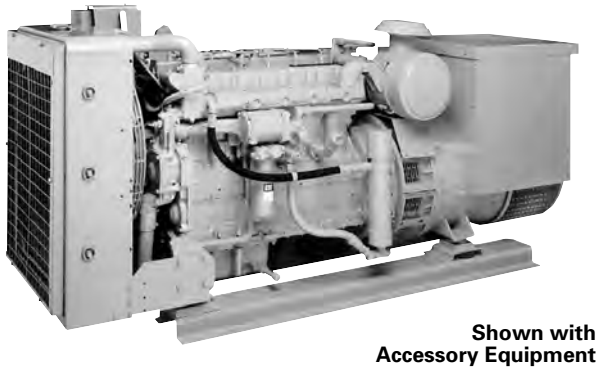
CATERPILLAR®

Marine Generator Set 3306B

Radiator Cooled

155 ekW (194 kVA) 50 Hz @ 1500 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx). . . . 1905 kg (4200 lb)
Capacity for Liquids
Cooling System . . . . . 25.0 L (6.6 U.S. gal)
Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Engine-mounted radiator, blower fan, fan drive, fan guard, oil cooler, thermostat and housing, gear driven centrifugal jacket water pump

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
High Capacity Radiator and Fan Drive
Hydraulic Pump Drive
Low Voltage Connections
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

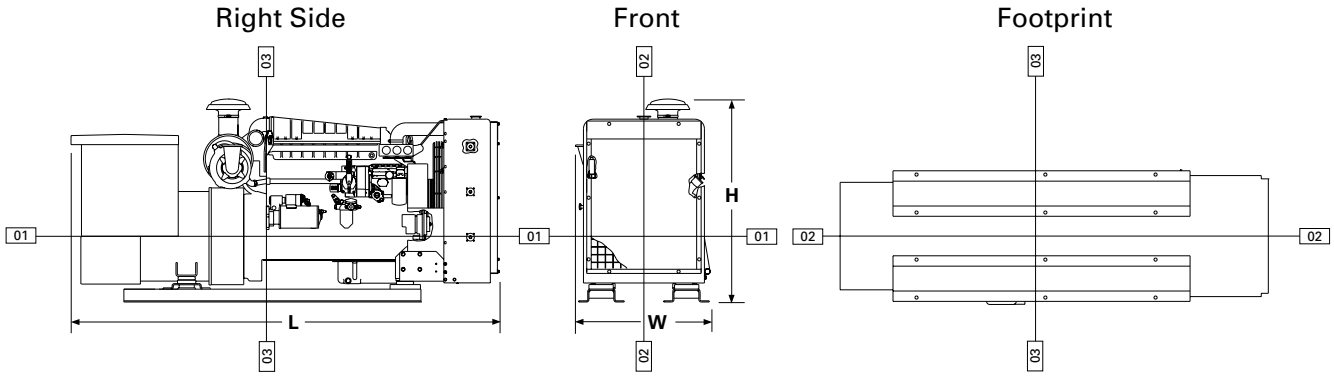
Turbocharged-Aftercooled

DM4999-00

155 ekW (.8 pf) 194 kVA			
% load	**ekW**	**Lph**	**gph**
100	157	44.1	11.6
76	119	33.3	8.8
51	80	22.4	5.9
26	41	12.8	3.4

CATERPILLAR®

3306B MARINE GENERATOR SET — 155 ekW (194 kVA)



DIMENSIONS*

	mm	in.
Overall Length	2822.2	111.1
Length from front to rear face of block	1534.7	60.4
Length from rear face of block to back of generator	1287.5	50.7
Overall Height	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0
Overall Width	880.6	34.7
Width from crankshaft centerline to port side (left side)	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	450.5	17.7

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.7	31.1	64.7	2.6	784.3	30.9

*Illustrations and dimensions from drawing: 128-3812.

CATERPILLAR SR4 GENERATOR

Type . . . . . Brushless, revolving field, permanent magnet excited

Construction . . . . . Single bearing, close coupled

Three-phase . . . 12 wire, wye or delta connected

Insulation. . . . . Class F with tropicalization and anti-abrasion

Voltage Regulator . . . . . Generator mounted, volts-per-hertz

Voltage Regulation. . . . . ±1/2%

Voltage Gain . . . . . Adjustable

Generator Weight, Net (approx)
446 frame. . . . . 809 kg (1780 lb)

Space Heater

Voltages Available (adjustable +10%, -5%)
50 Hz — 190-380 volts

Meets or exceeds Marine Society requirements

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.

TMI Reference No.: DM4999-00 (6-18-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.

