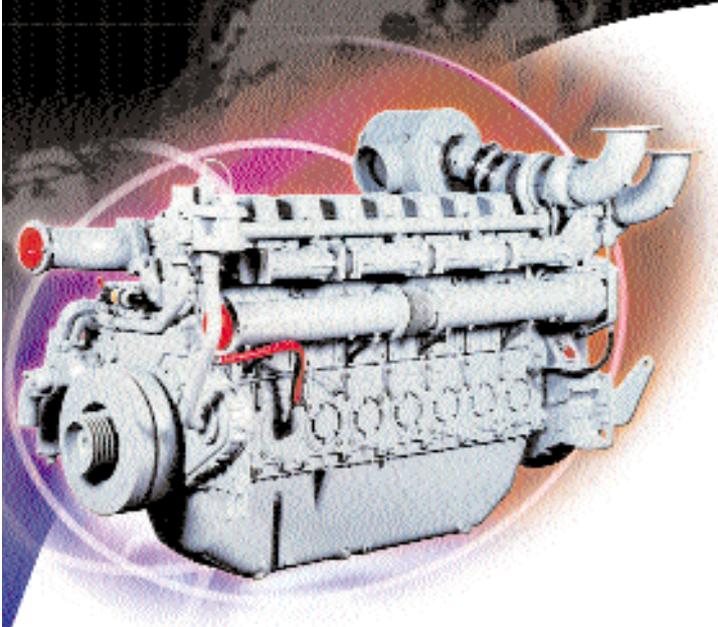




4000 Series Diesel Engine - Electro Unit 4008TAG2 4008TAG2A 947 kWm 1500 rpm 924 kWm 1800 rpm



The Perkins 4000 Series family of 8, 12 and 16 cylinder diesel engines was designed in advance of today's uncompromising demands within the power generation industry and includes superior performance and reliability.

The 4008TAG2 and 2A are turbo-charged, air-to-air charge cooled, 8 cylinder in-line diesel engines. Their premium design and specification features provide economic and durable operation as well as exceptional power to weight ratio, improved serviceability, low gaseous emissions, overall performance and reliability essential to the power generation market.

Economic power

Individual four valve cylinder heads give optimised gas flows, while unit fuel injectors ensure ultra fine fuel atomisation and hence controlled rapid combustion, for efficiency and economy
Commonality of components with other engines in 4000 Series family allows reduced parts stocking levels.

Reliable power

Developed and tested using latest engineering techniques.
Piston temperatures are controlled by an advanced gallery jet cooling system.
All engines are tolerant of a wide range of temperatures without derate.
Service is provided by the extensive Perkins network of over 4,000 distributors and dealers worldwide.

Clean, efficient power

Exceptional power to weight ratio and compact size for easier transportation and installation.
Designed to provide excellent service access for ease of maintenance.
Engines designed to comply with major international standards.
Low gaseous emissions for cleaner operation

| Engine Speed rev/min | Type of Operation | Typical Generator Output (Net) | | Engine Power | | | |
|-------------------------|-------------------|-----------------------------------|-----|--------------|------|-----|------|
| | | | | Gross | | Net | |
| | | kVA | kWe | kW | bhp | kW | bhp |
| 1200 4008TAG2 | Baseload Power | 650 | 520 | 584 | 783 | 547 | 733 |
| | Prime Power | 823 | 658 | 730 | 979 | 693 | 929 |
| | Standby (maximum) | 906 | 725 | 800 | 1072 | 763 | 1023 |
| 1500 4008TAG2A | Baseload Power | 809 | 647 | 719 | 964 | 681 | 913 |
| | Prime Power | 1022 | 818 | 899 | 1205 | 861 | 1155 |
| | Standby (maximum) | 1125 | 900 | 985 | 1320 | 947 | 1270 |
| 1800 4008TAG2 | Baseload Power | 783 | 626 | 715 | 959 | 659 | 885 |
| | Prime Power | 995 | 796 | 894 | 1199 | 838 | 1124 |
| | Standby (maximum) | 1098 | 878 | 980 | 1314 | 924 | 1239 |

Note: 4008TAG2A is offered for 50 hz operation only

The above ratings represent the engine performance capabilities guaranteed within plus or minus 3% at the reference conditions equivalent to those specified in ISO 8528/1, ISO 3046/1, BS5514/1.

Rating conditions: 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. Please consult your distributor or the factory for ratings in other ambient conditions.

Note: For full ratings please refer to Perkins Engines Company Limited. All electrical ratings are based on an average alternator efficiency and a power factor of 0.8

Fuel specification: BS2869: Class A1 +A2 or ASTM D975 No 2D.

Rating Definitions

Baseload power: Power available for continuous full load operation. No overload is permitted.

Prime power: Power available for variable load with an average load factor not exceeding 80% of the prime power rating in any 24 hour period. Overload of 10% permitted for one hour in every twelve hours operation

Standby (maximum): Power available at variable load in the event of a main power network failure up to a maximum of 500 hours per year. No overload is permitted.

