

## PU086T P-DRIVE

◎ Production tolerance : ±3%

Intermittent rating kW(PS) / rpm	Max. torque N.m(kg.m) / rpm	Fuel consumption g/kW.h(g/PS.h) / rpm
149 (205) / 2,200	826 (84.3) / 1,400	254 (187) / 2,200

Note : -. The engine performance corresponds to ISO 3046.



### ◎ 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.(in3)
- 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              1,277 x 824 x 1,001 mm  
(LxWxH)                    (50.3 x 32.4 x 39.4 in.)
- Rotation                 Counter clockwise viewed from Flywheel

### ◎ 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

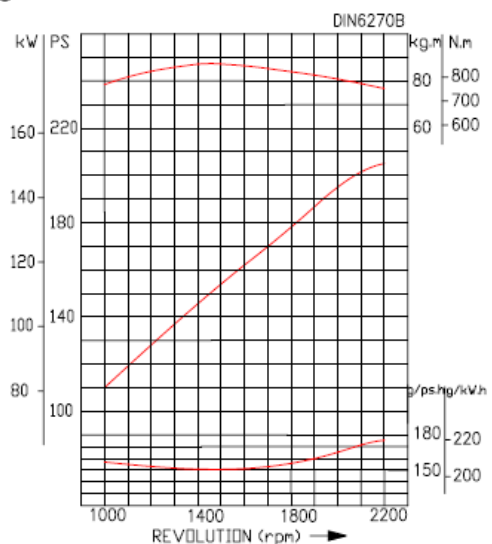
### ◎ FUEL SYSTEM

- 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