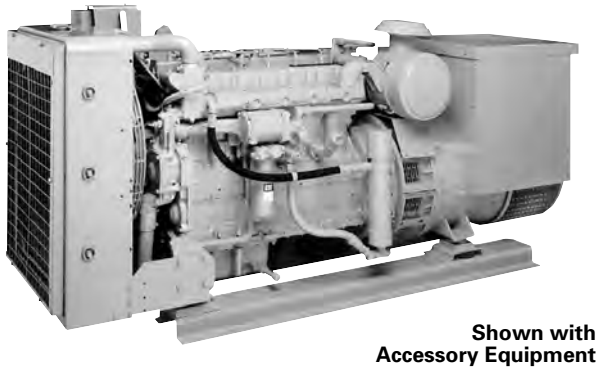
LEHM1664-00 (6-01) Printed in U.S.A.

CATERPILLAR®

Marine Generator Set 3306B

Radiator Cooled

170 ekW (213 kVA) 60 Hz @ 1800 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx). . . . 1297 kg (2860 lb)
Capacity for Liquids
Cooling System . . . . . 25.0 L (6.6 U.S. gal)
Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Engine-mounted radiator, blower fan, fan drive, fan guard, oil cooler, thermostat and housing, gear driven centrifugal jacket water pump

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
High Capacity Radiator and Fan Drive
Hydraulic Pump Drive
Low Voltage Connections
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

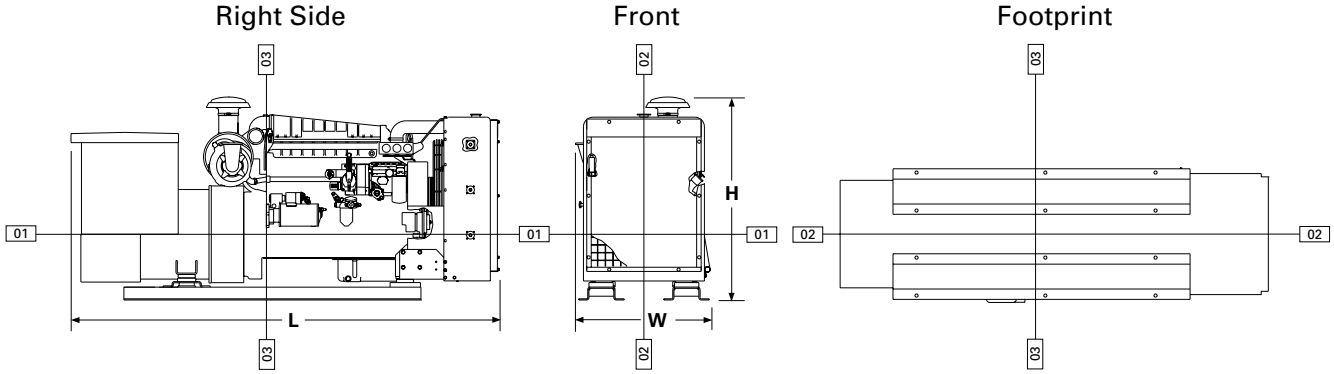
Turbocharged-Aftercooled

DM4993-00

170 ekW (.8 pf) 213 kVA			
% load	**ekW**	**Lph**	**gph**
98	170	49.3	13.0
73	128	36.4	9.6
49	85	24.9	6.6
24	43	14.6	3.9

CATERPILLAR®

3306B MARINE GENERATOR SET — 170 ekW (213 kVA)



DIMENSIONS*

	mm	in.
Overall Length	2799.3	110.2
Length from front to rear face of block	1534.7	60.4
Length from rear face of block to back of generator	1264.6	49.8
Overall Height	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0
Overall Width	880.6	34.7
Width from crankshaft centerline to port side (left side)	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	450.5	17.7

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.7	31.1	64.7	2.6	784.3	30.9

*Illustrations and dimensions from drawing: 128-3812.

CATERPILLAR SR4 GENERATOR

Type . . . . . Brushless, revolving field, permanent magnet excited
Construction . . . . . Single bearing, close coupled
Three-phase . . . 12 wire, wye or delta connected
Insulation. . . . . Class F with tropicalization and anti-abrasion
Voltage Regulator . . . . . Generator mounted, volts-per-hertz
Voltage Regulation. . . . . ±1/2%
Voltage Gain . . . . . Adjustable
Generator Weight, Net (approx)
445 frame. . . . . 750 kg (1650 lb)
Space Heater
Voltages Available (adjustable +10%, -5%)
60 Hz — 220-440 volts
Meets or exceeds Marine Society requirements

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.

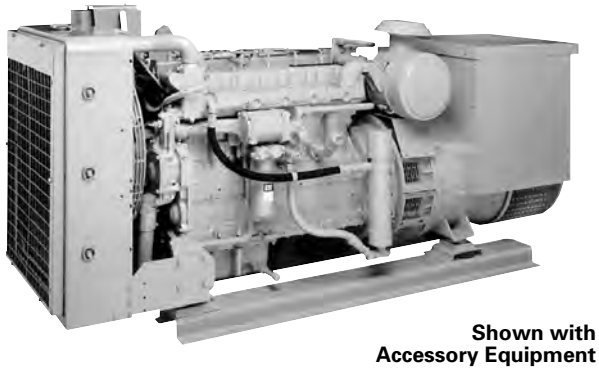
TMI Reference No.: DM4993-00 (6-18-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.
LEHM1667-00 (6-01) Printed in U.S.A.

