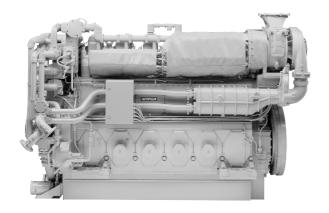
# **CATERPILLAR®**

# Marine Propulsion Engine

3606

1730-2030 bkW (2320-2722 bhp) @ 900-1000 rpm



Shown with Accessory Equipment

# **CATERPILLAR® ENGINE SPECIFICATIONS**

#### In-Line 6, 4-Stroke-Cycle-Diesel

•
EmissionsIMO compliant
Bore — mm (in)
Stroke — mm (in) 300 (11.8)
Displacement — L (cu in)
Rotation (from flywheel end) CCW or CW
Compression Ratio13:1
AspirationTurbocharged-Aftercooled
Low Idle Speed — rpm350
$Rated \ Speed \ rpm \ \ldots \ 900\text{-1000}$
Average Piston Speed — m/s (ft/s) $\dots$ 9-10 (29.5-32.8)
Engine Firing Pressure —
bar (psi)
BMEP — bar (psi)
BSFC — g/bkW-h (lb/hp-h) 197-206 (.324339)

### PERFORMANCE DATA

Rated rpm	1000		900	
	bkW	bhp	bkW	bhp
<b>Maximum Continuous</b>	2030	2722	1900	2548
Continuous Service	1850	2481	1730	2320

# STANDARD EQUIPMENT

#### Air Intake and Exhaust System

Charge air cooler, air inlet shutoff, high flow turbocharger, dry manifold with soft or hard shielding

# **Basic Engine Arrangement**

In-line engine with one-piece grey iron cylinder block, individual cylinder heads with four intake/exhaust valves, right- or left-hand service side available

#### **Cooling System**

Single or combined system, engine mounted freshwater and seawater pumps, engine coolant water drains

# **Fuel System**

Engine operates on MDO; fuel injection system is comprised of engine-driven fuel transfer pump and a unit injector for each cylinder, engine mounted duplex fuel filters, and flexible connections

# **Lube Oil System**

Top-mounted crankcase breather, two centrifugal oil filters with single shutoff, gear-driven pump, duplex oil filter, crankcase explosion relief, oil filler and dipstick

# Monitoring, Alarm, and Safety Control System

Alarms and shutdowns provided as required by marine society for unmanned machinery spaces. Marine Monitoring System II or Engine Control Panel are available; systems include temperature, pressure, and speed sensors; cylinder pressure relief valves, oil mist detector, and particle detector available

#### **Speed Control**

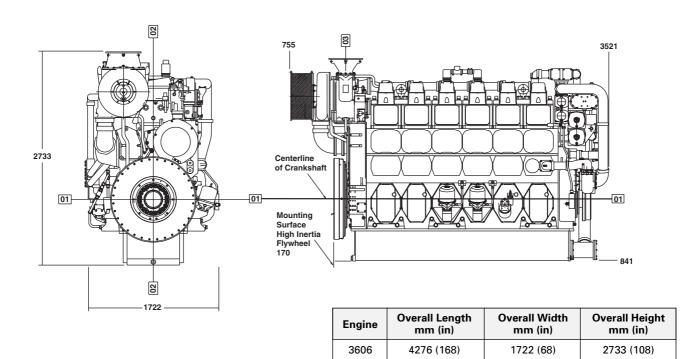
Electric actuator, programmable electronic governor, optional mechanical ballhead backup

#### General

Four lifting eyes mounted to cylinder heads, Caterpillar yellow paint, parts books and maintenance manuals, shrink wrap

#### **Optional Supplied Equipment**

Torsional coupling, fresh water heat exchanger, fuel cooler, emergency pumps and connections, jacket water heater, flexible connections, and antivibration isolators



Engine Weights	kg (lb)	
Engine Dry Weight	15 680 (34,496)	
Shipped Loose Items: Torsional Coupling Plate-Type Heat Exchanger Instrument/Alarm Panel	319 (702) 400 (880) 200 (440)	
Fluids: Lube Oil Jacket Water Heat Exchanger (FW, SW, LO)	634 (1,395) 400 (880) 70 (154)	

# **RATING DEFINITIONS AND CONDITIONS**

**MAXIMUM CONTINUOUS RATING** – 8% of the engine operating hours at 100% of rated power, 92% of the engine operating hours at 90% of rated power.

**CONTINUOUS SERVICE RATING** – 100% of the engine operating hours at 100% of rated power.

RATINGS are based on SAE J1995/ISO3046 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity at the stated charge air cooler water temperature. Ratings also meet classification society maximum temperature requirements of 45°C (113°F) air temperature to the turbocharger and 32°C (90°F) seawater temperature without derate.

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

**FUEL RATES** are based on 35° API, 16°C (60°F) fuel used at 29°C (85°F) with a density of 838.9 g/liter (7.001 lbs/U.S. gal). Lower Heat Value (LHV) of 42 780 kJ/kg (18,390 Btu/lb). Tolerance is +5%. Includes all engine mounted pumps. BSFC without pumps is 3% less.

MARINE CERTIFICATION – Ratings are marine classification society approved by ABS, BV, CCS, DnV, GL, KR, LRS, NKK, RINA, and RS. These societies have also granted 3600 factory line production approval which eliminates requirement for society surveyor witness test.

Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

Materials and specifications are subject to change without notice.

LEHM1876-01 (4-02)

The International System of Units (SI) is used in this publication.

Printed in U.S.A. ©2002 Caterpillar All rights reserved.