

# @ Perkins

## 4000 Series Diesel engine - Electro Unit

### 4008TAG2 4008TAG2A

947 kWm at 1500 rpm  
924 kWm at 1800 rpm

The Perkins 4000 Series family of 6, 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 turbo-charged, 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.

#### Economic power

Individual four valve cylinder heads giving optimised gas flows.  
Unit fuel injectors ensure ultra fine fuel atomisation and hence controlled rapid combustion.  
Commonality of components with other engines in 4000 Series family for reduced stocking levels.

#### Reliable power

Developed and tested using latest engineering techniques.  
Piston temperatures controlled by an advanced gallery jet cooling system.  
Tolerant of a wide range of temperatures without derate.  
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.

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (net)		Engine Power			
				Gross		Net	
		kVA	kWe	kW	bhp	kW	bhp
1200*	Continuous Baseload	650	520	584	783	547	733
	Prime Power	823	658	730	979	693	929
	Standby (maximum)	906	725	800	1072	763	1023
1500	Continuous Baseload*	809	647	719	964	681	913
	Prime Power	1022	818	899	1205	861	1155
	Standby (maximum)	1125	900	985	1320	947	1270
1800*	Continuous Baseload	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 1500 rev/min prime and standby duty 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

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

### Governing

Electronic governor to ISO 3046 Part 4 (BS5514/4)A1

### Electrical Equipment

24 Volt electrical equipment comprising starter motor, battery charging alternator with integral voltage regulator and activating switch

### Flywheel and Housing

SAE 18 flywheel, SAE 0 housing

### Fuel System

Direct fuel injection system, fuel lift pump, hand stop control

### Lubrication System

Lubricating oil filters  
Engine jacket water/oil temperature stabilizer

### Cooling System

Twin thermostats, water pump  
Free end crankshaft pulley

### Engine Protection

24 Volt stop solenoid (energised to run)  
Combined high coolant - temperature/low oil pressure switch  
Overspeed switch and magnetic pickup  
Turbine inlet temperature shutdown switch

## 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

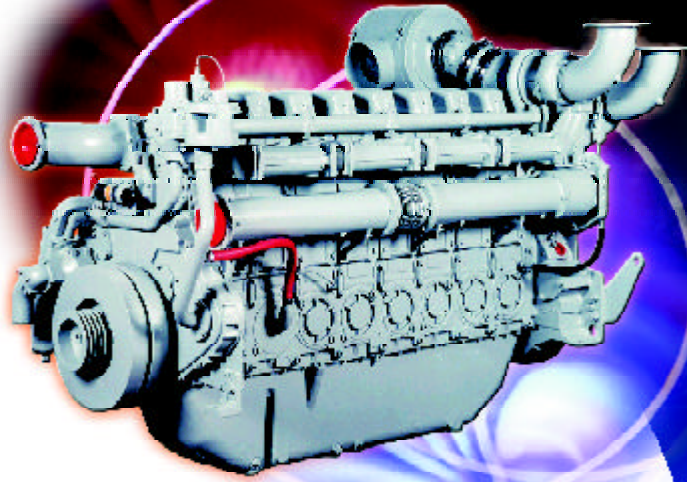
*Note: This list is not exhaustive, further options may be available to meet particular applications on enquiry to Perkins Sales Department*

## @ Perkins

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

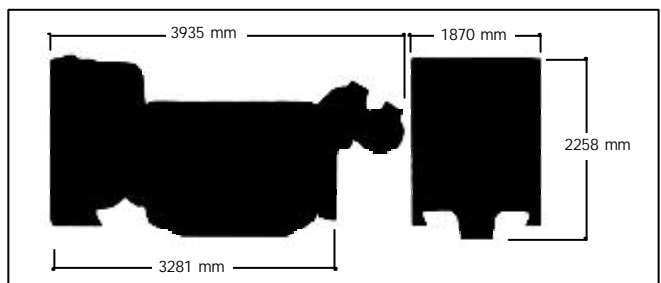


## General Data

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			
	1200 rev/min 4008TAG2	1500 rev/min 4008TAG2	1500 rev/min 4008TAG2	1800 rev/min 4008TAG2A
At standby maximum power rating	204	222	214	224
At prime power rating	200	217	208	222
At continuous baseload rating				
At 75% of prime power rating	195	214	202	220
At 50% of prime power rating	206	224	205	230
At 25% of prime power rating	230	262	216	275



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