

1100 Series M300C

Marine Propulsion Engine

225 kW (302 hp) @ 2400 rpm

These are the latest addition to the common platform concept of 1106 Series diesel engines. Assembled on a new high technology production line, these ultra clean engines will provide a superior replacement for all marine six cylinder models.

Frequent computerised checks during the production process ensure high build quality excellence is maintained.

The new engines boast considerable increases to delivered power, torque and noise reduction. These have been achieved through changes to combustion areas, turbocharger geometry, increased cylinder displacement and significantly, the inclusion of a high pressure, common rail fuel system.

These new engines incorporate components of Caterpillar ACERT™ technology.

A complete fuel system, air cleaner and heat exchanger is supplied as standard. Choice is provided to customers through the availability of a large variety of standard specifications incorporating a choice of alternator and front PTO.



Emissions

Meets EPA Tier 2, IMO2, RCD and CCNR Stage 2.

Specification		
Number of cylinders	6 vertical in-line	
Bore and stroke	105 x 127 mm	4.1 x 5.0 in
Displacement	6.6 litres	402.7 in ³
Aspiration	Turbocharged aftercooling	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	16.2:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	15 litres	3.9 US gal
Cooling system	Water cooled	
Total coolant capacity	26.3 litres	6.9 US gal

1100 Series M300C Marine Propulsion Engine

225 kW (302 hp) @ 2400 rpm

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

State of the art design

- These engines utilise components of Caterpillar ACERT™ technology. This provides excellent fuel economy and low heat rejection

Worldwide power solution

- They have been designed to be worldwide fuel tolerant, including kerosene, jet aviation fuel and B20 biofuel (RME). Options are available to meet local market needs

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

1100 Series M300C Marine Propulsion Engine

225 kW (302 hp) @ 2400 rpm

Technical information

Benefits

- Excellent power to weight
- Ease of Installation
- Clean, quiet, smooth operation
- Excellent fuel economy
- Easy to maintain with 500 hr Service interval
- Reliability
- Bio Diesel up to B20
- Approved for use with Military fuels

Standard features

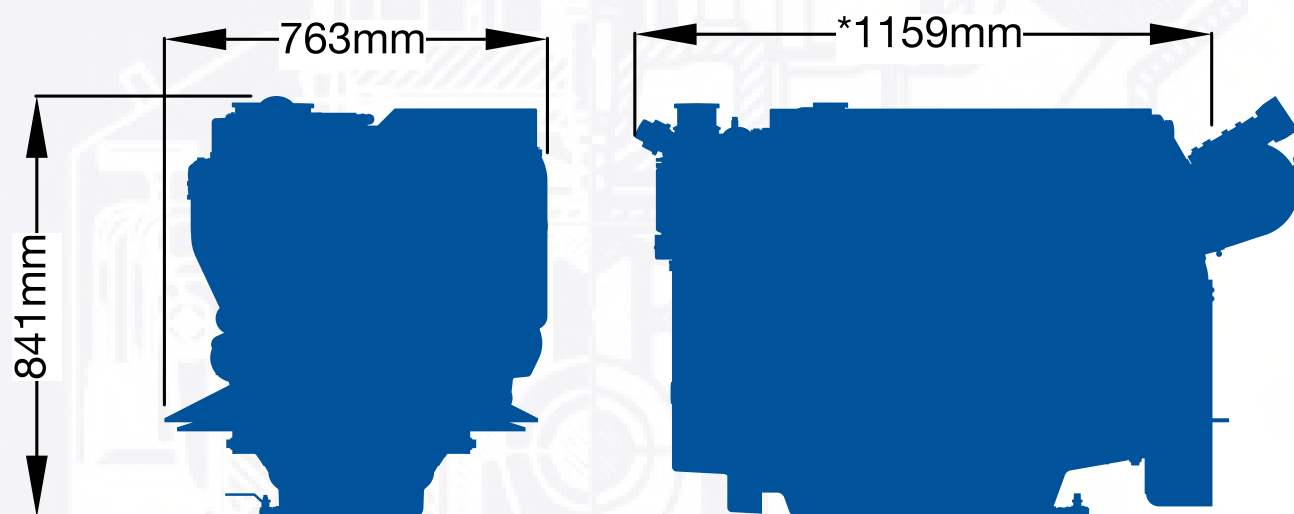
- 500 hour service interval
- CuNi sea water charge air cooler
- Common rail fuel system
- SAE3 backend
- Primary & secondary fuel filter, with integrated water in fuel alarm
- Watercooled exhaust manifold, with integral header tank
- Dry wrapped turbocharger
- Electronic governor
- Filtered crankcase breather
- Oil filter, high level dipstick, and twin oil fillers
- Shallow sump
- Integral oil cooler
- Gear driven self priming auxiliary water pump
- Gear driven centrifugal jacket water pump
- 90 Amp 12 Volt alternator
- 12 Volt starter motor
- J1939 fault diagnostics
- Insulated electrics
- US Coast Guard, MCA & RCD approved oil and fuel lines

