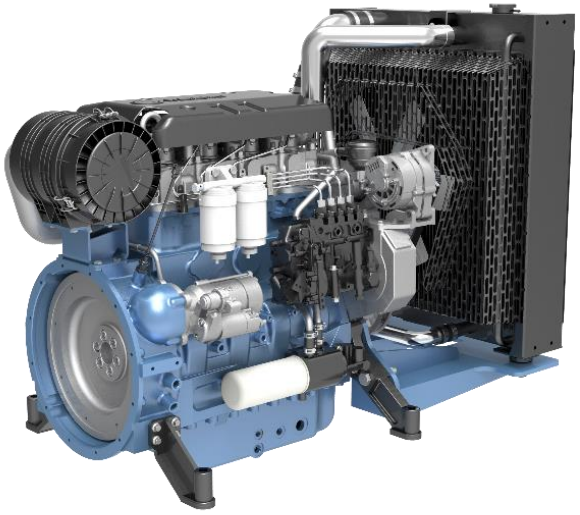
PowerKit Engine 4M11 Series

General Specifications

Bore x Stroke	105 x 130 mm
Displacement	4.5 L
N° of Cylinders	4
Cylinders Arrangement	In line
Fuel System	Mechanical Pump
Governor (Gov.)	Electronic
Aspiration (Asp.)	T / T/A-A



Diesel Engine		Gross Engine Output		Typical Generator Output				Asp.	Gov.
Model	Speed Rpm	Prime Power PRP kWm	Standby Power ESP kWm	Prime Power (PRP) kWe	Prime Power (PRP) kVA	Standby Power (ESP) kWe	Standby Power (ESP) kVA		
4M11G70/5	1500	60	66	52	65	57	72	T	Elec[1]
4M11G90/5	1500	74	81	66	82	72	90	T	Elec[1]
4M11G120/5	1500	98	108	88	110	96	120	T/A-A	Elec
4M11G83/6	1800	85	93	75	94	83	103	T	Elec[1]
4M11G106/6	1800	108	118	96	120	106	132	T/A-A	Elec

Aspiration : T = Turbocharged, T/A-A = Turbocharged & Air-to-Air Aftercooled
[1] : Mechanical governor available as option

Standard Equipment

Engine and block

Cast iron gantry type structure block
One-piece forged crankshaft
Separate cast iron cylinder heads and wet liners
Aluminum alloy pistons with oil cooling gallery

Cooling system

Radiator and hoses supplied directly mounted on the engine
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
Duplex fine 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
Exhaust manifold shield for heat isolating

Electrical system

12 Vdc electric starter motor and battery charging alternator
LOP + HWT sensors

Flywheel and housing

SAE 3 flywheel housing and 11.5” flywheel

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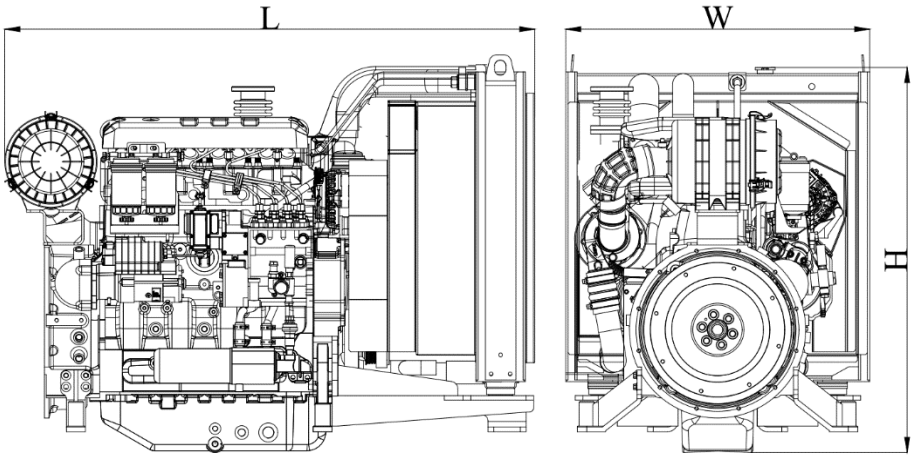
Dimensions and Weight



Diesel Engine		Dimensions and dry weights including radiator			
Model	Speed Rpm	L mm	W mm	H mm	Weight Kg.
4M11G70/5	1500	1389	800	1002	612
4M11G90/5	1500	1389	800	1002	612
4M11G120/5	1500	1389	800	1038	660
4M11G83/6	1800	1389	800	1002	612
4M11G106/6	1800	1389	800	1038	660

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.