

Arrangement shown  
with optional trailer

## XQ230 SOUND ATTENUATED DUAL VOLTAGE 50/60 Hz

### FEATURES

#### EMISSIONS

- EPA Tier 3 and CARB Emissions Certified for non-road mobile applications at all 60 Hz and 50 Hz ratings

#### CAT C9 ATAAC DIESEL ENGINE

- Utilizes ACERT® Technology
- Reliable, rugged, durable design
- Field-proven in multiple applications worldwide
- Four-stroke-cycle diesel engine combines durability with minimum weight while providing dependability and economy
- 50/60 Hz convertibility

#### CAT SR4B GENERATOR

- Designed to match performance and output characteristics of diesel engines
- Permanent magnet excitation
- Segregated AC/DC, low voltage accessory box provides single point access to accessory connections

#### ENCLOSURE

- Made with 12-gauge steel
- Single point lifting eye
- Sound attenuated
- Convenient hand holds and steps for safe operation
- Two coat polyester powder-coated finish

#### ENVIRONMENTALLY FRIENDLY DESIGN

- Sound attenuated for low noise operation
- OSHA compliant safe design
- 110% spill containment for coolant and oil
- UL142 certified dual wall fuel tank

#### MULTI-VOLTAGE DISTRIBUTION PANEL

- Simultaneous dual voltage
- Load door safety switch
- Rust-free hinges on all doors
- Adequate space for line and plug connection without interference
- Remote start and stop contacts

#### SINGLE-SOURCE SUPPLIER

- Complete systems designed at Caterpillar ISO 9001:2000 certified facilities
- **Certified Prototype Tested** with torsional analysis

#### WORLDWIDE PRODUCT SUPPORT

- Worldwide parts availability through the Caterpillar dealer network
- With over 1,875 dealer outlets operating in 200 countries, you're never far from the Caterpillar part you need.
- 99.7% of parts orders filled within 48 hours. The best product support record in the industry.
- Caterpillar dealer service technicians are trained to service every aspect of your electric power generation system.

## FACTORY INSTALLED STANDARD AND OPTIONAL EQUIPMENT

STANDARD FEATURES	
<b>Air Inlet System</b>	Air cleaner, dual element Turbocharger
<b>Charging System</b>	Battery charger Heavy duty charging alternator
<b>Control Panel</b>	Generator controls and monitoring Fuel tank monitoring Engine controls and monitoring Digital displays
<b>Cooling System</b>	Fan and belt guards Base mounted radiator Air to air aftercooling
<b>Distribution Panel</b>	Lockable doors Load door safety switch, (trips breaker upon door opening) Individual bus bar connections Circuit breaker with 24 VDC shunt trip Remote start/stop contacts Shore power connections
<b>Enclosure</b>	Sound attenuated 12-gauge steel Lockable doors Separate vented battery compartment Single point lifting Exterior oil and water drains with interior valves Hidden exterior fuel drain Hand holds and steps Powder coated finish
<b>Fuel System</b>	Primary fuel filter/water separator UL142 dual wall fuel tank 1667 L (440 gal) Radiator-mounted fuel cooler
<b>Generator</b>	Brushless, permanent magnet Coastal corrosion protection Shock mounted VR6 voltage regulator Space heater UL approved Simultaneous three-phase 480/277 and 240/139 voltage
<b>Mounting System</b>	Generator soft mounted to base Base contains integral fuel tank Skiddable structural steel design 110% oil and coolant spill containment
<b>Starting System</b>	Electric starting motor Battery set with disconnect switch Jacket water heater with thermostat, shut-off valves

OPTIONAL FEATURES	
<b>Trailer</b>	Full frame support Independent tandem axle trailer frame with tongue Electric actuated hydraulic brakes with rechargeable battery backup breakaway system. Overcenter mechanical parking brake Full length fenders Non-skid surface on steps Heavy duty safety chains and grab hooks Reinforced 4540 kg (10,000 lb) top wind drop jack

## SPECIFICATIONS

### CAT SR4B GENERATOR

Frame size .....	449
Type.....	Permanent magnet brushless
Construction.....	Single bearing, close coupled
Three-phase .....	12 lead reconnectable
Insulation .....	Class H with coastal insulation protection
IP rating.....	22
Alignment.....	Pilot shaft
Voltage regulator.....	3-phase sensing with Volts-per-Hertz
Voltage regulation.....	± ½% steady state/± ½% no load to full load
TIF .....	Less than 50
THD .....	Less than 5%

