

Cat® XQ330 Rental Generator Set



Standby 288 kW, 360 kVA
Prime 264 kW, 330 kVA
U.S. EPA Tier 4 Final
60/50 Hz
1800/1500 RPM

Image shown may not reflect actual configuration.

Specifications

Generator	Frequency	Voltage	Standby ekW (kVA)	Prime ekW (kVA)	Phase	Amp (A)
Standard	60 Hz	480/277V	288 (360)	264 (330)	3-phase	397
		208/120V	288 (360)	264 (330)	3-phase	916
	50 Hz	400/230V	273 (341)	248 (310)	3-phase	447
Optional	60 Hz	600V/349V	290 (363)	264 (330)	3-phase	318
		480V/277V	290 (363)	264 (330)	3-phase	397
		208/120V	262 (328)	238 (298)	3-phase	827
	50 Hz	400/230V	260 (325)	260 (325)	3-phase	426

Cat® C9.3B Diesel Engine	Metric	Imperial (English)
Configuration	Inline 6, 4-Stroke Cycle, Water Cooled, Diesel	
Bore	115 mm	4.53 in
Stroke	149 mm	5.87 in
Displacement	9.3 L	567.5 in ³
Aspiration	Turbocharged-Aftercooled (TA)	
Compression Ratio	17.0:1	
Fuel System	Direct Injection	
Engine Speed	Single	
Governor Type	Electronic controlled	
Engine RPM	1800/1500	

Benefits & Features

Fuel/Emissions Strategy

- Meets U.S. EPA Tier 4 Final emission standards and CARB certified for non-road mobile applications at 60 Hz & EU V for 50 Hz
- Requires Ultra Low Sulfur Diesel (ULSD) fuel

Rental Ready Features

- Voltage selection option
- Tank meets UL142, ULC S601, and UN31A with 21 hours run time
- Multiple options for customer interface connection
 - Single-phase GFCI duplex receptacles (20A@120V)
 - 208V 3-phase NEMA Sockets
 - California style, twist lock receptacles
 - NEMA locking input receptacle
- Switchable 60Hz/50Hz product
- Trailer mounted genset
- Silent enclosure with a sound attenuation of 72 dB @ 7m @ 75% load

Cat 9.3B Diesel Engine

- Four-stroke diesel engine offers consistent performance and excellent fuel economy with minimum weight
- Electronic ECM control

Aftertreatment / Clean Emissions Equipment

- Engine-mounted aftertreatment module consists of Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF), and Selective Catalytic Reduction (SCR)
- No requirement for ash servicing
- Diesel Exhaust Fluid (DEF) tank provides ~21 hrs run time at 75% Prime; located in discharge box, accessible through lockable access door
- Electrically heated DEF lines

Cat LC5100 Series Generator

- Designed to match performance and output characteristics of Cat diesel engines
- Coastal insulation protection
- Permanent Magnet Excitation

Cat EMCP 4.4 Control Panel

- Fully featured power metering, protective relaying, engine, and generator parameter viewing.
- Simple, user-friendly interface and navigation
- Single point interface for voltage and frequency adjustment
- Integrates with the Cat Integrated Voltage Regulator (IVR) to provide precise control, excellent block loading, and constant voltage

Standard Controls and Power Distribution

- Distribution panel for easy selection of desired output voltage (480/277V 3-phase or 208/120V 3-phase)
- Controls, sockets, and power distribution all accessible via rear access door
- Hinged door over main bus bars with safety switch to trip breaker

Sound-attenuated Enclosure

- Sound attenuating, galvanised sheet steel enclosure with exceptional noise reduction
- Interior walls, ceilings and ducts insulated with precision cut noise insulating materials
- External side-mounted dual point lifting frame for improved hook access
- Powder coated enclosure
- Secure design with safety glass control panel viewing window and padlock-able or keylock access doors
- Six doors from all the sides for easy service accessibility

Quality

- Factory designed and production tested to ensure customer satisfaction
- Manufactured in ISO 9001:2000 certified facility

