702 kWm @ 1800 rpm

The Perkins® 4000 Series is a family of 6, 8, 12 and 16 cylinder diesel engines, designed to address today's uncompromising demands within the power generation industry with particular aim at the standby market sector. Developed from a proven engine range that offers superior performance and reliability.

The 4006-23TAG2A is a turbocharged and air-to-air charge cooled, 6 cylinder diesel engine offered with either temperate or tropical cooling. Its premium features and design provide economic and durable operation as well as an exceptional power to weight ratio, excellent load acceptance and improved gaseous emissions, plus the overall performance and reliability characteristics essential to the power generation market.



Specification			
Number of cylinders	6 vertical in-line		
Bore and stroke	160 x 190 mm	6.3 x 7.5 in	
Displacement	22.921 litres 1397 in ³		
Aspiration	Turbocharged and air-to-air charge cooled		
Cycle	4 stroke		
Combustion system	Direct injection		
Compression ratio	13.6:1		
Rotation	Anti-clockwise, viewed on flywheel		
Total lubricating capacity	113.4 litres	29.5 US gal	
Cooling system	Water-cooled		
Total coolant capacity	105 litres	27.7 US gal	

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Features and benefits

Economic power

- Individual 4 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 the 4000 Series family for reduced stocking levels

Reliable power

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

Compact, clean and efficient power

- Exceptional power to weight ratio and compact size give optimum power density for easier transportation and installation
- Designed to provide excellent service access for ease of maintenance
- Engines to comply with major international standards
- Low gaseous emissions that will satisfy the requirements of ½ TA Luft (1986)

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 disposal 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



THE HEART OF EVERY GREAT MACHINE

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Technical information

Air inlet

Mounted air filter

Fuel system

- Direct fuel injection system, fuel lift pump
- Fuel cooler

Governing

Heinzmann digital governor – governing to ISO 8528-5 Class G2

Lubrication system

- Wet sump with filler and dipstick
- Lubrication oil filters
- Oil cooler with separate filter header

Cooling system

- Twin thermostats, water pump
- System designed for ambients up to 35°C or 50°C
- Radiator supplied loose incorporating air-to-air charge cooler

Electrical equipment

- 24 volt starter motor, 24 volt 70 amp battery charging alternator with integral voltage regulator and activating switch
- · High coolant temperature switch
- Low oil pressure switch

Flywheel and housing

- SAE J620 size 18 flywheel
- SAE '0' flywheel housing

Literature

• User's Handbook and Parts Manual

Optional equipment

- Heavy-duty air cleaners paper element with pre-cleaner
- Changeover lubrication oil filter
- Changeover fuel filter
- Immersion heater with thermostat
- Additional manuals
- 4 metre wiring harness
- Tropical or temperate radiator kit
- Temperate fan



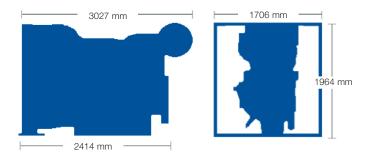
Photographs are for illustrative purposes only and may not reflect final specification.

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

Final weight and dimensions will depend on completed specification.



702 kWm @ 1800 rpm



Engine package weights and dimensions					
Length	3027 mm	119 in			
Width	1706 mm	67 in			
Height	1964 mm	77 in			
Weight (dry)	2524 kg	5564 lb			

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0 1	Type of operation	Typical generator output (Net)		Engine power			
Speed rpm				Gross		Net	
		kVA	kWe	kWm	hp	kWm	hp
1800	Continuous baseload	600	480	554	743	511	685
	Prime power	750	600	684	917	638	855
	Standby (maximum)	825	660	759	1018	702	941

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

Generator powers are typical and are based on an average alternator efficiency and a power factor (cos. θ) of 0.8. Fuel specification: BS 2869: Part 2 1998 Class A2 or ASTM D975 D2. Lubricating oil: 15W40 to API CG4.

Rating definitions

Baseload power: Power available for continuous full load operation. No overload is permitted on baseload power. Prime power: Power available at variable load with a load factor not exceeding 80% of the prime power rating. There is no overload permitted on baseload power. Standby power: Power available in the event of a main power network failure up to a maximum of 500 hours per year of which up to 300 hours may be run continuously. Load factor may be up to 100% of standby power. No overload is permitted.

Percent of prime power	Fuel consumption at 1800 rpm g/kWh	Fuel consumption at 1800 rpm l/hr		
Standby power	226	199		
Prime power	222	177		
Baseload power	210	136		
75%	212	129		
50%	212	90		