### ENGINE

C9 ATAAC, 4-stroke-cycle watercooled diesel	
Bore – mm (in) .....	112 (4.41)
Stroke – mm (in) .....	149 (5.87)
Displacement – L (cu in).....	8.8 (537)
Compression ratio .....	16.1:1
Aspiration.....	Turbocharged AA charge cooled
Engine control.....	ADEM™ A4

### CAT CONTROL PANEL – EMCP 3.2

#### 24 Volt DC Control

- NEMA 1, IP22 enclosure
- Lockable hinged door
- Enclosure mounted
- Single location customer connector point
- 16 light alarm module with alarm horn
- Electric fuel level gauge

Consult your Caterpillar dealer for available voltages.

## TECHNICAL DATA

		XQ230			
		Standby	TMI Ref.	Prime	TMI Ref.
<b>Power Rating</b> 60 Hz 50 Hz	ekW	230	DM8502	210	DM8512
	kVA	275	DM8504		
<b>Engine and Container Information</b> Engine model Container dimensions		C9 see chart on page 6			
<b>Shipping Weight (Dry)</b> Unit with trailer Unit without trailer	kg (lb)	6210 (13,690)			
	kg (lb)	4980 (10,980)			
<b>Maximum Fuel Capacity Weight</b> Unit with trailer Unit without trailer	kg (lb)	7506 (16,550)			
	kg (lb)	6278 (13,840)			
<b>Engine Lubricating Oil Capacity</b> <b>Engine Coolant Capacity with Radiator</b> <b>Fuel Tank Capacity</b>	L (gal)	40 (10.55)			
	L (gal)	36 (9.5)			
	L (gal)	1516 (400)			
<b>Fuel Consumption</b> <b>Fuel Consumption (75% Prime)</b> <b>Running Time @ 75% Prime</b> <b>Sound Level</b> Standby No load @ 7 m (23 ft) Prime	L/hr (gal/hr)	69.2 (18.3)		64.7 (17.1)	
	L/hr (gal/hr)		50.6 (13.4)		
	hours		28		
				74.72	
			70.20		
			73.49		
<b>Ambient Capability</b>	Deg C (Deg F)	43 (109.4)			

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## RATING DEFINITIONS AND CONDITIONS

### Meets or Exceeds International Specifications:

- NEMA MG1-32, IEC 60034, CSA, 98/37/EEC, 72/23/EEC, UL 508, UL142, ISO3046/1, ISO8528, 89/336/EEC

**Standby** – Output available with varying load for the duration of the interruption of the normal source power. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046/1, AS2789, DIN6271, and BS5514.

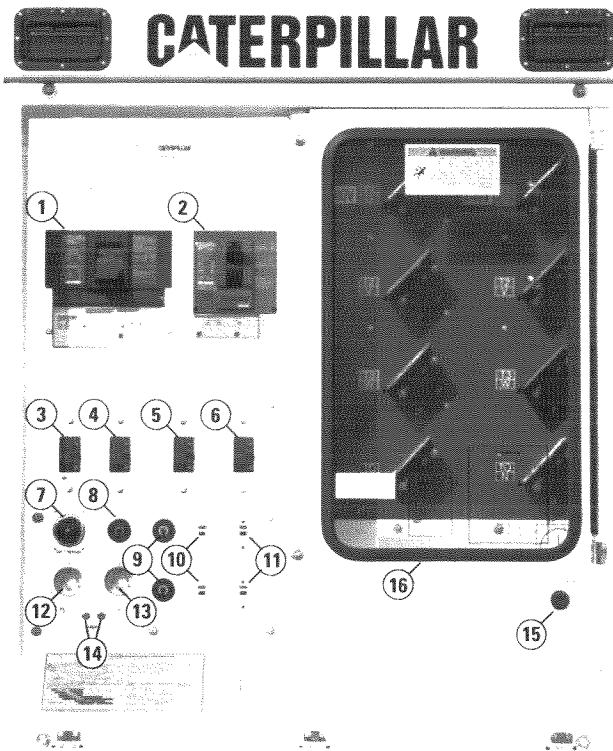
**Prime** – Output available with varying load for an unlimited time. Prime power in accordance with ISO8528. 10% overload power in accordance with ISO3046/1, AS2789, DIN6271, and BS5514 available on request.