Asset Monitoring and Management

- Cat Connect hardware provides remote equipment monitoring via cellular network
- Provides operational status, alarms, and engine and generator set parameters
- Flexible and customer-configurable user website
- GPS provides asset location and geo-fencing

Options

- Tandem axle trailer with electric brakes
- 600 V Generator
- Camlock Distribution System

Standard Equipment

Engine

- Cat C9.3B four stroke diesel engine
- Turbocharged air-to-air cooled
- Meets U.S. EPA Tier4 Final, CARB & EU-V emission regulation requirements at 60Hz & 50Hz
- Requires Ultra Low Sulfur Diesel (ULSD) fuel

Generator and Voltage Regulation

- LC5134N frame; 3-phase random wound, 12 lead, self-excited, 2/3 pitch
- Coastal insulation protection (CIP)
- PMG Excitation
- EMCP 4.4 mounted digital controller
- 60/50 Hz frequency switch (via link board)
- Panel & enclosure mounted emergency stop
- Anti-condensation heater

Aftertreatment System

- Engine mounted clean emission module (CEM) with Selective Catalytic Reduction (SCR), Diesel Oxidation catalyst (DOC) & Diesel Particulate Filter (DPF)
- Diesel Exhaust Fluid (DEF) Tank located in discharge box

Air Filtration System

- Efficient air cleaner with service indicator
- Full life efficiency of 99.9%.

Cooling System

- Variable speed fan with hydraulic clutch drive
- Package mounted radiator with vertical discharge
- Good ambient performance
- Fully guarded pusher fan
- Low coolant level shutdown
- Coolant heater
- Coolant drain valve easily accessible

Fuel System

- Bunded fuel tank with 21hr runtime (based on 75% Prime load), meets UL142 & transport Canada certified
- Internal fuel fill
- Engine mounted primary and secondary fuel filter
- Automatic onboard priming pump
- Mechanical fuel gauge

Control Panel

- EMCP 4.4 set mounted digital controller
- 50/60Hz frequency switch (via terminal link)
- IVR with EM10A excitation module
- Panel & enclosure mounted emergency stop
- PLG641

Electrical System

- 24V, DC electrical system
- 2 x 1000 CCA, maintenance-free, wet batteries
- Battery disconnect switch, lockable
- Solar battery charger with solar array
- Resettable, switch-style circuit breakers (DC circuit)
- Battery charger 24V (10A for two isolated batteries: 5A for two batteries linked in series) constant voltage, UL Listed

Distribution System

- Multiple options for distribution
 - California twist lock
 - NEMA 3Ph
 - Camlock
- All customer connections are easily accessible through rear door
- Distribution door protected with 24V DC shunt trip safety switch
- 3 pole, 1000A main circuit breaker
- Two-wire remote start/stop terminals and AC aux power connection for rapid start

Charging System

- Charging alternator; 24V, heavy duty with integral regulator and belt guards

Starting System

- Single 24V electric starting motor
- Unaided start -10°C (14°F) to + 50°C (122°F)
- Aided start -20°C (-4°F) to 50°C (122°F) with Jacket Water Heater

Exhaust System

- Outlet box mounted with vertical discharge

Lube Oil System

- On-engine primary and secondary oil filters, dipstick, and oil filler
- Closed crankcase breather
- 500-hour oil change interval

Trailer Options

- Vehicle Identification Number (VIN) plate, including serial number and supplier information to meet Department of Transportation (DOT) road requirements & Periodic Commercial Motor Vehicle Inspections Regulations (Canada)

General

- Factory Tested standard set
- Canadian Standards Authority (CSA) certified
- Full manufacturer's warranty, O&M manual

Technical Data

Cat Generator		
Frame Size	LC5134N	
Pitch	2/3	
No. of poles	4	
Insulation	Class H	
Enclosure	Drip proof IP23	
Voltage regulation	3-phase sensing with volts-per-hertz	
Frequency regulation	Meets ISO8528 G2 Class 0.5% at steady state from no load to full load	
Overspeed limit	2250 RPM	
Available voltages	Standard	Switchable voltage output for 60 Hz: 480/277V, 3-phase; 208/120V, 3-phase Switchable voltage output for 50 Hz: 400/230V, 3-phase
	Optional	Switchable voltage output for 60 Hz: 600/349V, 3-phase; 480/277V, 3-phase; 208/120V, 3-phase Switchable voltage output for 50 Hz: 400/230V, 3-phase

