



Marine Auxiliary Engine 4.4TWGM

1104 Series



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 ownership. 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 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

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

At Perkins we are constantly researching, developing and investing in our products and services. Total worldwide 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.

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.

Engine speed rev/min	Type of operation	Typical generator output (net)		Engine power (gross)		Typical fuel consumption		
		kWe	kVa	kW	bhp	UK gals/hr	Litres/hr	US gals/hr
1500	Prime power 110%	67.5	84.4	75.0	100.6	4.2	19.0	5.0
		74.3	92.8	82.5	110.6	4.5	20.4	5.4
1800	Prime power 110%	74.4	93.0	82.7	110.9	4.8	22.0	5.8
		81.9	102.4	91.0	122.0	5.3	24.1	6.4

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%.

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
- Deaeration 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
- Tool kit
- Belt cover
- Classification Society certification

General Data

Number of cylinders	Vertical in-line 4 cylinder
Bore and stroke	105 mm x 127 mm
Displacement	4.4 litres
Aspiration	Turbocharged, air to water cooled
Cycle	4 stroke
Combustion system	Direct injection
Compression ratio	19.3:1
Rotation	Clockwise viewed from front
Cooling system	15 litres
Operational angle	25° from horizontal in any direction
Dimensions	Length 1001 mm Width 754 mm Height 1272 mm
Dry weight	469 kg
Wet weight	522 kg

Final weight and dimensions will depend on completed specification

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.



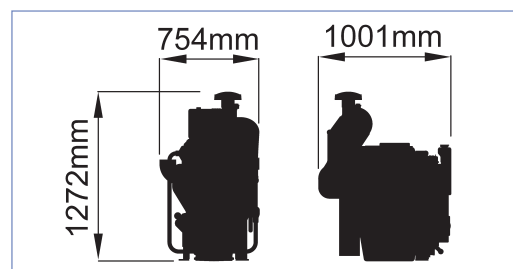
Wimborne Marine Power Centre

22 Cobham Road,
Ferndown Industrial Estate,
Wimborne,
Dorset, BH21 7PW,
England.

Tel: +44 (0)1202 893720, Fax: +44 (0)1202 851700

E-mail: Marine@Perkins.com

Web: www.Perkins.com/Marine



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