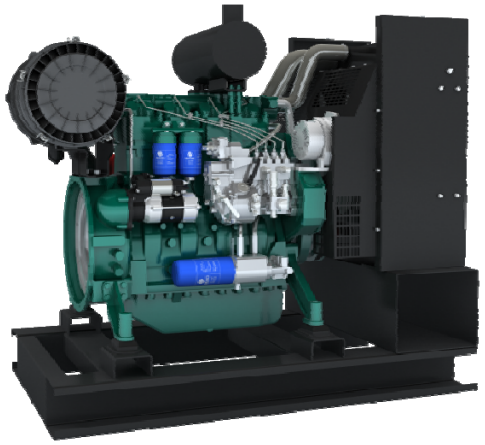
G-Drive Engine WP4D100E200

General Specifications

Bore & Stroke	105x130 mm
Displacement	4.5 L
Cylinder Number	4
Compression Ratio	18:1
Fuel System	Mechanical Pump
Governor Method	Mechanic/Electronic
Aspiration	T/TA
Emission Standard	EU Stage Ⅱ



Engine Speed	Engine Output		Typical Generator Output
	Prime(PRP)	Standby(ESP)	
RPM	kW	kW	kWe/kVA
1500	90	100	80/100

Engine Speed	Engine Output		Typical Generator Output
	Prime(PRP)	Standby(ESP)	
RPM	kW	kW	kWe/kVA
1800	90	100	80/100

Standard Equipment

Engine and block

Cast iron gantry type structure block

One-piece forged crankshaft

Separate cast iron cylinder heads and wet liners

Aluminium alloy pistons with gallery oil cooling

Cooling system

Radiator and hoses supplied separately

Thermostatically-controlled system with belt driven coolant pump and pusher fan

Lubrication system

Flat bottom large capacity oil pan (10 L)

Spin-on full-flow lub oil filter

Special design connector for oil heater and drawing off oil pump

Fuel system

P type fuel injection pump and injector for higher inject pressure

Duplex fine filter and large capacity pre-filter for better efficiency

Air intake and exhaust system

Top mounted turbocharger optimized for gen-set application

Special rear mounted air filter with restriction indicator

High performance silencer as standard

Stainless steel exhaust manifold shield for heat isolating

Electrical system

24V electric starter motor and battery charging alternator

Standard sensor connector

Flywheel and housing

SAE3 flywheel housing and 11.5” flywheel

Optional Equipment

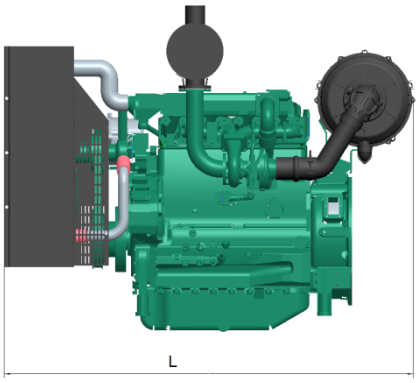
■Radiator for tropical environment (50℃) ■Shutoff solenoid mounted on the fuel pump ■Air heater for cold start

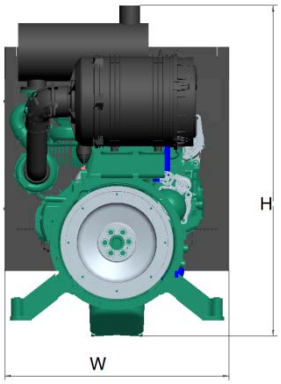
■Manual drawing off oil pump ■Tool Kits ■12V electrical system

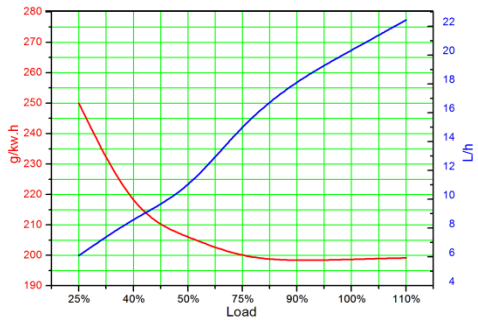
	Continuous Power(COP)	Prime Power(PRP)	Standby Power(ESP)
Mean engine load factor	100%	≤70% per 250 h	≤80% per 24 h
Annual working time	Unlimited	Unlimited	≤200 h
Time at full load	Unlimited(Max. load≤85% PRP)	≤500 h per year	≤25 h per year
Overload capacity	No	1 h per 12 h(10% overload)	No

Dimensions and Weight

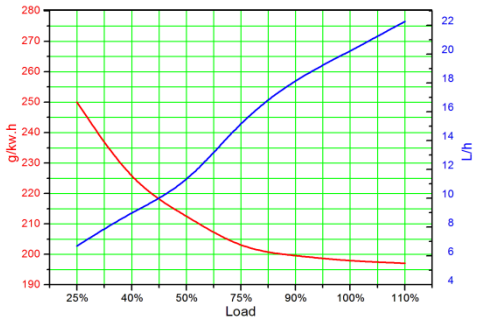
	T	TA
Length	1438 mm	1582 mm
Width	774 mm	764 mm
Height	1138 mm	1139 mm
Weight	550kg	570kg







WP4D100E200-90kW/1500rpm



WP4D100E201-90kW/1800rpm

Power definition

Standard ISO 3046/1 -1995(F)

Reference conditions

Ambiant temperature	25°C
Barometric pressure	100kPa
Relative humidity	30%

Fuel

Relative density	0.840±0.005
Lower calorific power	42 700 kJ/kg
Consumption tolerances	± 5 %

Lube oil

Recommend grade	CF 15W/40