**Ratings** are based on SAE J1349 standard conditions. These ratings also apply at ISO3046/1, DIN6271, and BS5514 standard conditions.

**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. Consult your Caterpillar representative for details.

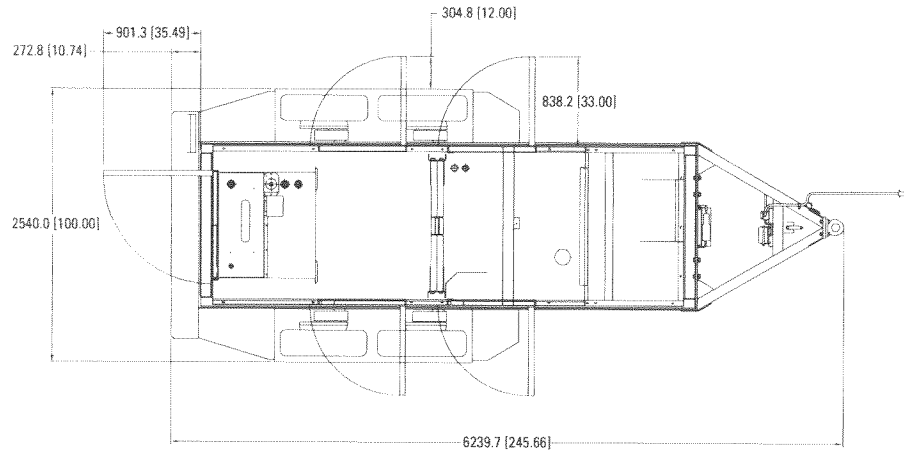
## DISTRIBUTION PANEL



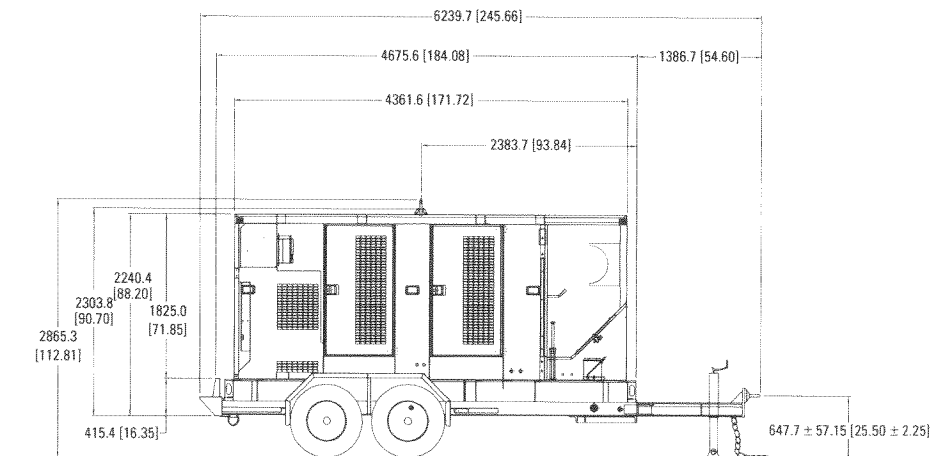
### Wiring Descriptions

1. 800 amp main breaker 240V with 24V shunt trip
2. 400 amp main 480V with 24V shunt trip
3. 50 amp 240V branch breaker
4. 20 amp 240V branch breaker
5. 20 amp 120V branch breaker
6. 15 amp 120V branch breaker
7. 50 amp 240V twistlock receptacle
8. 20 amp 240V twistlock receptacle
9. 20 amp 120V twistlock receptacle (2x)
10. 20 amp 120V ground fault interrupter, (2x)
11. 15 amp 120V ground fault interrupter, duplex receptacle (2x)
12. 30 amp 120V battery charger/generator space heater receptacle
13. 30 amp 120V JWH receptacle
14. Remote start/stop contacts
15. 12.7 mm (1/2") ground stud
16. Dual voltage load connection bus board [6.35 mm × 101.6 mm × 101.6 mm (1/4" × 4" x 4") bus bars]

## CONTAINER DIMENSIONS — TOP VIEW



## CONTAINER DIMENSIONS — RIGHT SIDE VIEW



Overall Dimensions				
	Package		With Trailer	
<b>Length</b>	4597.4 mm	181 in	6248.3 mm	246 in
<b>Width</b>	1498.6 mm	59 in	2540.0 mm	100 in
<b>Height</b>	2387.6 mm	94 in	2882.8 mm	113.5 in