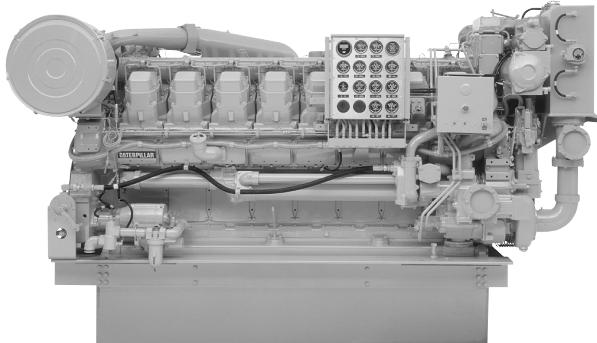




Marine Auxiliary Engine

3516

1230 bkW (1650 bhp) 1673 mhp @ 1200 rpm



Shown with Accessory Equipment

STANDARD EQUIPMENT

Air Inlet System

Corrosion-resistant aftercooler core (air side); regular duty air cleaner with service indicator; turbocharger, 152 mm (6 in.) OD

Cooling System

Jacket water pump, expansion tank, oil cooler, thermostats and housing

Exhaust System

Air-shielded watercooled exhaust manifold and turbocharger, 203 mm (8 in.) ID round flanged outlet

Flywheel and Flywheel Housing

SAE No. 00 (183 teeth)

Fuel System

RH fuel filter with service indicators, fuel transfer pump, fuel filter change indicator

Instruments

RH instrument panel with oil pressure, water temperature, and fuel pressure gauges; oil filter differential pressure gauges; service meter

Lube System

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

Mounting System

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

Power Take-Offs

Upper RH accessory drive, single-sided front housing

General

Vibration damper and guard, Caterpillar yellow paint, lifting eyes

SPECIFICATIONS

V-16, 4-Stroke-Cycle-Diesel

Displacement..... 69 L (4210 cu. in.)
 Bore..... 170 mm (6.7 in.)
 Stroke..... 190 mm (7.5 in.)
 Aspiration..... Turbocharged-Aftercooled
 Governor..... Hydra-mechanical
 Engine Weight, Net Dry (approx) .. 7961 kg (17550 lb)
 Capacity for Liquids
 Cooling System (engine only).. 384 L (101.4 U.S. gal)
 Lube Oil System..... 830 L (219.3 U.S. gal)
 Oil Change Interval..... 1000 hr
 Caterpillar DEO 10W30 or 15W40
 Rotation (from flywheel end)..... ccw or cw

ACCESSORY EQUIPMENT

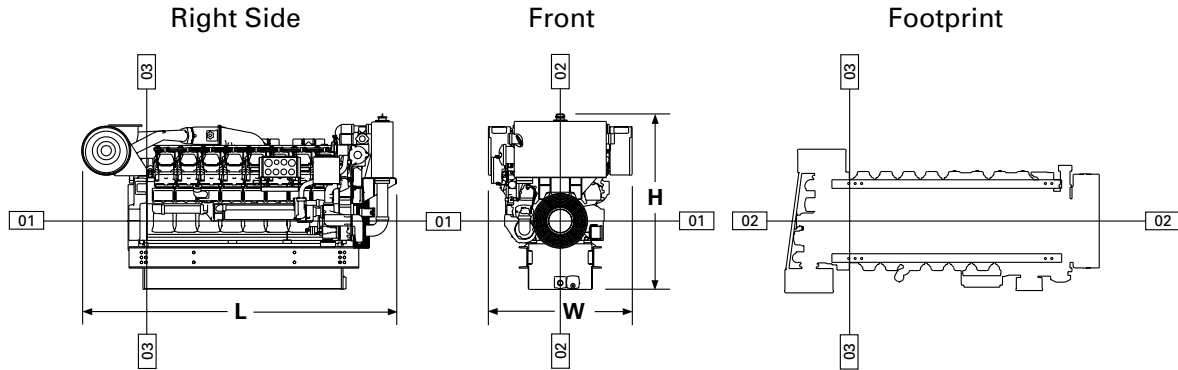
24V 60 Amp Alternator
 24V Electric Prelube Pump
 24V Electric Starting Motor
 Air or Gas Starting Motor
 Alarm Contactors — Oil Pressure, Water Temperature
 Auxiliary Drive Pulley and Shaft
 Auxiliary Sea Water Pump — Self and Non-Self Priming
 Crankshaft Pulleys
 Duplex Fuel Filter
 Duplex Oil Filter
 Electric Shutoff OP/WT/OS – ETS, ETR
 Engine Mounted Instrument Panel
 LH 8-Hole, RH 16-Hole
 Exhaust Elbow, Flange, Flexible Fitting
 Front Accessory Drives — Upper and Lower LH
 Front Enclosed Clutch
 Front Stub Shafts
 Fuel Priming Pump
 Generator — 1285 to 1825 ekW
 Air Filter, Bearing Temperature Detectors, Low Voltage Extension Box, RFI Filter, Voltage Regulator (Auto, Digital, Manual)
 Heat Exchanger
 Keel Cooling Connections
 Load Sharing Module
 Manual Air Start Control — RH, LH
 Manual Shutoff
 Pyrometer and Thermocouples
 Solenoid Shutoff — ETS, ETR
 Spare Parts Kit
 Sump Pump
 Vibration Isolators

PERFORMANCE DATA

Turbocharged-Aftercooled

DM1900-06 Aftercooler Temperature 30°C (86°F)

1230 bkW (.8 pf) 1650 bhp			
% load	bkW	Lph	gph
100	1228	313.0	82.7
75	919	239.5	63.3
50	615	168.1	44.4
25	316	97.2	25.7



DIMENSIONS*

	mm	in.		
Overall Length	3730.4	146.9		
Length from front to rear face of block	2960.0	116.5		
Length from rear face of block to back of flywheel housing	770.4	30.3		
Overall Height	2078.4	81.8		
Height from crankshaft centerline to top of engine	1267.7	49.9		
Height from crankshaft centerline to bottom of oil pan	810.7	31.9		
Overall Width	1703.0	67.1		
Width from crankshaft centerline to port side (left side)	851.5	33.5		
Width from crankshaft centerline to starboard side (right side)	851.5	33.5		
	Front		Rear	
	mm	in.	mm	in.
Customer mounting hole diameter	23.8	0.9	23.8	0.9
Width from crankshaft centerline to side	444.5	17.5	444.5	17.5
Length from rear face of block to mounting hole	2320.0	91.3	65.7	2.6
	2396.2	94.3	141.9	5.6
			10.5	0.4

*Illustrations and dimensions from drawing: 2W5367.

RATING CONDITIONS

Engine Performance Parameters

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

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).

Ratings are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°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°C (81°F), and 60% relative humidity.

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.

TMI Reference No.: DM1900-06 (6-15-01)

Materials and specifications are subject to change without notice.

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