CATERPILLAR®

Marine Generator Set 3306B

Radiator Cooled

190 ekW (238 kVA) 60 Hz @ 1800 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx). . . . 1987 kg (4380 lb)
Capacity for Liquids
Cooling System . . . . . 25.0 L (6.6 U.S. gal)
Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Engine-mounted radiator, blower fan, fan drive, fan guard, oil cooler, thermostat and housing, gear driven centrifugal jacket water pump

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
High Capacity Radiator and Fan Drive
Hydraulic Pump Drive
Low Voltage Connections
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

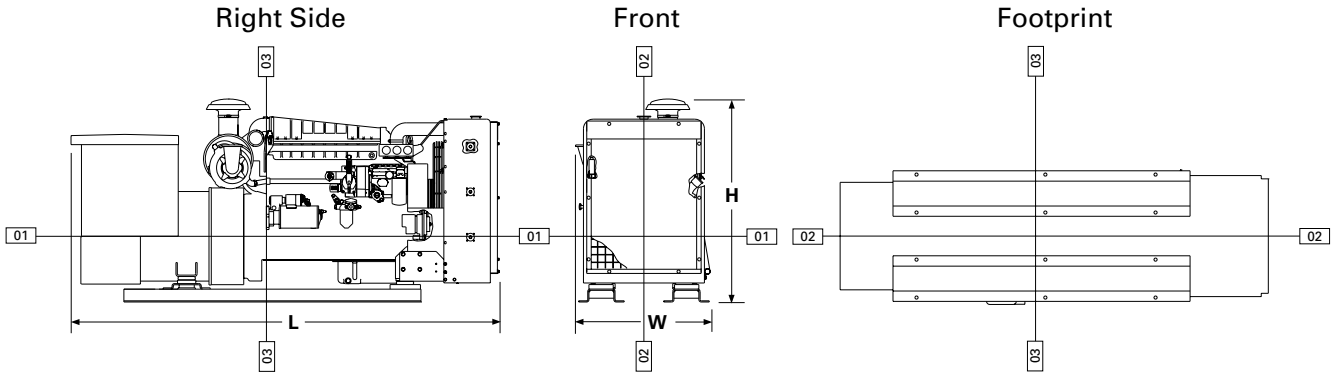
Turbocharged-Aftercooled

DM4995-00

190 ekW (.8 pf) 238 kVA			
% load	**ekW**	**Lph**	**gph**
100	194	55.0	14.5
76	146	41.8	11.0
51	99	28.7	7.6
26	51	16.8	4.4

CATERPILLAR®

3306B MARINE GENERATOR SET — 190 ekW (238 kVA)



DIMENSIONS*

	mm	in.
Overall Length	2822.2	111.1
Length from front to rear face of block	1534.7	60.4
Length from rear face of block to back of generator	1287.5	50.7
Overall Height	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0
Overall Width	880.6	34.7
Width from crankshaft centerline to port side (left side)	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	450.5	17.7

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.7	31.1	64.7	2.6	784.3	30.9

*Illustrations and dimensions from drawing: 128-3812.

CATERPILLAR SR4 GENERATOR

Type . . . . . Brushless, revolving field, permanent magnet excited
Construction . . . . . Single bearing, close coupled
Three-phase . . . 12 wire, wye or delta connected
Insulation. . . . . Class F with tropicalization and anti-abrasion
Voltage Regulator . . . . . Generator mounted, volts-per-hertz
Voltage Regulation. . . . . ±1/2%
Voltage Gain . . . . . Adjustable
Generator Weight, Net (approx)
446 frame. . . . . 809 kg (1780 lb)
Space Heater
Voltages Available (adjustable +10%, -5%)
60 Hz — 220-440 volts
Meets or exceeds Marine Society requirements

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.

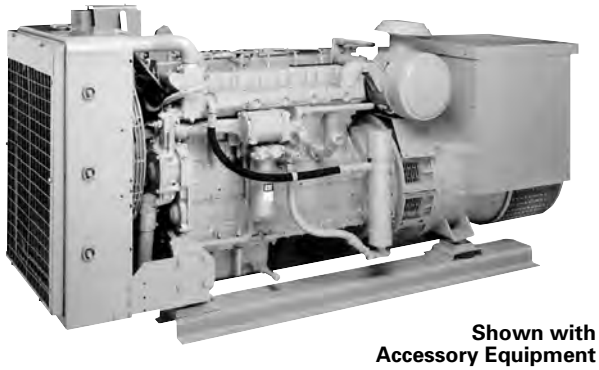
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

TMI Reference No.: DM4995-00 (6-18-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.
LEHM1666-00 (6-01) Printed in U.S.A.

