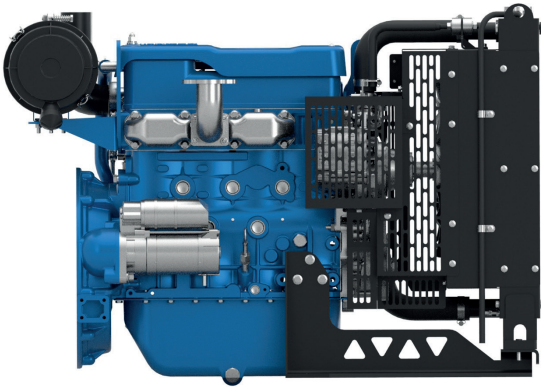




# 4M06

PowerKit ESP/PRP Diesel Engine

**BAV**  
Science and Industry Group  
[www.bav-co.com](http://www.bav-co.com)  
+98 (21) 22407575



Bore & Stroke (mm)	89 x 92
Displacement (L)	2.3
N° of Cylinders	4
Cylinders Arrangement	In line
Fuel System	High Pressure Common Rail/ Mechanical
Governor (Gov.)	ECU/ Electronic
Aspiration (Asp.)	Naturally Aspirated 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)

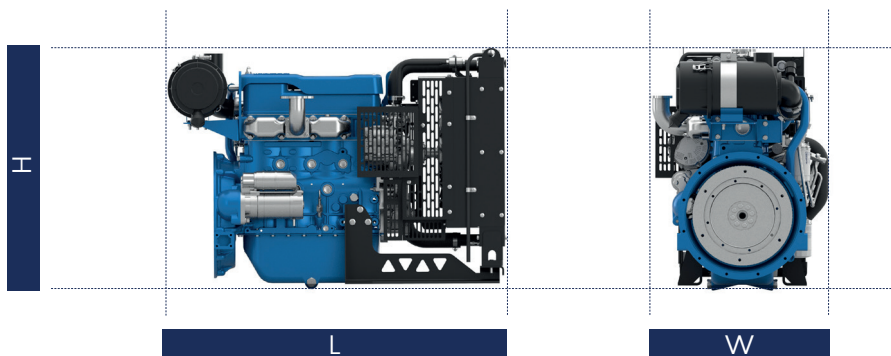
ESP/ PRP									
Diesel Engine Models	Gross Engine Output		Typical Generator Output				RPM	Asp.	Gov.
	ESP	PRP	ESP		PRP				
	kWm		kWe	kVA	kWe	kVA			
4M06GT20/5 <sup>a</sup>	20	18	16	20	15	18	1500	NA	ELEC
4M06G2D0/S	20	18	16	20	15	18	1500	NA	ELEC
4M06GT25/5 <sup>a</sup>	25	23	20	25	18	23	1500	NA	ELEC
4M06G4D0/S	25	23	20	25	18	23	1500	NA	ELEC
4M06GT35/5 <sup>a</sup>	33	30	28	35	26	32	1500	T	ELEC
4M06G6D0/S	33	30	28	35	26	32	1500	T	ELEC
4M06G8D0/S	41	37	35	44	32	40	1500	T	ELEC
4M06G50/5	48	44	40	50	36	45	1500	T/A-A	ELEC
4M06G10D0/5	53	48	53	55	40	50	1500	T/A-A	ECU
4M06G2D0/S	25	23	20	25	18	23	1800	NA	ELEC
4M06G4D0/S	30	27	25	32	23	29	1800	NA	ELEC
4M06G6D0/S	41	37	33	42	30	38	1800	T	ELEC
4M06G8D0/S	47	43	41	51	37	47	1800	T	ELEC
4M06G50/6	58	53	50	63	45	56	1800	T/A-A	ELEC
4M06G10D0/S	63	58	55	69	50	63	1800	T/A-A	ECU

\*Please note that models ending with S are switchable 50/60 Hz engines. (Dual Speed)  
a - Telecom

## 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, for engines with electronic governor High pressure Common Rail injection system, for engines with ECU Fine filter
Air intake and exhaust system	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 LOP + HWT sensors
Flywheel and housing	SAE 4 flywheel housing and 7.5" flywheel, for engines 4M06G20/5 & 25/5 and 4M06G20/6 & 25/6 SAE 3 flywheel housing and 11.5" flywheel, for other engines

## Dimensions and dry weight (mm/kg)



Diesel Engine	Speed RPM	Dimensions and dry weight including radiator			
		L mm	W mm	H mm	WEIGHT Kg
4M06GT20/5	1500	1055	580	855	290
4M06G2D0/S	1500/1800	1055	574	756	265
4M06GT25/5	1500	1055	580	855	290
4M06G4D0/S	1500/1800	1055	574	756	265
4M06GT35/5	1500	1111	610	899	300
4M06G6D0/S	1500/1800	1130	597	802	273
4M06G8D0/S	1500/1800	1130	597	802	273
4M06G50/5	1500	1185	684	797	286
4M06G10D0/S	1500/1800	1185	684	802	274
4M06G50/6	1800	1185	684	797	286

## 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  $\pm 5\%$ .
- 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.

