# CATERPILLAR®

# 3508B MARINE AUXILIARY

682 bkW (915 bhp) 928 mhp

# **SPECIFICATIONS**

V-8	4-Stroke-C	vcle-Diesel
v-0,	4-011046-0	ycie-Diesei

V-0, 4-Sti Uke-Cycle-Diesei
Emissions IMO compliant
Displacement
Rated Engine Speed 1200 rpm
Bore 170 mm (6.7 in.)
Stroke 190 mm (7.5 in.)
AspirationTurbocharged-Aftercooled
Governor Electronic
Engine Weight, Net Dry (approx) 5216 kg (11,500 lb)
Capacity for Liquids
Cooling System (engine only) 285 L (75.3 U.S. gal)
Lube Oil System 223 L (59 U.S. gal)
Oil Change Interval 500 hr
Caterpillar <sup>®</sup> DEO 10W30 or 15W40
Rotation (from flywheel end) Counterclockwise
or Clockwise

# ACCESSORY EQUIPMENT

24V 60 Amp Alternator 24V Electric Starting Motor Air Inlet Overspeed Shutoffs Air Starting Motor Auxiliary Drive Pulley and Shaft Crankshaft Pulleys Customer Communication Module (CCM) Deep Sump Oil Pan Dual Jacket Water Heater **Duplex Fuel Filter** Duplex Oil Filter Exhaust Elbow, Flange, Flexible Fitting Front Enclosed Clutch Front Stub Shafts Generators - 630 to 910 ekW Air Filter, Bearing Temperature Detectors, Low Voltage Extension Box, RFI Filter, Voltage Regulator (Auto, Digital, Manual) Heat Exchanger Instrument Panel Extension Harness — 8M or 16M **Keel Cooling Connections** LH Engine-Mounted Instrument Panel LH Fuel Priming Pump Load Sharing Module Premium Wiring Harness Program Relay Control Module Pyrometer and Thermocouples Pyrometer Extension Harness — 8M or 16M Radiator Cooling Conversion Self-Priming Auxiliary Sea Water Pump Shutoff and Alarm Contactors for Oil Pres. and Water Temp. Spare Parts Kit Sump Pump Upper RH Front Accessory Drives

#### **PERFORMANCE DATA**

#### Turbocharged-Aftercooled

DM4550-03	Aftercooler Temperature 30°C (86°F)

682 bkW (.8 pf) 915 bhp				
% load	bkW	Lph	gph	
100	634	161.2	42.6	
75	476	122.6	32.4	
50	320	84.2	22.2	
25	166	49.7	13.1	

## IMAGE IS NOT AVAILABLE

# STANDARD EQUIPMENT

#### Air Inlet System

Corrosion-resistant separate circuit aftercooler core (air side); regular duty air cleaner; dual turbochargers, 152 mm (6 in.) OD

#### **Cooling System**

Non-self-priming centrifugal auxiliary sea water pump, gear driven centrifugal jacket water pump, auxiliary fresh water pump, expansion tank, oil cooler, thermostats and housing with 92°C (198°F) full open temperature

#### Exhaust System

Dry gas tight manifolds with thermo-laminated heat shields; dual turbochargers with water cooled bearings and thermo-laminated heat shields; vertical exhaust outlet, 203 mm (8 in.) round flanged outlet

#### Flywheel and Flywheel Housing

SAE No. 00 (183 teeth)

#### **Fuel System**

RH fuel filter with service indicators, fuel transfer pump, Electronic Unit Injector (EUI) fuel system

#### Instruments

RH instrument panel with oil pressure, water temperature, and fuel pressure gauges; system DC voltage gauge; air inlet restriction gauge; exhaust temperature gauges; fuel and oil filter differential pressure gauges; service meter; tachometer; instantaneous fuel consumption; four-position start-stop

#### Lube System

Top-mounted crankcase breather, RH oil filter and oil level gauge, gear-type oil pump, standard sump oil pan

#### **Mounting System**

Engine length mounting rails, 254 mm (10 in.); C-channel

#### **Power Take-Offs**

Lower RH and LH accessory drive, two-sided front housing

#### General

Vibration damper and guard, Caterpillar yellow paint, lifting eyes



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# **DIMENSIONS\***

<b>Overall Length</b> Length from front to rear face of block Length from rear face of block to back of engine	<b>mm</b> 2350.4 1880.0 470.4	<b>in.</b> 92.5 74.0 18.5	
<b>Overall Height</b> Height from crankshaft centerline to top of engine Height from crankshaft centerline to bottom of rails	1806.3 1247.8 558.5	71.1 49.1 22.0	
<b>Overall Width</b> Width from crankshaft centerline to port side (left side) Width from crankshaft centerline to starboard side (right side)	1703.0 851.5 851.5	67.1 33.5 33.5	
Customer mounting hole diameter Width from crankshaft centerline to side Length from rear face of block to mounting hole	From mm 23.8 444.5 1196.0 1272.2	nt 0.9 17.5 47.1 50.1	Rearmmin.23.80.9444.517.565.72.6141.95.610.50.4
*Illustrations and dimensions from drawing: 125-6278.			

## **RATING CONDITIONS**

#### **Engine Performance Parameters**

Power	. ±3%
Specific Fuel Consumption	. ±3%
Fuel Rate	. ±5%

**Ratings** are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg),  $25^{\circ}C$  (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg),  $27^{\circ}C$  (81°F), and 60% relative humidity.

**Fuel rates** are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/L (7.001 lb/U.S. gal).

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

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.

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