CATERPILLAR®

Marine Generator Set 3306B

145 ekW (181 kVA) 50 Hz @ 1500 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx)
  Heat Exchanger Cooled . . . . . 1649 kg (3635 lb)
  Keel Cooled . . . . . 1626 kg (3585 lb)
Capacity for Liquids
  Cooling System (engine only) . . 15.9 L (4.2 U.S. gal)
  Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
  Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Gear driven, self priming, centrifugal auxiliary sea water pump with rubber impeller (heat exchanger engines); gear driven centrifugal jacket water pump; oil cooler; engine-mounted heat exchanger with removable tube bundle and replaceable copper-nickel tubes (heat exchanger engines); expansion tank; thermostat and housing

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
Hydraulic Pump Drive
Low Voltage Connections
Magnetic Pickup
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

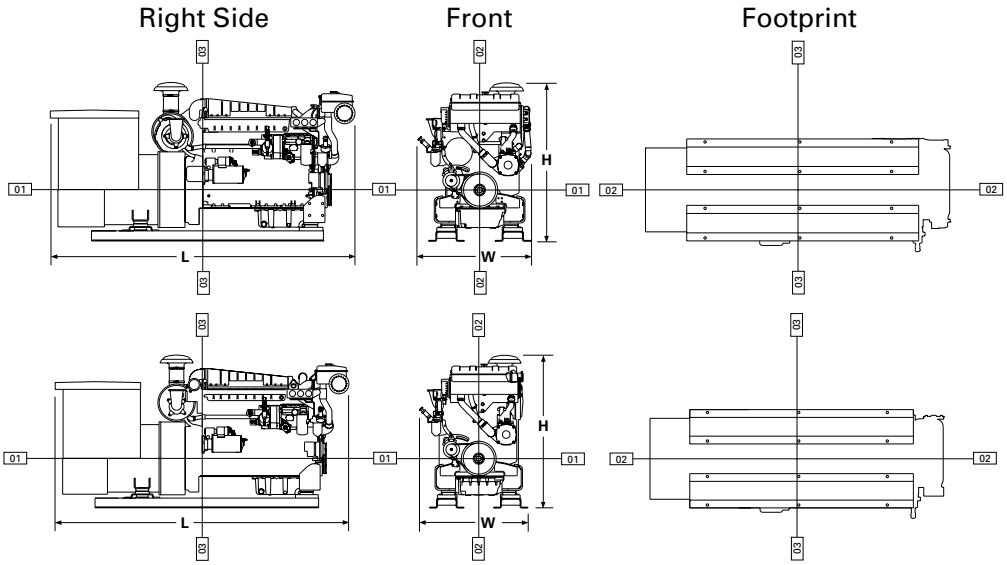
Turbocharged-Aftercooled

DM4998-00

145 ekW (.8 pf) 181 kVA			
% load	**ekW**	**Lph**	**gph**
100	145	40.6	10.7
75	109	30.4	8.0
50	73	20.4	5.4
25	36	11.7	3.1

CATERPILLAR®

3306B MARINE GENERATOR SET — 145 ekW (181 kVA)



DIMENSIONS*

	Heat Exchanger Cooled		Keel Cooled	
	mm	in.	mm	in.
Overall Length	2549.6	100.4	2549.6	100.4
Length from front to rear face of block	1285.0	50.6	1285.0	50.6
Length from rear face of block to back of generator	1264.6	49.8	1264.6	49.8
Overall Height	1337.1	52.6	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0	432.7	17.0
Overall Width	956.7	37.7	952.0	37.5
Width from crankshaft centerline to port side (left side)	434.8	17.1	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	521.9	20.6	521.9	20.6

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.5	31.1	14.8	0.6	784.3	30.9

*Illustrations and dimensions from drawings: 186-4323 Heat Exchanger Cooled, 118-7823 Keel Cooled.

CATERPILLAR SR4 GENERATOR

Type . . . . . Brushless, revolving field, permanent magnet excited
Construction . . . . . Single bearing, close coupled
Three-phase. . . . . 12 wire, wye or delta connected
Insulation. . . . . Class F with tropicalization and anti-abrasion
Voltage Regulator . . . . . Generator mounted, volts-per-hertz
Voltage Regulation. . . . . ±1/2%
Voltage Gain . . . . . Adjustable
Generator Weight, Net (approx)
445 frame. . . . . 750 kg (1650 lb)
Space Heater
Voltages Available (adjustable +10%, -5%)
50 Hz — 190-380 volts
Meets or exceeds Marine Society requirements

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.