Optional equipment

- 24 Volt starting
- 55 & 100 Amp 24 Volt charging alternators
- 175 Amp 12 Volt charging alternator
- Analogue & digital marine displays
- Anti-vibration engine mounts
- Dry & wet exhaust elbows
- Heat exchanger & keel cooling
- Marine transmission adaption kits
- Factory installed marine transmission
- Gearbox oil cooler
- Conversion kit for control cables
- Power Take Off – crankshaft PTO extension shaft with pulley drives

1100 Series M300C Marine Propulsion Engine

225 kW (302 hp) @ 2400 rpm



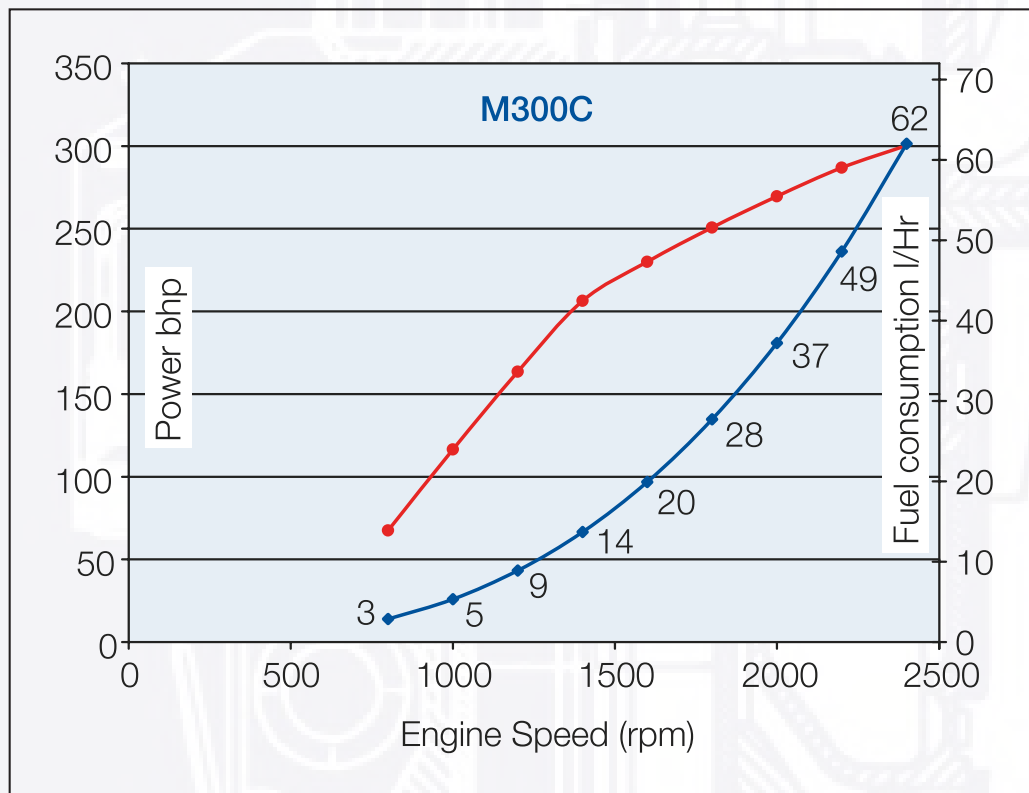
Engine package weights and dimensions

Length	*1159 mm	46 in
Width	763 mm	30 in
Height	841 mm	33 in
Weight (dry)	700 kg	1543 lb

*Less gearbox

1100 Series M300C Marine Propulsion Engine

225 kW (302 hp) @ 2400 rpm



Propeller law consumption (3 index).

Propellers should be matched to achieve maximum rated engine speed under fully laden boat conditions. Engine delivered from factory will be set to produce gross (flywheel) power output within manufacturing tolerances to ISO 8665: 2006 conditions.

Speed rpm	Power kW	Power bhp	Speed rpm	Torque Nm	Torque lb-ft	Rating type
2400	225	302	1400	1050	774	MD

Rating definitions

Pleasure duty: For vessels operating up to 30% load factor. This rating is intended for pleasure/non-revenue generating applications that operate less than 500 hours a year. Typical applications could include but are not limited to: High speed planning craft.

Light duty: For vessels operating up to 50% load factor. This rating is intended for applications that operate less than 1500 hours a year in variable load applications where full power is limited to 2 hours out of every 12 hours of operation and reduced power must be at or below 200 rpm of the maximum rated rpm. Typical applications could include but are not limited to: planing / semi displacement craft such as customs and police launches, sport fish charter vessels, passenger carriers, survey craft and long distance cruisers etc.

Medium duty: For vessels operating up to 60% load factor. This rating is intended for applications that operate less than 4000 hours a year. Typical applications could include but are not limited to: Semi-displacement / displacement craft such as customs and police launches, high speed commercial fishing, passenger carriers, survey craft, ferries and long distance cruisers etc.

Heavy duty: For vessels operating up to 80% load factor. This rating is intended for applications that operate less than 4000 hours a year. Typical applications could include but are not limited to: semi-displacement / displacement craft such as customs and police launches, high speed commercial fishing, passenger carriers, survey craft and ferries etc.

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