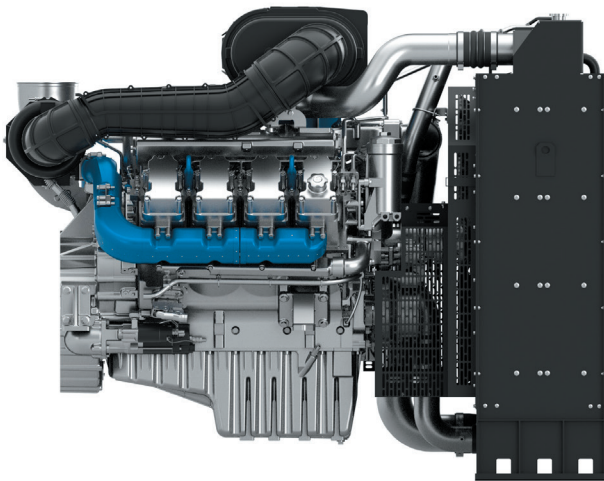




8M21

PowerKit ESP/PRP Diesel Engine



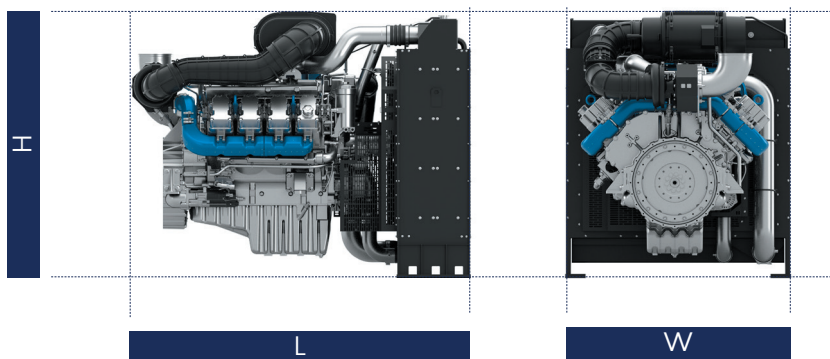
Bore & Stroke (mm)	127 x 165
Displacement (L)	16.72
N° of Cylinders	8
Cylinders Arrangement	At Vee
Fuel System	High Pressure Common Rail
Governor (Gov.)	ECU
Aspiration (Asp.)	Turbocharged and Aftercooled

Customer benefits

Warranty terms - 2 yrs unlimited hours PRP, 4 yrs / 800 ESP
 50°C Cooling package standard with low derating
 Extended MTBO

Engine	Speed	Gross Engine Output		Typical Generator Output			
		PRP	ESP	PRP		ESP	
	RPM	kWm	kWm	kWe	kVA	kWe	kVA
8M21G660/5	1500	530	580	480	600	528	660
8M21G520/6	1800	530	580	472	590	520	650

Dimensions and dry weight (mm/kg)



Diesel Engine	Speed	Dimensions and dry weights including radiator			
		L	W	H	Weight
	RPM	mm	mm	mm	Kg.
8M21G660/5	1500	2062	1345	1618	1819
8M21G520/6	1800	2062	1345	1618	1819

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
 High water temperature sensor

Lubrication system

Flat bottom large capacity oil pan
 Spin-on full-flow lube oil filter
 Low oil pressure sensor

Fuel system

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

Special rear mounted air filter with restriction indicator
 Exhaust manifold shield for heat isolating

Electrical system

24V DC electric starter motor and battery charging alternator

Flywheel and housing

SAE 1 flywheel housing and 14" flywheel

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.

- 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.
- 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.