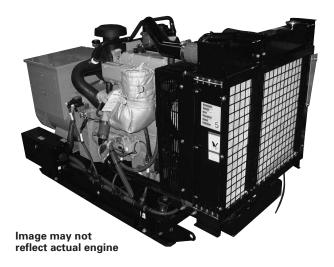
C4.4 MARINE GENERATOR SET

36 ekW (45 kVA)

50 Hz, 1500 rpm Radiator Cooled



## CATERPILLAR® ENGINE SPECIFICATIONS

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

Displacement
Bore 105 mm (4.13 in.)
Stroke 127 mm (4.99 in.)
Combustion
Aspiration Naturally Aspirated
Governor Electronic
Gen Set Package Dry Weight
(approx)
Total System Capacity
Cooling System 17.5 L (4.62 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; glowplug cold start system

## **Cooling System**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **Exhaust System**

Insulated exhaust elbow, water-cooled exhaust manifold

## **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)

## **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

## Marine Classification Society (MCS) Approval MCS approved packages available

## General

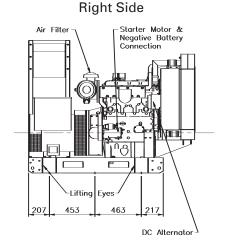
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

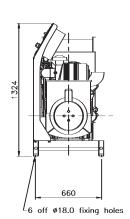
LEHM6176-01 Page 1 of 2

## C4.4 MARINE GENERATOR SET

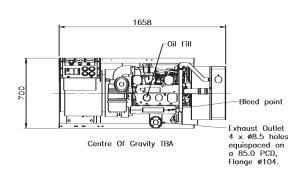
50 Hz, 1500 rpm

36 ekW (45 kVA)





Front



Plan View (Top View)

## **DIMENSIONS**

Package Dimensions		
Overall Length	1658 mm	65.3 in
Overall Height*	1187 mm	46.7 in
Overall Width	700 mm	27.6 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## PERFORMANCE DATA

## 50 Hz DINA

Fuel Consumption

@ Full Power

11 L/hour

2.9 gph

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation Class H
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 50 Hz 0.27 m³/s (572 cfm)
Excitation System AREP
Voltage Regulation (steady state) $\dots \pm 0.5\%$
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.

\*Ratings at 50°C (122°F) ambient are 33.5 ekW (42 kVA).

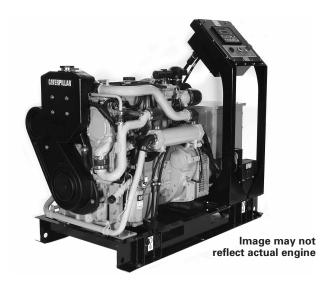
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions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

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.

## C4.4 MARINE GENERATOR SET

38 ekW (47 kVA)

50 Hz, 1500 rpm



## CATERPILLAR® ENGINE SPECIFICATIONS

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

Displacement
Bore
Stroke 127 mm (4.99 in.)
CombustionDirect Injection
Aspiration Naturally Aspirated
Governor Electronic
Gen Set Package Dry Weight
(approx)
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; 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

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## C4.4 MARINE GENERATOR SET

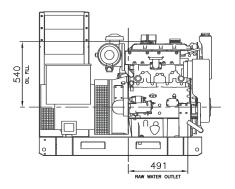
50 Hz, 1500 rpm

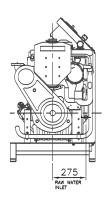
38 ekW (47 kVA)

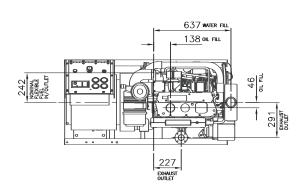
Right Side

Front

Footprint (Bottom View)







## **DIMENSIONS**

Engine Dimensions		
	Open mm (in)	Enclosed mm (in)
Overall Length	1422 (56.0)	1750 (68.9)
Overall Height*	1010 (39.8)	1215 (47.8)
Overall Width	700 (27.6)	1000 (39.4)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## PERFORMANCE DATA

## 50 Hz DINA

**Fuel Consumption** 

@ Full Power

11 L/hour

2.91 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 72.9 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
Insulation
Temperature Rise
@ 40°C Ambient
Winding Pitch Code2/3
Terminals 12 lead reconnectable
Drip Proof IP 23
Air Flow 50 Hz 0.27 m³/s (572 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%

## **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.

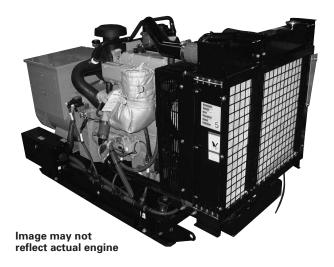
\*Ratings at 50°C (122°F) ambient are 35.5 ekW (44 kVA).

