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## **4M10** PowerKit ESP/PRP Diesel Engine

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Bore & Stroke (mm) Displacement (L) N° of Cylinders Cylinders Arrangement Fuel System Governor (Gov.) Aspiration (Asp.) 105 x 118 4.1 4 In line Mechanical Electronic Turbocharged Turbocharged & air-to-air cooled

### Customer benefits

Warranty terms – 2 yrs unlimited PRP, 4 yrs/800h ESP 50°C Cooling package standard with low derating Low fuel consumption across the range Extended mean time between overhauls (MTBO)

ESP/ PRP									
Diesel Engine Models	Gross Engine Output		Typical Generator Output						
	ESP	PRP	ESP PRP		RPM	Asp.	Gov.		
	kWm		kWe	kVA	kWe	kVA			
4M10G2D0/S	66	60	57	72	52	65	1500	Т	ELEC
4M10G4D0/S	80	72	88	70	80	64	1500	Т	ELEC
4M10G6D0/S	100	90	88	110	80	100	1500	T/A-A	ELEC
4M10G2D0/S	80	72	68	85	60	75	1800	Т	ELEC
4M10G4D0/S	95	85	83	103	75	94	1800	Т	ELEC
4M10G6D0/S	115	105	100	125	90	112	1800	T/A-A	ELEC

\* Please note that models ending with S are switchable 50/60 Hz engines.

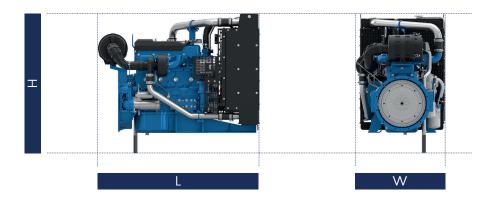
## **Standard Equipment**

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 drivencoolant 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 turbocharged optimized for gen-set application Special rear mounted air filter with restriction indicator Exhaust manifold shield for heat isolating	
Electrical System	12V DC electric starter motor and battery charging alternator Low Oil pressure δ high water temperature sensors	
Flywheel and housing	SAE 3 flywheel housing and 11.5" flywheel	
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### Dimensions and dry weight (mm/kg)



Diesel Engine	Speed	Dimensions and dry weights including radiator					
		L	W	н	WEIGHT		
	RPM	mm mm		mm	Kg		
4M10G2D0/S	1500/1800	1258	708	885	453		
4M10G4D0/S	1500/1800	1258	708	885	453		
4M10G6D0/S	1500/1800	1330	741	995	453		

## **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 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.

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.

