

Fuel Supply Requirements - 60 Hz				
Model	Natural Gas		LP Vapor	
	1/2 Load	Full Load	1/2 Load	Full Load
<b>B&amp;S Base Model 40351 8kW, GE Base Model 40350GE 8 kW (Model 31 Single Cylinder)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	94.00	121.00	37.60	56.40
BTU's/hour	94,000.00	121,000.00	94,000.00	141,000.00
Gallons/hour	1.14	1.46	1.05	1.57
kg/hour	4.13	5.31	3.79	5.69
MJ/hour	99.18	127.66	99.18	148.76
Cubic meters/hour (m <sup>3</sup> /hour)	2.66	3.43	1.06	1.60
Cost per hour	\$ 0.62	\$ 0.79	\$ 2.19	\$ 3.29
<b>B&amp;S Base Model 40375 10 kW, GE Base Model 40324 10 kW (Model 35 - Vanguard Twin Cylinder)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	111.00	169.00	42.80	65.60
BTU's/hour	111,000.00	169,000.00	107,000.00	164,000.00
Gallons/hour	1.34	2.05	1.19	1.82
kg/hour	4.88	7.42	4.32	6.62
MJ/hour	117.11	178.30	112.89	173.03
Cubic meters/hour (m <sup>3</sup> /hour)	3.14	4.79	1.21	1.86
Cost per hour	\$ 0.73	\$ 1.11	\$ 2.50	\$ 3.83
<b>BS Base Model 40326 12 kW, (Model 49 - V-Twin OHV)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	119.46	197.00	51.00	85.32
BTU's/hour	119,460.00	197,000.00	127,500.00	213,300.00
Gallons/hour	1.45	2.38	1.42	2.37
kg/hour	5.25	8.65	5.14	8.61
MJ/hour	119.39	181.93	122.02	200.04
Cubic meters/hour (m <sup>3</sup> /hour)	3.38	5.58	1.44	2.42
Cost per hour	\$ 0.78	\$ 1.29	\$ 2.98	\$ 4.98
<b>GE Model 40324GE 13kW, (Model 49 - V-Twin OHV)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	125.00	211.00	54.00	88.20
BTU's/hour	125,000.00	211,000.00	135,000.00	220,500.00
Gallons/hour	1.51	2.55	1.50	2.45
kg/hour	5.49	9.27	5.45	8.90
MJ/hour	121.67	190.10	128.19	212.07
Cubic meters/hour (m <sup>3</sup> /hour)	3.54	5.97	1.53	2.50
Cost per hour	\$ 0.87	\$ 1.47	\$ 3.15	\$ 5.15
<b>BS Model 40337 16 kW, (Model 61 - Vanguard Twin Cylinder)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	163.00	244.00	71.00	113.00
BTU's/hour	163,000.00	244,000.00	177,500.00	282,500.00
Gallons/hour	1.97	2.95	1.97	3.14
kg/hour	7.16	10.72	7.16	11.40
MJ/hour	126.04	207.76	134.52	225.04
Cubic meters/hour (m <sup>3</sup> /hour)	4.62	6.91	2.01	3.20
Cost per hour	\$ 1.07	\$ 1.60	\$ 4.14	\$ 6.59
<b>GE Model 40335 17 kW, (Model 61 - Vanguard Twin Cylinder)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	170.00	248.00	74.20	118.00
BTU's/hour	170,000.00	248,000.00	185,500.00	295,000.00
Gallons/hour	2.06	3.00	2.06	3.28
kg/hour	7.47	10.89	7.49	11.90
MJ/hour	179.36	261.65	195.71	311.24
Cubic meters/hour (m <sup>3</sup> /hour)	4.81	7.02	2.10	3.34
Cost per hour	\$ 1.11	\$ 1.62	\$ 4.33	\$ 6.89
<b>BS Model 40336, GE 40334 20 kW, (Model 61 - Vanguard Twin Cylinder)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	187.00	260.00	83.00	135.00
BTU's/hour	187,000.00	260,000.00	207,500.00	337,500.00
Gallons/hour	2.26	3.15	2.31	3.75
kg/hour	8.21	11.42	8.37	13.62
MJ/hour	131.99	222.70	142.43	232.64
Cubic meters/hour (m <sup>3</sup> /hour)	5.30	7.36	2.35	3.82
Cost per hour	\$ 1.23	\$ 1.70	\$ 4.84	\$ 7.88
<b>BS Model 40348CA California Only 15 kW, (Model 61 - Vanguard Twin Cylinder)</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	156.00	240.00	68.00	109.00
BTU's/hour	156,000.00	240,000.00	170,000.00	272,500.00
Gallons/hour	1.89	2.90	1.89	3.03
kg/hour	6.85	10.54	6.86	11.00
MJ/hour	164.59	253.21	179.36	287.50
Cubic meters/hour (m <sup>3</sup> /hour)	4.42	6.80	1.93	3.09
Cost per hour	\$ 1.02	\$ 1.57	\$ 3.97	\$ 6.36
<b>B&amp;S Models 076032, GE Model 076036 (35kW) Liq. Cooled GM</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	282.00	458.00	117.16	186.04
BTU's/hour	282,000.00	458,000.00	292,900.00	465,100.00
Gallons/hour	3.41	5.54	3.26	5.17
kg/hour	12.39	20.12	11.82	18.77
MJ/hour	297.53	483.22	309.03	490.71
Cubic meters/hour (m <sup>3</sup> /hour)	7.99	12.97	3.32	5.27
Cost per hour	\$ 1.85	\$ 3.00	\$ 6.84	\$ 10.86
<b>B&amp;S Model 076031 (45kW) Liq. Cooled GM</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	429.00	717.00	173.00	294.00
BTU's/hour	429,000.00	717,000.00	432,500.00	735,000.00
Gallons/hour	5.19	8.68	4.81	8.17
kg/hour	18.84	31.49	17.45	29.66
MJ/hour	452.62	756.48	456.31	775.47
Cubic meters/hour (m <sup>3</sup> /hour)	12.15	20.30	4.90	8.33