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.

C4.4 MARINE GENERATOR SET

42 ekW (53 kVA)

60 Hz, 1800 rpm Radiator Cooled



## 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	Naturally Aspirated
Governor	Electronic
Gen Set Package Dry Weight	
(approx)	776 kg (1710 lb)
Total System Capacity	
Cooling System	17.5 L (4.62 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; glowplug cold start system

## **Cooling System**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **Exhaust System**

Insulated exhaust elbow, water-cooled exhaust manifold

## **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)

## **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

## Marine Classification Society (MCS) Approval

MCS approved packages available

## Genera

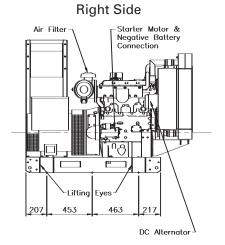
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

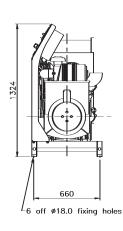
LEHM6180-01 Page 1 of 2

## C4.4 MARINE GENERATOR SET

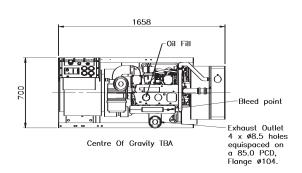
60 Hz, 1800 rpm

42 ekW (53 kVA)





Front



Plan View (Top View)

## **DIMENSIONS**

Package Dimensions		
Overall Length	1658 mm	65.3 in
Overall Height*	1187 mm	46.7 in
Overall Width	700 mm	27.7 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## **PERFORMANCE DATA**

## 60 Hz DINA

**Fuel Consumption** 

@ Full Power

13 L/hour

3.43 gph

## **CATERPILLAR GENERATOR**

Power Factor
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz 0.32 m³/s (678 cfm)
Excitation System AREP
Voltage Regulation (steady state)±0.5%
Total Harmonic Content LL/LN4%
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.

\*Ratings at 50°C (122°F) ambient are 39.5 ekW (49 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.

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.

## C4.4 MARINE GENERATOR SET

69 ekW (86 kVA)

50 Hz, 1500 rpm



## 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 Weigl	nt
(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	d)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

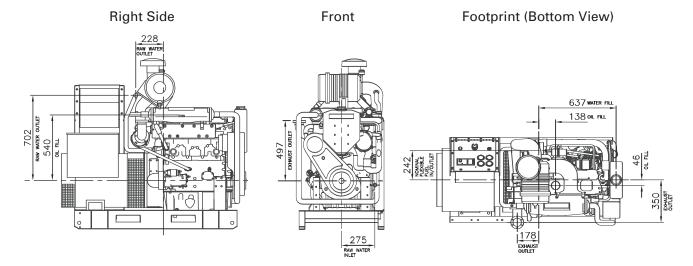
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## **C4.4** MARINE GENERATOR SET

50 Hz, 1500 rpm

69 ekW (86 kVA)



## **DIMENSIONS**

Engine Dimensions		
Open Enclosed mm (in) mm (in)		
Overall Length	1529 (60.2)	1750 (68.9)
Overall Height*	1132 (44.6)	1215 (47.8)
Overall Width	724 (28.5)	1000 (39.4)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## PERFORMANCE DATA

## 50 Hz DITA

**Fuel Consumption** 

@ Full Power

18.6 L/hour

4.91 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 70.3 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
@ 40°C Ambient Class H (150°K) Winding Pitch Code
Terminals
Air Flow 50 Hz
Voltage Regulation (steady state) ±0.5% Total Harmonic Content LL/LN <4%
Wave Form: NEMA=TIF         <50

## **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.

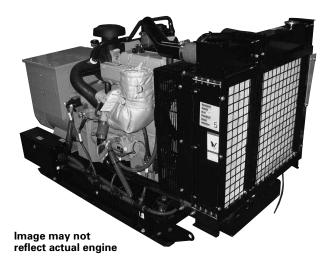
\*Ratings at 50°C (122°F) ambient are 69 ekW (86 kVA).

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.

