

# **PowerKit Engine 6M16 Series**

# **General Specifications**

Bore x Stroke 126 x 130 mm

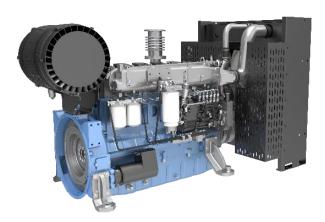
Displacement 9.726 L

N° of Cylinders 6

Cylinders Arrangement In line

Fuel System Mechanical Pump Governor (Gov.) Electronic

Aspiration (Asp.) T/A-A



Diesel Engine		Gross Engine Output		Typical Generator Output					
Model	Speed Rpm	Prime Power PRP	Standby Power ESP	Prime Power (PRP)		Standby Power (ESP)		Asp.	Gov.
		kWm	kWm	kWe	kVA	kWe	kVA		
6M16G220/5	1500	187	204	160	200	176	220	T/A-A	Elec <sup>1</sup>
6M16G250/5	1500	216	238	184	230	200	250	T/A-A	Elec <sup>1</sup>
6M16G275/5	1500	240	264	200	250	220	275	T/A-A	Elec <sup>1</sup>
6M16G350/5^	1500	291	320	256	320	280	350	T/A-A	Elec <sup>1</sup>
6M16G200/6	1800	216	238	180	225	200	250	T/A-A	Elec <sup>1</sup>
6M16G220/6	1800	240	264	200	250	220	275	T/A-A	Elec <sup>1</sup>
6M16G250/6	1800	262	288	227	284	250	313	T/A-A	Elec <sup>1</sup>
6M16G308/6^	1800	327	360	280	350	308	385	T/A-A	Elec <sup>1</sup>

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

# **Standard Equipment**

## **Engine and block**

Cast iron frame style body structure

One-piece forged crankshaft

Separate cast iron cylinder heads and 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

High capacity gear driven lube oil pump

### **Fuel system**

P type fuel injection pump and injector for higher inject pressure

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

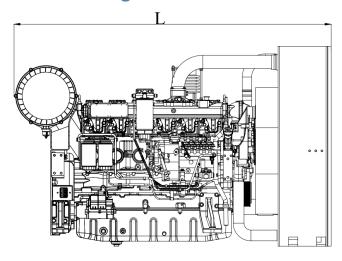
<sup>&</sup>lt;sup>1</sup>: Mechanical governor available as option

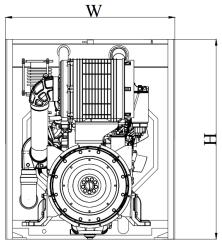
<sup>^</sup> These engines are designed for emergency standby power (ESP) applications only. The indicated PRP Power is for reference only.



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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.			
6M16G220/5	1500	2075	1041	1249	1050			
6M16G250/5	1500	2075	1041	1249	1050			
6M16G275/5	1500	2075	1041	1249	1050			
6M16G350/5	1500	2068	1100	1300	1070			
6M16G200/6	1800	2075	1041	1249	1050			
6M16G220/6	1800	2075	1041	1249	1050			
6M16G250/6	1800	2075	1041	1249	1050			
6M16G308/6	1800	2068	1100	1300	1070			

# 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.