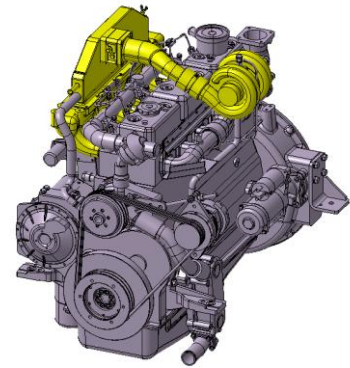


## ◎ POWER RATING

Intermittent rating kW(PS) / rpm	Max. torque N.m(kg.m) / rpm	Fuel consumption g/kW.h(g/PS.h) / rpm
228 (310) / 2,450	1177 (120) / 1,500	228 (168) / 2,450

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



## ◎ MECHANICAL SYSTEM

○ Engine Model	PU086TI
○ Engine Type	In-line 4 cycle, water cooled Turbo charged & intercooled
○ 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.(in3)
○ Compression ratio	16.7 : 1
○ Firing order	1-5-3-6-2-4
○ Injection timing	18° BTDC
○ Compression pressure	Above 28 kg/cm <sup>2</sup> (398 psi) at 200rpm
○ Dry weight	Approx. 800 kg (1,763 lb)
○ Dimension (LxWxH)	1,116 x 728 x 1,106 mm (43.9 x 28.6 x 43.5 in.)
○ Rotation	Counter clockwise viewed from Flywheel
○ Fly wheel housing	SAE NO.1M
○ Fly wheel	Clutch NO.14M

## ◎ 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	-
○ Electrical parts	Stop solenoid

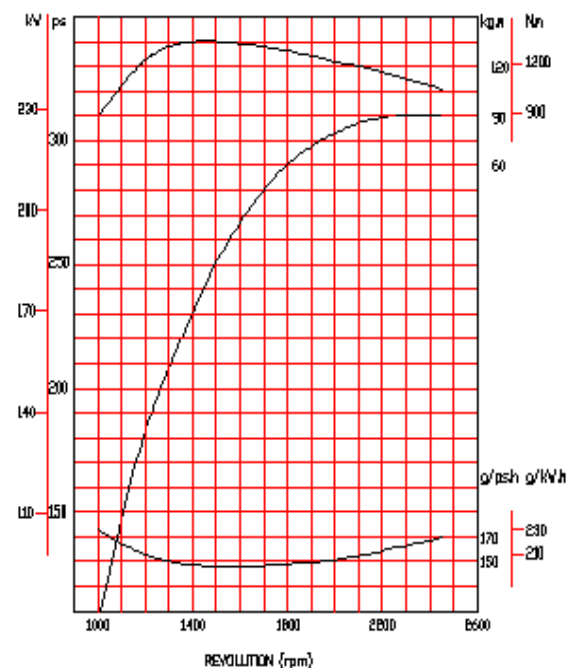
## ◎ FUEL SYSTEM

○ 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/cm <sup>2</sup> (3,186 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. 0.5 kg/cm<sup>2</sup> ( 7.1 psi)
- Water pump Centrifugal type driven by belt
- Water pump Capacity 273 liters ( 60.1 gal.)/min  
at 2,450 rpm (engine)
- Thermostat Wax – pellet type  
Opening temp. 71°C  
Full open temp. 85°C
- Cooling fan -

## ◎ ELECTRICAL SYSTEM

- Charging generator 24V x 45A alternator
- Voltage regulator Built-in type IC regulator
- Starting motor 24V x 6.0kW
- Battery Voltage 24V
- Battery Capacity 100 AH (recommended)
- Starting aid (Option) Block heater

## ◎ ENGINEERING DATA

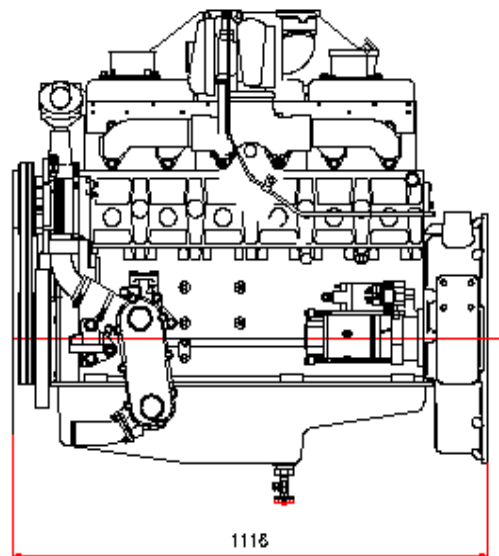
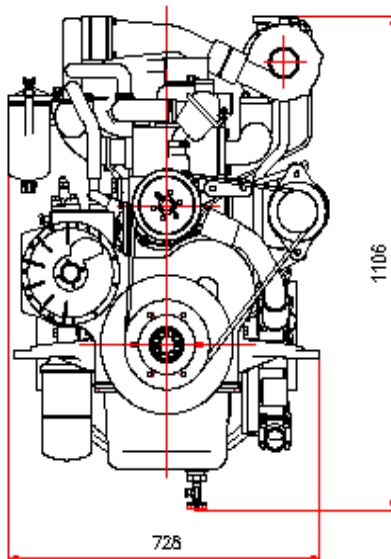
- Water flow 273 liters/min @ 2,450 rpm
- Heat rejection to coolant 33.9 kcal/sec @ 2,450 rpm
- Air flow 18.5 m<sup>3</sup>/min @ 2,450 rpm
- Exhaust gas flow 19.3 m<sup>3</sup>/min @ 2,450 rpm
- Exhaust gas temp. 544 °C @ 2,450 rpm
- Max. permissible restrictions
  - Intake system 220 mmH<sub>2</sub>O initial  
635 mmH<sub>2</sub>O final
  - Exhaust system 1,000 mmH<sub>2</sub>O max.

## ◎ INTERCOOLER DATA

- Heat rejection to coolant 10.5 kcal/sec @2,450 rpm

## ◆ 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 14.2233	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	



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※ Specifications are subject to change without prior notice