C4.4 MARINE GENERATOR SET

49 ekW (61 kVA)

50 Hz, 1500 rpm Radiator Cooled



## **CATERPILLAR® ENGINE SPECIFICATIONS**

I-4, 4-Stroke-Cycle-Diesel
Displacement
Bore 105 mm (4.13 in.)
Stroke 127 mm (4.99 in.)
Combustion
AspirationTurbocharged
Governor Electronic
Gen Set Package Dry Weight
(approx) 856 kg (1887 lb)
Total System Capacity
Cooling System 17.5 L (4.62 U.S. gal)
Lube Oil System 8.5 L (2.25 U.S. gal)

## 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**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **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)

## **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

## Marine Classification Society (MCS) Approval

MCS approved packages available

## 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

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## C4.4 MARINE GENERATOR SET

50 Hz, 1500 rpm

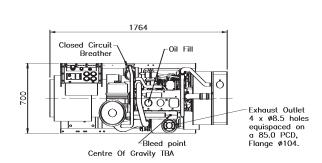
Plan View (Top View)

49 ekW (61 kVA)

# Right Side Air Filter Notor & Negative Battery Connection Connection Lifting Eyes 207 453 463 217

## 660 6 off Ø18.0 fixing holes

Front



## **DIMENSIONS**

Package Dimensions		
Overall Length	1764 mm	69.5 in
Overall Height*	1187 mm	46.7 in
Overall Width	700 mm	27.6 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## **PERFORMANCE DATA**

## 50 Hz DIT

**Fuel Consumption** 

@ Full Power

14.8 L/hour

3.9 gph

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 50 Hz 0.27 m <sup>3</sup> /s (572 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%

## **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 46.5 ekW (58 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.

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.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow" and the POWER EDGE trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

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

## C4.4 MARINE GENERATOR SET

51 ekW (64 kVA)

50 Hz, 1500 rpm



## CATERPILLAR® ENGINE SPECIFICATIONS

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

Displacement
Bore
Stroke 127 mm (4.99 in
CombustionDirect Injectio
AspirationTurbocharge
Governor Electron
Gen Set Package Dry Weight
(approx) 835 kg (1841 lk
Total System Capacity
Cooling System
Lube Oil System 8.5 L (2.25 U.S. ga
Oil Change Interval 500 h
Rotation (from flywheel end) Counterclockwis

## 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

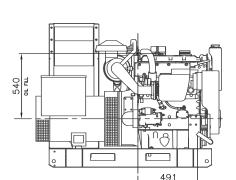
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## C4.4 MARINE GENERATOR SET

50 Hz, 1500 rpm

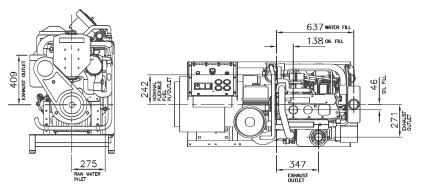
51 ekW (64 kVA)



Right Side

Front

Footprint (Bottom View)



## **DIMENSIONS**

Engine Dimensions		
	Open mm (in)	Enclosed mm (in)
Overall Length	1529 (60.2)	1750 (68.9)
Overall Height*	1055 (41.5)	1215 (47.8)
Overall Width	700 (27.6)	1000 (39.4)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## **PERFORMANCE DATA**

## 50 Hz DIT

**Fuel Consumption** 

@ Full Power

14.8 L/hour

3.91 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 67.8 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation Class H
Temperature Rise
@ 40°C Ambient Class H (150°K)
Winding Pitch Code 2/3
Terminals 12 lead reconnectable
Drip Proof
Air Flow 50 Hz 0.27 m <sup>3</sup> /s (572 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%

## **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.

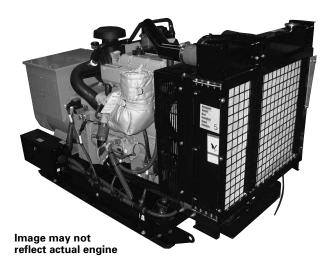
\*Ratings at 50°C (122°F) ambient are 49 ekW (61 kVA).

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.

