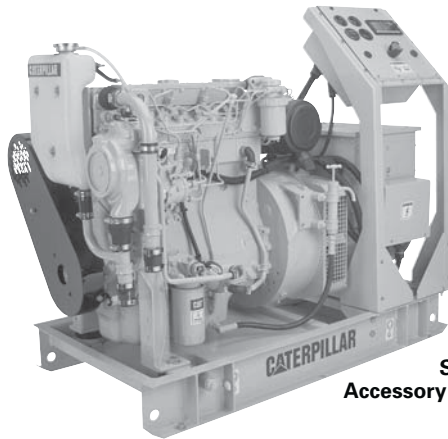




# Marine Generator Set

## 3054

34 ekW (43 kVA) 50 Hz @ 1500 rpm



Shown with  
Accessory Equipment

### STANDARD EQUIPMENT

#### Air Inlet System

Canister-type air cleaner, rain cap, Thermostart air inlet heater

#### Charging System

12V or 24V charging alternator, negative isolated ground electrical system

#### Cooling System

Gear-driven self-priming sea water pump (heat exchanger engines), gear-driven centrifugal jacket water pump, deaeration expansion tank, plate-type engine oil cooler, engine-mounted heat exchanger with copper-nickel tubes (heat exchanger engines), thermostat and housing, keel cooled package (keel cooled engines)

#### Exhaust System

Watercooled manifold

#### Flywheel and Flywheel Housing

SAE No. 3

#### Fuel System

Fuel priming pump, fuel filter, primary fuel filter/water separator, flexible fuel lines

#### Generator

Brushless separately excited generator, three-phase or single-phase, with solid state voltage regulator, 300% short circuit current up to 10 seconds, broad voltage band

#### Instruments

Electromechanical control panel with service meter, oil pressure, water temperature, DC voltage gauges; solid state control with control switch; preheat function; generator running light; remote start disabled light; alarm and silence switch; volt-free contacts

#### Lube System

Fumes disposal (closed system), LH oil filter and oil level gauge, manual sump pump

#### Mounting System

Steel base frame with drip pan, anti-vibration mounts

#### Protection System

Energized-to-run shutoff solenoid, switches/senders; shutdowns with indicator lights for low oil pressure, high coolant temperature, overspeed, and emergency stop

#### Starting System

12V or 24V electric starting motor

#### General

Caterpillar yellow paint

### CATERPILLAR ENGINE SPECIFICATIONS

#### I-4, 4-Stroke-Cycle-Diesel

Displacement ..... 4 L (243 cu. in.)  
 Bore ..... 100 mm (3.94 in.)  
 Stroke..... 127 mm (5.0 in.)  
 Combustion..... Direct Injection  
 Aspiration ..... Naturally Aspirated  
 Governor..... Mechanical  
 Gen Set Weight, Open Package (approx)  
 Heat Exchanger Cooled ..... 720 kg (1587 lb)  
 Keel Cooled ..... 715 kg (1576 lb)  
 Total System Capacity  
 Cooling System ..... 18 L (4.75 U.S. gal)  
 Lube Oil System ..... 8.1 L (2.1 U.S. gal)  
 Sump Capacity ..... 6.9 L (1.8 U.S. gal)  
 Oil Change Interval ..... 400 hr  
 Caterpillar DEO 10W30 or 15W40  
 Rotation (from flywheel end)..... Counterclockwise

### ACCESSORY EQUIPMENT

Air Starting Motor  
 Crankshaft-Mounted PTO Shaft  
 Crankshaft-Mounted Pulley  
 Cruise Kit  
 Double Wall Fuel Lines  
 Dry or Wet Exhaust Outlets  
 Generator Space Heater  
 Jacket Water Heater  
 Premium Control Panel, Rear Facing Control Panel  
 Radio Frequency Interference Filter  
 Remote-Mounted High Capacity Expansion Tank  
 Remote Panel Extension Harness  
 Remote Start/Stop Panel  
 Remote Start/Stop Panel with Engine Meters  
 Remote Start/Stop Panel with Engine Meters and AC Meters  
 Single or Dual Starters  
 12V or 24V Starting Motor

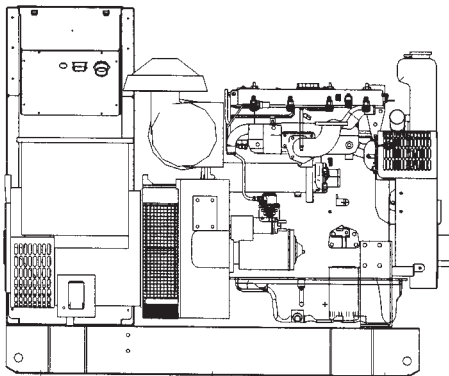
### PERFORMANCE DATA

Naturally Aspirated

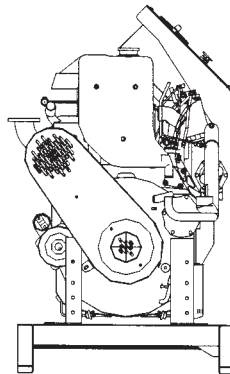
DM6579-00

34 ekW (.8 pf) 43 kVA			
% load	ekW	Lph	gph
100	34	10.4	2.7
75	26	7.9	2.1
50	17	5.4	1.4

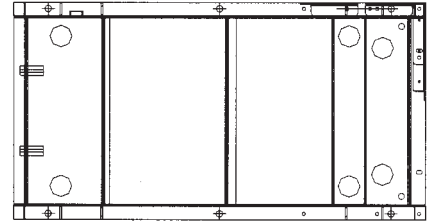
Right Side



Front



Footprint (Bottom View)



**DIMENSIONS**

	Open Package	
	mm	in.
Overall Length	1394	54.9
Overall Height	1186	46.7
Overall Width	735	28.9
Width of rails	700	27.6

**CATERPILLAR GENERATOR**

Power Factor	0.8/1.0
Phase	Three/Single
Frame	2024B/2024J
Insulation	Class H
Temperature Rise	
@ 50°C Ambient	105°C (221°F)
Winding Pitch Code	2/3-(N°6)
Terminals	12 wires
Drip Proof	IP 23
Air Flow 50/60 Hz	0.27-0.32 m³/s
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%

**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.

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.: DM6579-00 (10-31-01)

Materials and specifications are subject to change without notice.

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

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