

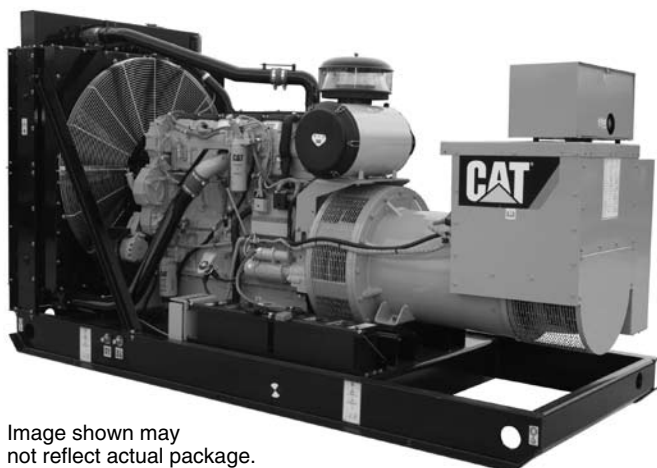


Image shown may
not reflect actual package.

CAT® ENGINE SPECIFICATIONS

In-Line 6, 4-Stroke-Cycle water-cooled diesel

Bore	137.2 mm (5.4 in.)
Stroke	171.4 mm (6.75 in.)
Displacement	15.2 L (927.56 cu. in.)
Compression Ratio	16.1:1
Aspiration	ATAAC
Fuel System	MEUI
Governor Type	Cat® ADEM™ A4 control system
Package Weight (estimated)	4760 kg (10,500 lb.)

Caterpillar is leading the power generation marketplace with power solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.

FEATURES

Ready to Run

- Shipped from the factory complete and ready to run

Fuel/Emissions Strategy

- U.S. EPA Tier 2 or 3 and EU and China Stage 2 non-road compliant

Full Range of Attachments

- Wide range of bolt-on system expansion attachments, factory designed and tested

Single-Source Supplier

- Fully prototype-tested with certified torsional vibration analysis available

Worldwide Product Support

- Cat dealers provide extensive post-sale support including maintenance and repair agreements.
- Cat dealers fill 99.7 percent of parts orders within 24 hours.
- Cat dealers have over 2,100 dealer branch stores operating in 200 countries.
- The Cat S•O•SSM program cost-effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products.

Cat C15 ACERT® ATAAC Diesel Engine

- Utilizes ACERT Technology
- Reliable, rugged, durable design
- Field-proven in thousands of applications worldwide
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine control

Cat Generator

- Designed to match performance and output characteristics of Cat diesel engines
- 2/3 pitch
- UL 1446 Recognized Class H Insulation

Cat EMCP 3 Control Panel

- EMCP 3.1 offers basic engine/generator monitoring, metering, and protection.
- Segregated low voltage (AC/DC) accessory box provides single point access to accessory connections
- Panel lights

Web Site

For all your petroleum power requirements, visit www.catoilandgas.cat.com.

STANDARD EQUIPMENT

Air Inlet System

- Heavy-duty air filter

Cooling System

- Radiator package mounted (50° C)
- Coolant drain line with valve at edge of base
- Coolant level sensor
- Fan and belt guards
- Coolant level sight gauge
- Cat Extended Life Coolant

Exhaust System

- Dry exhaust manifold
- Flanged faced outlets
- Stainless steel flex with split-cuff connection

Fuel System

- Primary fuel filter with integral water separator
- Secondary fuel filters
- Fuel priming pump
- Flex fuel lines

Generator

- SR4B brushless, single-bearing, self-excited
- Class H insulation
- Random wound
- IP23 protection
- CDVR 3-phase sensing with selectable volts/Hz
- 3 sensing CTs and one droop CT
- Coastal protection

Power Termination

- RH extended cable access box

Governor

- ADEM A4

Lube System

- Deep sump (60 L) — 500-hour service interval
- High efficiency oil filter
- Oil drain valves
- Fumes disposal
- Gear-type lube oil pump

Mounting System

- Steel base frame (skidable)
- Linear vibration isolation — seismic zone 4

Starting/Charging System

- 24-volt starting motor
- 45-amp charging alternator
- Battery rack

General

- Paint — Caterpillar yellow except rails and radiators (gloss black)
- Flywheel and flywheel housing — SAE No. 1
- Vibration damper with pulley
- Engine lifting eyes

OPTIONAL EQUIPMENT

Air Inlet System

- Precleaner

Exhaust System

- Mufflers
- Manifold and turbocharger guards
- Elbows

OPTIONAL EQUIPMENT (continued)

Generator

- Permanent magnet excitation
- Oversize and premium generators
- Anti-condensation space heaters available with permanent magnet excitation generators

Power Termination

- Top and bottom power cable entry

Starting/Charging System

- Jacket water heater with shutoff valves
- Battery disconnect switch
- Battery rack with heavy duty batteries

SPECIFICATIONS

Cat Generator

Voltage	480 V
Excitation	Self excited
Pitch	0.6667
Number of poles	4
Number of bearings	Single
Insulation	UL 1446 Recognized Class H with tropicalization and antiabrasion
IP Rating	Drip Proof IP23
Alignment	Pilot Shaft
Overspeed capability	125% of rated
Wave form deviation (line-to-line)	2%
Voltage regulator	3-phase sensing with selectable volts/Hz
Voltage regulation	Less than $\pm 1/2\%$ (steady state) Less than $\pm 1/2\%$ (with 3% speed change)
Harmonic Distortion	Less than 5%

