

# **DIESEL ENGINE**

## **MODEL 6DSP-285**

## **Performances**

Ratings			2900 rpm		
			PRIME	STAND-BY	
Rated Output	kWm		259	285	

#### Note:

PRIME POWER: The prime power is the maximum power available with varying loads for an unlimited number of hours. The average power output during a 24h period of operation must not exceed 80% of the declared prime power between the prescribed maintenance intervals and at standard environmental conditions. A 10% overload is permissible for 1 hour every 12 hours of operation.

STAND-BY POWER: The stand-by power is the maximum power available for a period of 500 hours/year with a mean load factor of 90% of the declared stand-by power. No kind of overloads is permissible for this use.

## **Specifications**

## Mechanical system

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Engine model	6DSP-285		
Engine type	In-line, 4 stroke, water cooled		
Combustion type	Direct Injection		
Cylinder type	Dry liner		
Air intake type	Turbocharger and intercooler		
Cylinder No.	6		
Bore*Stroke(mm)	126*130		
Total displacement(L)	9.726		
Compression ratio	16:1		
Firing order	1-5-3-6-2-4		
Injection timing	16°±1°		
Speed governor	Mechanical ≤8%		
Exhaust temperature ( $^{\circ}$ C)	≤6000		
Mean Effective Pressure (KPa)	1327		
Noise Level(dBA)	≤105		
Exhaust gas back pressure(KPa)	8.65		
Exhaust flow (m³/h)	2634		
Cooling air flow (m <sup>3</sup> /h)	3950		
Air for combustion flow (m <sup>3</sup> /h)	1706		
Piston Speed(m/s)	10.4		
Dry weight (kg)	950		
Dimension(L*W*H)(mm)	2097*920*1493 (with radiator and muffler)		
Rotation	Counter clockwise viewed from flywheel		
Flywheel housing/flywheel	SAE 1/ 14"		



Exhaust valve 0.30-0.40mm

Diesel

Spin-on type

23L including pipes, filters etc.

38L



#### Mechanism

Type Over head valve

Valves per cylinder Air intake valve 0.30-0.40mm Valve lash(cold state)

Valve timing (crankshaft rotating angel)

34.5° before top dead center Air intake valve open Air intake valve close 65.5° after bottom dead center Exhaust valve open 78° before bottom dead center Exhaust valve close 26° after top dead center

Specific fuel consumption

rpm 2900 Fuel consumption (g/kWh) ≤210

Oil consumption

Oil consumption(g/kWh) ≤0.816

**Fuel system** 

Fuel injector pump PW pump Governor model RSV full range type Feed pump Mechanical type Injection nozzle multi holes type Fuel filter Spin-on type

Fuel

Oil filter

**Lubrication system** 

Mixed type, pressure and splash lubrication Oil pump Displacement/speed Inner and outer rotor type (L/min/r/min) 140/2200

Lube oil total system capacity

Engine + radiator

Cooling system

Cooling method Water cooled, forced circulation

Coolant capacity: engine only 14L

Centrifugal type driven by belt Water pump type

≥380 Water pump capacity(L/min)

Thermostat Opening temp.73 ℃ Φ760mm, 9blades, PA Cooling fan

**Electronic system** 

Charging alternator 28v/1000w **AVR** Built-in type 24v/8.1kW Starting motor

24v/185Ah **Battery capacity** 