## C4.4 MARINE GENERATOR SET

56 ekW (70 kVA)

60 Hz, 1800 rpm Radiator Cooled



## 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
Governor	Electronic
Gen Set Package Dry Weight	
(approx)	856 kg (1887 lb)
Total System Capacity	
Cooling System	17.5 L (4.62 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**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **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)

## **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

## Marine Classification Society (MCS) Approval

MCS approved packages available

## 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

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## C4.4 MARINE GENERATOR SET

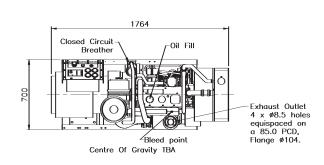
60 Hz, 1800 rpm

56 ekW (70 kVA)

# Right Side Air Filter Notor & Negative Battery Connection Connection Lifting Eyes 207 453 463 217 DC Alternator

## 660 6 off Ø18.0 fixing holes

Front



Plan View (Top View)

## **DIMENSIONS**

Package Dimensions		
Overall Length	1764 mm	69.5 in
Overall Height*	1187 mm	46.7 in
Overall Width	700 mm	27.6 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## PERFORMANCE DATA

## 60 Hz DIT

**Fuel Consumption** 

@ Full Power

16.9 L/hour

4.46 gph

## **CATERPILLAR GENERATOR**

## **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 53 ekW (66 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.

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.

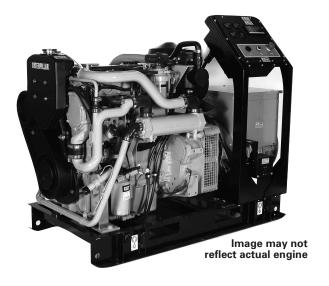
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The International System of Units (SI) is used in this publication.

## C4.4 MARINE GENERATOR SET

58 ekW (72 kVA)

60 Hz, 1800 rpm



## CATERPILLAR® ENGINE SPECIFICATIONS

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

Displacement
Bore
Stroke 127 mm (4.99 in.
CombustionDirect Injection
AspirationTurbocharged
Governor Electronic
Gen Set Package Dry Weight
(approx) 835 kg (1841 lb
Total System Capacity
Cooling System
Lube Oil System 8.5 L (2.25 U.S. gal
Oil Change Interval 500 h
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 ambient 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

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## C4.4 MARINE GENERATOR SET

60 Hz, 1800 rpm

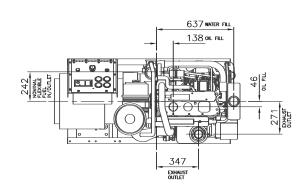
58 ekW (72 kVA)

Right Side



Front

Footprint (Bottom View)



## **DIMENSIONS**

540 % FLL

Engine Dimensions		
	Open mm (in)	Enclosed mm (in)
Overall Length	1529 (60.2)	1750 (68.9)
Overall Height*	1055 (41.5)	1215 (47.8)
Overall Width	700 (27.6)	1000 (39.4)

491

## PERFORMANCE DATA

## 60 Hz DIT

**Fuel Consumption** 

@ Full Power

16.9 L/hour

4.46 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 71.6 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation Class H
Temperature Rise
@ 40°C Ambient
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz 0.32 m <sup>3</sup> /s (678 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%

## **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 55 ekW (69 kVA).

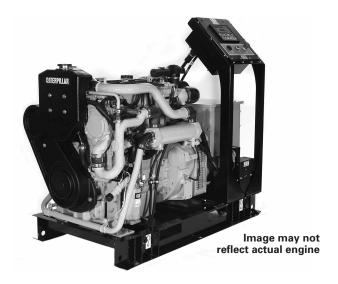
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions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

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## C4.4 MARINE GENERATOR SET

44 ekW (55 kVA)

60 Hz, 1800 rpm



## CATERPILLAR® ENGINE SPECIFICATIONS

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

Displacement	4.4 L (269 cu. in.)
Bore	
Stroke	127 mm (4.99 in.)
Combustion	Direct Injection
Aspiration	Naturally Aspirated
Governor	Electronic
Gen Set Package Dry Weight	
(approx)	755 kg (1664 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; glowplug cold start system

## **Cooling System**

Heat exchanger-cooled packages with Cupro-nickel tube bundle (sized for 50°C ambient 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

## Genera

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

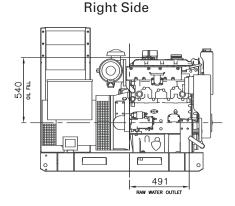
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

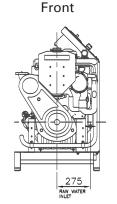
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## **C4.4** MARINE GENERATOR SET

