

◎ POWER RATING

Engine Speed rev/min	Type of Operation	Engine Power	
		kWm	Ps
1800	Prime Power	150	204
	Standby Power	165	224
1500	Prime Power	128	174
	Standby Power	141	192



Note : -. The engine performance corresponds to ISO 3026, BS 5514 and DIN 6271.

-. Ratings are based on ISO 8528.

→ **Prime power** available at variable load. The permissible average power out put (during 24h period) shall not exceed 70% of the prime power rating.

→ **Standby power** available in the event of a main power network failure. No overload is permitted.

◎ MECHANICAL SYSTEM

○ Engine Model	GE08TIC
○ Engine Type	In-line 4 cycle, water cooled
	Turbo charged & intercooled (water to air)
○ Combustion type	Stoichiometric, Premixed and spark ignited
○ Cylinder Type	Replaceable wet liner
○ Number of cylinders	6
○ Bore x stroke	111(4.37) x 139(5.47) mm(in.)
○ Displacement	8.071 (492.52) lit.(in ³)
○ Compression ratio	10.5 : 1
○ Firing order	1-5-3-6-2-4
○ Ignition timing	13° BTDC
○ Compression pressure	Above 16 kg/cm ² (228 psi) at 200rpm
○ Dry weight	Approx. 750 kg (1,654 lb)
○ Dimension (LxWxH)	1,224 x 760 x 973 mm (48 x 30 x 38 in.)
○ Rotation	Counter clockwise viewed from Flywheel
○ Fly wheel housing	SAE NO.2
○ Fly wheel	Clutch NO.11 1/2

◎ MECHANISM

○ Type	Over head valve
○ Number of valve	Intake 1, exhaust 1 per cylinder
○ Valve lashes at cold	Intake 0.30mm (0.0118 in.) Exhaust 0.30mm (0.0118 in.)

◎ VALVE TIMING

	Opening	Close
○ Intake valve	16 deg. BTDC	34 deg. ABDC
○ Exhaust valve	46 deg. BBDC	14 deg. ATDC

◎ FUEL CONSUMPTION

○ Prime Power (Nm ³ /h)	1,500 rpm	1,800 rpm
25%	13.3	13.9
50%	17.8	21.8
75%	24.3	29.9
100%	31.8	38.5

◎ FUEL SYSTEM

○ Carburetor	Impco 200 Varifuel carburetor
○ Gas regulator	Maxitrol RV61
○ Max. inlet pressure	1.0 psi at the engine inlet

◎ LUBRICATION SYSTEM

○ Lub. Method	Fully forced pressure feed type
○ Oil pump	Gear type driven by crankshaft
○ Oil filter	Full flow, cartridge type
○ Oil pan capacity	High level 23 liters (6.08 gal.) Low level 17 liters (4.49 gal.)
○ Angularity limit	Front down 25 deg. Front up 25 deg. Side to side 25 deg.
○ Lub. Oil	Refer to Operation Manual Low ash type(0.5wt%) natural gas engine oil API service grade CD or higher SAE 15W-40

◎ COOLING SYSTEM

- Cooling method Fresh water forced circulation
- Water capacity 18 liters (4.76 gal.)
(engine only)
- Pressure system Max. 0.9 kg/cm² (12.8 psi)
- Water pump Centrifugal type driven by belt
- Water pump Capacity 240 liters (63.4 gal.)/min
at 1,800 rpm (engine)
- Thermostat none

◎ ELECTRICAL SYSTEM

- Charging generator 24V x 45A alternator
- Voltage regulator Built-in type IC regulator
- Starting motor 24V x 4.5kW
- Battery Voltage 24V
- Battery Capacity 150 AH (recommended)
- Ignition controller 12 or 24V DC
(min 8V DC at start, 32V DC max)

◎ IGNITION SYSTEM

- Spark plug NGK IFR7B-D, 0.4mm air gap
Champion RC78PYP, 0.38mm air gap
- Ignition controller Altronic CD 1 unit (12 or 24V DC)
- Ignition coil Altronic 501 061 blue epoxy individual
coil
- Trigger system Magnetic pick-up sensor and trigger
wheel and Hall-effect
(0.75 ~ -0.25mm air gap)

◎ ENGINEERING DATA

- Water flow 200 liters/min @1,500 rpm
- Heat rejection to coolant 29.4 kcal/sec @1,500 rpm
- Heat rejection to CAC 1.2 kcal/sec @1,500 rpm
- Air flow 10.3 m³/min @1,500 rpm
- Exhaust gas flow 16.5 m³/min @1,500 rpm
- Exhaust gas temp. 540 °C @1,500 rpm
- Water flow 240 liters/min @1,800 rpm
- Heat rejection to coolant 35.3 kcal/sec @1,800 rpm
- Heat rejection to CAC 2.3 kcal/sec @1,800 rpm
- Air flow 12.5 m³/min @1,800 rpm
- Exhaust gas flow 20.3 m³/min @1,800 rpm
- Exhaust gas temp. 560 °C @1,800 rpm
- Max. permissible restrictions
 - Intake system 220 mmH₂O initial
635 mmH₂O final
 - Exhaust system 600 mmH₂O max.

◆ CONVERSION TABLE

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|---|------------------------------------|
| in. = mm x 0.0394 | lb/ft = N.m x 0.737 |
| PS = kW x 1.3596 | U.S. gal = lit. x 0.264 |
| psi = kg/cm ² x 14.2233 | kW = 0.2388 kcal/s |
| in ³ = lit. x 61.02 | lb/PS.h = g/kW.h x 0.00162 |
| hp = PS x 0.98635 | cfm = m ³ /min x 35.336 |
| lb = kg x 2.20462 | Nm ³ = SCF × 0.0283 |
| Kg/hr = Nm ³ /hr × 0.732 (natural gas) | |
| Btu/ft ³ = MJ/m ³ × 26.8392 (natural gas) | |

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