Fuel Supply Requirements - 50 Hz				
Generator Rated Output	Natural Gas		LP Vapor	
	1/2 Load	Full Load	1/2 Load	Full Load
<b>40295 12.5 kW</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	126.00	242.00	56.00	107.64
BTU's/hour	126,000.00	242,000.00	140,000.00	269,090.91
Gallons/hour	1.53	2.93	1.56	2.99
kg/hour	5.53	10.63	5.65	10.86
MJ/hour	132.94	255.32	147.71	283.91
Cubic meters/hour (m <sup>3</sup> /hour)	3.57	6.85	1.59	3.05
Cost per hour	\$0.83	\$1.59	\$3.27	\$6.28
<b>40297 13.5 kW</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	160.00	293.40		
BTU's/hour	160,000.00	293,400.00		
Gallons/hour	1.94	3.55		
kg/hour	7.03	12.89		
MJ/hour	168.81	309.55		
Cubic meters/hour (m <sup>3</sup> /hour)	4.53	8.31		
Cost per hour	\$ 1.05	\$ 1.92		

Fuel consumption for all of our standby models.

An important point to remember:  
These are estimated fuel consumption rates.  
BTU content of the fuel is greatly affected by elevation.  
So, installers need to understand the BTU content for each application,

and adjust fuel flow rates accordingly

Utility providers charge customers for natural gas in therms.

1 therm is equal to 100,000 BTU's.

It is also approximately 100 cubic feet of natural gas.

Wisconsin Natural Gas Price per therm 

Month
\$0.655 Feb-13

LPG (Propane) is sold per gallon. 

Month
\$2.099 Feb-13

  
Price per gallon (Ferrell Gas - 500 gallon fill-up)

4.23 pounds/gallon LP	1.53	2.96
1.92 kg/gallon LP	Pounds/hr	Pounds/hr
	0.696	1.34

1 Gal = 128 oz.

128 oz = 3.628739 kg

1 oz = 0.02834952 kg

1 " W.C. = 2.491 mBar

1 ft<sup>3</sup> LPG = 0.0278 gallons of LPG

1 gallon LPG = 35.97 ft<sup>3</sup> LPG

1 ft<sup>3</sup> NG = 0.012 gallons of NG

1 gallon NG = 82.62 ft<sup>3</sup> NG

1 BTU = 0.001055056 MJ (Megajoule) 0.0010551

1 ft<sup>3</sup> LPG = 0.0278 gallons of LPG

1 gallon LPG = 35.97 ft<sup>3</sup> LPG

1 ft<sup>3</sup> NG = 0.012 gallons of NG

1 gallon NG = 82.62 ft<sup>3</sup> NG

1 BTU = 0.001055056 MJ (Megajoule) 0.0010551

1 gallon propane = 91,500 BTU

Cost per hour	\$ 2.81	\$ 4.70	\$ 10.09	\$ 17.16
<b>GE Model 076035 (48kW) Liq. Cooled GM</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	429.00	717.00	185.00	314.00
BTU's/hour	429,000.00	717,000.00	462,500.00	785,000.00
Gallons/hour	5.19	8.68	5.14	8.73
kg/hour	18.84	31.49	18.66	31.68
MJ/hour	452.62	756.48	487.96	828.22
Cubic meters/hour (m <sup>3</sup> /hour)	12.15	20.30	5.24	8.89
Cost per hour	\$ 2.81	\$ 4.70	\$ 10.80	\$ 18.32
<b>BS Model 76160, GE Model 076060 (60kW) Liq. Cooled GM</b>				
Cubic feet/hour (ft. <sup>3</sup> /hour)	463.00	788.00	200.00	345.00
BTU's/hour	463,000.00	788,000.00	500,000.00	862,500.00
Gallons/hour	5.60	9.54	5.56	9.59
kg/hour	20.34	34.61	20.18	34.80
MJ/hour	488.49	831.38	527.53	909.99
Cubic meters/hour (m <sup>3</sup> /hour)	13.11	22.31	5.66	9.77
Cost per hour	\$ 3.22	\$ 5.48	\$ 11.67	\$ 20.13