Cat EMCP 3 Control Panel

- EMCP 3.1
- NEMA 1, IP23 enclosure
- Run/Auto/Stop control
- True RMS metering, 3-phase
- Speed adjust
- Vandal cover (option)
- Voltage adjust
- Digital indication for:
 - rpm
 - Operating hours
 - Oil pressure
 - Coolant temperature
 - System DC volts
 - L-L volts, L-N volts, phase amps, Hz
 - kW, kVA, kVAR, kW-hr, % kW, PF, (EMCP 3.2/3.3)
- Shutdowns with common indicating light for:
 - Low oil pressure
 - High coolant temperature
 - Low coolant level
 - Overspeed
 - Emergency stop
 - Failure to start (overcrank)



C15 ACERT DIESEL OILFIELD GENERATOR SET

320-455 kW — 60 Hz, 1800 rpm

365-455 kVA — 50 Hz, 1500 rpm

C15 ACERT OILFIELD GENERATOR SET PACKAGES

	60 Hz — Standard				50 Hz — Standard	
ekW Rating	320	365	410	455	292	364
kVA Rating	400	455	515	570	365	455
rpm	1800	1800	1800	1800	1500	1500
Emissions	EPA Tier 3	EPA Tier 3	EPA Tier 3	EPA Tier 2	EU/China Stage 2	EU/China Stage 2
Rated PF	0.8	0.8	0.8	0.8	0.8	0.8
Temperature Rise ²	105° C	105° C	105° C	105° C	105° C	105° C
Tilt Requirements	5° Static	5° Static	5° Static	5° Static	5° Static	5° Static
Insulation Class	H	H	H	H	H	H
Overload	50% / 2 min.	50% / 2 min.	50% / 2 min.	50% / 2 min.	50% / 2 min.	50% / 2 min.
Excitation (PM option)	SE	SE	SE	SE	SE	SE
Voltage	480	480	480	480	400	400
Voltage Regulator	CDVR	CDVR	CDVR	CDVR	CDVR	CDVR
Configuration	1-Brg	1-Brg	1-Brg	1-Brg	1-Brg	1-Brg
Coastal Protection	Yes	Yes	Yes	Yes	Yes	Yes
Space Heater	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Construction	RW	RW	RW	RW	RW	RW
Frame Size	449	450	499	499	450	499

Generator Terminal Box

Terminal box shall be standard with terminals on the right side, top entry or rear depending on size. Normal cable entrance shall be from the top.

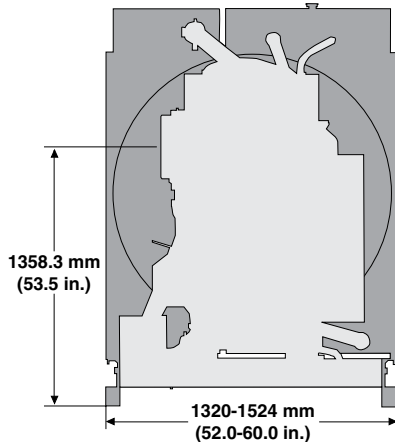
¹ Ambient capability at 1000 m (3281 ft) above sea level. For ambient capability at other altitudes, consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

²Generator temperature rise is based on a 40° C (104° F) ambient per NEMA MG1-32.

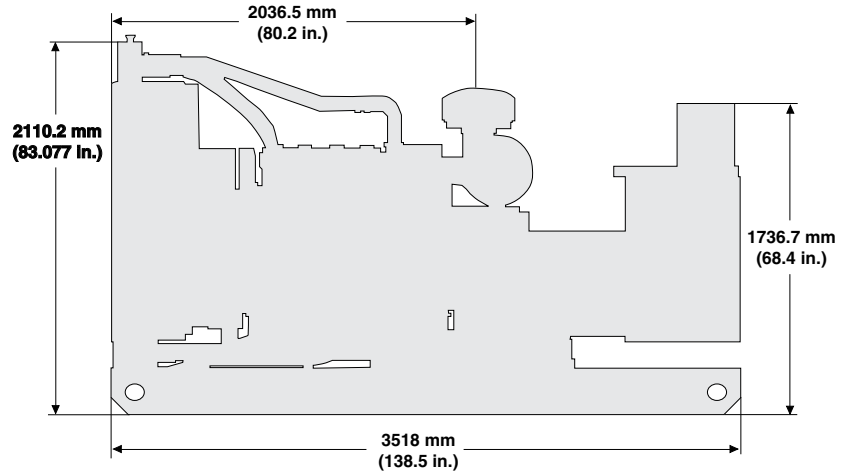
For additional generator ratings contact your local dealer.

INSTALLATION DRAWINGS

Front View



Left Side View



Note: Package dimensions may change depending on generator arrangement selection.

Package Dimensions		
Length	3518 mm	138.5 in.
Width	1320-1524 mm	52.0-60.0 in.
Height	2110.2 mm	83.077 in.
Weight (estimated)	4760 kg	10,500 lb.

RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications: AS1359, AS2789, CSA, EGSA101P, IEC60034, ISO3046, ISO8528, NEMA MG 1-32, UL508, 72/23/EEC, 89/336/EEC, 98/37/EEC.

Prime output available with varying load for an unlimited time. Prime power in accordance with ISO8528. 10 percent overload power in accordance with ISO3046, AS2789, and BS5514. Prime ambient temperatures shown indicate a coolant top tank temperature just below shutdown at 100 percent load.

Ratings are based on SAE J1995 standard conditions. These ratings also apply at ISO3046 standard conditions. Fuel rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 82 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for details.

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, S•O•S, ACERT, ADEM, "Caterpillar Yellow," 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.