

50 Hz, 1500 rpm
60 Hz, 1800 rpm

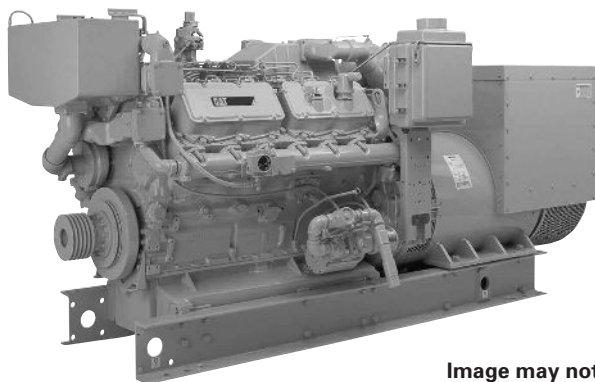


Image may not reflect actual engine

CATERPILLAR® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle-Diesel

Bore 137 mm (5.4 in.)
Stroke 152 mm (6.0 in.)
Displacement 27.0 L (1649 cu. in.)
Rotation (from flywheel end) Counterclockwise
Compression Ratio 14.5:1
Capacity for Liquids
Cooling System (engine and radiator)
Turbocharged
50 Hz D rad — 112.6 L (29.3 U.S. gal)
60 Hz E rad — 158.0 L (41.7 U.S. gal)
Turbocharged-Aftercooled
E rad — 162.2 (42.8 U.S. gal)
Lube Oil System (refill)
w/o filter chg. 118.0 L (31.1 U.S. gal)
Oil Change Interval 250 hrs
Engine Weight, Net Dry (approx)
Turbocharged (T) 2370 kg (5220 lb.)
Turbocharged-Aftercooled (TA).. 2420 kg (5324 lb.)
Engine and Radiator Weight (approx)
Turbocharged Aftercooled (TA).. 2980 kg (6556 lb.)

STANDARD EQUIPMENT

Air Intake

Aftercooler core, air cleaner, turbocharger inlet

Cooling

Oil cooler, thermostats and housing, jacket water pump, radiator, blower fan

Exhaust

Watercooled exhaust manifold and turbocharger, dry flange and elbow

Flywheel and Flywheel Housing

SAE No. 0

Fuel

Priming & transfer pumps, filter, flexible fuel lines

Governor

Hydramechanical

Instruments and gauges

Fuel pressure, lubricating oil pressure, water temperature, service meter

Lubrication

Oil filter, crankcase breather, deep sump oil pan

Mounting System

Rails

PERFORMANCE DATA

50 Hz, 1500 rpm – Turbocharged

60 Hz, 1800 rpm

% Load	385 ekW (.8 pf), 481 kV•A				400 ekW (.8 pf), 500 kV•A			
	100	75	50	25	100	75	50	25
ekW	385	289	192	96	400	300	200	100
L/hr	106.3	86.5	61.8	39.4	114.8	92.1	66.3	42.6
gph	28.1	22.9	16.3	10.4	30.3	24.3	17.5	11.3

50 Hz, 1500 rpm – Turbocharged-Aftercooled

60 Hz, 1800 rpm

% Load	480 ekW (.8 pf), 625 kV•A				550 ekW (.8 pf), 688 kV•A			
	100	75	50	25	100	75	50	25
ekW	480	360	240	120	550	412	275	138
L/hr140.7	135.5	101.9	72.2	44.1	155.2	120.6	86.5	54.7
gph	35.8	26.9	19.1	11.6	41.0	31.9	22.9	14.5

Note: Caterpillar marine engines and generators are approved by marine classification societies. Consult your Caterpillar dealer for specific ratings and approvals. Fuel and emission rates are based on 30° C (86° F) water supplied to the aftercooler.

DIMENSIONS



	L		H		W	
	mm	in	mm	in	mm	in
60 Hz TA	4034.0	158.8	2154.3	84.8	1706.0	67.2
60 Hz T	3990.8	157.1	2154.3	84.8	1706.0	67.2
50 Hz TA	4143.2	163.1	2154.3	84.8	1706.0	67.2
50 Hz T	3681.2	144.9	1923.0	75.7	1285.7	50.6

CATERPILLAR SR4B GENERATOR

Type brushless, revolving field,
 solid state self-excited
 Construction single bearing, close coupled
 Phase 3
 Connection 10 wire, wye
 Insulation Class H with tropicalization
 and anti-abrasion
 Alignment pilot shaft
 Voltage regulator generator mounted,
 Volts-per-Hertz
 Voltage regulation ± 1/2 %
 Voltage droop adjustable for parallel operation
 Voltage gain adjustable
 Generator weight, net (approx) — kg (lb)
 593 frame 979 (3764)
 595 frame 1099 (4228)
 596 frame 1238 (4760)
 Voltages available (adjustable +10%, -5%)
 50 Hz — 190-380 Volts
 60 Hz — 220-440 Volts
 Space heater
 Meets or exceeds marine society requirements

RATING DEFINITIONS AND CONDITIONS

Ratings are based on SAE J3046 and J1349 standard conditions of 100 kPa (29.61 in Hg) and 25° C (77° F). These ratings also apply at ISO3046/1, DIN6271, and BS5514 standard 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/liter (7.001 lb/U.S. gal).

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

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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