



**STANDBY
PRIME**

**175 kW
157.5 kW**

60 Hz

Voltage	Standby kW (kVA)	Prime kW (kVA)
208/120V 3 phase	175 (218.8)	157.5 (196.9)
480/277V 3 phase	175 (218.8)	157.5 (196.9)

FEATURES

EPA TIER 3 AND CARB CERTIFIED FOR NON-ROAD MOBILE APPLICATIONS

SOUND ATTENUATED ENCLOSURE

- The fully weatherproof enclosure incorporates an internally mounted exhaust silencer and is of extremely rugged construction in order to withstand the rough handling common with rental applications.
- Highly corrosion resistant construction.
 - Body made from sheet steel components pretreated with zinc phosphate prior to polyester powder coating at 200° C (392° F)
 - Black stainless steel padlockable latches.
 - Zinc die cast hinges/grab handles.
- Excellent access for maintenance.
 - Two large doors on each side. Two rear doors for distribution/control panel.
 - Hinged front door for air discharge box access.
 - Lube oil and cooling water drains piped to exterior of the enclosure.
 - Doorkeepers on all doors.
- Security and safety.
 - Safety glass control panel viewing window in a lockable access door.
 - Cooling fan and battery charging alternator fully guarded.
 - Fuel fill and battery can only be reached through lockable access doors.
- Transportability.
 - Tested and certified single point lifting eye.
 - Lifting points on baseframe.

ROBUST DESIGN FOR RENTAL ENVIRONMENT

- Packages designed to survive in rugged environments.
- Dual wall UL142 fuel tank base with 24 hour fuel supply.

DISTRIBUTION PANEL

- Switchable voltage from 480/277V 3-phase to 240/139V 3-phase (can be adjusted down to 208/120V 3-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 3 off-highway compliant C6.6 engine.
- 110% Spill containment for all fluids.
- Sound attenuated to 73 dBA for low noise.

RENTAL READY FEATURES

- Anti-condensation heater 110-120 volt AC.
- Coolant heater 110-120 volt AC.
- UL Listed 10A Battery charger.
- Cam lock distribution system.

OPTIONS

- Tandem axle trailers with hydraulic or electric brakes.
- CSA Certification.

FACTORY INSTALLED STANDARD AND OPTIONAL FEATURES

System	Standard Features
Air Inlet	<ul style="list-style-type: none"> • Air cleaner, two stage cyclonic/paper with dust cup and service indicator • Turbocharger and Air-to-air aftercooler
Charging System	<ul style="list-style-type: none"> • 12V – 100A charging alternator with integral regulator and fully guarded • 10A battery charger (panel mounted) with meter
Control Panel	<ul style="list-style-type: none"> • Analog auto-start control panel in a vibration isolated enclosure with hinged lockable door and clear plexi-glass viewing window • Idle/rated and panel light switches, emergency stop pushbutton • Voltage/Amperage selection switch and voltage adjust potentiometer • Fault indicators for: Low coolant level shutdown, high coolant temp shutdown, low fuel level/leak alarm, low oil pressure shutdown, over-speed and emergency stop shutdown • Gauges for: oil pressure, engine temperature, engine hours, voltage, amperage, frequency, fuel level, battery voltage
Cooling System	<ul style="list-style-type: none"> • Radiator package mounted with vertical discharge designed for 43° C ambient capability • 50% coolant antifreeze with corrosion inhibitor • Blower fan, fan drive, and belts complete with protection guards • 120V AC coolant heater, fuse protected, thermostatically controlled, automatically disconnected on start-up • Coolant drain lines with valves piped to base-frame
Distribution Panel	<ul style="list-style-type: none"> • NEMA 1 steel enclosure with separate, hinged lockable door for load section • Main bus connections with hinged load cover with clear plexiglass window which must be closed during operation • 3-pole 800A 100% rated UL circuit breaker with 12 VDC shunt trip wired to load door safety switch • Multiple duplex and twistlock output receptacles with individual circuit breakers • Two wire start/stop connection terminals and 120V AC shore power connection for rapid emergency starting • CamLock distribution system
Enclosure	<ul style="list-style-type: none"> • Sound attenuating, 12-gauge steel enclosure of modular panel construction limits overall noise 73 dBA at 7 m (23 feet) • Black stainless steel pad-lockable latches, doorkeepers on all doors and Zinc die-cast hinges/grab handles • Hinged, lockable access door for easy radiator maintenance • All components are pretreated for anti-corrosive protection prior to painting with polyester powder at 200° C
Engine	<ul style="list-style-type: none"> • Heavy duty industrial Tier 3 compliant Caterpillar C6.6 with electronic governor compliant with BS5514, Class A1 • 12V DC energized to shutdown solenoid. • Oil pressure and coolant temperature/level shutdowns switches and gauge senders • High gloss polyurethane paint for durability and scuff resistance
Exhaust System	<ul style="list-style-type: none"> • Critical exhaust silencer with flexible connector and vertical discharge • Heat guards provide protection from the exhaust pipe
Fuel System	<ul style="list-style-type: none"> • Integral UL142 dual wall fuel tank in base-frame with 264 gallon capacity (provides 24 hours of operation at 75% of prime rating) • Cartridge type, replaceable element fuel filter with integrated manual priming pump • Fuel cooler, fuel/water separator and primary fuel filter • Interconnected, 3-way valve for switching fuel supply between remote and integral fuel
Generator	<ul style="list-style-type: none"> • 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 load performance • Fully sealed, R448 automatic voltage regulator maintains the voltage within ± 0.5% at steady state from no load to full load • 120 VAC anti-condensation heater, automatically disconnected on start-up • Reconnectable voltage output
Lube System	<ul style="list-style-type: none"> • Cartridge type full flow lube oil filters (spin-on) and dipstick • Lubricating oil, oil cooler, crankcase breather with collection assembly • Oil drain lines with valve
Mounting System	<ul style="list-style-type: none"> • Engine-generator are directly coupled using SAE flange prohibiting misalignment and the engine flywheel is flexibly coupled to the generator rotor • Generator set soft mounted to the heavy duty, fabricated steel base-frame using captive anti-vibration pads between generator set and base-frame to ensure complete isolation of the rotating assemblies • Base-frame includes integral fuel tank and provides 110% spill containment
Starting System	<ul style="list-style-type: none"> • Single, 12V starting motor on engine • Dual 12V (950 CCA) Cat brand maintenance free batteries with disconnect switch, battery rack, cables, installed on the base. • Glow plugs fitted on the engine
General	<ul style="list-style-type: none"> • Full manufacturer's warranty • Factory testing • Caterpillar yellow paint on engine and generator, black on base, lifting arch, and radiator, white enclosure • Complete O&M manuals • The equipment meets the following quality standards: BS49999, BS5000, BS5514, IEC60034, EN6100-6, NEMA MG1-22.
System	Optional Features
Mounting	<ul style="list-style-type: none"> • 5000 lb, tandem axle trailers with torflex suspension and either hydraulic or electric brakes

