



MACH-30G Gas Engine

Mitsubishi Advanced Engine of Clean & High Efficiency

The MACH-30G series realizes electric power solutions that are friendly on the environment.

We have achieved an efficiency of 45.5% or greater that is unsurpassed in gas engines by individually controlling each cylinder and using a pilot injection ignition that utilizes a common rail. Also, it is possible to maintain stabilized capabilities without an efficiency drop as is often seen results from intermediate loads and high temperature found in gas turbines.

The achievement of unsurpassed efficiency of anywhere at 45.5% or greater

**Clean Emission
NOx Level of
100 ppm (O₂=0%)**

MACH-30G emissions are friendly on the environment with NOx values of exhaust gas that are lower than gas turbines.

Rates of NOx: MACH: 0.5g/kWh

Gas turbines: 0.7g/kWh

NOx rate of MACH meet the requirements in urban areas.

Higher Reliability

An overall efficiency with co-generation rate of over 80%

The MACH-30G was developed based on our rich experience in KU30 series, diesel and gas engine. We have over 300 accepts with some engines operating over 120,000 hours.

We have obtained an overall efficiency rate of greater than 80% through the joint installation of an exhaust gas boiler, an absorption chiller etc.

Main Specifications

Category	Unit	12MACH-30G		14MACH-30G		16MACH-30G		18MACH-30G	
Type		V-type 4-cycle gas engine (KU-30GA)							
Number of cylinders		12		14		16		18	
Frequency	Hz	60	50	60	50	60	50	60	50
Rated output (Generator motor)	kW	3,650	3,800	4,250	4,450	4,900	5,100	5,500	5,750
Voltage	V	6,600							
Fuel consumption rate	Nm ³ /h	744	774	866	906	998	1,039	1,120	1,171
Steam generation rate (0.78MPaG)	kg/h	1,920	2,000	2,240	2,350	2,560	2,670	2,900	3,030
Engine weight	ton	40		48		54		60	
Bore× stroke	mm	300×380							
Revolution	rpm	720	750	720	750	720	750	720	750
Power generator efficiency (LHV)	%	45.5 (NOx free, Methane index ≥ 65, 42.0 at NOx=100ppm)							

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