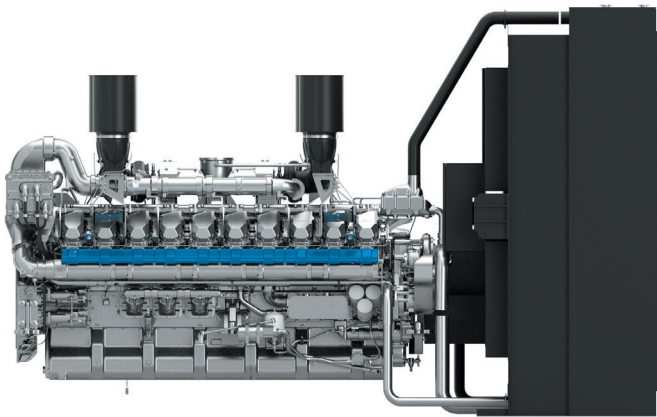




20M33

PowerKit ESP/PRP Diesel Engine



Bore & Stroke (mm)	150 x 185
Displacement (L)	65.4
N° of Cylinders	20
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 PRP, 4 yrs/800h ESP
 50°C Cooling package standard with low derating
 Low fuel consumption across the range
 Extended MTBO

Diesel Engine	Speed	Gross Engine Output (kWm)		Typical Generator Output			
				PRP		ESP	
	RPM	PRP	ESP	kWe	kVA	kWe	kVA
20M33G2250/5	1500	1850	2020	1600	2000	1800	2250
20M33G2500/5 [^]	1500	2010	2210	1800	2250	2000	2500
20M33G2000/6	1800	2027	2230	1800	2250	2000	2500
20M33G2200/6 [^]	1800	2240	2460	2000	2500	2200	2750

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

Standard equipment

Engine and block

Cast iron cylinder block with inspection door per cylinder
 Cast iron cylinder liners, wet type and replaceable valves guides and seats
 Separate cast iron cylinder heads with 4 valves
 Hardened steel forged crankshaft with induction hardened journals, crankpins and radius
 Lube oil cooled light alloy pistons with high performance piston rings

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

Lubrication system

Full flow screw able oil filters
 Lube oil purifier with replaceable cartridge
 Water cooled lube oil cooler

Fuel system

High pressure common rail system with one high pressure pump gear driven in the V angle of cylinder block
 Two rails mounted on the sides of the engine, double wall, under inlet manifold
 Duplex fine filter and water separation filter assembly with transparent cup for better efficiency
 Electric fuel priming pump integrated in the filters support

Air intake and exhaust system

The 4 compressors are feeding a single water-air intercooler, mounted over the flywheel housing, with vertical flow
 Special rear mounted air filter with restriction indicator
 Exhaust manifold and turbocharger shield for heat isolating

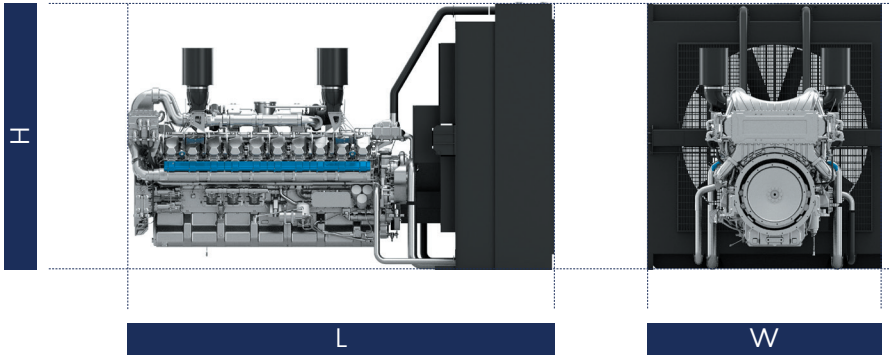
Electrical system

24V DC electric starter motor and battery charging alternator
 Low oil pressure & high water temperature sensors

Flywheel and housing

SAE 00 flywheel housing and 21" flywheel

Dimensions and dry weight (mm/kg)



Diesel Engine	Speed RPM	Dimensions and dry weights including radiator			
		L mm	W mm	H mm	Weight Kg.
20M33G2250/5	1500	4611	2756	2870	8275
20M33G2500/5^	1500	4611	2756	2870	8275
20M33G2000/6	1800	4611	2756	2870	8275
20M33G2200/6^	1800	4611	2756	2870	8275

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 ±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.