DIESEL ENGINE

KOODEC

Model: 16KDG-880

Prime power	795.0KW(1081.0HP)/1500 rpm	880.0KW(1197.0HP)/1800 rpm
Standby Power	880.0KW(1197.0HP)/1500 rpm	965.0KW(1312.0HP)/1800 rpm

- The engine performance is as per ISO 3046. Type of operation is based on ISO 8528.
- Prime power is available for an unlimited number of hours per year in a variable load application.
- The permissible average power output over 24 hours of operation shall not exceed 80% of the prime power rating.

Engine Specifications

V-Type, 4 stroke, water-cooled, Turbocharged, air-to-air intercooled.

Combustion type	Direct injection
Cylinders - Bore × stroke	16 - 128 × 142 mm
Displacement	29,236 cc
Firing order	1–12–5–8–3–10–6–7–2–11–4–9
Compression ratio	14.6 : 1
Dry weight	Approx. 2,100 kg
Dimension(LxWxH)	1,950 × 1,389 × 1,288 mm
Rotation	Anti-clockwise
Flywheel / Housing	SAE # 18 / # 0

Cooling System

Cooling method	Fresh water forced type
Water pump	Centrifugal, Belt driven
Water Capacity	26.0 liters (engine only)
Max. water Temp	95 degree C.
Cooling Fan	Blade 7EA - Ø 1450 mm

Intake & Exhaust System

Max air restriction	Clean 2 kPa / Dirty 5 kPa
Exhaust back	Max 6 kPa

Electric System

Charging generator	27.5 V × 45 A
Starting motor	24 V × 11.0 kW
Battery	12 V x 2 x 120 Ah

Fuel System

Injection pump	Direct Injection type
Governor	Electronic type
Feed pump	Mechanical type
Injection nozzle	Multi-hole type/ 0.255 mm
Opening pressure	27+0.5MPa
Fuel filter	Single Stage, Paper

Fuel Consumption

Prime power at 1500rpm	199.2 liters/h
Standby power at 1500rpm	120.4 liters/h
Prime power at 1800rpm	224.8 liters/h
Standby power at 1800rpm	246.5 liters/h

Lubrication System

Lub. Oil Pan Capacity	78.0 liters
Max. allowable Oil Temp	120 degree C.
Oil pressure	Min. 300 kPa Max. 650 kPa

Engineering Data

Combustion Air at 1500rpm	62.9 m3/min
Exhaust Gas at 1500rpm	163.5 m3/min
Combustion Air at 1800rpm	71.0 m3/min
Exhaust Gas at 1800rpm	184.6 m3/min

Conversion Table

PS = kW × 1.3596	in. = mm × 0.0394
psi = kg/cm2 × 14.2233	
HP= PS x 0.98635	