XQ175

Materials and specifications are subject to change without notice.

Generator Set Technical Data – 1,800 rpm/60 Hz			Standby		Prime	
	kW	(kVA)	175	(218.8)	157.5	(196.9)
Lubricating System Oil type required: API CH-4 Total oil capacity Oil pan	L L	(U.S. gal) (U.S. gal)	16.5 15.5	(4.4) (4.1)	16.5 15.5	(4.4) (4.1)
Fuel System Recommended fuel: #2 diesel Generator set fuel consumption 100% load 75% load 50% load Fuel tank capacity	L/hr L/hr L/hr L	(gal/hr) (gal/hr) (gal/hr) (U.S. gal)	52.7 41.4 34.4 988	(13.9) (10.9) (9.1) (264)	49.4 40.5 33.0 988	(13.1) (10.7) (8.7) (264)
Cooling System Radiator system capacity including engine	L	(U.S. gal)	21	(5.5)	21	(5.5)
Air Requirements Combustion air flow Maximum air cleaner restriction Radiator cooling air Generator cooling air	m ³ /min kPa m ³ /min m ³ /min	(cfm) (in H ₂ O) (cfm) (cfm)	12.6 8.0 455 30.6	(445) (32.1) (16,082) (1,081)	12.6 8.0 455 30.6	(445) (32.1) (16,082) (1,081)
Exhaust System Exhaust flow at rated kW Exhaust temperature at rated kW – dry exhaust	m ³ /min °C	(cfm) (°F)	29.7 677	(1,049) (1,251)	28.6 666	(1010) (1231)
Generator Set Noise Rating [with enclosure at 7 meters (23 feet)]	dBA		73		73	

SPECIFICATIONS

GENERATOR

Voltage regulation ± 0.5% at steady state from
no load to full load
Frequency ± 0.25% for constant load from
no load to 100% load
Waveform distortion THD < 4%, at no load
Radio interference Compliance with EN61000-6
Telephone interference..... TIF < 50, THF < 2%
Overspeed limit 2,250 rpm
Insulation..... Class H
Temperature rise Within Class H limits
Available voltages Reconnectable voltage
output: 480/277 volt,
208/120 volt, 240/139 volt 3-phase
Deration Consult factory for available outputs
Ratings..... At 30° C (86° F), 152.4 m (500 ft)
60% humidity, 0.8 pf

