



Prime 115 kVA (92 kW) 50/60 Hz Switchable EU Stage V

Image shown may not reflect actual configuration.

Specifications

Frequency	Speed	Voltage	Pri	Prime		Breaker Rating (A)
Hz (rpm)		Voltage	kVA	kW	(A)	
		415 / 240V	115	92	160	
50 1500	1500	400 / 230V	115	92	166	200
		380 / 220V	115	92	175	
		480 / 277V	125	100	150	
60	1800	440 / 254V	125	100	164	200
		380 / 220V	120	96	182	

Cat® C4.4 Diesel Engine	Metric Imperial (English)		
Configuration	Inline 4-cylinder, 4-Stroke-Cycle, Water Cooled, Diesel		
Bore	105 mm 4.13 in		
Stroke	127 mm	5 in	
Displacement	4.4 L	268 in ³	
Aspiration	Turbocharged-Aftercooled (TA)		
Compression Ratio	18.23:1		
Engine rpm	1500 – 1800		
Aftercooler Type		AAC	
Turbocharger	Single		
Fuel System	Direct Injection, Rotary Pump		
Governor Type	Electronic Governor, Mechanical Actuator		
Fuel	See Fuel Specification Table		

LEHX21178-07 1 of 8



Benefits & Features

Rental-ready Features

- Dual wall tank base with drag / tie down points and robust skid plate
- Forklift pockets
- · Externally certified dual point lift
- Certified spark arrest system
- 50/60 Hz frequency switch via terminal link
- · EMC certified
- Robust busbar connection for lugged cable connection
- AC protected by limit switch on distribution door

Fuel/Emissions Strategy

EU Stage V

Single-source Supplier

- Factory designed and fully prototype tested with torsional vibration analysis available
- ISO 9001:2000 compliant facility

Cat® C4.4 Diesel Engine

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

After Treatment

- Diesel Exhaust Fluid (DEF) Tank located in discharge box, accessible through lockable access door
- DEF tank capacity is sufficient to last more than 34 hrs when fully filled (based on 75% Prime load)

XQCP Control Panel

- Fully featured power metering, protective relaying, engine/generator control and monitoring
- · Simple user-friendly interface and navigation

Available Options

- CE socket box with integrated MCB & RCBO protection
- Syncronising control panel and motorised breaker
- Anti condensation heater 230V AC
- Coolant heater 230V AC
- Permanent Magnet Generator (PMG) requires D350 AVR
- Earth leakage detection
- Lube oil sump pump
- Fuel Option Pack Inboard mounted 3-way valve for external fuel connection, electronic fuel gauge and Bund Level Sender
- Battery option 12V 950CCA maintenance-free CAT Batteries
- Battery Isolator Single pole (padlockable)
- 12V battery charger
- Control Panel noise breakout option
- Drains option Pack Oil and coolant drains piped to baseframe

Cat LC3100 Generator

- Designed to match performance and output of Cat diesel engines
- Coastal insulation protection
- · Self (shunt) excitation

Automatic Voltage Regulator (AVR) R250

- · Three-phase sensing
- Adjustable Volts-per-Hertz regulation
- Provides precise control, excellent block loading, and constant voltage in the normal operating range

Enclosure

- Galvanized sheet steel construction
- Two coat polyester powder-coated finish
- · 6 access doors for improved service access
- Secure design with safety glass control panel viewing window and padlockable or keylock access doors
- Fuel fill, battery and controls accessible only through lockable access doors

Environmental Considerations

- 110% spill containment of all on-board engine fluids and bund level alarm
- · Low noise enclosure

Cat Connect

Fleet management and asset tracking*

*Subject to local certifications

LEHX21178-07 2 of 8



Standard Equipment

Generator

- LC3114F frame; 3-phase random wound, 12 lead, selfexcited, 2/3 pitch
- Coastal insulation protection (CIP)

Cat® C4.4 Diesel Engine

- · Turbocharged, air-to-air aftercooler
- Electronic ECM control

After Treatment

- · Remote mounted Clean Emissions Module (CEM)
- Diesel Exhaust Fluid (DEF) Tank located in discharge box, accessible through lockable access door

Air Filter

Air cleaner, cyclonic/paper with dust cup and service indicator

Cooling System

- Package mounted radiator with vertical air discharge
- · High ambient performance
- · Fully guarded pusher fan
- · Low coolant level shutdown
- · 50% glycol mix with corrosion inhibitor

