

50 Hz, 1500 rpm



Image may not reflect actual engine

CATERPILLAR® ENGINE SPECIFICATIONS

I-4, 4-Stroke-Cycle-Diesel

Displacement.....	4.4 L (269 cu. in.)
Bore.....	105 mm (4.13 in.)
Stroke.....	127 mm (4.99 in.)
Combustion.....	Direct Injection
Aspiration.....	Turbocharged-Aftercooled
Governor.....	Electronic
Gen Set Package Dry Weight (approx).....	1029 kg (2269 lb)
Total System Capacity	
Cooling System.....	16.5 L (4.36 U.S. gal)
Lube Oil System.....	8.5 L (2.25 U.S. gal)
Oil Change Interval.....	500 hr
Rotation (from flywheel end).....	Counterclockwise

STANDARD EQUIPMENT

Air Inlet System

Air cleaner, single element canister type with service indicator and rain cap; dry insulated turbocharger; glowplug cold start system

Cooling System

Heat exchanger-cooled packages with Cupro-nickel tube bundle (sized for 50°C amb. air and 32°C sea water) or keel-cooled packages (sized for 50°C ambient air); deaeration expansion tank, plate-type engine, gear-driven centrifugal jacket water pump, gear-driven self priming sea water pump, Caterpillar® Extended Life Coolant (heat exchanger-cooled packages)

Exhaust System

Dry insulated turbocharger, water-cooled exhaust manifolds

Fuel System

Primary fuel filter/water separator with NPT and BSP connectors (ship loose), secondary fuel filter (LH), fuel priming pump — electric, energize-to-run shutoff solenoid

Generator

12 lead reconnectable, 3 phase all models, 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 potentiometer, Class H insulation, connection poles

Governing System

Electronic governor

Lube System

Lubricating oil, oil filter (LH), dipstick (LH), fumes disposal (closed system)

Mounting System

Steel base frame with drip pan, anti-vibration mounts

Starting/Charging System

Negative isolated ground electric system

General

Single-side service (LH), keel-cooled gensets do not include the keel cooler(s)

OPTIONAL ATTACHMENTS

Control System

Governor droop kit (selecting this kit enables paralleling with appropriate customer-supplied switchgear)

Generators & Generator Attachments

Space heater kit, installed — 120V AC, 240V AC

Fuel System

Double wall fuel lines and mounted alarm reservoir

Starting System

Jacket water heater options, additional 12 or 24 volt starter

Cooling System

Remote expansion tank kit (box supplied loose)

Sound Attenuation Enclosure

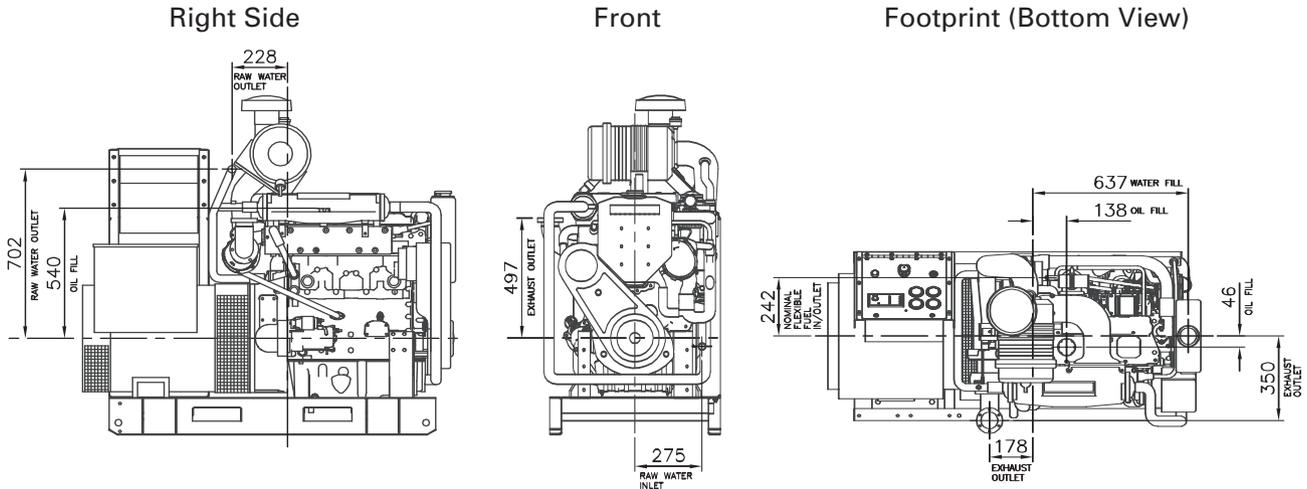
Aluminum-framed enclosure with zinc-plated steel panels finished in tough polyester powder coating

Marine Classification Society (MCS)

MCS-approved packages available direct from the factory through RINA, ABS, DNV, CCS, Lloyds, GL, and BV

General

PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments



DIMENSIONS

Engine Dimensions		
	Open mm (in)	Enclosed mm (in)
Overall Length	1589 (62.56)	1750 (68.9)
Overall Height*	1132 (44.60)	1215 (47.8)
Overall Width	724 (28.54)	1000 (39.4)

*Height dimension does not include remote-mounted air filter or electronic control panel.

CATERPILLAR GENERATOR

Power Factor	1.0
Frame	C4.4
Insulation	Class H
Temperature Rise	
@ 40°C Ambient	Class H (150°C)
Winding Pitch Code	2/3
Terminals	12 lead reconnectable
Drip Proof	IP 23
Air Flow 50 Hz	0.37 m ³ /s (784 cfm)
Excitation System	AREP
Voltage Regulation (steady state)	±0.5%
Total Harmonic Content LL/LN	<4%
Wave Form: NEMA=TIF	<50
Wave Form: I.E.C.=THF	<2%

PERFORMANCE DATA

50 Hz DITA

Fuel Consumption

@ Full Power 24.6 L/hour 6.50 gph

ENCLOSED SOUND DATA

50 Hz DIN A

Sound levels are average sound pressure

level @ 1 meter and 100% load 71.9 db(A)

RATING CONDITIONS

***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.

*Ratings at 50°C (122°F) ambient are 85.5 ekW (107 kVA).

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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