ENGINE

Manufacturer Caterpillar
Model C6.6
Type 4-cycle
Aspiration ATAAC
Cylinder configuration..... In-line 6
Displacement – L (cu in)..... 6.6 (403)
Bore – mm (in) 105 (4.13)
Stroke – mm (in) 127 (5.00)
Compression ratio 16.2:1
Governor
Type Electronic
Class G2
Piston speed – m/sec (ft/sec) 7.62 (25.0)
Engine speed – rpm..... 1,800
Maximum power at rated rpm – kW (hp)
Standby 204.3 (273.9)
Prime 185.7 (249)
BMEP – kPa (psi)
Standby..... 1103 (160.0)
Prime 1003 (145.5)

CONTROL PANEL

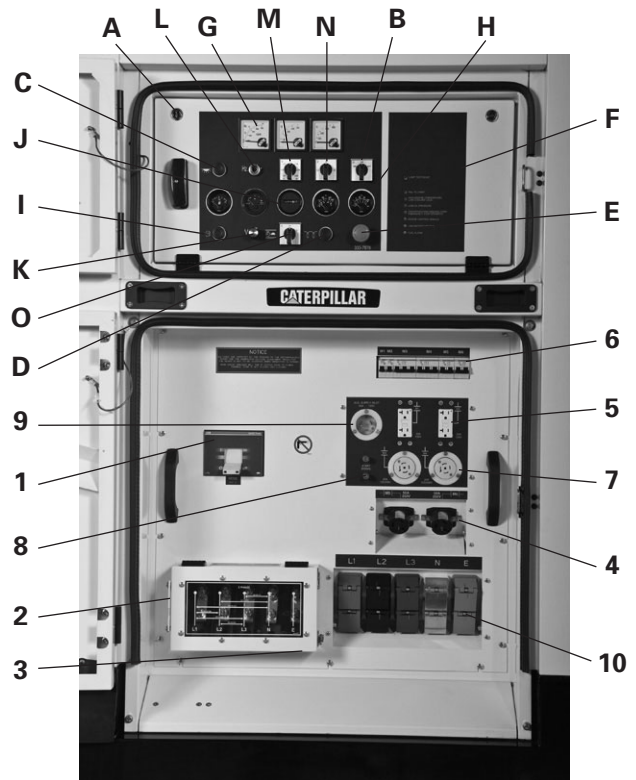
- A** Steel enclosure with hinged lockable door with viewing window.
- B** Manual run/off.
- C** Panel light ON/OFF switch.
- D** Pre-heat pushbutton.
- E** Red emergency stop pushbutton.
- F** Lamp test/reset pushbutton.
- G** AC instrumentation: 1-voltmeter, 1-ammeter, 1-frequency meter.
- H** Engine gauges for: oil pressure, coolant temperature, battery volts, fuel level.
- I** Fuel level display with momentary activation pushbutton.
- J** Hours run meter.
- K** Voltage adjust potentiometer.
- L** Frequency adjust potentiometer.
- M** 1 — 7 Position voltmeter phase selector switch.
- N** 1 — 4 Position ammeter phase selector switch.
- O** Idle/Run Switch

OTHER FEATURES

- Shutdowns: high coolant temperature/low coolant level, low oil pressure, overcrank, overspeed.
- Low fuel level/fuel tank leak alarm.
- Solid state control logic.
- Autostart standard.
- Cycle cranking with 3 adjustable time crank/rest periods.
- Battery charger, 10 Amp constant voltage, UL listed.

DISTRIBUTION PANEL

- 1** 1 — 3 Pole MCCB with solid neutral (4 Wire). UL/CSA listed with shunt trip. Integral trip unit for thermal and magnetic overload protection on MCCB.
- 2** Main bus connection studs enclosed with hinged transparent cover for easy access and operator safety.
- 3** Cover for bus studs includes safety lockout feature to keep unit from operating with door open.
- 4** 2 — Single phase — California style Twistlocks, 50 Amps @ 208 Volt phase to phase, 120 Volt phase to neutral (adjustable to 240/139).



