# Marine Auxiliary Engine 4.4GM





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 4.4GM 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 4.4GM satisfies current European Emissions Legislation.

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

# 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.

# World Class Product Support

With 80 years experience, we are experts in the engines industry. At Perkins we are constantly researching, developing and investing in our products and services. Strong global support is provided through a network of over 130 distributors and service outlets in 184 countries, providing access to over 50,000 parts and exchange units 24 hours a day, 365 days a year.

# Lower Operating Costs

Service intervals 500 hours as standard and Perkins provides comprehensive warranty cover for 2 years, with 3 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. Rated speed is available at 1500 rev/min and 1800 rev/min allowing standard builds to operate at either 50Hz or 60Hz.

### **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. Built from heavy duty industrial core which is ideally suited to constant speed applications.

## **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. Our commitment to quality is your guarantee of reliability.

Engine speed rev/min	Type of operation	Typical output (net)		Power (gross)		Typical fuel consumption		
		kWe	kVa	kW	bhp	UK gals/hr	Litres/hr	US gals/hr
1500	Prime power	38.4	48.0	42.7	57.3	2.4	11.0	2.9
	110%	42.3	52.9	47.0	63.0	2.7	12.2	3.2
1800	Prime power	44.2	55.2	49.1	65.8	2.9	13.0	3.4
	110%	48.6	60.8	54.0	72.4	3.2	14.5	3.8

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 1 kPa.

For operation outside of these conditions please consult your Perkins contact. Performance tolerance quoted by Perkins is  $\pm$  5%. Electrical ratings assume a power factor of 0.8 and a generator efficiency of 90%.



# 4.4GM

# 1104 Series



### Benefits:

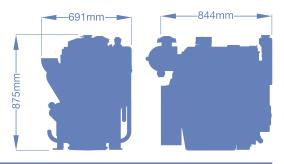
- Excellent power to weight
- Ease of Installation
- Clean, quiet, smooth operation
- Excellent fuel economy
- Easy to maintain with 500hr Service interval
  Reliability

### **Standard Features**

- Backend SAE3
- 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**

- 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
- Double skin high pressure fuel lines.
- PTO facility
- Additional starter options
- 5000 hours parts kit
- Block heater
- Tool kit
- Belt cover
- Classification Society certification



Ger	neral	Data

Number of cylinders	Vertical in-line 4 cylinder				
Bore and stroke	105 mm x 127 mm				
Displacement	4.4 litres				
Aspiration	Natural				
Cycle	4 stroke				
Combustion system	Direct injection				
Compression ratio	18.23:1				
Rotation	Clockwise viewed from front				
Cooling system	15 litres				
Operational angle	25° from horizontal in any direction				
Dimensions	Length 844 mm, Width 691 mm, Height 875 mm				
Dry weight	462 kg				
Wet weight	489 kg				
Final weight and dimensions will depend on completed specification					

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### **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.

Distributed by

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

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