

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

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

serviceability, low gaseous

generation market.

operation as well as exceptional power to weight ratio, improved

reliability essential to the power

emissions, overall performance and

reliability.



# 4000 Series 4008TAG2

# Diesel Engine - Electro Unit

924 kWm 1800 rpm



- 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.



- 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	Baseload Power	650	520	584	783	547	733
4008TAG2	Prime Power	823	658	730	979	693	929
	Standby (maximum)	906	725	800	1072	763	1023
1800	Baseload Power	783	626	715	959	659	885
4008TAG2	Prime Power	995	796	894	1199	838	1124
	Standby (maximum)	1097	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.

# 4000 Series 4008TAG2

# 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

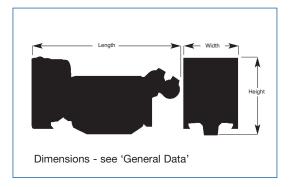
Immersion heater with thermostat

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	206	216					
Prime Power Rating	202	213					
Baseload Power Rating	198	206					
75% of Prime Power Rating	198	206					
50% of Prime Power Rating	208	205					
25% of Prime Power Rating	232	210					

#### General Data

Combustion system

Cooling system

Displacement

Number of cylinders 8 Cylinder arrangement Vertical in-line Cycle 4 stroke Induction system Turbocharged and

> air to air charge cooled Direct injection Water-cooled 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

Total lubrication system capacity

Total coolant capacity

Total weight (dry) Length Width Height

1, 4, 7, 6, 8, 5, 2, 3

1760 mm

165.6 litres Electro Unit ElectropaK 48 litres 162 litres 3250 kg 4360 kg 2879 mm 3935 mm 1870 mm 1571 mm

2258 mm

Final weight and dimensions will depend on completed specification



## **Perkins Engines Company Limited**

Peterborough PE1 5NA United Kingdom Telephone +44 (0)1733 583000 Fax +44 (0)1733 582240

www.perkins.com

Distributed by

All information in this document is substantially correct at time of printing and may be altered subsequently Publication No. 2199/11/08 Produced in England ©2005 Perkins Engines Company Limited