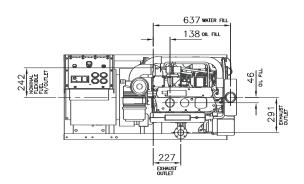
60 Hz, 1800 rpm

44 ekW (55 kVA)





## Footprint (Bottom View)



## **DIMENSIONS**

Engine Dimensions		
	Open mm (in)	Enclosed mm (in)
Overall Length	1422 (56.0)	1750 (68.9)
Overall Height*	1010 (39.8)	1215 (47.8)
Overall Width	700 (27.6)	1000 (39.4)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## PERFORMANCE DATA

## 60 Hz DINA

**Fuel Consumption** 

@ Full Power

13 L/hour

3.43 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 75.1 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
Temperature Rise @ 40°C Ambient
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz 0.32 m <sup>3</sup> /s (678 cfm)
Excitation System AREP
Voltage Regulation (steady state)±0.5%
Total Harmonic Content LL/LN
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.

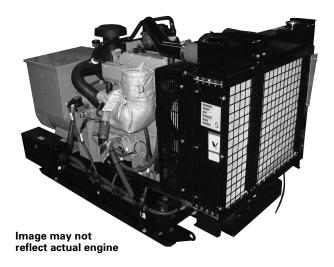
\*Ratings at 50°C (122°F) ambient are 41.5 ekW (52 kVA).

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.

C4.4 MARINE GENERATOR SET

65 ekW (81 kVA)

50 Hz, 1500 rpm Radiator Cooled



## 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 Weig	ht
(approx)	1021 kg (2251 lb)
Total System Capacity	
Cooling System	17.5 L (4.62 U.S. gal)
Lube Oil System	8.5 L (2.25 U.S. gal)
Oil Change Interval	500 hr
Rotation (from flywheel en	d)Counterclockwise

## STANDARD EQUIPMENT

### Air Inlet System

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

## **Cooling System**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **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)

## **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

## Marine Classification Society (MCS) Approval

MCS approved packages available

## Genera

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

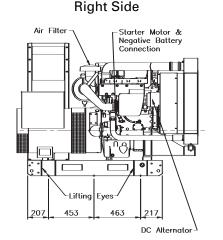
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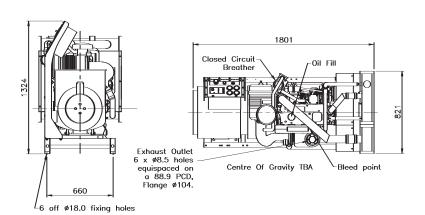
## C4.4 MARINE GENERATOR SET

Plan View (Top View)

50 Hz, 1500 rpm

65 ekW (81 kVA)





## **DIMENSIONS**

Package Dimensions		
Overall Length	1801 mm	70.9 in
Overall Height*	1174 mm	46.2 in
Overall Width	821 mm	32.3 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## **PERFORMANCE DATA**

## 50 Hz DITA

Front

**Fuel Consumption** 

@ Full Power

18.6 L/hour

4.91 gph

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 50 Hz $\dots 0.37 \text{ m}^3\text{/s}$ (784 cfm)
Excitation System AREP
Voltage Regulation (steady state) $\dots \pm 0.5\%$
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.

\*Ratings at 50°C (122°F) ambient are 65 ekW (81 kVA).

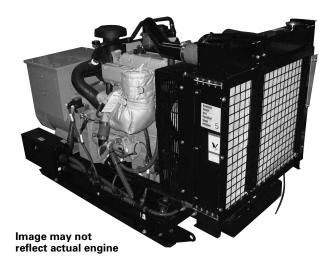
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions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

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.

## C4.4 MARINE GENERATOR SET

72 ekW (90 kVA)

60 Hz, 1800 rpm Radiator Cooled



## **CATERPILLAR® ENGINE SPECIFICATIONS**

# I-4, 4-Stroke-Cycle-DieselDisplacement4.4 L (269 cu. in.)Bore105 mm (4.13 in.)Stroke127 mm (4.99 in.)CombustionDirect InjectionAspirationTurbocharged-AftercooledGovernorElectronicGen Set Package Dry Weight<br/>(approx)1021 kg (2251 lb)

Total System Capacity

 Cooling System
 17.5 L (4.62 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; air-to-air charge cooler; glowplug cold start system

## **Cooling System**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **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)

