

Image may not reflect actual engine

STANDARD EQUIPMENT

Air Inlet System

Corrosion-resistant aftercooler core; turbocharger inlet, 254 mm (10 in.); regular duty panel-type air cleaner; air cleaner inlet adapter, 152 mm (6 in.)

Cooling System

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

Exhaust System

Watercooled manifold and turbocharger; dry elbow and flange, 203 mm (8 in.)

Flywheel and Flywheel Housing

SAE No. 0 (136 teeth)

Fuel System

Fuel priming pump, fuel transfer pump, RH fuel filter, flexible fuel lines

Instruments

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

Lube System

RH oil level gauge and oil filter, crankcase breather, oil filler in valve cover, deep sump oil pan

Mounting System

Supports

General

Vibration damper, Caterpillar yellow paint, lifting eyes

SPECIFICATIONS

V-12, 4-Stroke-Cycle-Diesel

Emissions IMO compliant
 Displacement 27 L (1649 cu. in.)
 Bore 137 mm (5.4 in.)
 Stroke 152 mm (6.0 in.)
 Aspiration Turbocharged-Aftercooled
 Governor Hydra-mechanical or PSG
 Engine Weight, Net Dry (approx) . . . 2360 kg (5200 lbs)
 Capacity for Liquids
 Cooling System (engine only) . . 61 L (16.25 U.S. gal)
 Lube Oil System 68 L (18 U.S. gal)
 Oil Change Interval 500 hr
 Caterpillar® DEO 10W30 or 15W40
 Rotation (from flywheel end) Counterclockwise

ACCESSORY EQUIPMENT

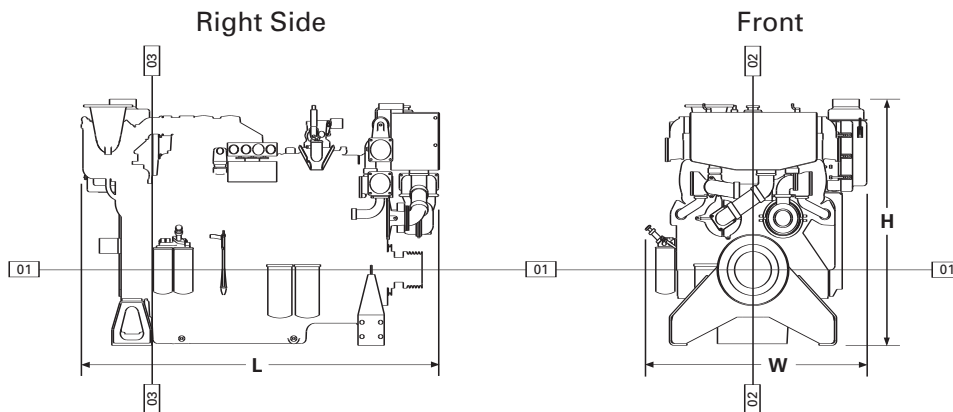
Air starting motor
 24V 35 amp, 24V 60 amp alternator
 32V 60 amp alternator
 Alarm contactor — oil pressure, water temperature
 Auxiliary sea water pump
 Digital tachometer
 Double wall fuel lines and drain
 Dry charge coolant conditioner
 Duplex fuel filter
 Duplex oil filter
 24V or 32V electric gauges
 24V, 30 or 32V electric starting motor
 24V electric shutoffs — oil pressure, water temperature, overspeed
 Exhaust elbows, pipe, flange, flexible fittings
 Front enclosed clutch
 Front stub shaft
 Generator installation arrangement
 Heat exchanger
 Hydraulic pump drive and adapter
 4- or 8-hole instrument panel
 LH oil level gauge
 Magnetic pickup
 Mechanical shutoffs — oil pressure, water temperature
 Mechanical tachometer drive
 Primary fuel filter/water separator
 Solenoid shutoffs — 24V ETR, ETS
 Spare parts kit

PERFORMANCE DATA

Turbocharged-Aftercooled

DM6089-00

620 bkW (.8 pf) 831 bhp			
% load	bkW	Lph	gph
100	620	166.1	43.9
75	466	122.4	32.3
50	314	84.9	22.4
25	163	50.0	13.2



DIMENSIONS*

	mm	in.		mm	in.	
Overall Length	2047.3	80.6				
Length from front to rear face of block	1643.2	64.7				
Length from rear face of block to back of engine	404.1	15.9				
Overall Height	1409.7	55.5				
Height from crankshaft centerline to top of engine	977.9	38.5				
Height from crankshaft centerline to bottom of oil pan	431.8	17.0				
Overall Width	1266.7	49.9				
Width from crankshaft centerline to port side (left side)	650.7	25.6				
Width from crankshaft centerline to starboard side (right side)	616.0	24.3				
			Front	Rear		
			mm	in.	mm	in.
Customer mounting hole diameter	24.0	0.9	24.0	0.9		
Width from crankshaft centerline to mounting holes	417.8	16.5	357.5	14.1		
			417.8	16.5		
Length from rear face of block to mounting holes	1196.5	47.1	40.3	1.6		
	1310.8	51.6	192.7	7.6		

*Illustrations and dimensions from drawing: 5N7062.

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°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.

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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