

LOW FUEL COST, HIGH EFFICIENCY , GREEN INNOVATION

# GAS ENGINE AND GENSET

**FOR LPG, NAUTRAL GAS & BIOGAS  
FOR GENERATOR, MICOR COGEN & GHP**

**50 / 60 HZ (1500RPM / 1800RPM )**



**ENGINE**TECH  
KOREA CO., LTD.

◆ POWER RATINGS

Engine Speed(rp m)	Applicati on	Engine Power		Elec. Power
		kWm	bhp	kWe
1500	Prime	22	30	19
	Standby	24	32	21
1800	Prime	28	37	24
	Standby	30	40	26

**Power Standards**

The engine performance corresponds to ISO 3046, BS5514. The technical data applies to an engine without cooling fan and operating on a fuel with calorific value of 9.53Mcal/NM<sup>2</sup>, also where this deviation from the standards, Power output guaranteed within 0 to +/-5% at rated ambient conditions at delivery. Ratings are based on ISO8528.

Engine speed & Ignition controls are in accordance with electronic control units.

**Exhaust emissions,**

The engine exhaust emissions complies with EPA, CARB and TA-Luft regulation.

**Rating Guidelines**

**PRIME POWER** rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours in stead of commercially purchased power. A 10% overload capability is available for this rating.

But, The permissible average power shell not exceed 70% of the max. power rating during 24h .

STANDBY POWER rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No over-load capability is available for this rating

**Notices**

Engine Tech reserves the right to make changes at any time, without notice, as to technical data, price, materials, standard equipment, specifications and models, and to discontinue models. The engine illustrated may not be entirely identical to production standard engines.

## ◆ ENGINE SPECIFICATION

Engine Model	EG26-N ( N; for N.gas)	Original Engine type	D4BB
Engine Type	In-Line 4Cyl, 4Stroke	Valve Timing	Intake
Swept Volume	2,607 cc		Exhaust
Bore X Stroke	Ø91.1 X 100 (mm)	Aspiration	Natural Aspiration
Compression Ratio	<b>11.5:1</b>	Fuel	N;Natural Gas, **(Biogas ,LPG)
Firing Order	1-3-4-2	Fuel Control	Closed Loop (LC-ITB )
Rated Power	45 PS @ 1800 rpm	Fuel Supply	Mixer & Zero Governor Type,
Maximum Torque	17.3 kgf-m @ 1800 rpm	Ignition Control	ECU
Flywheel & Housing	SAE #10 / 4	Lubrication Type	Forced Feed with oil Pump
Dry Weight (kg)	<b>210 kg(engine only)</b>	Oil Capacity	5.8ℓ (Oil Pan ;4.6ℓ & Others ; 1.2ℓ)
Dimensions (mm)	<b>708(L)X619(W)X691(H)</b>	Coolant Capacity	3.9ℓ(Engine Only)
Rotation Direction	CCW (Seen from Flywheel)	Lubrication Oil	SAE 10W40 (CNG)
Valve Type	OHV, Timing Chain Drive	Start Motor	12V X 2.2kW
Valve No.	2 Valve / 1 Cylinder		

### Remarks,

1. In case of the Biogas & LPG, it should be adjusted or changed with some of component such as ECU, mixer, Gas train & etc as well as the gas line.
2. The fuel type of Biogas could not using with the below of 60% methan(CH<sub>4</sub>) and the biogas should be treated with the gas disposal utility for the H<sub>2</sub>S, Humidity of <80%, Siloxanes, NH<sub>3</sub>, O<sub>2</sub>, Tar, dust and etc.
3. In case of Biogas application, the customer always have to contact with the expert or special engineer of Engine Tech. Co.

### ◆ Standard Scope of Supply / EG-20 Gas Engine (G-Drive)

- Basic Engine included Fly wheel & Housing : SAE #4 & 10
- Control System ; Throttle Position(LC-ITB) for Speed control & ignition Timing(ECU).
- Starting Motor(12 V) & Charging Alternator 65A
- Air Filter(Dry type) w/ Service Indicator & Oil Filter
- Air Intake Manifold with Mixer & Gas Adjusting Screw
- Ex. Manifold, Upward, with Flexible Extension Pipe
- Engine Cooling Radiator & 400mm Cooling Fan w/ hose & acc.
- Engine Wiring harness

### ◆ Optional Items on Demand

- Gas Train ( Gas Filter, Solenoid Valve, Zero-Pressure Regulator & Flexible hose )
- Bio-Gas Kits for Gas Engine
- LPG Kits for Gas Engine
- G-Pack ( G-Drive gas Engine w/ Common Bed & Isolator for Gen-set)
- GCP(Gen-set Control Panel without Circuit Breaker)
- Gen-set ( included GCP W/ Circuit Breaker )
- Power Pack (Gen-set with Sound Proof Enclosure ,<68 dB(A) or 75dB(A) )
- Extended Warranty Condition ( Max. 4000hrs or 2 years of operation )

**◆ Technical Engineering Data (Check data)**

1. Max. Gas inlet Pressure ; **Max. 10~50mbar** to Gas Train Inlet (by N.Gas)
2. Max. Permissible restriction ; - Intake Air Cleaner 100mmH<sub>2</sub>O (clean) & 450mmH<sub>2</sub>O  
- Exhaust Gas back pressure ; 3 kPa(1500rpm) , 5kPa(1800rpm)
3. Lube Oil Consumption ; 0.015 Liter/hour @standby, 1500/1800rpm
4. Cooling Water Flow rate ; 28 L/min @1500rpm, 35 L/min1800rpm
5. Thermostat ; - Start to open 76.5 °C, - Fully open 86.5 °C (Max. allowable Coolant temp. ; 95°C)
6. Fan drive ratio ; 1.32 : 1
7. Fan Flow rate ; 1.03 m<sup>3</sup>/sec@1500rpm, 0.25kPa , 1.48 m<sup>3</sup>/sec @1800rpm, 0.25kPa
8. Max. Exhaust gas temperature ; 553 °C@1500rpm, 587 °C@1800rpm
9. **Max. intake Air Flow rate at Standby rating ; 26.6 L/sec@1500rpm, 31.3 L/sec@1800rpm**
10. Charging Alternator ; 65A at 1800rpm at 12V
11. Starting Motor ; 12VDC, 2.2kW

**◆ REFERANCE LAYOUT**