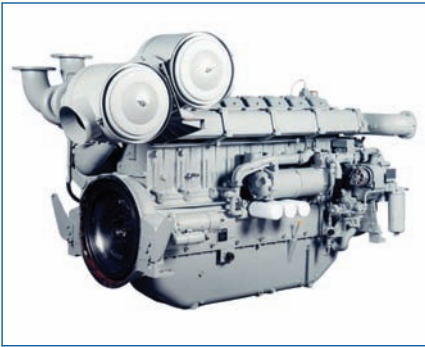


# 4000 Series

## 4008TAG1

Diesel Engine – Electro Unit

821 kWm 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 4008TAG1 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.

### 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.
- Perkins global product support is designed to enhance the customer experience of owning a Perkins powered machine. We deliver this through the quality of our distribution network, extensive global coverage and a range of Perkins supported OEM partnership options. So whether you are an end-user or an equipment manufacturer our engine expertise is essential to your success.

### 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

### Product Support

- Perkins actively pursues product support excellence by ensuring our distribution network invest in their territory - strengthening relationships and providing more value to you, our customer
- Through an experienced global network of distributors and dealers, fully trained engine experts deliver total service support around the clock, 365 days a year. They have a comprehensive suite of web based tools at their fingertips covering technical information, parts identification and ordering systems, all dedicated to maximising the productivity of your engine
- Throughout the entire life of a Perkins engine, we provide access to genuine OE specification parts and service. We give 100% reassurance that you receive the very best in terms of quality for lowest possible cost .. wherever your Perkins powered machine is operating in the world

Engine Speed (rev/min)	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kWm	bhp	kWm	bhp
1200 4008TAG1	Baseload Power	583	466	528	708	491	658
	Prime Power	740	592	660	886	623	835
	Standby (maximum)	815	652	723	970	686	920
1800 4008TAG1	Baseload Power	694	555	640	858	584	783
	Prime Power	884	707	800	1072	744	997
	Standby (maximum)	975	780	877	1176	821	1101

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.

# 4000 Series

## 4008TAG1

### 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
- High coolant temperature switch
- 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

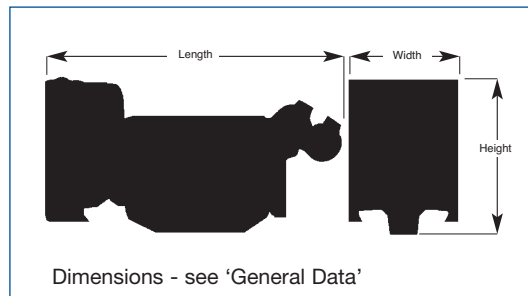
Immersion heater with thermostat

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.



Fuel Consumption (g/kWh)		
Engine Speed	1500 rev/min	1800 rev/min
Standby Maximum Rating	200	212
Prime Power Rating	196	211
Baseload Power Rating	-	206
75% of Prime Power Rating	196	208
50% of Prime Power Rating	210	210
25% of Prime Power Rating	235	207

#### 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	
Total coolant capacity	<b>Electro Unit</b> 48 litres	<b>ElectropaK</b> 162 litres
Total weight (dry)	3250 kg	4360 kg
Length	2879 mm	3935 mm
Width	1571 mm	1870 mm
Height	1760 mm	2258 mm

Final weight and dimensions will depend on completed specification



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