Charging System

 Charging alternator; 12V, heavy duty with integral regulator and belt guards

Starting System

- Single 12V electric starting motor
- Single 12V 950CCA maintenance-free battery with padlockable single-pole isolator switch

Fuel System

- 24 hr dual wall fuel tank (based on 75% Prime load)
- · Internal fuel fill
- · Engine mounted primary and secondary fuel filter
 - Primary filter (10 micron) with integral water separator (330 ml capacity)
 - o Secondary filter (4 micron) Automatic onboard priming pump
- · Mechanical fuel gauge

Control Panel

- XQCP set mounted digital controller
- 50/60 Hz frequency switch (via terminal link)
- Automatic Voltage Regulator (AVR) R250

Fuel Specifications

· Panel & enclosure mounted emergency stop

Distribution System

- Separate robust steel enclosures for control & distribution sections
- Distribution door protected with 12V DC shunt trip safety switch
- · 4 pole, 200A main circuit breaker
- Two-wire remote start/stop terminals and AC aux power connection for rapid starting

Mounting System

- Heavy duty steel baseframe with integral fuel tank (dual wall)
- Provides 110% spill containment including all on-board fluids
- Forklift pockets
- · Skid plates with drag points
- Generator set soft mounted using captive vibration mounts

Enclosure

- Sound attenuating, galvanised sheet steel enclosure with exceptional noise reduction performance
- Interior walls, ceilings and ducts insulated with precision cut noise insulating materials
- Sealed quarter-turn compression latches with key or padlock capabilities
- External side-mounted dual point lifting frame for improved hook access
- Powder coated with Cat Rental Power decals

Exhaust System

- Certified spark arresting 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 requirement

General

- Factory Tested
- Full manufacturer's warranty, O&M manuals

LEHX21178-07 3 of 8



Fuel Specifications

Specification Standard	Grade Class	Fuel Description
		Ultra-Low Sulphur Diesel Only (ULSD).
EU Stage V specifies Ultra Low Sulphur Diesel		ULSD with a maximum fuel sulphur level of either 15 or 20 ppm1 is required in all diesel applications using a diesel particulate filter (DPF and DOC).
Olita Low Galphar Dieser		Bio-diesel fuel may be used up to B20 (80% standard ULSD with 20% bio-fuel dilution by volume), provided an appropriate approved additive is used.

Oil Specifications

Specification Standard	Oil Description
EU Stage V Recommended oil 15W-40 CK-4 1E1867F	CAT DEO-ULS (Preferred)

DEF Specifications

Specification Standard	DEF Description
EU Stage V DEF Requirements ISO 22241-1	Diesel Exhaust Fluid

LEHX21178-07 4 of 8



Technical Data

Cat® Generator	
Frame size	LC3114F
Pitch	2/3
No. of poles	4
Excitation	Static regulated, brushless, self excited
Number of bearings	Single bearing, close coupled
Insulation	Class H
Temperature rise	125/40°C
Enclosure	Drip proof IP23
Overspeed capability — % of rated	25%
Voltage regulator	3-phase sensing with adjustable volts per hertz
Voltage regulation	Less than ± 0.5%
Wave form deviation	
Telephone Influence Factor (TIF)	Less than 2%
Harmonic Distortion (THD)	Less than 2%

Cat Generator Set			
	TMI Performance No. Units	Prime — 50 Hz P6324B	Prime — 60 Hz P6320A
Power Rating	kVA (kW)	115 (92)	120 (96)
Performance Specification			
Lubricating System Oil pan capacity	L (gal)	7 (1	.85)
Fuel System Fuel consumption — 100% Load 75% Load 50% Load Fuel tank capacity Running time @ 75% rating	L/hr (gal/hr) L/hr (gal/hr) L/hr (gal/hr) L (gal) Hr	27.3 (7.2) 20.4 (5.3) 13.9 (3.7) 518 (136.8) 25.4	28 (7.4) 21 (5.5) 27.3 (7.2) 518 (136.8) 24.7
After Treatment* DEF Tank Capacity	L (gal)	28 (7.4)
Cooling System Ambient capability Engine & radiator coolant capacity Engine coolant capacity	°C (°F) L (gal) L (gal)	36 (96.8) 19.5 (5.1) 9.1 (2.4)	43(109.4) 19.5 (5.1) 9.1 (2.4)
Air Requirements Combustion air flow	m³/min (cf m)	6.7 (236.6)	7.3 (257.7)
Exhaust System Exhaust flow at rated — dry exhaust Exhaust temperature at rated kW	m³/min (cf m) °C (°F)	14.1 (498) 530 (986)	15.6 (551) 530 (986)

