

PU086TI P-DRIVE

© POWER RATING

Intermittent rating kW(PS) / rpm	Max. torque N.m(kg.m) / rpm	Fuel consumption g/kW.h(g/PS.h) / rpm
213 (290) / 2,200	1095 (111.7) / 1,600	219 (161) / 2,200

- 1. The engine performance corresponds to ISO 3046, DIN 6270B.
- 2. Continuous power rating is to 169kW(230ps) @2200rpm.



© MECHANICAL SYSTEM

O Engine Model PU086TI

○ Engine Type In-line 4 cycle, water cooled

Turbo charged & intercooled

Combustion typeCylinder TypeReplaceable dry liner

Cylinder Type ReplaceableNumber of cylinders 6

○ Bore x stroke 111(4.37) x 139(5.47) mm(in.)

○ Displacement 8.071(492.49) lit.(in3)

○ Compression ratio
 ○ Firing order
 ○ Injection timing
 16.7:1
 1-5-3-6-2-4
 ○ Injection timing

○ Compression pressure Above 28 kg/cm²(398 psi) at 200rpm

○ Dry weight Approx. 792 kg (1,746 lb)
 ○ Dimension 1,242 x 918 x 1,100 mm
 (LxWxH) (48.9 x 36.1 x 43.3 in.)

• Rotation Counter clockwise viewed from Flywheel

○ Fly wheel housing SAE NO.1M ○ Fly wheel Clutch NO.14M

© MECHANISM

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

© OPTION & ACCESSORY PARTS

O Engine parts Fly wheel & housing

Intake & exhaust manifold

Accessory partsElectrical partsRaditor, silencer & air cleanerGauge panel & stop solenoid

◎ FUEL SYSTEM

○ Injection pump Zexel in-line "PE6P" type ○ Governor RSV type(all speed control)

○ Feed pump Mechanical type○ Injection nozzle Multi hole type

○ Opening pressure 224 kg/cm2 (3,186 psi) ○ Fuel filter Full flow, cartridge type

○ Used fuel Diesel fuel oil

© LUBRICATION SYSTEM

Lub. Method Fully forced pressure feed typeOil pump Gear type driven by crankshaft

○ Oil filter Full flow, cartridge type

○ Oil pan capacity High level 15 liters (4.09 gal.)

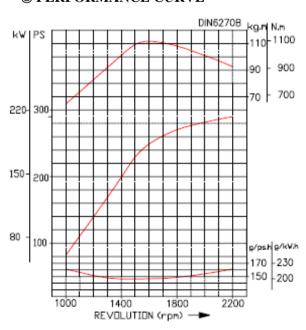
Low level 12 liters (3.17 gal.)

○ Angularity limit Front down 25 deg.

Front up 25 deg. Side to side 25 deg.

○ Lub. Oil Refer to Operation Manual

© PERFORMANCE CURVE





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© COOLING SYSTEM

○ Cooling method Fresh water forced circulation

○ Water capacity 14 liters (3.70 gal.)

(engine only)

○ Pressure system Max. 0.9 kg/cm² (12.8 psi)
 ○ Water pump Capacity Centrifugal type driven by belt
 250 liters (66.0 gal.)/min

water pump capacity 250 fiters (60.0 gar.)/illin

at 2,200 rpm (engine)

○ Thermostat Wax – pellet type

Opening temp. 71°C Full open temp. 85°C

○ Cooling fan Blower type, plastic

660 mm diameter, 7 blade

© ENGINEERING DATA

○ Water flow
 ○ Heat rejection to coolant
 ○ Air flow
 250 liters/min @2,200 rpm
 29.7 kcal/sec @2,200 rpm
 25.1 m³/min @2,200 rpm

○ Exhaust gas flow 40.1 m³/min @2,200 rpm

○ Exhaust gas temp. 450 °C @2,200 rpm

○ Max. permissible restrictions

-.Intake system 220 mmH₂O initial

635 mmH₂O final

-.Exhaust system 1,000 mmH₂O max.

© ELECTRICAL SYSTEM

○ Charging generator○ Voltage regulator24V x 45A alternatorBuilt-in type IC regulator

○ Starting motor 24V x 4.5kW

○ Battery Voltage 24V

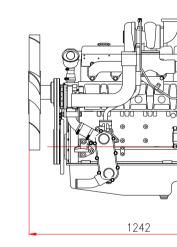
○ Battery Capacity 100 AH (recommended)

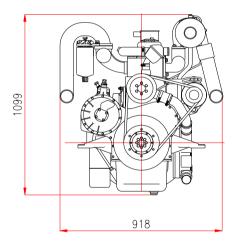
○ Starting aid (Option) Block heater

♦ CONVERSION TABLE

in3 = 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

 $1b = kg \times 2.20462$





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^{*} Speccifications are subject to change without prior notice