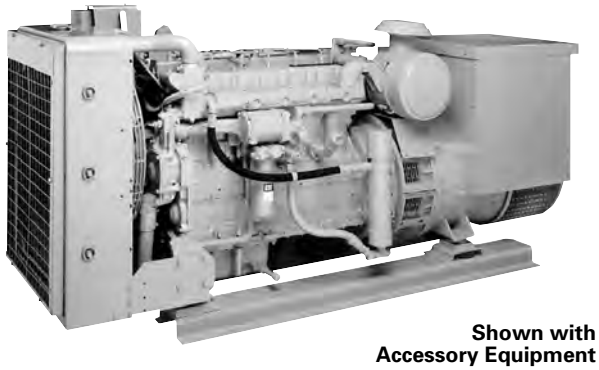
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

TMI Reference No.: DM4998-00 (6-18-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.
LEHM1646-00 (6-01) Printed in U.S.A.

CATERPILLAR®

Marine Generator Set 3306B

160 ekW (200 kVA) 50 Hz @ 1500 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx)
  Heat Exchanger Cooled . . . . . 1800 kg (3970 lb)
  Keel Cooled . . . . . 1778 kg (3920 lb)
Capacity for Liquids
  Cooling System (engine only) . . 15.9 L (4.2 U.S. gal)
  Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
  Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Gear driven, self priming, centrifugal auxiliary sea water pump with rubber impeller (heat exchanger engines); gear driven centrifugal jacket water pump; oil cooler; engine-mounted heat exchanger with removable tube bundle and replaceable copper-nickel tubes (heat exchanger engines); expansion tank; thermostat and housing

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
Hydraulic Pump Drive
Low Voltage Connections
Magnetic Pickup
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

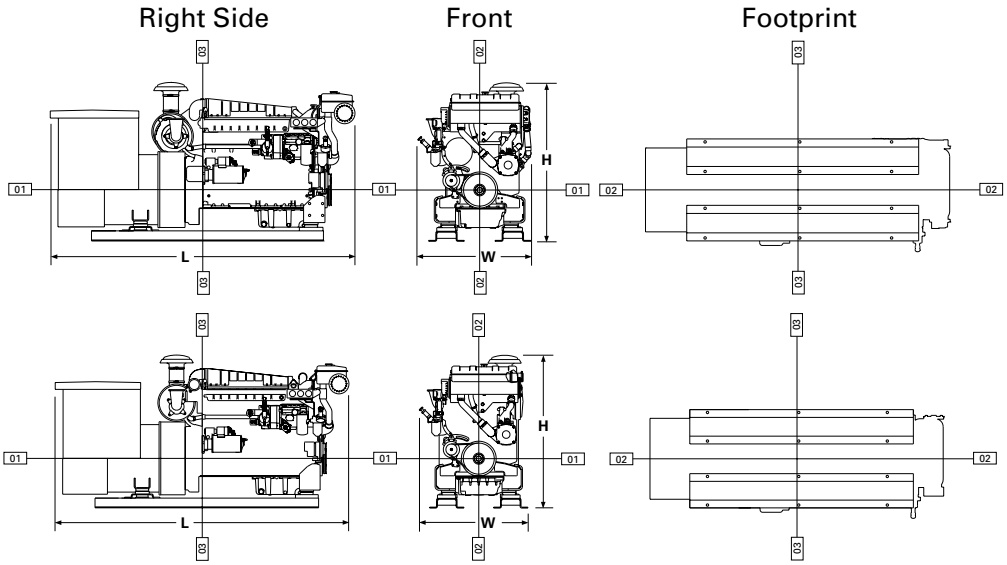
Turbocharged-Aftercooled

DM6051-00

160 ekW (.8 pf) 200 kVA			
% load	**ekW**	**Lph**	**gph**
100	160	44.7	11.8
75	120	33.7	8.9
50	80	22.4	5.9
25	40	12.6	3.3

CATERPILLAR®

3306B MARINE GENERATOR SET — 160 ekW (200 kVA)



DIMENSIONS*

	Heat Exchanger Cooled		Keel Cooled	
	mm	in.	mm	in.
Overall Length	2572.5	101.3	2572.5	101.3
Length from front to rear face of block	1285.0	50.6	1285.0	50.6
Length from rear face of block to back of generator	1287.5	50.7	1287.5	50.7
Overall Height	1337.1	52.6	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0	432.7	17.0
Overall Width	956.7	37.7	952.0	37.5
Width from crankshaft centerline to port side (left side)	434.8	17.1	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	521.9	20.6	521.9	20.6

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.5	31.1	14.8	0.6	784.3	30.9

*Illustrations and dimensions from drawings: 186-4323 Heat Exchanger Cooled, 118-7823 Keel Cooled.

