

WPG825*7

DIESEL GENERATING SET

GENERATING SET RATINGS

50Hz – 1500rpm @ 0.8p.f

	DCP		PRP		ESP	
	kVA	kWe	kVA	kWe	kVA	kWe
Voltage	750	600	750	600	825	660
415/240	750	600	750	600	825	660
400/230	750	600	750	600	825	660
380/220	750	600	750	600	825	660

PRODUCT FEATURES

Engine and block

- Vermicular graphite cast iron cylinder block and cylinder head
- Alloyed cast iron, wet cylinder liners with fire ring on the top
- Separate cylinder head with 4 valves, top-down cooling
- Hydraulic bolt for both the cylinder head and bearing cap
- Hardened steel forged crankshaft with induction hardened journals, crankpins and radius
- Monoblock piston with PCJ

Cooling System

- Radiator and hoses supplied separately
- Two separate circuits
- High temperature circuit equipped with thermostatically-controlled system with one gear-driven coolant pump
- Low temperature circuit equipped with thermostatically-controlled system with one gear-driven coolant pump

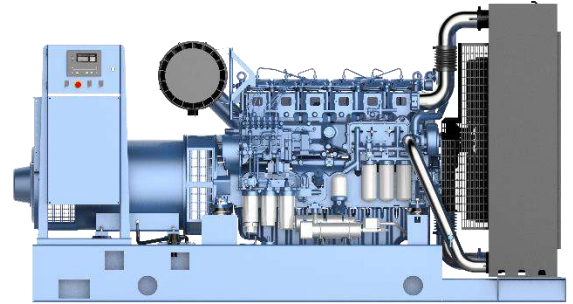
Fuel System

- High pressure Common Rail injection system, for engines with ECU Fine filter

Lubrication System

- Fin oil cooler, 5 oil filters
- Bypass oil and oil thermostat to keep the oil temperature steady
- Electrical oil pre-lube pump to pre-lubricate the engine and ensure good starting ability

Air Intake



- 4 single-stage turbochargers
- Air filters with restriction indicator

Electrical System

- Each starting system comes with 2 x 24 Vdc electric starter motors and 1 x battery charging alternator
- LOP + HWT sensors

Exhaust System

- Exhaust manifold and turbocharger shield for heat isolating

Alternator

- Brushless, 4 Pole, IP23 drip-proof revolving field design built with Class H insulation and Class H temperature rise
- Low reactance with 2/3 pitch windings on the stator
- Direct-coupled by high-elasticated coupling
- Sustained overcurrent >300% in 10 sec
- Direct drive centrifugal blower fan cooling

Control module

- DSE control module is ideal for a wide control range to manage, monitor, and diagnose quickly and easily.
- Display status message Provide protection Auto shutdown at fault detection



GENERATOR SET SPECIFICATIONS		
Governor and regulation class		In accordance to ISO 8528-5 Class G3 performance
Phase number and connection		3 phase, 4 wires, Y-type
Cooling method		Closed looped water-cooled
Starting method		DC 24V Electric starter
Steady-state voltage deviation		≤± 1%
Steady-state frequency band		≤ 0.5%
ENGINE		
Brand / Model		Baudouin / 6M33G825/5
Gross Power	kWm	ESP – 725 / PRP - 675
Cylinder / Type / Aspiration		6 / L- Type / Turbocharged and intercooled
Bore x Stroke	mm	150 x 185
Displacement	L	19.6
Compression ratio		15:1
Brake Mean Effective Pressure	kPa	ESP – 2959

COOLING SYSTEM		
Type of Coolant		Liquid(water + 50% antifreeze)
Total Cooling System Capacity (with Radiator)	L	159
Max coolant temperature – shutdown	°C	103
Cooling Fan Airflow	m3/min	783.3

LUBRICATION SYSTEM		
Operating Temperature range before Engine	°C	78 -105
Oil consumption	g/kW.hr	≤ 0.6
Total lub oil capacity (including filters)	L	64
Type of lub oil filter		Spin-on full flow filter