Cat Generator Set					
	Units	60 Hz		50 Hz	
		Standby	Prime	Standby	Prime
Power Rating	kW (kVA)	288 (360)	264 (330)	272.8 (341)	248 (310)
Performance Number		EM6633	EM6634	EM4732	EM4733
Performance Specification					
Lubricating System Total oil pan capacity	L (gal)	30 (7.9)			
Fuel System Fuel Consumption — 100% Load	L/hr (gal/hr)	77.6 (20.5)	70 (18.5)	70.4 (18.6)	62.5 (16.5)
75% Load	L/hr (gal/hr)	57.5 (15.2)	52 (13.7)	51.9 (13.7)	47.3 (12.5)
50% Load	L/hr (gal/hr)	39.4 (10.4)	37 (9.8)	36.0 (9.5)	33.3 (8.8)
Fuel Tank Capacity	L (gal)	1359 (359)	1359 (359)	1359 (359)	1359 (359)
Running Time @ 75% rating	Hr	23.6	21	26.2	28.7
DEF System DEF Tank Capacity	L/hr (gal/hr)	93.7 (24.7)	93.7 (24.7)	93.7 (24.7)	93.7 (24.7)
Fuel Consumption — 100% Load	L/hr (gal/hr)	5.4 (1.4)	4.82 (1.27)	5.5 (1.4)	5.0 (1.3)
75% Load	L/hr (gal/hr)	4.3 (1.1)	3.65 (0.96)	4.8 (1.3)	3.8 (1.0)
50% Load	L (gal)	2.9 (0.77)	2.42 (0.63)	2.8 (0.74)	2.5 (0.66)
Running Time @ All Power Settings	Hr	21.7	21	19.5	24.6
Cooling System Ambient capability	°C (°F)	42 (107.6)			
Engine & radiator coolant capacity	L (gal)	37.9 (10)			
Engine coolant capacity	L (gal)	20.3 (5.4)			

*Package fuel consumption and sound levels are for reference only.

Technical Data (continued)

Cat Generator Set					
	Units	60 Hz		50 Hz	
		Standby	Prime	Standby	Prime
Power Rating	kW (kVA)	288 (360)	264 (330)	272.8 (341)	248 (310)
Performance Number		EM6633	EM6634	EM4732	EM4733
Performance Specification					
Air Requirements					
Combustion air flow	m ³ /min (cfm)	24.8 (875.8)	23.6 (833)	19 (671)	24 (847.5)
Maximum dirty air cleaner restriction	kPa (inches H ₂ O)	6.2 (25)	6.2 (25)	6.2 (25)	6.2 (25)
Exhaust System					
Exhaust flow at rated (dry exhaust Exhaust temperature at rated kW	m ³ /min (cfm) °C (°F)	21.5 (759.2) 418.1 (784.6)	20.4 (720.4) 398.5 (749.3)	17.0 (602.8) 441.4 (826.6)	15.7 (556.8) 414.8 (778.7)
Noise rating (with enclosure)* @ 7 meters (23') @ 75% of rating	dB(A)	NA	70.2	NA	68.9
Emissions (not to exceed data)					
NOx	g/hp-hr	0.08	0.07	0.07	0.05
CO	g/hp-hr	0.06	0.07	0.05	0.05
HC	g/hp-hr	0.02	0.02	0.02	0.01
PM	g/hp-hr	0.00	0.00	0.00	0.00