CATERPILLAR SR4 GENERATOR

Type . . . . . Brushless, revolving field, permanent magnet excited
Construction . . . . . Single bearing, close coupled
Three-phase. . . . . 12 wire, wye or delta connected
Insulation. . . . . Class F with tropicalization and anti-abrasion
Voltage Regulator . . . . . Generator mounted, volts-per-hertz
Voltage Regulation. . . . . ±1/2%
Voltage Gain . . . . . Adjustable
Generator Weight, Net (approx)
446 frame. . . . . 809 kg (1780 lb)
Space Heater
Voltages Available (adjustable +10%, -5%)
50 Hz — 190-380 volts
Meets or exceeds Marine Society requirements

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.

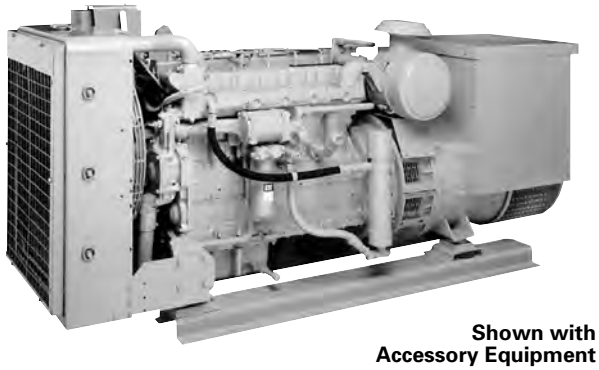
TMI Reference No.: DM6051-00 (6-17-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.

LEHM1645-00 (6-01) Printed in U.S.A.

CATERPILLAR®

Marine Generator Set 3306B

170 ekW (213 kVA) 60 Hz @ 1800 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx)
  Heat Exchanger Cooled . . . . . 1649 kg (3635 lb)
  Keel Cooled . . . . . 1626 kg (3585 lb)
Capacity for Liquids
  Cooling System (engine only) . . 15.9 L (4.2 U.S. gal)
  Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
  Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Gear driven, self priming, centrifugal auxiliary sea water pump with rubber impeller (heat exchanger engines); gear driven centrifugal jacket water pump; oil cooler, engine-mounted heat exchanger with removable tube bundle and replaceable copper-nickel tubes (heat exchanger engines); expansion tank; thermostat and housing

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
Hydraulic Pump Drive
Low Voltage Connections
Magnetic Pickup
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

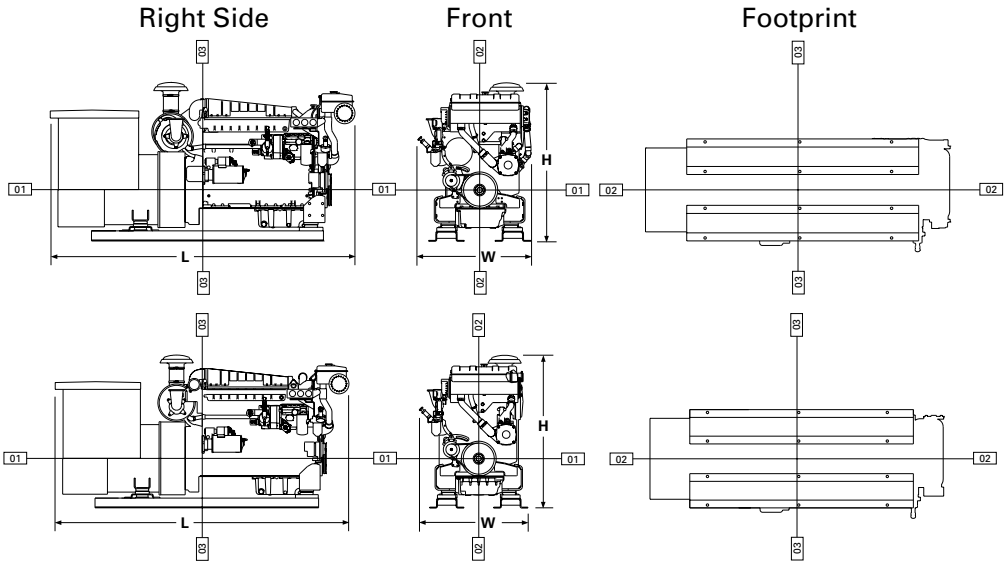
Turbocharged-Aftercooled

DM4992-00

170 ekW (.8 pf) 213 kVA			
% load	**ekW**	**Lph**	**gph**
100	170	48.6	12.8
75	128	36.4	9.6
50	85	24.9	6.6
25	43	14.6	3.9

CATERPILLAR®

3306B MARINE GENERATOR SET — 170 ekW (213 kVA)



DIMENSIONS*

	Heat Exchanger Cooled		Keel Cooled	
	mm	in.	mm	in.
Overall Length	2549.6	100.4	2549.6	100.4
Length from front to rear face of block	1285.0	50.6	1285.0	50.6
Length from rear face of block to back of generator	1264.6	49.8	1264.6	49.8
Overall Height	1337.1	52.6	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0	432.7	17.0
Overall Width	956.7	37.7	952.0	37.5
Width from crankshaft centerline to port side (left side)	434.8	17.1	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	521.9	20.6	521.9	20.6

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.5	31.1	14.8	0.6	784.3	30.9

*Illustrations and dimensions from drawings: 186-4323 Heat Exchanger Cooled, 118-7823 Keel Cooled.