FUEL SYSTEM			
Type of fuel filter		Spin-on fuel flow filter	
Min. internal diameter of the supply pipe	mm	14	
Min. internal diameter of the return pipe	mm	14	
Max fuel return restriction	Bar	0.5	
Max. fuel inlet temperature	°C	50	
Fuel supply flow	L/hr	900	
Fuel Consumption (Tolerance +3%)			
	Rating	gr/kWh	L/hr
	100%ESP	202.5	174.8
	100%PRP	198.5	159.5
	75%PRP	190.4	114.8
	50%PRP	192.6	77.4
	25%PRP	213	42.8



EXHAUST SYSTEM

Exhaust Gas temperature after the turbocharger	°C	550
Exhaust Gas flow	m3/min	ESP – 163.1 PRP – 148.2
Max Exhaust back pressure	mBar	75

ALTERNATOR

Brand / Model	Leroy Somer / TAL A49 B
Rated Current	1083A
Coupling / No. of Bearing	Direct / Single
Winding Pitch	2/3
Cooling type	Air
Voltage regulation method	AVR
Winding temperature sensor	/
Bearing temperature sensor	/
Anti-condensation heater voltage	AC230V
Insurance	Class H
Temperature rise	Class H
Protection Grade	IP23
Efficiency at 0.8p.f. @100% load	93.5%

CONTROL MODULE

The control module is an easy to use multi-generator load Share system

DSE control module is ideal for a wide variety of demanding load share applications

Direct USB connection to PC.

All communication ports capable of being active at the same time

Sequential set start /Automatic hours run balancing.

Hours counter provides accurate information for monitoring and maintenance.



Ratings definitions

Emergency standby power (ESP):

Emergency Standby Power is the maximum power available for a varying load for the duration of a main power network failure. The average load factor over 24 hours of operation should not exceed 70% of the engine's ESP power rating.

Typical operational hours of the engine is 200 hours per year, with a maximum usage of 500 hours per year. This includes an annual maximum of 25 hours per year at the ESP power rating. No overload capability is allowed. The engine is not to be used for sustained utility paralleling applications.

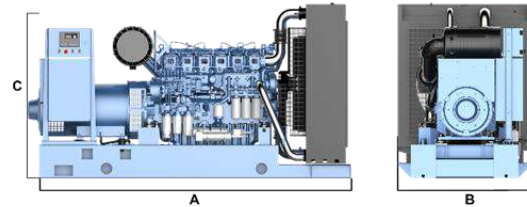
Prime power (PRP):

Prime Power is the maximum power available for unlimited hours of usage in a variable load application. The average load factor should not exceed 70% of the engine's PRP power rating during any 24 hour period. An overload capability of 10% is available, however, this is limited to 1 hour within every 12 hour period.

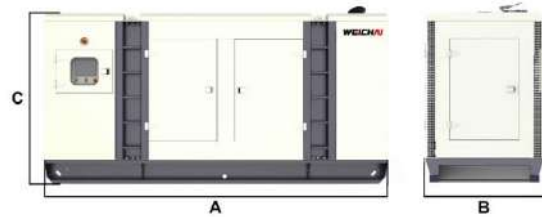
Data Center power (DCP):

Data Center Power is the maximum power which an engine is capable of delivering while supplying a variable or continuous load and during unlimited run hours.

Open genset



Silence genset



This outline drawing is to provide representative configuration details for Model series only.
See respective model data sheet for specific model outline drawing number.

Do not use for installation design

Dimension and Weight

Structure	Model	Dim "A" mm	Dim "B" mm	Dim "C" mm	Dry wt.* kg
Open	WPG825F7	3750	1680	2210	5600
Silence	WPG825L7	5300	2180	2300	8100

* Note: Weights represent a set with standard features. See outline drawings for weights of other configurations.

Codes and standards

ISO 9001	This generator set is designed and manufactured in facilities certified to ISO 9001.	ISO 8528	This generator set has been designed to comply with ISO 8528 regulation.
CE	The CE marking is only valid when equipment is used in a fixed installation application. Material compliance declaration is available upon request.		

For more information contact your local Weichai distributor or visit www.weichai.com