## **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

## Marine Classification Society (MCS) Approval MCS approved packages available

## 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

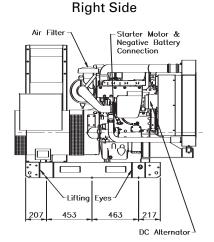
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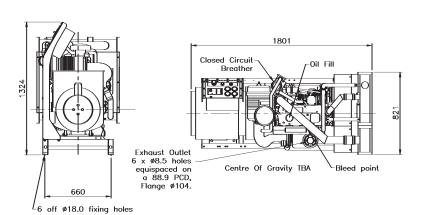
## C4.4 MARINE GENERATOR SET RADIATOR COOLED

Plan View (Top View)

60 Hz, 1800 rpm

72 ekW (90 kVA)





## **DIMENSIONS**

Package Dimensions		
Overall Length	1801 mm	70.9 in
Overall Height*	1174 mm	46.2 in
Overall Width	821 mm	32.3 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## **PERFORMANCE DATA**

## 60 Hz DITA

Front

**Fuel Consumption** 

@ Full Power

22 L/hour

5.81 qph

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz $\dots 0.44 \text{ m}^3\text{/s}$ (932 cfm)
Excitation System AREP
Voltage Regulation (steady state) $\pm 0.5\%$
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.

\*Ratings at 50°C (122°F) ambient are 72 ekW (90 kVA).

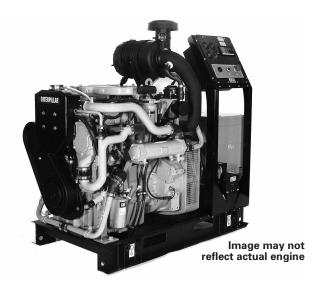
Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions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

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.

## C4.4 MARINE GENERATOR SET

76 ekW (95 kVA)

60 Hz, 1800 rpm



## 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 Wei	ght
(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 e	nd)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 ambient 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

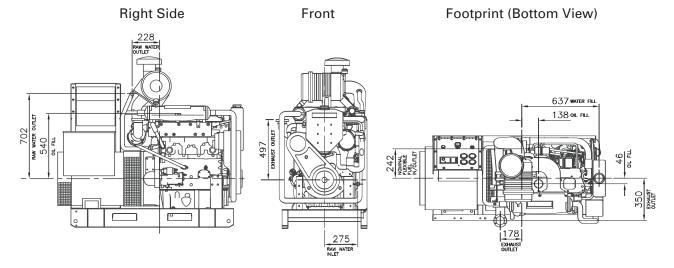
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## **C4.4** MARINE GENERATOR SET

60 Hz, 1800 rpm

76 ekW (95 kVA)



## **DIMENSIONS**

Engine Dimensions		
	Open mm (in)	Enclosed mm (in)
Overall Length	1529 (60.20)	1750 (68.9)
Overall Height*	1132 (44.60)	1215 (47.8)
Overall Width	724 (28.54)	1000 (39.4)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## **PERFORMANCE DATA**

## 60 Hz DITA

**Fuel Consumption** 

@ Full Power

22.0 L/hour

5.81 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 71.8 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation Class H
Temperature Rise
@ 40°C Ambient
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz 0.44 m $^3$ /s (932 cfm)
Excitation System AREP
Voltage Regulation (steady state) $\dots\dots \pm 0.5\%$
Total Harmonic Content LL/LN<4%
Wave Form: NEMA=TIF<50
Wave Form: I.E.C.=THF $\dots < \! 2\%$

## **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).

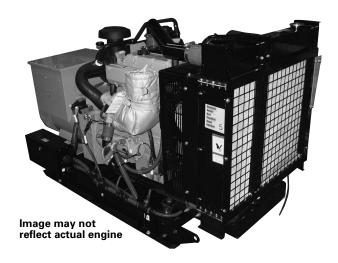
Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

\*Ratings at 50°C (122°F) ambient are 76 ekW (95 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.

