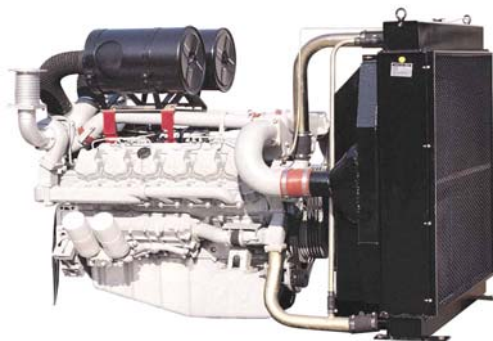


◎ POWER RATING

Intermittent rating kW(PS) / rpm	Max. torque N.m(kg.m) / rpm	Fuel consumption g/kW.h(g/PS.h) / rpm
588 (800) / 2100	3205 (327) / 1500	223 (164) / 2100

Note : 1. The engine performance corresponds to ISO 3046, DIN 6270B.
 2. Continuous duty at charge and constant speed consider on engine choice, a power derating of about 15%.
 3. Max. rpm of Continuous duty is 1,800rpm.



◎ MECHANICAL SYSTEM

- Engine Model PU222TI
- Engine Type V-type 4 cycle, water cooled
Turbo charged & intercooled
- Combustion type Direct injection
- Cylinder Type Replaceable wet liner
- Number of cylinders 12
- Bore x stroke 128(5.04) x 142(5.59) mm(in.)
- Displacement 21.927 (1,338.0) lit.(in³)
- Compression ratio 15 : 1
- Firing order 1-12-5-8-3-10-6-7-2-11-4-9
- Injection timing 18° BTDC
- Dry weight Approx. 1,575 kg (3,472 lb)
- Dimension 1,717 x 1,389 x 1,288 mm
(LxWxH) (67.6 x 54.7 x 50.7 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 0.25mm (0.0098 in.)
Exhaust 0.35mm (0.0138 in.)

◎ VALVE TIMING

- | | Opening | Close |
|-----------------|--------------|--------------|
| ○ Intake valve | 24 deg. BTDC | 36 deg. ABDC |
| ○ Exhaust valve | 63 deg. BBDC | 27 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

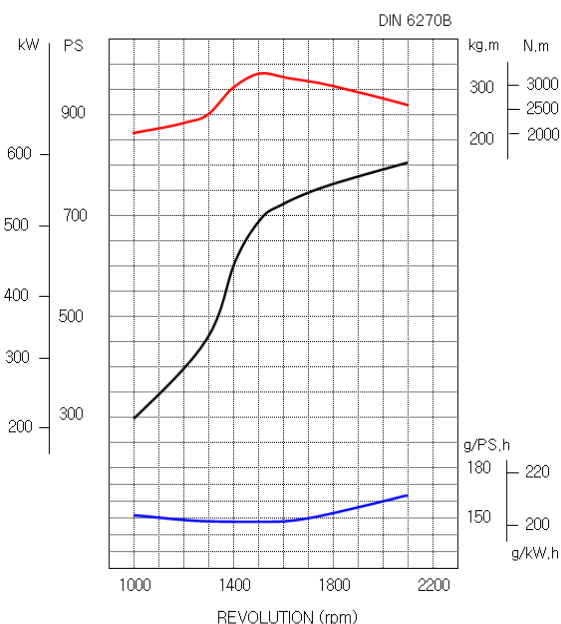
◎ FUEL SYSTEM

- Injection pump Bosch in-line "P" type
- Governor Mechanical type
- Feed pump Mechanical type
- Injection nozzle Multi hole type
- 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 40 liters (10.6 gal.)
Low level 33 liters (8.7 gal.)
- Angularity limit Front down 20 deg.
Front up 20 deg.
Side to side 15 deg.
- Lub. Oil Refer to Operation Manual

◎ PERFORMANCE CURVE



◎ COOLING SYSTEM

- Cooling method Fresh water forced circulation
- Water capacity 23 liters (6.07 gal.)
(engine only)
- Pressure system Max. 0.5 kg/cm² (7.1 psi)
- Water pump Centrifugal type driven by belt
- Water pump Capacity 454 liters (120 gal.)/min
at 2,100 rpm (engine)
- Thermostat Wax – pellet type
Opening temp. 71°C
Full open temp. 85°C
- Cooling fan Blower type, plastic
915 mm diameter, 7 blade

◎ ELECTRICAL SYSTEM

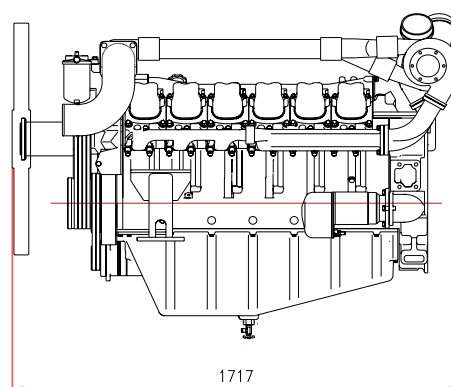
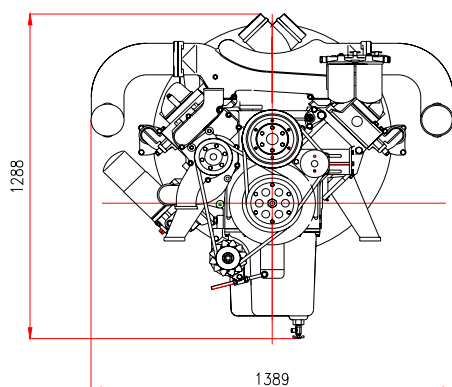
- Charging generator 24V x 45A alternator
- Voltage regulator Built-in type IC regulator
- Starting motor 24V x 7.0kW
- Battery Voltage 24V
- Battery Capacity 200 AH (recommended)
- Starting aid (Option) Block heater

◎ ENGINEERING DATA

- Water flow 454 liters/min @2,100 rpm
- Heat rejection to coolant 67 kcal/sec @2,100 rpm
- Heat rejection to CAC 47 kcal/sec @2,100 rpm
- Air flow 47 m³/min @2,100 rpm
- Exhaust gas flow 132 m³/min @2,100 rpm
- Exhaust gas temp. 600 °C @2,100 rpm
- Max. permissible restrictions
 - Intake system 220 mmH₂O initial
635 mmH₂O final
 - Exhaust system 1000 mmH₂O 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 ² x 14.2233	kW = 0.2388 kcal/s
in ³ = 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
lb = kg x 2.20462	



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