82.7 kW (110.9 hp) gross prime power @ 1800 rpm

Building upon Perkins proven reputation within the marine power generation industry. The 4.4 Series range of Marine Auxiliary engines now fit even closer to the needs of their customers'.

In the world of power generation success is greeted for those providing more for even less. Therefore with this new 4.4TWGM unit, Perkins has engineered for its customers even higher levels of reliability, yet lowered the cost of owner ship. And with six cylinder capability from a four cylinder package performance increases, but crucially, bare engine noise is lower than ever before.

Rapid starting and pick-up are naturally built in especially for cold operation, but where legislation or local markets demand an emissions capability, then the 4.4TWGM satisfies European Emissions Legislation.

4.4 Series matches technology to customers needs. An in-line 4 cylinder, 4.4 litre unit very quietly sets a new standard in prime power supply and standby for the marine power generation industry.



Specification				
Number of cylinders	4 vertical in-line			
Bore and stroke	105 x 127 mm	4.1 x 5.0 in		
Displacement	4.4 litres	268.5 in <sup>3</sup>		
Aspiration	Turbocharged, air to water cooled			
Cycle	4 stroke			
Combustion system	Direct injection			
Compression ratio	19.3:1			
Rotation	Clockwise, viewed from front			
Total lubricating capacity	15 litres	4 US gal		
Cooling system	Water cooled			
Total coolant capacity	15 litres	15 litres 3.9 US gal		

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### Features and benefits

### Powered by your needs

• Perkins engines can be tailored specifically for you.

These engines offer a choice of standard build configurations to match the needs of customers for a diverse range of applications

#### Lower operating costs

 Service intervals 500 hours as standard and Perkins provides comprehensive warranty cover for two years, with three years on major engine components

### Economic power

One side servicing and cast aluminium header tank for reduced service time and cost. Extended service intervals, including 500 hour (or 12 months) oil change period, and competitively priced parts provide low cost of ownership. Keeping our customers engines running wherever they are in the world

### Durable power

Maximum cooling efficiency is provided by a gear driven water pump. Leak free operation is ensured by Viton
crankshaft seals and sophisticated controlled swell joints, giving protection in the toughest conditions. Inserted
valve seats, oil spray cooled pistons and compact plate cooler give enhanced engine life

### Reliable power

• Suitable for operation in ambient temperatures up to 50°C and sea waters up to 38°C. Fuelled starting aid for temperatures down to -15°C. Approved by classification societies and marine authorities

#### 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
- To find your local distributor: www.perkins.com/distributor



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### Technical information

#### **Benefits**

- Excellent power to weight
- Ease of Installation
- Clean, quiet, smooth operation
- Excellent fuel economy
- Easy to maintain with 500hr Service interval
- Reliability

### Standard features

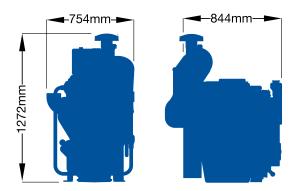
- Water jacketed exhaust manifold
- Flat bottomed cast iron sump
- Wiring harness with 23 way connector
- Electronic governor (control to ISO 8528 G3)
- Rotary fuel injection pump
- Spin on fuel oil filter and separator
- Spin on full flow lube oil filter with integral lubrication oil cooler on left side of engine
- Thermostatically controlled cooling water system
- Gear driven fresh water pump
- Air filter
- Closed engine breather system
- Deareation headertank
- User's handbook

### Optional equipment

- Backend SAE 3
- Engine mounting brackets
- Exhaust outlets-either dry with bellows and silencer or water injected
- 12 or 24 volt insulated electrics
- Control panel options
- Heat exchanger or keel cooling with radiator cooled versions available
- PTO facility
- 5000 hours parts kit
- Toolkit
- Belt cover
- Classification Society certification



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Engine package weights and dimensions					
Length	844 mm	33 in			
Width	754 mm	27 in			
Height	1272 mm	50 in			
Weight (dry)	469 kg	1034 lb			

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0 .	Type of operation	Typical generator output (Net)		Engine power			
				Gross		Net	
	operation	kVA	kWe	kW	hp	kW	hp
1800	Prime power	93.0	74.4	82.7	110.9	82.7	110.9
	110%	102.4	81.9	91.0	122.0	91.0	122.0

#### Rating definitions

Prime power: Power for continuous service. Overload of 10% is permitted for 1 hour in very 12 hours' operation.

For further details on definitions please contact your local Perkins distributor.

Percent of prime power	Fuel consumption at 1800 rpm g/kWh	Fuel consumption at 1800 rpm l/hr		
100% power	4.8	22.0		
110% power	5.3	24.1		

These ratings represent the performance capabilities to conditions specified in BS5514:1996, ISO 3046/1:1995 and DIN 6271.

Test Conditions Air temperature 25°C (80.6°F) barometric pressure 100 kPa (29.5 in Hg), relative humidity 30%, maximum exhaust back pressure 6 kPa, maximum inlet restriction 3 kPa.

For operation outside of these conditions please consult your PerkIns contact. Performance tolerance quoted by Perkins is ± 5%.

Electrical ratings assume a power factor of 0.8 and a generator efficiency of 90%.