LEHX21178-07 5 of 8



Technical Data (continued)

Cat Generator Set				
	TMI Performance No.	Prime — 50 Hz	Prime — 60 Hz	
	Units	P6324B	P6320A	
Noise Rating (with enclosure)** Sound Power* @ 7 meters @ 75% load @ 7 meters @ 100% load @ 1 meter @ 75% load @ 1 meter @ 100% load	dB(A)	92	96	
	dB(A)	64.9	68.9	
	dB(A)	65.9	69.6	
	dB(A)	75.3	78.9	
	dB(A)	75.8	80	
Emissions data at 100% Load NOx CO HC PM	g/hp-hr g/hp-hr g/hp-hr g/hp-hr	TBC TBC TBC TBC	TBC TBC TBC TBC	

^{**}Guaranteed sound power as per 2000/14/EC

LEHX21178-07 6 of 8

For full Engine & Emissions data please refer to TMI using the engine performance no.



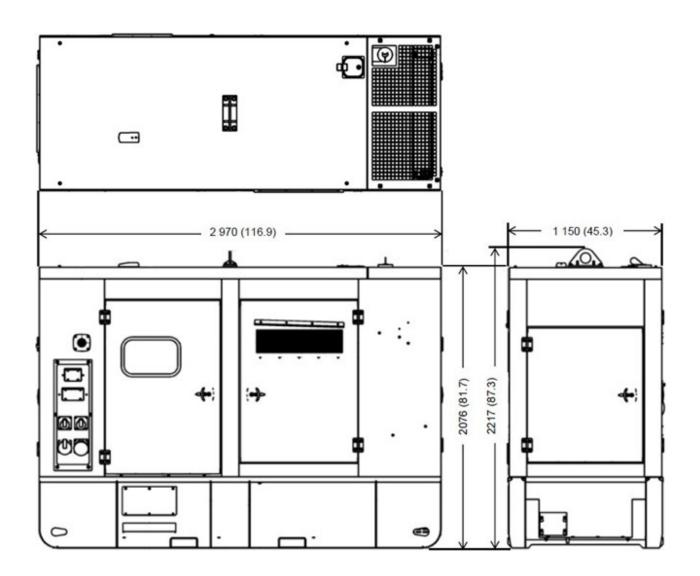
Weights & Dimensions

Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	With Lube Oil & Coolant Kg (lb)	With Fuel (Full Tank), Lube Oil & Coolant Kg (lb)
2970 (116.9)	1150 (45.3)	2076 (81.7)	2077 (4579)	2527 (5571)

Socket Box Op	tions					
Sockets	15A	16A	32A	50A	63A	125A
SBOX3	_	2x1ph+N+E	1x3ph+N+E	-	1x3ph+N+E	_
SBOX7	_	1x3ph+N+E	1x3ph+N+E	_	1x3ph+N+E	1x3ph+N+E

Layout for General Dimensions

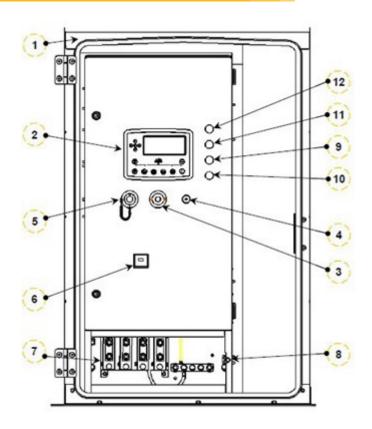
Dimensions in millimeters (inches)



LEHX21178-07 7 of 8



Item	Description
1	Steel enclosure with hinged, lockable door (not shown)
2	XQCP digital generator set controller
3	Emergency Stop button
4	Alarm
5	Service tool connector
6	Circuit breaker. 4-pole molded case, 630A
7	Main bus connection (bus bars with 14 mm holes)
8	Micro safety switch for bus bar door
9	Manual holder
10	Emission system failure lamp
11	Low DEF level lamp



Rating Definitions and Conditions

Designed to Meet Specifications: ISO 8528, EN 12601, EN 60204-1, ISO 3046, IEC 60034.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO 3046 standard conditions.

Prime — Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year.

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 lbs/U.S. gal).

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