Shown without optional trailer

STANDBY 200 kW
PRIME 182 kW
POWER MODULE
60 Hz 1800 rpm 480V

Frequency	Voltage	Standby kW (kVA)	Prime kW (kVA)
60 Hz	480/277V	200 (250)	182 (227.5)
60 Hz	240/139V	200 (250)	182 (227.5)
60 Hz	208/120V	200 (250)	182 (227.5)

FEATURES

FUEL/EMISSIONS STRATEGY
- EPA Tier 4 Interim and CARB Certified for Non-Road Mobile applications at all 60 Hz ratings

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

CAT® C7.1 Interim 4 ACERT™ DIESEL ENGINE
- Utilizes ACERT Technology and Cat NOx Reduction System (NRS)
- Cat CEM exhaust after treatment
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine control

CAT LC SERIES GENERATOR
- Matched to the performance and output characteristics of Cat engines
- UL 1446 Recognized Class H insulation

CAT EMCP 4.2 CONTROL PANEL
- Fully featured power metering, protective relaying and engine/generator control and monitoring
- Simple user friendly interface and navigation
- Automatic set-point adjustment

CAT DIGITAL VOLTAGE REGULATOR (CDVR)
- Three-phase sensing
- Adjustable volts-per-hertz regulation
- Provides precise control, excellent block loading, and constant voltage in the normal operating range

ENCLOSURE
- Highly corrosion resistant 12 gauge galvanealed sheet steel construction
- Two coat polyester powder-coated finish
- Six access doors for ease of maintenance
- Secure and safe design with safety glass control panel viewing window with lockable access door
- Fuel fill and battery can only be reached through lockable access doors
- Certified single point lifting eye and lifting points on the base frame

DISTRIBUTION PANEL
- Switchable voltage from 480/277V 3 phase to 240/139V 3 phase (can be adjusted down to 208/120V 3 Phase), 240/120V 1 phase

REAR CUSTOMER ACCESS
- Separate control panel and distribution panel access doors
- Hinged door over main bus connectors
- Emergency stop on panel
- Remote start/stop contacts

ENVIRONMENTALLY FRIENDLY DESIGN
- EPA Tier 4Interim certified
- 110% spill containment of onboard engine fluids
- Meets 71 dB(A) at 7 m per SAE J1074

RENTAL READY FEATURES
- Anti-condensation heater 110-120 VAC
- Coolant heater 110-120 VAC
- UL Listed battery charger
- Solar powered battery maintainer
- Cam lock distribution system