## C4.4 MARINE 82 ekW GENERATOR SET (103 kVA)

50 Hz, 1500 rpm Radiator Cooled



## **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)	1076 kg (2372 lb)
Total System Capacity	
Cooling System	17.5 L (4.62 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; glowplug cold start system

## **Cooling System**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **Exhaust System**

Insulated exhaust elbow, water-cooled exhaust manifold

## **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

## Genera

Single-side service (LH)

## **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

## Marine Classification Society (MCS) Approval MCS approved packages available

ivics approved packages available

## General

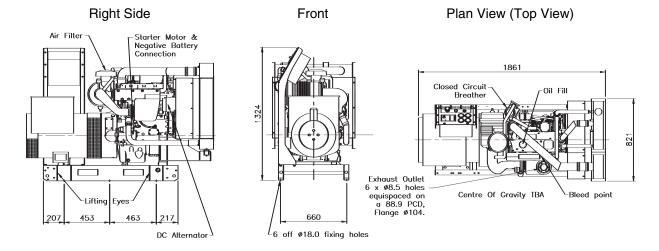
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## C4.4 MARINE GENERATOR SET

50 Hz, 1500 rpm

82 ekW (103 kVA)



## **DIMENSIONS**

Package Dimensions		
Overall Length	1861 mm	73.3 in
Overall Height*	1174 mm	46.2 in
Overall Width	821 mm	32.3 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## **PERFORMANCE DATA**

## 50 Hz DITA

**Fuel Consumption** 

@ Full Power

24.6 L/hour

6.5 gph

## **CATERPILLAR GENERATOR**

Power Factor.         1.0           Frame         C4.4           Insulation         Class H
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals12 lead reconnectable
Drip Proof
Air Flow 50 Hz 0.37 m³/s (784 cfm)
Excitation System AREP
Voltage Regulation (steady state) ±0.5%
Total Harmonic Content LL/LN
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.

\*Ratings at 50°C (122°F) ambient are 81.5 ekW (102 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.

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.

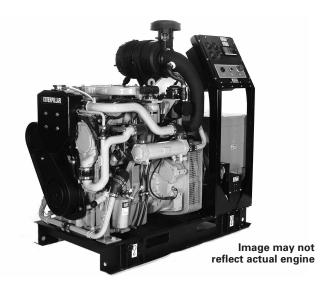
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The International System of Units (SI) is used in this publication.

## C4.4 MARINE SENERATOR SET (107 kVA)

86 ekW

50 Hz, 1500 rpm



## CATERPILLAR® ENGINE SPECIFICATIONS

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

Displacement	4.4 L (269 cu. in.)
Bore	
Stroke	
Combustion	Direct Injection
Aspiration	. Turbocharged-Aftercooled
Governor	Electronic
Gen Set Package Dry Wei	ght
(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 e	nd)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

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

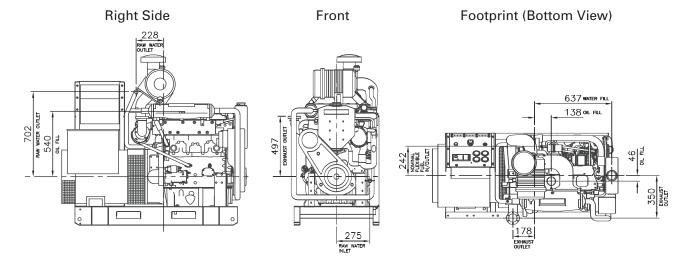
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## **C4.4** MARINE GENERATOR SET

50 Hz, 1500 rpm

86 ekW (107 kVA)



## **DIMENSIONS**

Engine Dimensions		
Open Enclosed mm (in) 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)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## **PERFORMANCE DATA**

## 50 Hz DITA

Fuel Consumption

@ Full Power

24.6 L/hour

6.50 gph

## **ENCLOSED SOUND DATA**

### 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 71.9 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
@ 40°C Ambient
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 50 Hz 0.37 m <sup>3</sup> /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%

## **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).

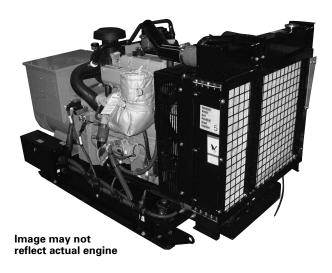
Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

\*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.

