

60 Hz, 1800 rpm

CATERPILLAR® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions	IMO/EPA Tier 2 and CCNR Stage II compliant
Displacement	8.8 L (538 cu. in.)
Rated Engine Speed	1800
Bore	112 mm (4.41 in.)
Stroke	149 mm (5.87 in.)
Aspiration	Turbocharged-Aftercooled
Governor	Electronic
Cooling System	Heat Exchanger and Keel-Cooled
Refill Capacity	
Cooling System	47.5 L (50.1 qt)
Lube Oil System	32 L (33.8 qt)
Oil Change Interval	500 hr
Caterpillar Diesel Engine Oil 10W30 or 15W40	
Rotation (from flywheel end)	Counterclockwise
Flywheel and flywheel housing	SAE No. 1
Flywheel Teeth	113
Max. Exhaust Backpressure	10.0 kPa (40.2 in. water)



Image is a representation only, and may not show optional attachments.

STANDARD EQUIPMENT

Air Inlet System

Aftercooler, air cleaner, turbocharger

Control System

Electronic governor, Hydraulically actuated Electronically controlled Unit Injection (HEUI™) fuel system, Electronic Control Unit (ECU), engine-mounted 40-pin dedicated customer connector, SAE J1939 data link

Cooling System

Thermostat and housing; jacket water pump, belt-driven, centrifugal; auxiliary sea water pump, gear-driven; expansion tank (heat exchanger engines only); engine-mounted heat exchanger, removable tube bundle for sea water (heat exchanger engines only); engine oil cooler; auxiliary sea water lines; keel-cooling (includes pipe thread flange kit)

Exhaust System

Manifold and turbocharger, watercooled; 152 mm (6 in) round flanged outlet; elbow, dry

Flywheels & Flywheel Housings

Flywheel, SAE No. 1, 113 teeth; flywheel housing, SAE No. 1

Fuel System

Fuel filter, front service; fuel transfer pump; fuel priming pump

Generator

12 lead reconnectable, 3-phase brushless, separately excited from auxiliary winding to provide 300% short circuit current up to 10 seconds, 2/3 pitch, broad voltage band, IP23 water protection, solid state voltage regulator with integral voltage adjustment, Class H insulation, generator temperature rise exceeds marine society requirements for Class H insulation, 105° C @ 50° C ambient — prime, 85° C @ 50° C ambient — prime connection poles

Instrumentation

Instrument panel, electric service meter, start/stop switch, emergency stop button, maintenance due light, diagnostic light, warning light, maintenance clear switch, 15A breaker

Lube System

Crankcase breather; oil filter, RH service; oil filler, in valve cover; oil level gauge, LH service; oil pan; oil pan drain, LH; lubricating oil; engine oil pump (gear-driven)

Mounting System

Skiddable base frame, front support, anti-vibration isolators between base and engine-generator

General

Torsional vibration damper and guard; paint, Caterpillar yellow; lifting eyes; protective lifting covers; literature; variable engine wiring; battery disconnect switch; plastic wrap packaging

OPTIONAL EQUIPMENT

Exhaust System

Elbows, pipe, flexible fittings, flange, rain caps, mufflers, shields (shields required to meet MCS certification)

Fuel System

Fuel cooler, flexible fuel lines, fuel temperature sensors, fuel and oil shielding

Lube System

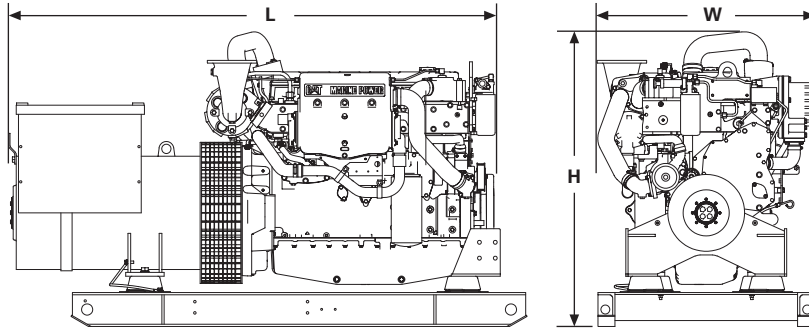
Manual sump pumps, oil filler, duplex oil filters

Marine Classification Society (MCS)

MCS approvable packages available direct from the factory through ABS, BV, DNV, GL, and LR

Power Take-offs

Crankshaft pulley



DIMENSIONS

175 ekW (219 kVA), 215 ekW (269 kVA), and 250 ekW (313 kVA) Heat Exchanger and Keel-Cooled

Length	175 ekW (219 kVA)	2106 mm (82.9 in)
	215 & 250 ekW (269 & 313 kVA)	2216 mm (87.2 in)
Width	Standard	996.8 mm (39.2 in)
	MCS	1047 mm (41.2 in)
Height	All	1169 mm (46.0 in)
Weight (wet)	175 ekW (219 kVA)	1753 kg (3865 lb)
	215 ekW (269 kVA)	1838 kg (4052 lb)
	250 ekW (313 kVA)	1903 kg (4195 lb)
Weight (wet) MCS Specification	175 ekW (219 kVA)	1762 kg (3876 lb)
	215 ekW (269 kVA)	1847 kg (4063 lb)
	250 ekW (313 kVA)	1912 kg (4206 lb)

PERFORMANCE DATA

60 Hz Ratings at 1800 rpm

% load	ekW	Lph	gph
175 ekW (0.8 pf) 219 kVA — DM7757			
100	175	51.8	13.7
75	131	39.7	10.5
215 ekW (0.8 pf) 269 kVA — DM7758			
100	215	63.5	16.8
75	161	47.6	12.6
250 ekW (0.8 pf) 313 kVA — DM7759			
100	250	68.1	17.9
75	188	51.4	13.6

RATING CONDITIONS

Power at declared engine speed is in accordance with ISO3046-1:2002E. Caterpillar maintains ISO9001:1994/QS-9000 approved engine test facilities to assure accurate calibration of test equipment. Electronically controlled engines are set at the factory at the advertised power corrected to standard ambient conditions. The published fuel consumption rates are in accordance with ISO3046-1:2002E.

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.

Power produced at the flywheel will be within standard tolerances up to 49°C (120°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.

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