CATERPILLAR SR4 GENERATOR

Type ..... Brushless, revolving field, permanent magnet excited
Construction ..... Single bearing, close coupled
Three-phase..... 12 wire, wye or delta connected
Insulation..... Class F with tropicalization and anti-abrasion
Voltage Regulator ..... Generator mounted, volts-per-hertz
Voltage Regulation..... ±1/2%
Voltage Gain ..... Adjustable
Generator Weight, Net (approx)
445 frame..... 750 kg (1650 lb)
Space Heater
Voltages Available (adjustable +10%, -5%)
60 Hz — 220-440 volts
Meets or exceeds Marine Society requirements

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.

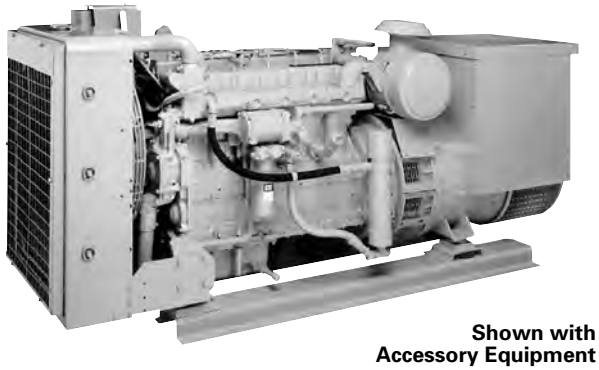
TMI Reference No.: DM4992-00 (6-18-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.

LEHM1648-00 (6-01) Printed in U.S.A.

CATERPILLAR®

Marine Generator Set 3306B

190 ekW (238 kVA) 60 Hz @ 1800 rpm



Shown with Accessory Equipment

CATERPILLAR ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions . . . . . IMO compliant
Displacement . . . . . 10.5 L (641 cu. in.)
Bore . . . . . 120.7 mm (4.75 in.)
Stroke . . . . . 152.4 mm (6.0 in.)
Aspiration . . . . . Turbocharged-Aftercooled
Governor . . . . . Hydra-mechanical or PSG
Engine Weight, Net Dry (approx)
  Heat Exchanger Cooled . . . . . 1882 kg (4150 lb)
  Keel Cooled . . . . . 1860 kg (4100 lb)
Capacity for Liquids
  Cooling System (engine only) . . 15.9 L (4.2 U.S. gal)
  Lube Oil System (refill) . . . . . 38.8 L (10.25 U.S. gal)
Oil Change Interval . . . . . 250 hr
  Caterpillar DEO 10W30 or 15W40
Rotation (from flywheel end) . . . . . Counterclockwise

STANDARD EQUIPMENT

Air Inlet System
Regular duty air cleaner, rain cap

Charging System
24V 35 Amp alternator

Cooling System
Gear driven, self priming, centrifugal auxiliary sea water pump with rubber impeller (heat exchanger engines); gear driven centrifugal jacket water pump; oil cooler, engine-mounted heat exchanger with removable tube bundle and replaceable copper-nickel tubes (heat exchanger engines); expansion tank; thermostat and housing

Exhaust System
Watercooled manifold and turbocharger; dry elbow and flange, 127 mm (5 in.)

Flywheel and Flywheel Housing
SAE No. 1 (156 teeth)

Fuel System
Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines

Generator and Attachments
Brushless PM excited SR4 generator, VR3 voltage regulator, 500 watt space heater

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

Lube System
Top-mounted crankcase breather, oil filter, LH oil level gauge, oil pan

Mounting System
Rails, 85 mm (3.3 in.) high with 20.5 mm (0.8 in.) mounting holes; linear vibration isolators between base and generator

Starting System
24V electric starting motor

General
Vibration damper and guard, Caterpillar yellow paint, lifting eyes

ACCESSORY EQUIPMENT

Air Starting Motor
Alarm Contactor — Oil Pressure, Water Temperature
Auxiliary Drive Pulley
Digital Tachometer
Double Wall Fuel Lines and Drain
12V Electric Gauges — Oil Pressure, Water Temperature
24V or 32V Electric Gauges — Oil Pressure, Water Temperature
Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed
Ether Starting Aid
Exhaust Elbow, Pipe, Flexible Fittings
Extension Terminal Box
Fuel Ratio Control
Hydraulic Pump Drive
Low Voltage Connections
Magnetic Pickup
Manual Shutoff Lever
Manual Voltage Control
Mechanical Tachometer Drive
Mechanical Overspeed Contactor
Paralleling Kit
RFI Filter
RH Oil Level Gauge
Solenoid Shutoff — 12V or 24V, ETR or ETS
Spare Parts Kit
Terminal Strip Connections

