



4000 Series

4008TAG2

Diesel Engine – Electro Unit

924 kWm 1800 rpm



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

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 is a turbocharged, air-to-air charge cooled, 8 cylinder in-line diesel engine. Its 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.

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (Net)		Engine Power			
		kVA	kWe	Gross		Net	
				kWm	bhp	kWm	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
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

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, BS 5514/1.

Ratings conditions: 25°C air inlet temperature, barometer 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: BS 2869 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 1 hour in every 12 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.

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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.



Perkins Engines Company Limited

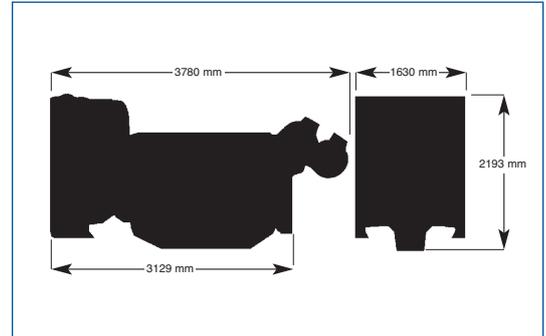
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General Data

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	
Displacement	30.561 litres	
Bore and stroke	160 x 190 mm	
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

Final weight and dimensions will depend on completed specification

Fuel Consumption (g/kWh)		
Engine Speed	1200 rev/min 4008TAG2	1800 rev/min 4008TAG2
At Standby Maximum Rating	206	216
At Prime Power Rating	202	213
At Continuous Baseload Rating	198	206
At 75% of Prime Power Rating	198	206
At 50% of Prime Power Rating	208	205
At 25% of Prime Power Rating	232	210

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