

DIESEL ENGINE

MODEL 6DSP-195

Performances

| Ratings | | 2900 rpm | |
|--------------|-----|----------|----------|
| | | PRIME | STAND-BY |
| Rated Output | kWm | 177 | 195 |

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

| | |
|--------------------------------|---|
| Engine model | 6DSP-195 |
| 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) | 105*125 |
| Total displacement(L) | 6.490 |
| Compression ratio | 17.5:1 |
| Firing order | 1-5-3-6-2-4 |
| Injection timing | 17°±1° |
| Speed governor | Mechanical ≤8% |
| Exhaust temperature (°C) | ≤600 |
| Mean Effective Pressure (KPa) | 1116 |
| Noise Level(dBA) | ≤99 |
| Exhaust gas back pressure(KPa) | 10 |
| Exhaust flow (m³/h) | 2693 |
| Cooling air flow (m³/h) | 1663 |
| Air for combustion flow (m³/h) | 1164 |
| Piston Speed(m/s) | 10.4 |
| Dry weight (kg) | 720 |
| Dimension(L*W*H)(mm) | 1639*800*1150 (with radiator and air filter)) |
| Rotation | Counter clockwise viewed from flywheel |
| Flywheel housing/flywheel | SAE 3/ 11.5" |

Mechanism

Type

Over head valve

Valves per cylinder

2

Valve lash(cold state)

Air intake valve 0.30-0.40mm

Exhaust valve 0.30-0.40mm

Valve timing (crankshaft rotating angel)

Air intake valve open

24.5° before top dead center

Air intake valve close

55.5° after bottom dead center

Exhaust valve open

54° before bottom dead center

Exhaust valve close

26° after top dead center

Specific fuel consumption

rpm

2900

Fuel consumption (g/kWh)

≤205

Oil consumption

Oil consumption(g/kWh)

≤1.52

Fuel system

Fuel injector pump

BQ pump

Governor model

RSV full range type

Feed pump

Mechanical type

Injection nozzle

multi holes type

Fuel filter

Spin-on type

Fuel

Diesel

Lubrication system

Type

Mixed type, pressure and splash lubrication

Oil pump Displacement/speed

Inner and outer rotor type

(L/min/r/min)

80/2000

Oil filter

Spin-on type

Lube oil total system capacity

17L including pipes, filters etc.

Cooling system

Cooling method

Water cooled, forced circulation

Coolant capacity: engine only

10L

Engine + radiator

35L

Water pump type

Centrifugal type driven by belt

Water pump capacity(L/min)

≥180

Thermostat

Opening temp.73℃

Cooling fan

Φ490mm, 7blades, PA

Electronic system

Charging alternator

28v/1000w

AVR

Built-in type

Starting motor

24v/6.6kW

Battery capacity

24v/120Ah