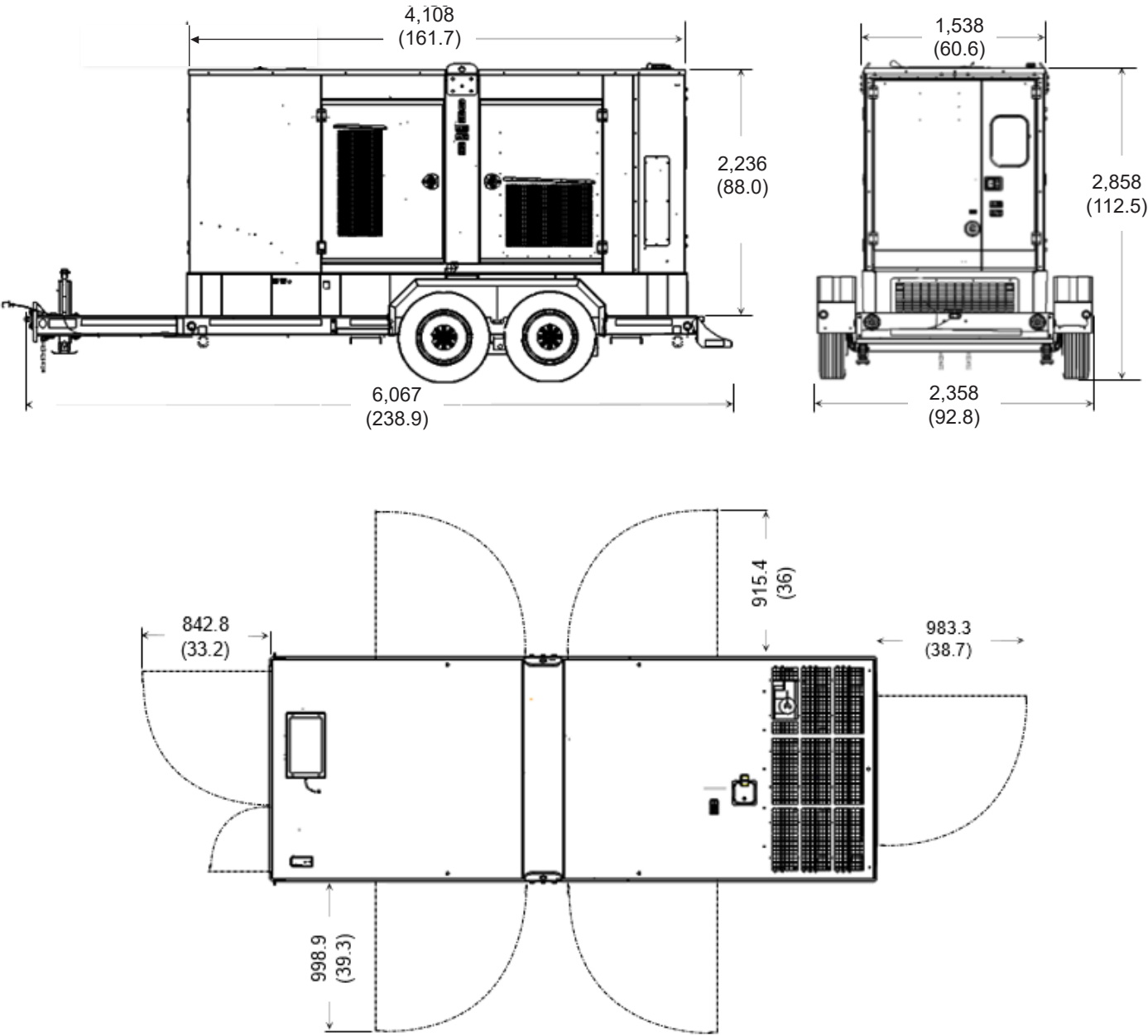
*Package fuel consumption and sound levels are for reference only.

Dimensions and Weights

Model	Length mm (in)	Width mm (in)	Height mm (in)	With Lube Oil & Coolant Kg (lb)	With Fuel, Lube Oil & Coolant Kg (lb)
XQ330	4,108 (161.7)	1,538 (60.6)	2,236 (88)	3,828 (8,432)	4,720 (10,405)
XQ330 with trailer (electric brakes)	6,067 (238.9)	2,358 (92.8)	2,858 (112.5)	5,782 (12,746)	6,822 (15,039)

