

ELECTRIC POWER RATING GUIDE

GAS GENERATOR SETS



Gammco



50Hz GAS GENERATOR SET PRODUCT RATINGS SUMMARY

Natural Gas ¹⁾									
Model	rpm	Emission Level (No _x) ²⁾		Aftercooler Temperature		Electric Power ³⁾ @ 1.0 pf kW _e	Efficiency ⁴⁾		
		mg/Nm ³	g/bhp-hr	°C	°F		Electrical Efficiency	Thermal Efficiency	Total Efficiency
							%	%	%
G3406	1500	11293	27.5	-	-	125	31.9%	57.5%	89.4%
G3406	1500	9986	25.0	54	130	160	32.2%	50.2%	82.4%
G3412C	1500	885	2.0	54	130	370	37.4%	47.3%	84.7%
CG132B-8	1500	500	1.0	45	113	400	43.1%	43.6%	86.7%
CG132B-12	1500	500	1.0	45	113	600	43.3%	44.6%	87.9%
CG132B-16	1500	500	1.0	45	113	800	43.5%	44.6%	88.1%
G3516	1500	834	2.0	54	130	983	34.8%	48.3%	83.0%
CG132B-16	1500	500	1.0	45	113	1000	41.0%	47.0%	88.0%
CG170-12	1500	500	1.0	60	140	1000	43.0%	45.4%	88.4%
G3512E	1500	500	1.0	54	130	1017	41.5%	44.7%	86.7%
CG170-12	1500	500	1.0	40	104	1125	40.9%	45.6%	86.5%
CG170-12	1500	500	1.0	40	104	1200	43.6%	43.3%	86.9%
G3512E	1500	500	1.0	54	130	1211	42.2%	44.2%	86.4%
CG170-16	1500	500	1.0	40	104	1500	40.9%	45.7%	86.6%
G3512H	1500	500	1.0	54	130	1500	44.9%	42.1%	87.0%
CG170-16	1500	500	1.0	40	104	1560	43.2%	43.8%	87.0%
G3516C	1500	500	1.0	54	130	1603	40.0%	46.5%	86.5%
G3520C	1500	500	1.0	54	130	1976	40.2%	46.6%	86.8%
CG170-20	1500	500	1.0	38	100	2000	44.4%	42.5%	86.9%
G3520C	1500	500	1.0	54	130	2010	40.4%	46.1%	86.5%
G3516H	1500	500	1.0	48	118	2027	45.3%	41.3%	86.6%
G3520E	1500	500	1.0	54	130	2039	42.5%	45.1%	87.6%
CG170B-20	1500	500	1.0	54	130	2300	45.0%	42.3%	87.3%
G3520H	1500	500	1.0	48	119	2519	45.4%	40.9%	86.3%
CG260-12	1000	500	1.0	40	104	3333	43.9%	42.6%	86.5%
CG260-16	1000	500	1.0	40	104	4300	44.1%	42.7%	86.8%
CG260-16	1000	500	1.0	40	104	4500	44.6%	43.2%	87.8%
G16CM34	750	500	1	45	113	6585	46.80%	46.10%	92.90%
G20CM34	750	500	1	45	113	10320	47.90%	45.30%	93.20%

Biogas ¹⁾									
Model	rpm	Emission Level (No _x) ²⁾		Aftercooler Temperature		Electric Power ³⁾ @ 1.0 pf kW _e	Efficiency ⁴⁾		
		mg/Nm ³	g/bhp-hr	°C	°F		Electrical Efficiency	Thermal Efficiency	Total Efficiency
							%	%	%
G3406	1500	7613	21.0	-	-	107	28.8%	60.7%	89.5%
G3412	1500	7051	19.9	-	-	174	27.4%	62.0%	89.4%
CG132B-8	1500	500	1.0	45	113	400	42.8%	42.2%	85.0%
CG132B-12	1500	500	1.0	45	113	600	42.9%	42.8%	85.7%
CG132B-16	1500	500	1.0	45	113	800	43.1%	42.6%	85.7%
CG170-12	1500	500	1.0	60	140	1000	42.6%	44.2%	86.8%
G3516A	1500	500	1.0	54	130	1041	32.1%	47.0%	79.1%
G3516A	1500	500	1.0	54	130	1105	36.8%	41.5%	78.3%
CG170-12	1500	500	1.0	50	122	1200	43.0%	42.8%	85.8%
CG170-16	1500	500	1.0	50	122	1560	42.6%	43.1%	85.7%
G3520C	1500	500	1.0	54	130	1984	39.4%	41.4%	80.5%
CG170-20	1500	500	1.0	50	122	2000	43.0%	43.3%	86.3%
CG170B-20	1500	500	1.0	50	122	2300	43.6%	42.9%	86.5%
CG260-16	1000	500	1.0	40	104	3770	43.0%	39.8%	82.8%

¹⁾ Bio Gases at LHV = 18.0-23.3MJ/Nm³ (457 to 593 Btu/cu.ft); MN=130-134. Natural Gas at 34.56 MJ/Nm³ (905Btu/cu.ft); MN = 70 for CG series, all others 80.

²⁾ Emissions are based on the engine operating at steady state conditions and adjusted to the specified NO_x level at 100% load. Values are engine out without exhaust aftertreatment and subject to nominal tolerance based on fuel, site and operating conditions.

³⁾ Power output based on ISO3046/1 conditions.

⁴⁾ Electrical efficiency based on 1.0 pf, ISO 3046/1. Thermal efficiency based on nominal tolerance (+/-8% for CG line, +/- 10% for G3300/3400/3500/GCM34 line). Thermal efficiency includes heat rejection from jacket water circuit and exhaust gas at LHV to 120°C (CG series using Bio Gas: 150°C for CG 132/170, 180°C for CG260) and 80°C for GCM34.

⁵⁾ NSPS Compliant Capable with addition of three-way catalyst or oxidation catalyst.

HIGH PERFORMANCE LESS OPERATING COSTS

Highly Efficient

With recent improvements of inlet ducting, combustion chamber design and high efficiency spark plugs, the CG170 gas generator delivers up to 43.7 percent electrical efficiency and more recoverable heat while reducing carbon emissions.



Lower Operating Costs

An optimized lubrication system means that the CG170 consumes up to 1,900 liters (500 gallons) less lubricating oil each year than competing gas generators, which means more money stays in your company's pockets.



Greater Availability

The CG170 utilizes soot-free combustion with chamber plugs for extended maintenance intervals up to 4,000 hours. Newly optimized blow-by gas recirculation reduces turbocharger maintenance intervals and boosts efficiency.



System Control

Control the entire system, not just the engine, with the Cat Total Electronic Management System. Control or monitoring of ancillary equipment such as heat recovery modules, exhaust aftertreatment and fuel treatment systems becomes seamless. Features like temperature monitoring for each cylinder and anti-knock control allow for maximum power output and the best possible fuel utilization, even with fluctuating gas composition.



High Transient Response

When your facility requires operation isolated from the electric utility grid, an optimized CG170 turbocharging system is provided to ensure transient load response that will keep your operation running.



Why choose Gmmco to meet your power needs

- We come with over 30 years of experience in the field of Engines and Alternate Power Generation
- Trusted by over 11000 customers across India
- Your single point of contact for all your power needs wherever you go
- Offices across 100 locations
- Over 200 field experts specifically to cater to your power needs



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