

BA.A-MG1100KW Technical Specification

Gas Generator Set with MTU 16V165RQ Engine



Gas engine **16V165RQ** is newly developed products with modified designs and technical innovations, which are manufacture on the basis of the product license of diesel engines 396 that was introduced from MTU Germany.

Technical Features

		Total displacement	63.36L
		Piston Speed	9.25m/s
Genset		Compression ratio	11:1
Genset Model	TMT1375G	Effective pressure	1.6Mpa
Manufacture	Tide Power System	Gas consumption rate	330
Engine Model	16V165RQ	Starter	15kW/24VDC
Alternator Model	IFC2 561-4LB42	Oil consumption	<1.5g/kw.h
Prime Power	1100kW/1375kVA	Weight	6400kg
Standby	1210kW/1512kVA	Dimension	3350×1549×1906
Power Factor	0.8(lag)	Exhaust temperature	≤620°C
Rated Voltage	400V/230V		
Rated current	1983A	Alternator	
Governor	Woodward	Model	Siemens IFC2 561-4LB42
	Actuator ProAct-ITB	Rated Power	1178kW/1472kVA
Dimension	4856×1543×2100mm	Protection Class	IP23
Control cabinet	2200×1000×1000mm	Protection Class	H
Total Weight	11300kg	Steady voltage regulation (%)	+5
		Voltage motion rate (%)	1.5
		Voltage stability time (%)	2
Engine Data		Instant voltage regulation (%)	+25,-20
Engine speed	1500rpm	Steady frequency regulation (%)	+8
Engine power	1260kW		
No. of cylinders	16		0-8 adjustable)
Cylinder arrangement	V type 90°	Instant frequency regulation (%)	+18
Bore	165mm	Frequency motion rate (%)	2
Stroke	185mm	Frequency stability time(s)	15
One cylinder displacement	3.96L		

The MTU engines incorporated the key technology of diesel engines 396 as blew which make Diesel Engines 396 compacted with the features of less weight, high power, better economic effects and longer service life:

- One-body engine case made of alloy iron casting.
- Combined piston with oil injecting cooling nozzles.
- Wat-type changeable cylinder liners.
- Plate-type high efficient heat exchanger.
- Exhaust system with three-layer walls for water cooling and heat insulation.
- Integrated accessories and standard interfaces.
- Every day and periodic maintenance.

Gas Engine

Gas engine referenced to and incorporate the advantages of the gas engine made abroad. New fuel combustion technology suitable for 396 engine has been developed together with supercharging, supervising and controlling system with combined functions adjusting, controlling, self-inspecting, safety protection and so on. The requirements of different air density and low-pressure combustion gas can be satisfied by mixing combustion gas before the air compression. The advanced angle of ignition and igniting amount can be adjusted automatically according to the different working conditions by powerful ignition system with micro processing capability. Accurate controlled rotating speed and safety operation can be achieved by adopting the accurate speed control system and the ignition inspection system, which can keep the engine working in its best condition all the time. The percentage between gas and air can be adjusted quickly by adopting the technology of thin-air combustion, one-point injection and closed loop control of gas-air percentage, which make the emitting, the safety and the index of the economic effects improved greatly.

Alternator

Gas generating sets driven by gas engine as their original power are equipped with 3-phase brushless synchronous AC generator in phase compounded self-excitation. These kinds of generators are made on the basis of Siemens Technology.

Controller

Matured Woodward control system and display instrument box with LCD and so on are used, which ensure the performance stability with on-set or multiple-set operation. The generating sets are compacted with less weight, convenience in transportation and can be used for stationary or moveable stations. Variety of gases, such as nature gas, coal mine gas, coal gas, marsh gas suitable for gas engines due to the usage of the reliable combustion gas technology.

Alborzgenerator Co., Ltd

Tel: +98-121-2229599

Fax: +98-121-3235519