

1250 KW DIESEL GENERATOR XQ1250



24-HOUR SERVICE
877-291-3354
www.ers-cat.com

**Energy Rental
Solutions**



TECHNICAL DATA

XQ1250		XQ1250			
Rating Information	Engine 60 Hz – 1800 rpm Prime power rating (w/10% overload) @ 0.8PF with fan Voltage Aspiration	kW	3512 1250 480 TA		
Physical Factors – Package with undercarriage	Length Width Height Shipping weight	cm in cm in cm in kg lb	1219 480 234 92 411 162 25 600 56 500		
Lubrication & Cooling Systems	Engine lubricating oil capacity Engine coolant capacity w/radiator (with 50% glycol)	L qts L gal	348 368 318 84		
Engine Performance Data @ Rated Conditions	Fuel tank capacity Fuel consumption prime (100% load) w/fan per ISO 3046/1 +55, -0% tolerance Fuel consumption (75% load) w/fan Fuel consumption (75% load) w/fan Deration: Altitude – 3.0% per 305 m (1000 ft) above Temperature – 1.9% per 5.5° C (10° F) above at sea level or degree above standard ambient at altitude above 760 m (2500 ft). Sound level – Prime +10% @ 16 m (50 ft) Log Average 4 pt.	L gal L/Hr gph L/Hr gph L/Hr gph m ft ° C ° F dba	4738 1250 333.6 88.2 248.2 65.6 175.0 46.3 1225 4019 55 131 69		
		L	H	W	
cm	in	cm	in	cm	in
1219	480	290	114	234	92

24-HOUR SERVICE
877-291-3354
www.ers-cat.com

**Energy Rental
Solutions**



STANDARD CONTROLS

12 m (40 ft) containers (480 V/60 Hz, 400 V/50 Hz)

Floorstanding switchgear includes the following functions and features:

Electronic Modular Control Panel (EMCP II)

Components Generator Set Control (GSC)

Monitoring

Sequentially rotating, backlit LCD display of engine hours, engine rpm, DC battery voltage, oil pressure, and water temperature. Includes pushbutton to hold display on any single parameter.

Protection

Shutdowns:

Overspeed, overcrank, high water temperature, low oil pressure, and emergency stop. With LED indicator for each condition.

Alarms:

Low coolant level

AC Metering

Three-phase volts (L-L), amperes and frequency with phase select pushbutton, on backlit LCD. Metering accuracy is 0.5%.

Control

Automatic starting with field adjustable cycle crank, failure to start (overcrank), and cooldown timer.

Programming and Diagnostics

Includes field programmable set-points for engine control and monitoring variables and self diagnosis of EMCP II system component and wiring failures.

Alarm Module

Flashing LED warnings for: low coolant temperature, high coolant temperature (pre-alarm), low oil pressure (pre-alarm), engine control switch not in automatic, and low DC voltage. Includes alarm horn and acknowledge pushbutton.

Engine Control Switch

Snap action rotary switch, four-position – off/reset, automatic, manual, stop/cooldown. Off/reset for engine shutdown and resetting faults, automatic remote starting by customer contact closure, manual for local starting and manual paralleling, stop/cooldo for manual operation cooldown.

Alarm Acknowledge/Lamp Test Switch

Three-position, spring return to center switch for alarm acknowledge and lamp test of all discrete indicating lamps. Lamp test shall also sound the alarm horn.

Annunciation Circuits

Upon receipt of an alarm or shutdown condition, the horn shall sound and an LED shall flash. Upon acknowledgement from alarm acknowledge/lamp test switch, the horn shall be silenced and the lamp steadied. LED shall be extinguished when ECS is placed in the off/reset position if the alarm condition has been corrected. Circuits are recurring such that the LED shall flash and the horn sound, should another fault occur even prior to correction of the initial fault.

Emergency Stop Pushbutton

Mushroom head, twist to reset, causes engine shutdown

and tripping of the generator circuit breaker. Prevents engine starting when depressed.

Manual Paralleling

Controls consisting of reverse power relay, synchronizing lights, and switch. Reverse power condition causes tripping of the generator circuit breaker, immediate engine shutdown, flashing of indicating lamp, and sounding of alarm horn.

Circuit Breaker

Fix mounted, three-pole, manually operated, molded case circuit breaker with solid state trip unit for overload (time overcurrent) and fault (instantaneous) protection. Includes DC shunt trip coil activated on any generator set monitored fault. Circuit breaker is sized for full load capacity of the generator set at 0.8 power factor.

Load Share Governor

Electronic load sharing governor with speed adjust potentiometer, idle/rated switch, and isochronous/droop switch.

Voltage Regulator

Standard Caterpillar generator-mounted VR3 voltage regulator with voltage adjust rheostat mounted in the floor standing switchgear.

Current Transformers (3)

Five-ampere secondary with shorting terminal strips

Potential Transformers (3)

120VAC secondary with primary and secondary fuse protection, two connected to the generator side of the circuit breaker, one connected to the load side of the circuit breaker.

Bus Bars

Three-phase plus fully rated neutral bus bars with NEMA standard hole pattern for connection of customer load cables and generator cables. Bus bars are sized for full load capacity of the generator set at 0.8 power factor. Also includes ground bus, connected to the generator frame ground and container frame with holes for connection of field ground cable. Bus bars are accessible from outside of the power module via hinged, lockable cable access door.

Accessory Power

3500 Power Modules

Three 120VAC (60 Hz units) or 230VAC (50 Hz units) shore power connections for jacket water heaters, generator space heater, and battery charger.

Battery Charger

24VDC/20A battery charger with float/equalize modes and charging ammeter.

24-HOUR SERVICE

877-291-3354

www.ers-cat.com

Energy Rental
Solutions

