

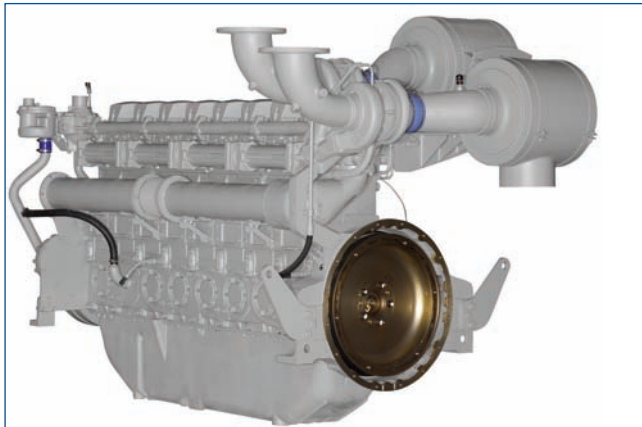
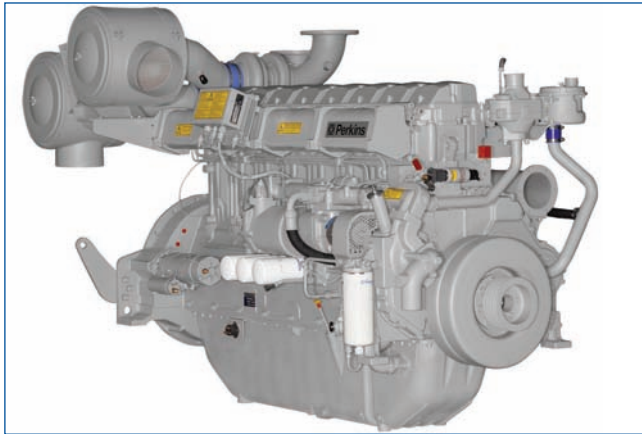
4000 Series

4008TAG1A/2A

Diesel Engine - Electropak

839 kWm 1500 rev/min TAG1A

947 kWm 1500 rev/min TAG2A



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 4008TAG1A/2A Electropaks are turbo-charged, air-to-air charge cooled, 8 cylinder in-line diesel engines. Offered with either Temperate or Tropical cooling packages (with or without fuel cooling). 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 per cylinder heads give optimised gas flows, whilst digitally governed unit fuel injectors ensure ultra fine fuel atomisation and hence controlled rapid combustion, for efficiency and economy
- Commonality of components with other engines in the 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
- New designed radiator assemblies with corrosion inhibiting powder coated surfaces; fewer pipe joints and easier access to reduce maintenance times
- 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 Model Rated Speed Radiator Type	Operation Type	Typical Generator Output (Net)		Engine Power			
		kVA	kWe	Gross		Net	
				kW	bhp	kW	bhp
4008TAG1A 1500 rev/min Tropical	Baseload Power	715	572	640	858	602	807
	Prime Power	905	724	800	1072	762	1022
	Standby (maximum)	996	797	877	1176	839	1125
4008TAG2A 1500 rev/mim Tropical	Baseload Power	809	647	719	964	681	913
	Prime Power	1022	818	899	1206	861	1155
	Standby (maximum)	1125	900	985	1320	947	1270

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.

Full 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.

All information in this document is substantially correct at time of printing and may be altered subsequently

Publication No.1832/03/06 Produced in England ©2006 Perkins Engines Company Limited

4000 Series

4008TAG1A/2A

Standard ElectropaK Specification

Air inlet

- Mounted oil filters and turbochargers

Fuel system

- Unit fuel injectors with lift pump and hand stop control
- Digital 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
- Powder coated radiator assemblies comprising: water radiator; air charge cooled radiator; fuel oil cooling (optional); all pipes, hoses and clips; fan; pulley; fan belts and safety guards

Electrical system

- 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

General Data

Number of cylinders	8 vertical in-line	
Bore and stroke	160 mm x 190 mm	
Displacement	30.561 litres	
Aspiration	Turbocharged and air-to-air charge cooled	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	13.6:1	
Rotation	Anti-clockwise viewed from flywheel end	
Cooling system	Water-cooled	
Total lubrication system capacity	165.6 litres	
	Temperate cooling	Tropical cooling
Ambient coolant clearance TAG1A	41°C	50°C
Ambient coolant clearance TAG2A	35°C	50°C
Total coolant capacity	143 litres	149 litres
Dimensions	Length 3852 mm	Length 3711 mm
	Width 2046 mm	Width 2046 mm
	Height 2067 mm	Height 2146 mm
Dry weight	4270 kg *	4320 kg *

* For fuel cooler, add 6 kg
Final weight and dimensions will depend on completed specification

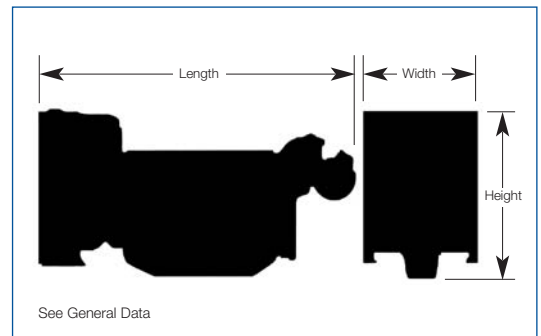


Perkins Engines Company Limited

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



All information in this document is substantially correct at time of printing and may be altered subsequently
Publication No.1832/03/06 Produced in England ©2006 Perkins Engines Company Limited



Optional Equipment

Other optional extra equipment available:

- Choice of Temperate or Tropical radiators available dependent on operational cooling requirements
- Fuel oil cooling radiator available integral to radiator assemblies
- Twin heavy duty air cleaner - paper element with pre-cleaner
- Changeover lubricating oil filter
- Changeover fuel oil filter
- Immersion heater with thermostat
- 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 Temperate/Tropical	
Engine speed	1500 rev/min 4008TAG1A
At standby maximum power rating	210
At prime power rating	206
At continuous baseload rating	203
At 75% of prime power rating	201
At 50% of prime power rating	207
At 25% of prime power rating	217

Fuel Consumption g/kWh Temperate/Tropical	
Engine speed	1500 rev/min 4008TAG2A
At standby maximum power rating	214
At prime power rating	208
At continuous baseload rating	204
At 75% of prime power rating	202
At 50% of prime power rating	205
At 25% of prime power rating	216

Distributed by