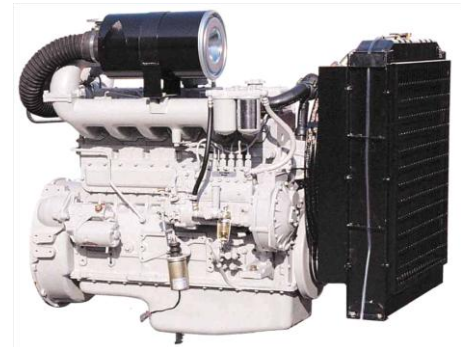


## ◎ POWER RATING

Intermittent rating kW(PS) / rpm	Max. torque N.m(kg.m) / rpm	Fuel consumption g/kW.h(g/PS.h) / rpm
151 (205) / 2,200	793 (80.8) / 1,400	216 (159) / 2,200

1. The engine performance corresponds to ISO 3046.
2. Continuous power rating is to 129kW(175ps) @2200rpm.



## ◎ MECHANICAL SYSTEM

○ Engine Model	PU086T
○ Engine Type	In-line 4 cycle, water cooled Turbo charged
○ Combustion type	Direct injection
○ Cylinder Type	Replaceable dry liner
○ Number of cylinders	6
○ Bore x stroke	111(4.37) x 139(5.47) mm(in.)
○ Displacement	8.071(492.49) lit.(in.3)
○ Compression ratio	16.8 : 1
○ Firing order	1-5-3-6-2-4
○ Injection timing	12° BTDC
○ Compression pressure	Above 28 kg/cm <sup>2</sup> (398 psi) at 200rpm
○ Dry weight	Approx. 780 kg (1,720 lb)
○ Dimension (LxWxH)	1,277 x 824 x 1,001 mm (50.3 x 32.4 x 39.4 in.)
○ Rotation	Counter clockwise viewed from Flywheel
○ Fly wheel housing	SAE NO.2M
○ Fly wheel	Clutch NO.11 1/2M

## ◎ MECHANISM

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

## ◎ VALVE TIMING

	Opening	Close
○ Intake valve	16 deg. BTDC	36 deg. ABDC
○ Exhaust valve	46 deg. BBDC	14 deg. ATDC

## ◎ OPTION & ACCESSORY PARTS

○ Engine parts	Fly wheel & housing Intake & exhaust manifold
○ Accessory parts	Raditor, silencer & air cleaner
○ Electrical parts	Gauge panel & stop solenoid

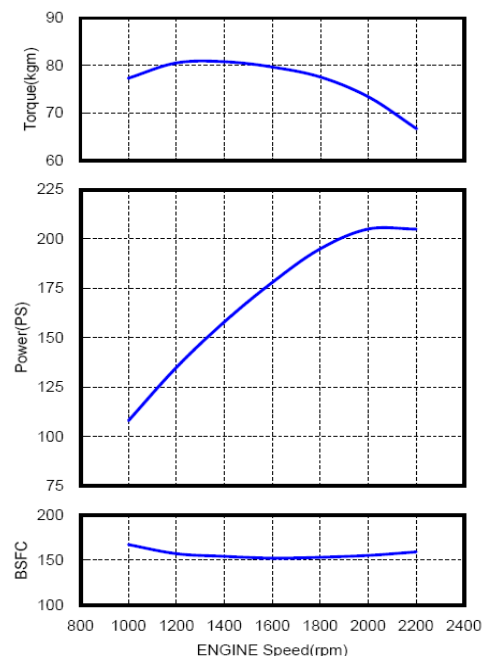
## ◎ FUEL SYSTEM

○ Injection pump	Zexel in-line "AD" type
○ Governor	RSV type(all speed control)
○ Feed pump	Mechanical type
○ Injection nozzle	Multi hole type
○ Opening pressure	214 kg/cm <sup>2</sup> (3,044 psi)
○ Fuel filter	Full flow, cartridge type
○ Used fuel	Diesel fuel oil

## ◎ 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 15 liters ( 4.09 gal.) Low level 12 liters ( 3.17 gal.)
○ Angularity limit	Front down 25 deg. Front up 25 deg. Side to side 25 deg.
○ Lub. Oil	Refer to Operation Manual

## ◎ PERFORMANCE CURVE



## ◎ COOLING SYSTEM

- Cooling method Fresh water forced circulation
- Water capacity 14 liters ( 3.70 gal.)  
(engine only)
- Pressure system Max. 0.9 kg/cm<sup>2</sup> ( 12.8 psi)
- Water pump Centrifugal type driven by belt
- Water pump Capacity 190 liters ( 41.8 gal.)/min  
at 2,200 rpm (engine)
- Thermostat Wax – pellet type  
Opening temp. 71°C  
Full open temp. 85°C
- Cooling fan Blower type, steel  
590 mm diameter, 6 blade

## ◎ ELECTRICAL SYSTEM

- Charging generator 24V x 45A [or 12V x 26A ] alternator
- Voltage regulator Built-in type IC regulator
- Starting motor 24V x 4.5kW [or 12V x 2.5kW ]
- Battery Voltage 24V [or 12V ]
- Battery Capacity 100 AH [or 150 AH ](recommended)
- Starting aid (Option) Block heater

## ◎ ENGINEERING DATA

- Water flow 190 liters/min @2,200 rpm
- Heat rejection to coolant 21.0 kcal/sec @2,200 rpm
- Air flow 15.3 m<sup>3</sup>/min @2,200 rpm
- Exhaust gas flow 18.0 m<sup>3</sup>/min @2,200 rpm
- Exhaust gas temp. 530 °C @2,200 rpm
- Max. permissible restrictions
  - Intake system 220 mmH<sub>2</sub>O initial  
635 mmH<sub>2</sub>O final
  - Exhaust system 1,000 mmH<sub>2</sub>O max.

## ◆ CONVERSION TABLE

- 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<sup>2</sup> x 14.223      kW = 0.2388 kcal/s
- in<sup>3</sup> = lit. x 61.02      lb/PS.h = g/kW.h x 0.00162
- hp = PS x 0.98635      cfm = m<sup>3</sup>/min x 35.336
- lb = kg x 2.20462

