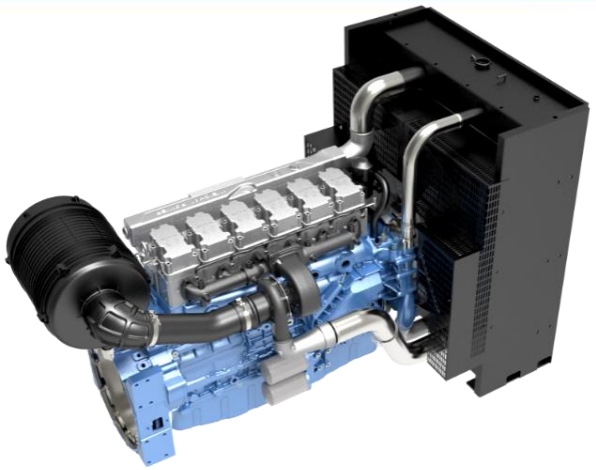
PowerKit Engine 6M21 Series



General Specifications

Bore x Stroke	127 x 165 mm
Displacement	12.54 L
N° of Cylinders	6
Cylinders Arrangement	In line
Fuel System	Mechanical Pump / Common Rail
Governor (Gov.)	Electronic / ECU
Aspiration (Asp.)	T/A-A

Diesel Engine		Gross Engine Output		Typical Generator Output				Asp.	Gov.
Model	Speed Rpm	Prime Power PRP	Standby Power ESP	Prime Power (PRP)		Standby Power (ESP)			
		kWm	kWm	kWe	kVA	kWe	kVA		
6M21G385/5	1500	350	385	280	350	308	385	T/A-A	Elec[1]
6M21G440/5	1500	368	405	320	400	352	440	T/A-A	Elec[1]
6M21G500/5^	1500	409	450	360	450	400	500	T/A-A	ECU
6M21G330/6	1800	350	385	300	375	330	413	T/A-A	Elec[1]
6M21G390/6	1800	407	448	350	438	390	488	T/A-A	Elec[1]
6M21G400/6^	1800	418	460	360	450	400	500	T/A-A	ECU

Aspiration : T/A-A = Turbocharged & Air-to-Air Aftercooled

[1] : Mechanical governor available as option

^ These engines are designed for emergency standby power (ESP) applications only. The indicated PRP Power is for reference only.

Standard Equipment

Engine and block

Cast iron frame style body structure

One-piece forged crankshaft

Split-cap forged steel connecting rods

Separate cast iron cylinder heads with 4 valves

Replaceable dry cylinder liners

Aluminum alloy pistons with oil cooling gallery

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

Spin-on full-flow lube oil filter

Fuel system

P type fuel injection pump and injector for higher inject pressure, for engines with electronic governor

High pressure Common Rail injection system, for engines with ECU

Duplex fine filter and water separation filter assembly with transparent cup for better efficiency

Air intake and exhaust system

Mid-position and below inlet turbocharger optimized for genset application

Special rear mounted air filter with restriction indicator

Exhaust manifold shield for heat isolating

Electrical system

24 Vdc electric starter motor and battery charging alternator

LOP + HWT sensors

Flywheel and housing

SAE 1 flywheel housing and 14” flywheel

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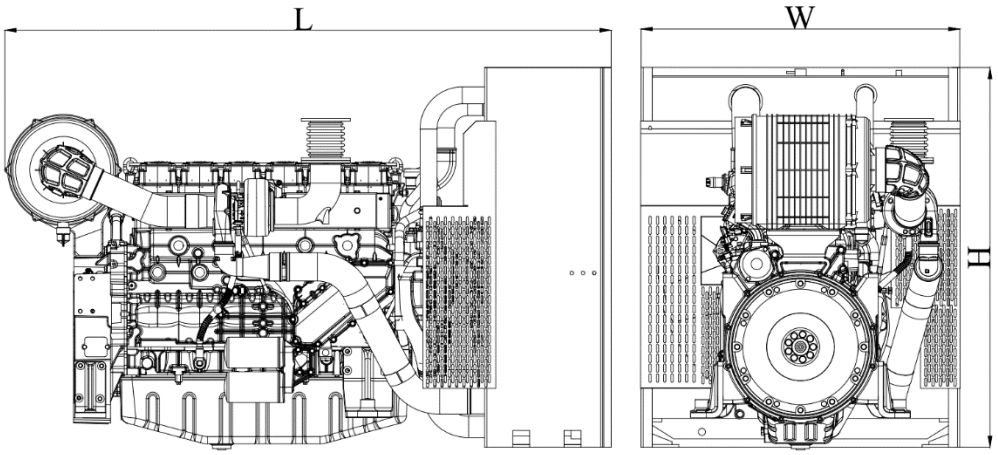
Dimensions and Weight



Diesel Engine		Dimensions and dry weights including radiator			
Model	Speed Rpm	L mm	W mm	H mm	Weight Kg.
6M21G385/5	1500	2163	1136	1359	1190
6M21G440/5	1500	2163	1136	1359	1190
6M21G500/5	1500	2163	1136	1359	1260
6M21G330/6	1800	2163	1136	1359	1190
6M21G390/6	1800	2163	1136	1359	1190
6M21G400/6	1800	2163	1136	1359	1260

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.

Unlimited Prime Rated 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.

Continuous Power (COP)

Continuous Power is the maximum power available for an unlimited period of use at a constant load factor. No overload capability is allowed.

1) All ratings are based on operating conditions under ISO 8528-1, ISO 3046, DIN6271. Performance tolerance of ±5%.
2) Test conditions : 100 kPa, 25°C air inlet temperature, relative humidity of 30%, with fuel density 0.84 kg/L. Derating may be required for conditions outside these; please contact the factory for details.
3) Power output curves are based on the engine operating with fuel system, water pump and lubricating oil pump; not included are battery charging alternator, fan and optional equipment.