- 5** 2 — Single phase — GFCI Duplex receptacles, 20 Amps @ 120 Volts.***
- 6** Individual circuit breaker protection for receptacles. Also act as on/off switches.
- 7** 2 — 3-phase NEMA locking receptacles, 20 Amps at 208/120V
- 8** Two wire remote start connection terminals.
- 9** 1 — 30A, 125V single phase NEMA locking inlet receptacle
- 10** Camlock Connections

*** Receptacles not for use with unit operating at 480/277V or 240/139V 3 phase.

Model	Length mm (in)	Width mm (in)	Height mm (in)	Weight	
				With Lube Oil and Coolant kg (lb)	With Fuel, Lube Oil and Coolant kg (lb)
XQ175	3722.5 (146.55)	1157 (44.55)	2159.8 (85.03)	3145 (6,934)	4015 (8,852)
XQ175 with trailer	5276.9 (207.75)	1943.1 (76.5)	2528.4 (99.54)	3940.5 (8,687)	4810.5 (10,605)

RATING DEFINITIONS

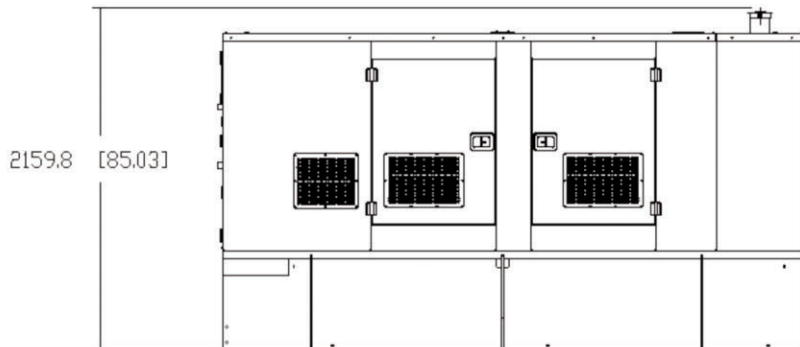
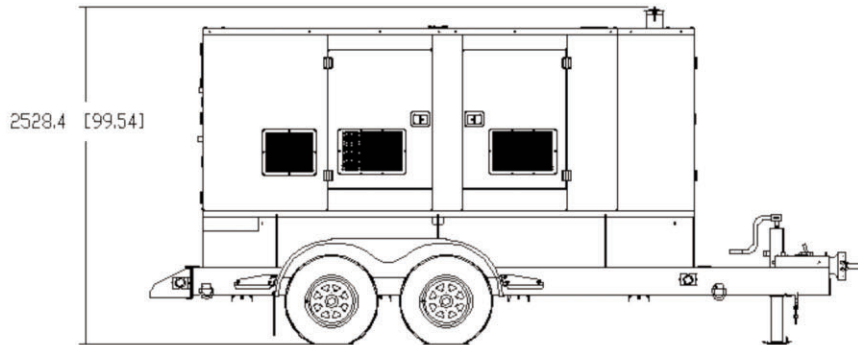
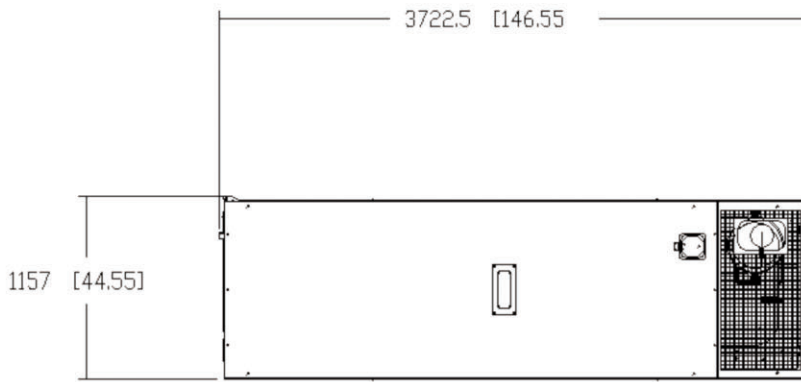
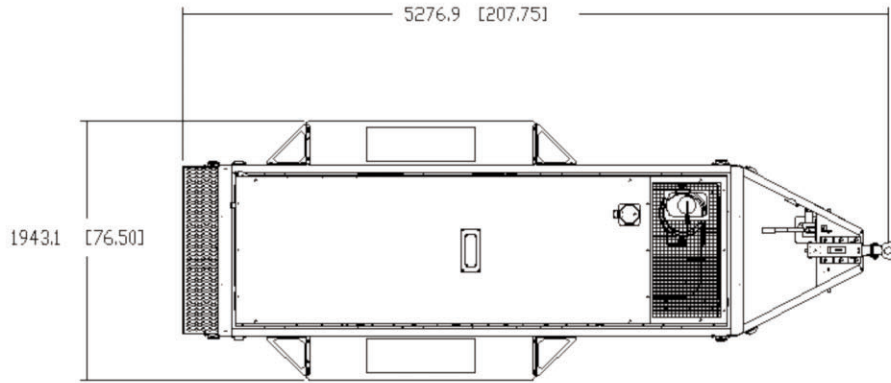
Standby – Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator on the generator set is peak prime rated (as defined in ISO8528-3) at 30° C (86° F).

Prime – Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and the generator set can supply 10% overload power for 1 hour in 12 hours.

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