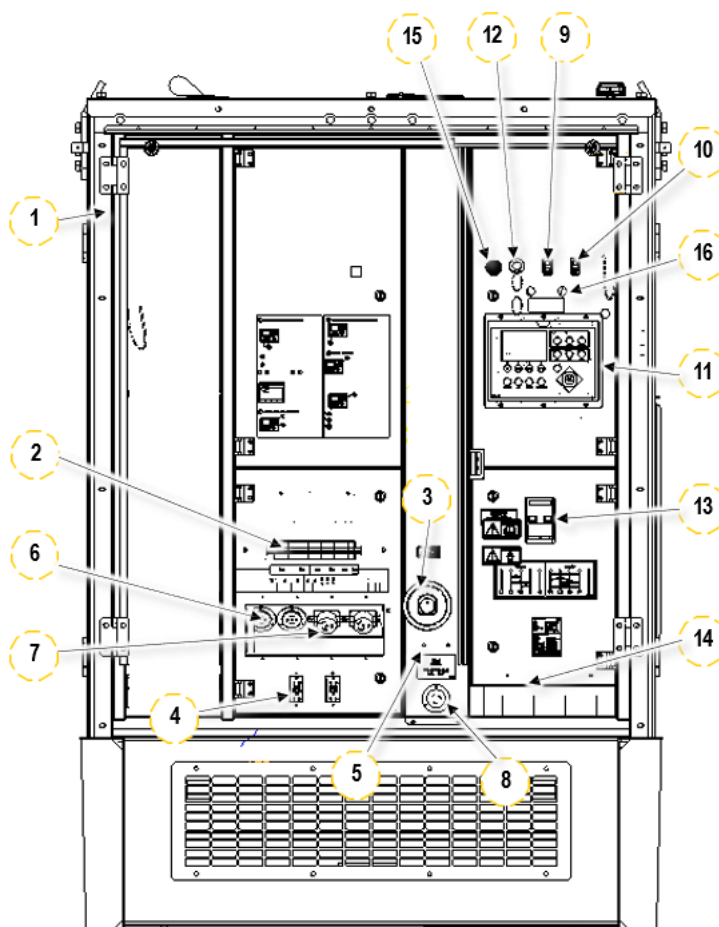
General Layout Dimensions

Dimensions in millimetres (inches)
Shown with optional trailer



Control Panel and Power Distribution Layout

Item	Description
1	Steel enclosure with hinged, lockable door (not shown)
2	Circuit breakers for receptacles
3	Emergency stop
4	Single-phase GFCI duplex receptacles (20A @ 120V)
5	Two-wire remote start terminals
6	Standard NEMA socket receptacles
7	Single-phase, California-style, twist-lock receptacles, 50A @ 208V phase-to-phase, 120V phase to neutral, or 240/120 single-phase when in that voltage position
8	Single-phase, NEMA locking input receptacle, (30A @ 120V) to power block heater, battery charger and generator space heater
9	Low DEF Level Lamp
10	Emission System Failure Lamp
11	EMCP 4.4 digital generator set controller
12	Cat ET service tool connector
13	Electrically operated circuit breaker, 3 pole, molded case, LSIG, 800A (provided with paralleling option) for EMCP4.4 1000A
14	Main bus connection (bus bars attached to breaker) behind door
15	Alarm horn
16	Circuit breaker open and close pushbuttons (provided with paralleling option) for EMCP4.4 option



Ratings Definitions and Conditions

Meets or Exceeds International Specifications:

AS1359, CSA 22.0 No. 100, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-33, NEMA MG1-16, UL1004B, NEC, CEC, 2006/42/ EEC, 2006/95/EC, 2004/108/EC, 2000/EC/14, UL142, ULc601, CGSB43, EGSA 101P, IEEE 43, UL1741, NFPA 99/110, OSHA, 97/68/EC, BS4999, BS5000, IEC60034-5.

Fuel Rates are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lb/U.S. gal).

Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding low sulfur fuel and biodiesel capability, consult your Cat dealer.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

Standby – Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator on the generator set is peak prime rated (as defined in ISO8528 at 30°C (86°F)).

Prime – Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation on the annual hours of operation and the generator can supply 10% overload power.

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