PERFORMANCE DATA

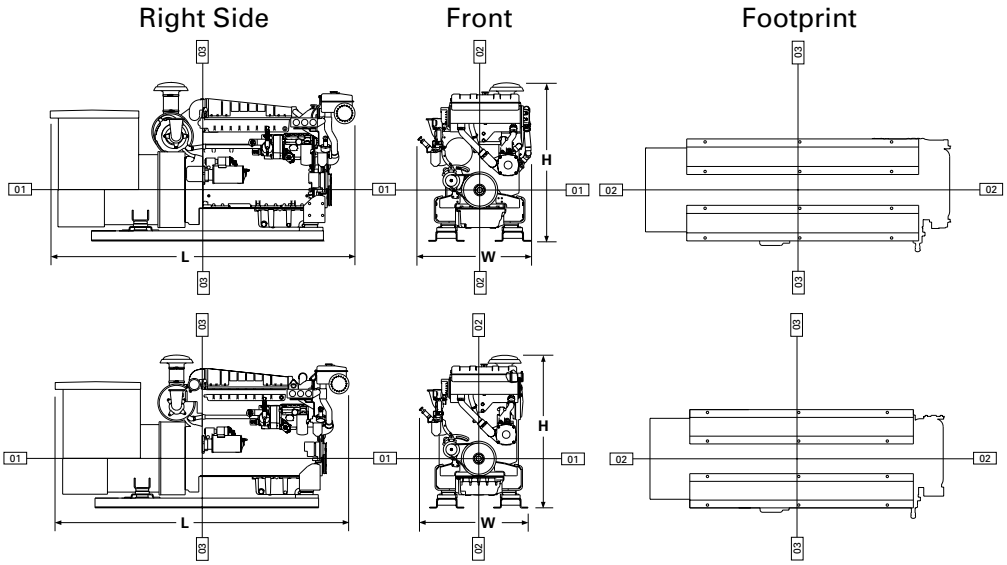
Turbocharged-Aftercooled

DM4994-00

190 ekW (.8 pf) 238 kVA			
% load	**ekW**	**Lph**	**gph**
100	190	54.0	14.3
75	143	40.7	10.8
50	95	27.6	7.3
25	48	15.8	4.2

CATERPILLAR®

3306B MARINE GENERATOR SET — 190 ekW (238 kVA)



DIMENSIONS*

	Heat Exchanger Cooled		Keel Cooled	
	mm	in.	mm	in.
Overall Length	2572.5	101.3	2572.5	101.3
Length from front to rear face of block	1285.0	50.6	1285.0	50.6
Length from rear face of block to back of generator	1287.5	50.7	1287.5	50.7
Overall Height	1337.1	52.6	1337.1	52.6
Height from crankshaft centerline to top of engine	904.4	35.6	904.4	35.6
Height from crankshaft centerline to bottom of rails	432.7	17.0	432.7	17.0
Overall Width	956.7	37.7	952.0	37.5
Width from crankshaft centerline to port side (left side)	434.8	17.1	430.1	16.9
Width from crankshaft centerline to starboard side (right side)	521.9	20.6	521.9	20.6

	Front		Center		Rear	
	mm	in.	mm	in.	mm	in.
Customer mounting hole diameter	20.5	0.8	20.5	0.8	20.5	0.8
Width from crankshaft centerline to side	155.1	6.1	155.1	6.1	155.1	6.1
	405.1	16.0	405.1	16.0	405.1	16.0
Length from rear face of block to mounting holes	790.5	31.1	14.8	0.6	784.3	30.9

*Illustrations and dimensions from drawings: 186-4323 Heat Exchanger Cooled, 118-7823 Keel Cooled.

CATERPILLAR SR4 GENERATOR

Type . . . . . Brushless, revolving field, permanent magnet excited
Construction . . . . . Single bearing, close coupled
Three-phase. . . . . 12 wire, wye or delta connected
Insulation. . . . . Class F with tropicalization and anti-abrasion
Voltage Regulator . . . . . Generator mounted, volts-per-hertz
Voltage Regulation. . . . . ±1/2%
Voltage Gain . . . . . Adjustable
Generator Weight, Net (approx)
446 frame. . . . . 809 kg (1780 lb)
Space Heater
Voltages Available (adjustable +10%, -5%)
60 Hz — 220-440 volts
Meets or exceeds Marine Society requirements

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.

TMI Reference No.: DM4994-00 (6-18-01)
Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.
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