

PowerKit Engine

16M33 Series

General Specifications

Bore x Stroke	150 x 185 mm
Displacement	52.3 L
N° of Cylinders	16
Cylinders Arrangement	At Vee
Fuel System	Common Rail
Governor (Gov.)	ECU
Aspiration (Asp.)	T/A-W



Diesel Engine	Speed Rpm	Gross Engine Output		Typical Generator Output				Asp.	Gov.
		Prime Power PRP kWm	Standby Power ESP kWm	Prime Power PRP		Standby Power ESP			
				kWe	kVA	kWe	kVA		
16M33G1700/5	1500	1390	1530	1200	1500	1360	1700	T/A-W	ECU
16M33G1900/5	1500	1530	1680	1400	1750	1520	1900	T/A-W	ECU
16M33G2000/5 [^]	1500	1620	1800	1464	1830	1600	2000	T/A-W	ECU
16M33G1400/6	1800	1440	1580	1275	1594	1400	1750	T/A-W	ECU
16M33G1500/6	1800	1530	1680	1365	1706	1500	1875	T/A-W	ECU
16M33G1650/6	1800	1625	1785	1500	1875	1650	2063	T/A-W	ECU
16M33G1750/6 [^]	1800	1750	1920	1590	1988	1750	2188	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

- 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 2 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

- 2 x 24 Vdc electric starter motors and n° 1 battery charging alternator
- LOP + HWT sensors

Flywheel and housing

- SAE 0 flywheel housing and 18" 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.

Continuous Power (COP)

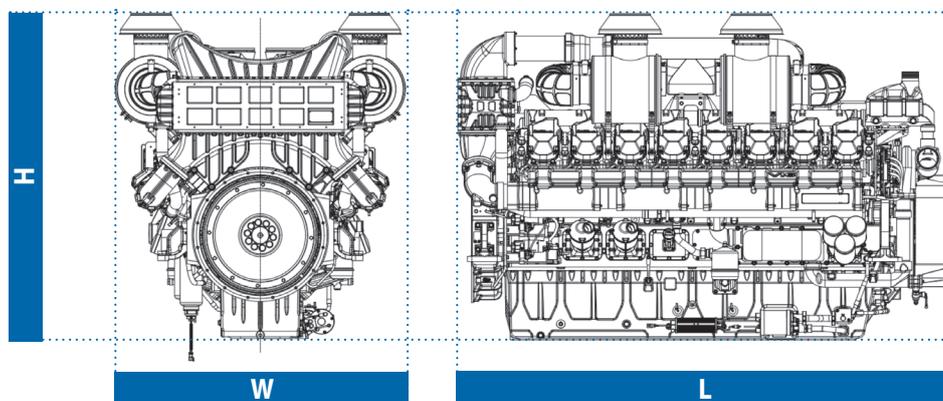
Continuous Power is the maximum power available for an unlimited period of use at a constant load factor. No overload capability is allowed.

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.

Dimensions and dry weight (mm / kg)



Diesel Engine	Speed Rpm	Dimensions and dry weights including radiator			
		L mm	W mm	H mm	Weight Kg.
16M33G1700/5	1500	2609	1542	1746	5125
16M33G1900/5	1500	2609	1542	1746	5125
16M33G2000/5	1500	2609	1542	1746	5125
16M33G1400/6	1800	2609	1542	1746	5125
16M33G1500/6	1800	2609	1542	1746	5125
16M33G1650/6	1800	2609	1542	1746	5125
16M33G1750/6	1800	2609	1542	1746	5125