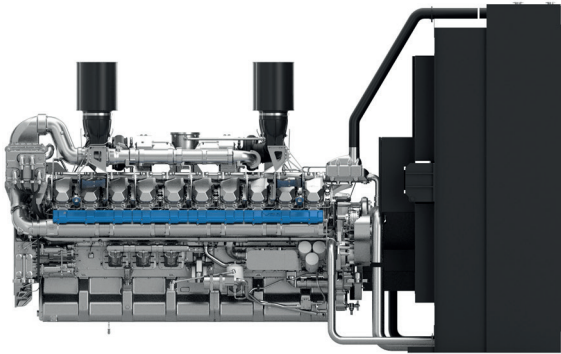




20M33

PowerKit ESP/PRP/DCP Diesel Engine



| | |
|-----------------------|---------------------------|
| Bore & Stroke (mm) | 150 x 185 |
| Displacement (L) | 65.4 L |
| N° of Cylinders | 20 |
| Cylinders Arrangement | At Vee |
| Fuel System | High Pressure Common Rail |
| Governor (Gov.) | ECU |
| Aspiration (Asp.) | T/A-W |

Customer benefits

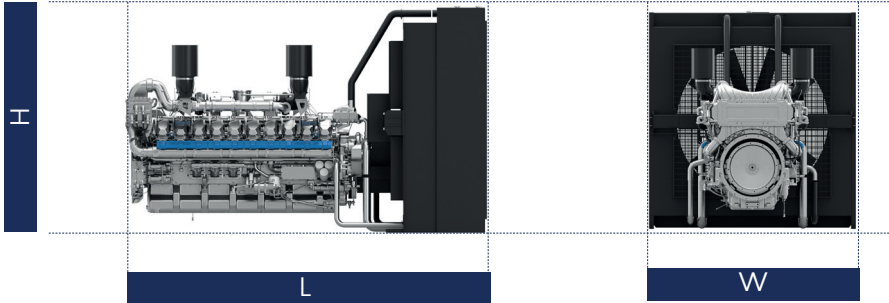
Warranty terms - 2 yrs unlimited hours PRP, 4 yrs / 800 ESP
 50°C Cooling package standard with low derating
 Extended MTBO

| ESP/PRP/DCP Diesel Engine Models | Gross Engine Output | | | Typical Generator Output | | | | | | RPM | Asp. | Gov. |
|----------------------------------|---------------------|------|------|--------------------------|------|------|------|------|------|------|-------|------|
| | ESP | PRP | DCP | ESP | | PRP | | DCP | | | | |
| | kWm | | | kWe | kVA | kWe | kVA | kWe | kVA | | | |
| 20M33G2250/5 | 2020 | 1850 | 1850 | 1800 | 2250 | 1600 | 2000 | 1600 | 2000 | 1500 | T/A-W | ECU |
| 20M33G2500/5^ | 2210 | 2010 | | 2000 | 2500 | 1800 | 2250 | | | 1500 | T/A-W | ECU |
| 20M33G2000/6 | 2230 | 2027 | 2027 | 2000 | 2500 | 1800 | 2250 | 1800 | 2250 | 1800 | T/A-W | ECU |
| 20M33G2200/6^ | 2460 | 2240 | | 2200 | 2750 | 2000 | 2500 | | | 1800 | T/A-W | ECU |

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 Special rear mounted air filter with restriction indicator Exhaust manifold shield for heat isolating |
| Air intake and exhaust system | The 4 compressors are feeding a single water-air intercooler, mounted over the exhaust system 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 weight 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 | 8295 |
| 20M33G2200/6 [^] | 1800 | 4611 | 2756 | 2870 | 8295 |

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.

DCP

Data Centre Power is defined as being the maximum power which a generating set is capable of delivering while supplying a variable or continuous electrical load and during unlimited run hours. Depending on the sites to supply and the availability of reliable utility, the generating set manufacturer is responsible to define what power level he is able to supply to fulfil that requirement including hardware or software or maintenance plan adaptation.

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.

