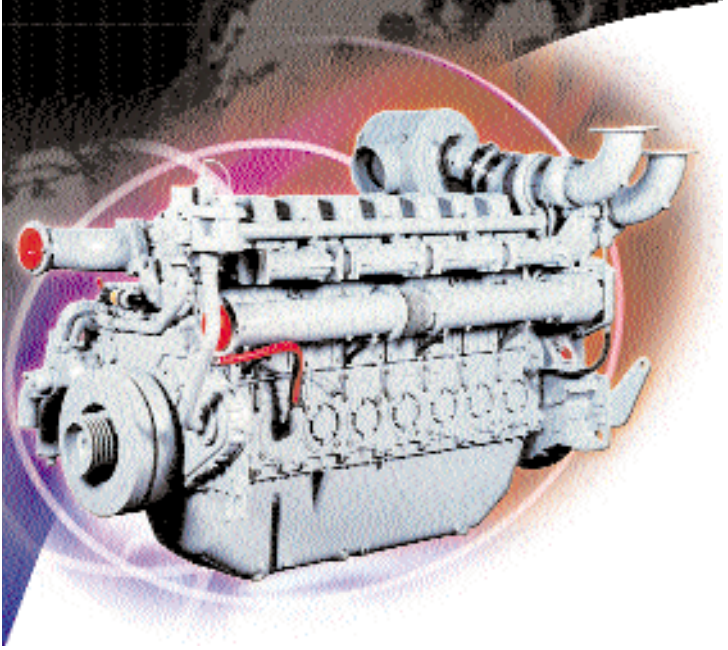


4000 Series

Diesel Engine - Electro Unit

4008TAG1
4008TAG1A

839 kWm 1500 rpm
821 kWm 1800 rpm

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 4008TAG1 and 1A are turbo-charged, air-to-air charge cooled, 8 cylinder in-line diesel engines. 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 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

Engine Speed rev/min	Type of Operation	Typical Generator Output (Net)		Engine Power			
				Gross		Net	
		kVA	kWe	kW	bhp	kW	bhp
1200 4008TAG1	Baseload Power Prime Power Standby (maximum)	583 740 815	466 592 652	528 660 723	708 886 970	491 623 686	658 835 920
1500 4008TAG1A	Baseload Power Prime Power Standby (maximum)	715 905 996	572 724 797	640 800 877	858 1072 1176	602 762 839	807 1021 1125
1800 4008TAG1	Baseload Power Prime Power Standby (maximum)	694 884 975	555 707 780	640 800 877	858 1072 1176	584 744 821	783 997 1101

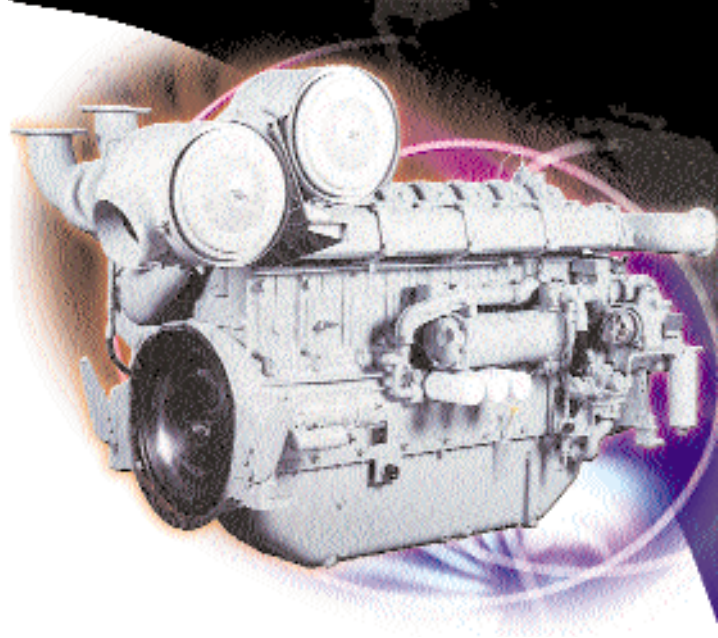
Note: 4008TAG1A is offered for 50 hz operation only

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
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.

4000 Series
4008TAG1
4008TAG1A



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

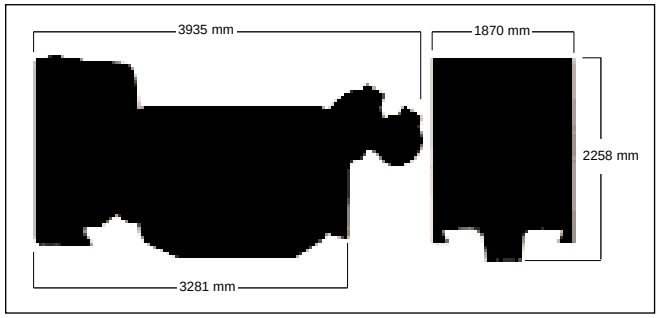
Note: This list is not exhaustive, further options may be available to meet particular applications on enquiry to Perkins Sales Department

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

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

Fuel Consumption g/kWh			
Engine speed	1200rev/min 4008TAG1	1500 rev/min 4008TAG1A	1800 rev/min 4008TAG1
At standby maximum power rating	200	210	212
At prime power rating	196	206	211
At continuous baseload rating	-	203	206
At 75% of prime power rating	196	201	208
At 50% of prime power rating	210	207	210
At 25% of prime power rating	235	217	207



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