## C4.4 MARINE 95 ekW GENERATOR SET (119 kVA)

60 Hz, 1800 rpm Radiator Cooled



## CATERPILLAR® ENGINE SPECIFICATIONS

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

-	4.4 L (269 cu. in.)
	105 mm (4.13 in.)
	127 mm (4.99 in.)
	Direct Injection
Aspiration	. Turbocharged-Aftercooled
Governor	Electronic
Gen Set Package Dry Weig	ght
(approx)	1076 kg (2372 lb)
Total System Capacity	
Cooling System	17.5 L (4.62 U.S. gal)
Lube Oil System	8.5 L (2.25 U.S. gal)
Oil Change Interval	500 hr
Rotation (from flywheel er	nd) Counterclockwise

## STANDARD EQUIPMENT

## Air Inlet System

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

## **Cooling System**

Radiator cooled package (sized for up to 50°C ambient air) incorporating deaeration expansion tank, plate-type engine oil cooler, gear-driven centrifugal jacket water pump, Caterpillar® Extended Life Coolant

## **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)

## 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

## Marine Classification Society (MCS) Approval

MCS approved packages available

## Genera

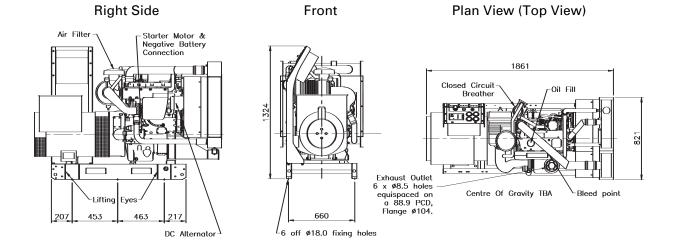
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## C4.4 MARINE GENERATOR SET

60 Hz, 1800 rpm

95 ekW (119 kVA)



## **DIMENSIONS**

Package Dimensions		
Overall Length	1861 mm	73.3 in
Overall Height*	1174 mm	46.2 in
Overall Width	821 mm	32.3 in

<sup>\*</sup>Height dimension does not include height to electronic control panel.

## **PERFORMANCE DATA**

## 60 Hz DITA

**Fuel Consumption** 

@ Full Power

27.7 L/hour

7.32 gph

## **CATERPILLAR GENERATOR**

Power Factor
Frame
Insulation Class H
Temperature Rise
@ 40°C Ambient (110%) Class H (150°K)
@ 50°C Ambient (110%) Class H (140°K)
Winding Pitch Code
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz 0.44 m³/s (932 cfm)
Excitation System AREP
Voltage Regulation (steady state) $\dots \pm 0.5\%$
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.

\*Ratings at 50°C (122°F) ambient are 94 ekW (118 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.

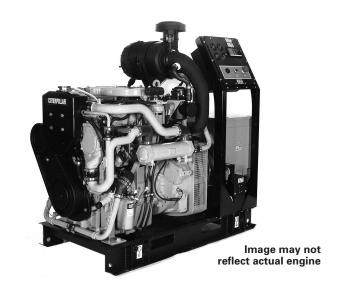
Power produced at the flywheel will be within standard tolerances up to 49°C (120°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft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

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

## C4.4 MARINE 99 ekW GENERATOR SET (123 kVA)

60 Hz, 1800 rpm



## 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 Weigl	nt
(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	d)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 amb. 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

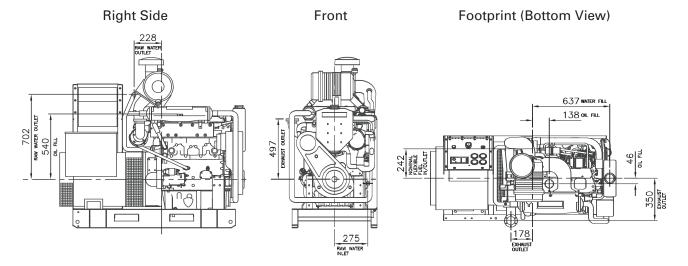
PGS test report @ 1.0 power factor, extra literature, storage preservation, export packing: single engine shipment to U.S., 20-foot container engine shipments, 40-foot container engine shipments

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## **C4.4** MARINE GENERATOR SET

60 Hz, 1800 rpm

99 ekW (123 kVA)



## **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)

<sup>\*</sup>Height dimension does not include remote-mounted air filter or electronic control panel.

## PERFORMANCE DATA

## 60 Hz DITA

**Fuel Consumption** 

@ Full Power

27.7 L/hour

7.32 gph

## **ENCLOSED SOUND DATA**

## 50 Hz DINA

Sound levels are average sound pressure level @ 1 meter and 100% load 72.5 db(A)

## **CATERPILLAR GENERATOR**

Power Factor
Temperature Rise
@ 40°C Ambient
Winding Pitch Code 2/3
Terminals 12 lead reconnectable
Drip Proof
Air Flow 60 Hz 0.44 m³/s (932 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

## **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 98 ekW (123 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.