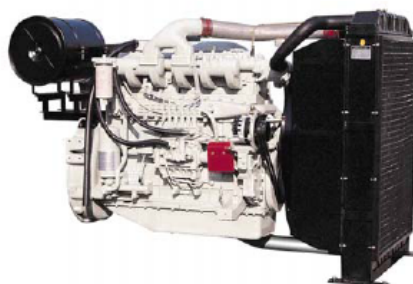


## P126TI-II G-DRIVE

### ◎ POWER RATING

Engine Speed rev/min	Type of Operation	Engine Power	
		kWm	Ps
1800	Continuous Power	*	*
	Prime Power	307	418
	Standby Power	342	465
1500	Continuous Power	*	*
	Prime Power	265	360
	Standby Power	294	400



Note : -. The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271.

- Ratings are based on ISO 8528.

→ Prime power available at variable load. The permissible average power out put (during 24h period) shall not exceed 70% of the prime power rating.

→ Standby power available in the event of a main power network failure. No overload is permitted.

### ◎ MECHANICAL SYSTEM

○ Engine Model	P126TI- II
○ Engine Type	In-line 4 cycle, water cooled Turbo charged & intercooled (air to air)
○ Combustion type	Direct injection
○ Cylinder Type	Replaceable dry liner
○ Number of cylinders	6
○ Bore x stroke	123(4.84) x 155(6.1) mm(in.)
○ Displacement	11.051(674.5) lit.(in <sup>3</sup> )
○ Compression ratio	17 : 1
○ Firing order	1-5-3-6-2-4
○ Injection timing	16° BTDC
○ Compression pressure	Above 28 kg/cm <sup>2</sup> (398 psi) at 200rpm
○ Dry weight	Approx. 910 kg (2,006 lb)
○ Dimension (LxWxH)	1,383 x 870 x 1,207 mm (54.4 x 34.3 x 47.5 in.)
○ Rotation	Counter clockwise viewed from Flywheel
○ Fly wheel housing	SAE NO.1
○ Fly wheel	Clutch NO.14

### ◎ MECHANISM

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

### ◎ VALVE TIMING

	Opening	Close
○ Intake valve	18 deg. BTDC	34 deg. ABDC
○ Exhaust valve	46 deg. BBDC	14 deg. ATDC

### ◎ FUEL CONSUMPTION

○ Prime Power (lit/hr)	1,500 rpm	1,800 rpm
25%	16.9	20.6
50%	31.3	37
75%	47	56
100%	63.1	73.8
○ Standby Power (lit/h)	1,500 rpm	1,800 rpm
25%	18.3	22.2
50%	34.9	41.4
75%	51.6	61.5
100%	77.6	89.5

### ◎ FUEL SYSTEM

○ Injection pump	Zexel in-line "P" type
○ Governor	Electric type
○ Feed pump	Mechanical type
○ Injection nozzle	Multi hole type
○ Opening pressure	220 kg/cm <sup>2</sup> (3,129 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 23 liters ( 6.1 gal.) Low level 20 liters ( 5.3 gal.)
○ Angularity limit	Front down 25 deg. Front up 25 deg. Side to side 15 deg.
○ Lub. Oil	Refer to Operation Manual

◎ **COOLING SYSTEM**

- Cooling method Fresh water forced circulation
- Water capacity 19 liters ( 5.02 gal.) (engine only)
- Pressure system Max. 0.9 kg/cm<sup>2</sup> ( 12.8 psi)
- Water pump Centrifugal type driven by gear
- Water pump Capacity 320 liters ( 84.5 gal.)/min at 1,800 rpm (engine)
- Thermostat Wax – pellet type  
Opening temp. 71°C  
Full open temp. 85°C
- Cooling fan Blower type, plastic  
755 mm diameter, 7 blade

◎ **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 150 AH (recommended)
- Starting aid (Option) Block heater

◎ **ENGINEERING DATA**

- Water flow 265 liters/min @1,500 rpm
- Heat rejection to coolant 27.6 kcal/sec @1,500 rpm
- Heat rejection to CAC 8.4 kcal/sec @1,500 rpm
- Air flow 20.1 m<sup>3</sup>/min @1,500 rpm
- Exhaust gas flow 47.4 m<sup>3</sup>/min @1,500 rpm
- Exhaust gas temp. 590 °C @1,500 rpm

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- Water flow 320 liters/min @1,800 rpm
- Heat rejection to coolant 32.2 kcal/sec @1,800 rpm
- Heat rejection to CAC 14.9 kcal/sec @1,800 rpm
- Air flow 28.2 m<sup>3</sup>/min @1,800 rpm
- Exhaust gas flow 64.2 m<sup>3</sup>/min @1,800 rpm
- Exhaust gas temp. 580 °C @1,800 rpm

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- Max. permissible restrictions
  - Intake system 220 mmH<sub>2</sub>O initial  
635 mmH<sub>2</sub>O final
  - Exhaust system 600 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 14.2233 | 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                  |                                    |