4000 Series

4008TAG2

4008TAG2A

Standard Electro Unit Specification

Air Inlet

Mounted air filters and turbochargers

Fuel System

Unit fuel injectors with lift pump and hand stop control
Electronic governor to ISO 3046 Part 4 class A1
Full-flow spin-on fuel oil filters

Lubrication System

Wet sump with filler and dipstick
Full-flow spin-on oil filters
Engine jacket water/lub oil temperature stabiliser

Cooling System

Gear driven circulating pump
Twin thermostats
Crankshaft pulley for fan drive

Electrical Equipment

24 Volt starter motor and 24 volt/40 Amp alternator with integral regulator and DC output
24 Volt combined high coolant temperature/low oil pressure switch
Overspeed switch and magnetic pickup
Turbine inlet temperature shutdown switch
24 Volt stop solenoid (energised to run)

Flywheel and Housing

Flywheel to SAE J620 size 18
SAE 0 flywheel housing

Optional Equipment

The following optional extra equipment is available to make up the specifications to the Perkins ElectropaK specification:
Tropical radiator including: water pipes, clips and hoses, fan, fan guards and belts

Other optional extra equipment available:

Twin heavy duty air cleaner - paper element with pre-cleaner
Changeover lubricating oil filter
Changeover fuel oil filter
Immersion heater with thermostat
Water pipes, clips and hoses for radiator
Air starters
Instrument panel

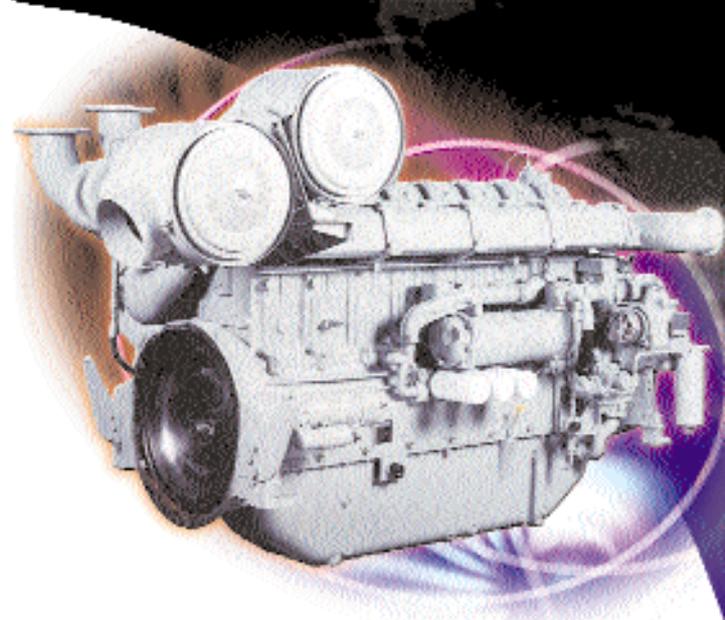
Note: This list is not exhaustive, further options may be available to meet particular applications on enquiry to Perkins Sales Department



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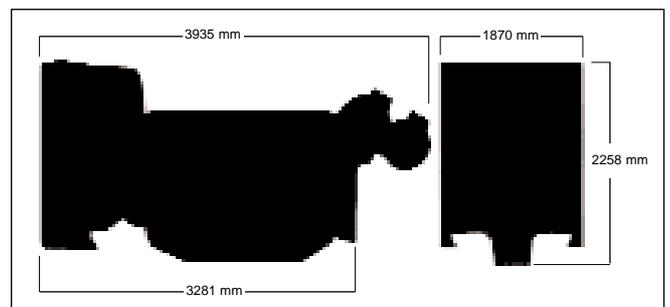
All information given in this leaflet is correct at the time of printing but it may be changed subsequently by the Company



General Data

| | | |
|--|---|-------------------|
| Number of Cylinders | 8 | |
| Cylinder Arrangement | Vertical in-line | |
| Cycle | 4 stroke | |
| Induction System | Turbocharged and air to air charge cooled | |
| Combustion System | Direct injection | |
| Cooling System | Water-cooled | |
| Bore and Stroke | 160 x 190 mm | |
| Displacement | 30.561 litres | |
| Compression Ratio | 13.6:1 | |
| Direction of Rotation | Anti-clockwise, viewed from flywheel end | |
| Firing Order | 1, 4, 7, 6, 8, 5, 2, 3 | |
| Total Lubrication System Capacity | 165.6 litres | |
| | Electro Unit | ElectropaK |
| Total Coolant Capacity | 48 litres | 162 litres |
| Total Weight (Dry) | 3250 kg | 4360 kg |
| Length | 2855 mm | 3935 mm |
| Width | 1585 mm | 1870 mm |
| Height | 1775 mm | 2258 mm |

| Engine speed | Fuel Consumption g/kWh | | |
|---------------------------------|-------------------------|---------------------------|--------------------------|
| | 1200rev/min 4008TAG2 | 1500 rev/min 4008TAG2A | 1800 rev/min 4008TAG2 |
| At standby maximum power rating | 206 | 214 | 216 |
| At prime power rating | 202 | 218 | 213 |
| At continuous baseload rating | 198 | 204 | 206 |
| At 75% of prime power rating | 198 | 202 | 206 |
| At 50% of prime power rating | 208 | 205 | 205 |
| At 25% of prime power rating | 232 | 216 | 210 |



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