FACTORY INSTALLED STANDARD EQUIPMENT

SYSTEM	STANDARD EQUIPMENT
Air Inlet	Air cleaner, two stage cyclonic/paper with dust cup and service indicator Series turbocharger and air-to-air aftercooler
Charging System	12V - 100 Amp charging alternator UL/CSA listed 120V-10A battery charger Solar powered battery maintainer
Control Panel	EMCP 4.2 genset mounted controller Automatic start/stop with cool down timer Idle/rated switch Generator Protection features: 32, 32RV, 46, 50/51, 27/59, 81 O/U Metering display: voltage, current, frequency, power factor, kW, WHM, and kVAR
Cooling System	Package mounted radiator with vertical air discharge provides 43° C ambient capability at standby rating 120VAC coolant heater, fuse protected, thermostatically controlled, automatically disconnected on start-up Coolant drain line with internal control valve piped to base-frame Coolant sight gauge, level switch and shutdown 50% Coolant antifreeze with corrosion inhibitor
Distribution System	NEMA 1 steel enclosure with separate hinged, lockable door Main bus connections with hinged load cover with clear Plexiglas window closed for operation 4-pole 800A 100% UL circuit breaker with 12V DC shunt trip wired to load door safety switch Multiple duplex and twist lock receptacles with individual circuit breakers Two wire remote start/stop terminals and 120 VAC shore power connection for rapid starting CamLock distribution system
Enclosure	Sound attenuating, 12gauge galvanealed sheet metal enclosure limits overall noise to 71 dB(A) @ 7m (23') Interior walls and ceilings insulated with sound attenuating foam Black stainless steel pad-lockable latches, doorkeepers on all doors and zinc die-cast hinges/grab handles All components are pretreated for anti-corrosive protection prior to painting with polyester powder coat Painted Cat power module white with Cat rental decals
Engine	EPA approved Tier 4 Interim Cat C7.1 ATAAC heavy duty diesel engine Electronic ADEM™ A4 controls 12VDC energized to shutdown solenoid
Exhaust System	Cat Clean Emissions Module and integrated silencer with flexible connectors
Fuel System	350 gal fuel tank, UL listed, double wall, 24 hr runtime @ 100% prime rating Fuel cooler, primary fuel filters with integral water separator, and engine mounted secondary Switch operated electric priming pump Interconnected three way fuel for switching between remote and integral tank
Generator	Three-phase, random wound, 12-lead design, 0.667 pitch Screen protected and drip proof, self regulating, brushless generator with fully interconnected damper windings, IC06 cooling system and sealed for life bearings Class H insulation with coastal insulation protection. Windings are impregnated in a triple dip, thermo-setting moisture, oil and acid resisting polyester varnish. Heavy coat of anti-tracking varnish for additional protection against moisture and condensation Permanent magnet provides 350% short circuit, enhanced motor starting and non-linear performance 120VAC anti-condensation heater Cat digital voltage regulator (Cat DVR) with VAR/PF control
Lube System	Lubricating oil system including pump, integral oil cooler, lube oil, filter, open crankcase breather with filter Oil drain line with internal valve routed to connection point accessible from exterior 500 hour oil change intervals
Mounting System	Generator set soft mounted to the heavy duty, fabricated steel base frame using captive anti-vibration pads between the generator set and base-frame to ensure complete isolation of rotating assemblies Base frame includes integral fuel tank and provides 110% spill containment of all engine fluids
Starting System	Single 12V electric starting motor on engine One 12V-1000 CCA Cat brand maintenance free battery with disconnect switch, battery rack, and cables Glow plugs fitted on the engine
General	Factory testing of standard generator set and complete power module Full manufacturer's warranty O&M manuals
	OPTIONAL EQUIPMENT
Available Options	Canadian Standards Authority certification (CSA) Transport Canada compliant fuel tank (IBC CGSB43) Tandem axle trailers with either hydraulic or electric brakes

TECHNICAL DATA

CAT GENERATOR

Frame Size LC5034H
Pitch 0.667
No. of poles 4
Excitation . . . . . Static regulated brushless PM excited
Number of bearings. . . . . Single bearing, close coupled
Insulation. . . . . Class H
Enclosure . . . . . Drip proof IP23
Alignment. . . . . Pilot shaft
Overspeed capability – % of rated . . . . . ….125% of rated
Voltage regulator . . . . . 3 phase sensing with Volts-per-Hertz
Voltage regulation. . . . . Less than ± 1⁄2% voltage gain
Adjustable to compensate for engine speed droop and line loss
Wave form deviation 2%
Telephone Influence Factor (TIF). . . . . Less than 50
Harmonic Distortion (THD). . . . . Less than 5%

ENGINE

Manufacturer ……..Caterpillar
Model……C7.1
Type ……4-cycle
Cylinder configuration ……In-line 6
Displacement – L (cu in) . . . . . 7.01 L (427.7 in^3)
Bore – mm (in). . . . . 105mm (4.13 in)
Stroke – mm (in) . . . . . 135 mm (5.3 in)
Compression ratio. 16.5:1
Engine RPM 2200
Aspiration. . . . . ATAAC
Fuel system . . . . . MEUIC
Governor type . . . . . ADEM™ A4
Fuel…… Requires ULSD

Materials and specifications are subject to change without notice.

Generator Set Technical Data		60Hz	60Hz
	Units	Standby	Prime
Power Rating	kW (KVA)	200 (250)	182 (227.5)
Performance Specification		DM	DM
Lubricating System			
Oil pan capacity	L (gal)	16(4.3)	16(4.3)
Fuel System			
Fuel consumption			
100% Load	L/hr (gal/hr)	59.5 (15.7)	53.1 (14.0)
75% Load	L/hr (gal/hr)	44.6 (11.8)	39.8 (10.5)
50% Load	L/hr (gal/hr)	29.8 (7.9)	27.8 (7.3)
Fuel Tank Capacity	L (gal)	1295 (350)	1295 (350)
Running time @ 75% rating	Hr	29	33
Cooling System			
Ambient Capability	°C (°F)	43	43
Engine & Radiator coolant capacity	L (gal)	28 (7.6)	28 (7.6)
Engine coolant capacity	L (gal)	11.5 (3.1)	11.5 (3.1)
Air Requirements			
Combustion air flow	m_3/min (cfm)	14.3 (505)	13.6 (480.3)
Maximum dirty air cleaner restriction	kPa (in H_2O)		
Exhaust System			
Exhaust flow at rated	m_3/min (cfm)	N/A	13.1 (462.6)
Exhaust temperature at rated kW – dry exhaust	°C (°F)	506 (942.8)	N/A
Noise Rating (with enclosure)*			
@ 7 meters (23 feet)	dB(A)	71	71
Emissions (Tier 4 interim regulation)			
NOx	g/hp-hr	1.9	1.9
CO	g/hp-hr	.2	.2
HC	g/hp-hr	.02	.02
PM	g/hp-hr	.005	.005

