note: Gas Inlet Pressure for BBG burner is not suitable for fuel flow measurement and is given for component sizing and reference only

BBG 1010/2010/3010 Pressure Curves
Natural Gas 1034 BTU/ft³ (HHV Standard) / 10.21 kWh/nm³ (LHV Metric), 0.59 S.G.
and Ambient and Preheated Combustion Air



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BBG 1010/2010/3010 Operating and Ignition Window

Natural Gas 1034 BTU/ft³ (HHV Standard) / 10.21 kWh/nm³ (LHV Metric), 0.59 S.G.
and Ambient Combustion Air

