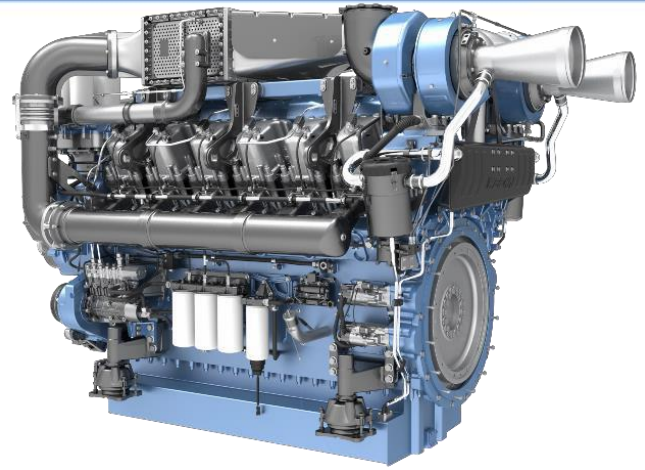


PowerKit Engine 12M55 Series



General Specifications

Bore x Stroke	180 x 215 mm
Displacement	65.65 L
N° of Cylinders	12
Cylinders Arrangement	At Vee
Fuel System	Common Rail
Governor (Gov.)	ECU
Aspiration (Asp.)	T/A-W

Diesel Engine		Gross Engine Output		Typical Generator Output				Asp.	Gov.
Model	Speed Rpm	Prime Power PRP kWm	Standby Power ESP kWm	Prime Power (PRP)		Standby Power (ESP)			
				kWe	kVA	kWe	kVA		
12M55G2300/5	1500	1850	2020	1680	2100	1840	2300	T/A-W	ECU
12M55G2550/5	1500	1985	2210	1824	2280	2040	2550	T/A-W	ECU
12M55G2750/5 [^]	1500	2200	2450	2000	2500	2200	2750	T/A-W	ECU
12M55G2000/6	1800	2050	2230	1852	2315	2000	2500	T/A-W	ECU
12M55G2250/6	1800	2200	2420	2045	2557	2250	2813	T/A-W	ECU
12M55G2500/6 [^]	1800	2450	2700	2250	2813	2500	3125	T/A-W	ECU

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

[^] These engines are designed for emergency standby power (ESP) applications only. The indicated PRP Power is for reference only.

Standard Equipment

Engine and block

Vermicular graphite cast iron cylinder block and cylinder head

Alloyed cast iron, wet cylinder liners with fire ring on the top

Separate cylinder head with 4 valves, top-down cooling

Hydraulic bolt for both the cylinder head and bearing cap

Hardened steel forged crankshaft with induction hardened journals, crankpins and radius

Monoblock piston with PCJ

Cooling system

Radiator and hoses supplied separately

Two separate circuits

High temperature circuit equipped with thermostatically-controlled system with two gear driven coolant pumps

Low temperature circuit equipped with belt driven coolant pump

Fuel system

Super-high fuel supply system for more peak fire pressure

Pre-filter and main filters with electric fuel pump

Lubrication system

Fin oil cooler, 5 oil filters and 1 centrifugal oil filter

Bypass oil and oil thermostat to keep the oil temperature steady

Electrical oil pre-lube pump to pre-lubricate the engine and ensure good starting ability

Air intake and exhaust system

2 single-stage turbochargers

Air filters with restriction indicator

Exhaust manifold and turbocharger shield for heat isolating

Electrical system

2 x 24 Vdc electric starter motors and n° 1 battery charging alternator

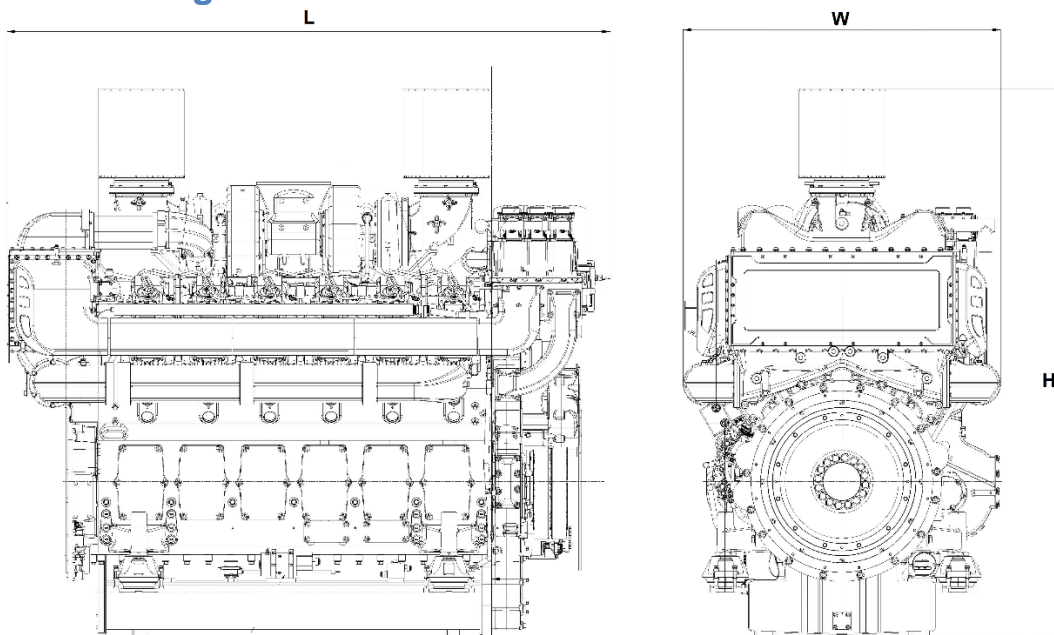
LOP + HWT sensors

Flywheel and housing

SAE 00 flywheel housing and 21" flywheel

PowerKit Engine 12M55 Series

Dimensions and Weight



Diesel Engine		Dimensions and dry weights without radiator			
Model	Speed Rpm	L mm	W mm	H mm	Weight Kg.
12M55G2300/5	1500	2934	1544	2655	9550
12M55G2550/5	1500	2934	1544	2655	9550
12M55G2750/5	1500	2934	1544	2655	9550
12M55G2000/6	1800	2934	1544	2655	9550
12M55G2250/6	1800	2934	1544	2655	9550
12M55G2550/6	1800	2934	1544	2655	9550

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 $\pm 5\%$.
- 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.