Model	Length mm (in)	Width mm (in)	Height mm (in)	Weight with Lube oil and Coolant kg (lb)	Weight with fuel, lube oil and coolant Kg (lb)
XQ200 w/o trailer	4083 (161)	1401(52)	2162(85)	4053 (8916)	5300 (11660)
XQ200 w/ trailer	6019 (237)	2235(88)	2577(101)	4969 (10932)	6300 (13860)

CONTROL PANEL

FEATURES

- EMCP 4.2 engine operator interface
- Battery charger indicator
- Fuel level display
- Idle /rated switch
- Panel light momentary pushbutton
- Voltage adjust potentiometer
- Regeneration alarm indications for DPF 80% soot level and high exhaust temperature
- Coolant alarm
- Emergency stop pushbutton
- Alarm horn
- Convenient service access for Cat (service tools not included).

EMCP 4.2 ENGINE OPERATOR INTERFACE

- Controls
  - Run/Auto/Stop
  - Emergency Stop
  - Speed Adjust
  - Cycle crank
  - Cool-down timer
- Engine Monitoring:
  - RPM
  - DC Volts
  - Operating hours
  - Oil pressure
  - Coolant Temperature
  - Oil Temperature
- True RMS AC metering, 3 phase
  - L-L volts, L-N volts, phase amps
  - Average volts, Amps, Frequency
  - ekW, kVA, kVAR, kW-hr, %kW
  - Power Factor (Average, Phase)
  - kW-hr, kVA-hr (total)
- Shutdowns with common indicating light for:
  - Low oil pressure
  - Overspeed
  - High Coolant Temp
  - High Oil Temperature
  - Failure to Start (Overcrank)
  - Emergency stop
  - Low Coolant level
- Fuel level monitoring and control.

EMCP 4.2 GENERATOR PROTECTIVE RELAYING

- Generator protective features provided by EMCP 4.2
  - Phase over/under voltage (Device 27/59)
  - Over/Under frequency (Device 81 O/U)
  - Reverse Power (Device 32/32RV)
  - Current Balance (46)
  - Overcurrent (Device 50/51) (GCB trip unit)
  - Loss of Excitation (Device 40) (CDVR)
  - Generator Phase Sequence

DISTRIBUTION PANEL

- One 4 pole 800 A MCCB, with 12 VDC shunt trip coil activated on any monitored engine or electrical
- Under-voltage release NEMA 1 steel enclosure with hinged lockable door with clear Plexiglas window
- Bus bars are sized for full load capacity of the generator set at 0.8 power factor.
- Includes ground bus, tin-plated copper, for connection to the generator frame ground and field ground cable.
- Customer convenience panel with multiple output receptacles:
  1 – 125V, 30 A single phase auxiliary supply
  2 – 240V, 50A California style Twist Lock.
  2 – 120/208V, 20A Twist Lock.
  2 – 120V, 20A Duplex Receptacles with GFI..
- CamLock distribution system
- Consistent 120VAC output from GFCI receptacles independent of bus bar voltage

AC DISTRIBUTION

- Provides 120 VAC for all module accessories.
- Includes controls to de-energize jacket water heaters, battery charger, and generator space heater when the engine is running.

RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications:
CSA 22.0 No. 100, IEC60034-22, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-16, UL1004B, NEC,CEC, 2006/42/EEC, 2006/95/EC, 2004/108/EC, 2000/EC/14, UL142, Ulc601, IBC CGSB43, API 546, EGSA 101P, IEEE 43, DEFRA, UL1741, NFPA 99/110, OSHA, 97/68/EC, BS4999, BS5000, IEC60034-5

Fuel Rates are based on fuel oil of 35o API {16oC (60oF)} gravity having an LHV of 42780 kj/kg (18390 Btu/lb) when used at 29oC (85oF) and weighing 838.9 g/liter (7.001 /b/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 ISO0346 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 ISO852 at 30° C (86° F).

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

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