Shown with
Optional Equipment

XQ500 SOUND ATTENUATED POWER MODULE

60 Hz

FEATURES

EMISSIONS
- EPA and CARB Emissions Certified for non-road mobile applications.

CAT® 3456 ATAAC DIESEL ENGINE
- Reliable, rugged, durable design
- Field-proven in thousands of applications worldwide
- Four-stroke-cycle diesel engine combines consistent performance and excellent fuel economy with minimum weight

CAT SR4B GENERATOR
- 12 lead 480/277 volt generator reconnectable to 240/139 volt
- Optimum winding pitch for minimum total harmonic distortion and maximum efficiency
- Segregated low voltage (AC/DC) accessory box provides single point access to accessory connections

ENCLOSURE
- Rugged 20′ ISO container
- Sound attenuated to 70 db(A)
- Optional undercarriage with ladders
- Lockable

CAT CONTROL PANEL
- Caterpillar EMCPII+ panel
- Multi-unit semi-automatic paralleling capability

ENVIRONMENTALLY FRIENDLY DESIGN
- Sound attenuated for low noise operation
- UL listed, double-wall fuel tank
- Spill containment for coolant, oil and fuel

MULTI-VOLTAGE DISTRIBUTION PANEL
- Load door safety switch, engine faults, and shut down system
- Rust-free hinges on side opening door
- Adequate space for line and plug connection without interference
- Remote start and stop contacts

SINGLE-SOURCE SUPPLIER
- Complete systems designed at Caterpillar ISO9001 certified facilities
- **Certified Prototype Tested** with torsional analysis

WORLDWIDE PRODUCT SUPPORT
- Worldwide parts availability through the Caterpillar dealer network
- With over 1,200 dealer outlets operating in 166 countries, you're never far from the Caterpillar part you need
- 99.5% 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

LEHE2798-02

FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

STANDARD FEATURES	
Air Inlet System	Dual element air cleaner with service indicator
Circuit Breaker	1600 amp main circuit breaker with 24 V shunt trip Semi-automatic paralleling protection
Control Panel	Generator controls and monitoring Fuel tank monitoring Engine controls and monitoring Digital display Synchronizing lights
Cooling System	Base mounted radiator sized for 43°C (110°F) ambient External coolant drain service connection Fan and belt guards Low coolant level alarm or shutdown Caterpillar Extended Life Coolant
Distribution Panel	Lockable doors Safety switch with circuit breaker trip protection Individual bus bar connections 120V and 240V convenience receptacles with individual circuit breakers 480/240 quick changeover board Remote start/stop contacts Shore power input for battery charger, generator space heater and JW heater
Enclosure	Sound attenuated to 70 db(A) at 7 m (23 ft.) Air intake louvers Vertical radiator and exhaust discharge plenum 24 V DC lighting system with shut-off timer Lockable doors Engine fluid spill containment
Fuel System	UL listed dual wall fuel tank External fuel drain service connection Primary fuel filter with water separator Fuel priming pump Fuel pressure gauge
Generator	12 lead 480/277 volt generator reconnectable to 240/139 UL and CSA approved Anti-condensation space heater PM excited Costal insulation VR3 voltage regulator
Mounting System	Anti-vibration engine and generator mounts
Starting/Charging	Battery set with disconnect switch 5 amp battery charger 24 volt starting motor Heavy duty 45 amp charging alternator UL approved jacket water heater with thermostat and shut-off valves
OPTIONAL FEATURES	
Trailer/ Undercarriage	20′ twin axle undercarriage US DOT and Canadian highway code compliant

SPECIFICATIONS

CAT ENGINE

3456 ATAAC, 4-stroke-cycle watercooled diesel

Bore — mm (in) 140 (5.5)
Stroke — mm (in) 171 (6.75)
Displacement — L (cu in) 15.8 (966)
Compression ratio 16.1:1
Aspiration . . . . . Air-to-Air Aftercooled
Fuel system . . . . . Electronic Unit Injection
Governor type . . . . . Electronic (ADEM II)

CAT SR4B GENERATOR

Frame size 499
Excitation. . . . . PM
Pitch . . . . . Optimum
Number of poles 4
Number of bearings. 1
Number of leads 12
Insulation . . . . . UL 1446 Recognized Class H Insulation
IP rating. . . . . Drip proof IP22
Alignment. . . . . Pilot shaft
Overspeed capability 125%
Wave form. . . . . Less than 5% deviation
Paralleling kit droop transformer . . . . . Standard
Voltage regulator . . . . . 3-phase sensing with adjustable 1:1 or 2:1 Volts/Hz, UL 508A Listed
TIF . . . . . Less than 50
THD . . . . . Less than 5%

CAT CONTROL PANEL

24 Volt DC Control
NEMA 1, IP22 enclosure
Lockable hinged door
Generator instruments meet ANSI C-39-1
Enclosure mounted
Single location customer connector point
Synchronizing lights for multi-unit semi-automatic paralleling

TECHNICAL DATA

Power Rating — 1800 rpm/60 Hz/480 Volts		Standby DM6217-01	Prime DM6218-01
Package Performance			
Power rating	ekW	500	455
Power rating @ 0.8 pf	kVA	625	569
Fuel Consumption			
100% load with fan	l/hr (gal/hr)	137.4 (36.3)	123.7 (32.7)
75% load with fan	l/hr (gal/hr)	97.6 (25.8)	88.6 (23.4)
50% load with fan	l/hr (gal/hr)	66.3 (17.5)	60.9 (16.1)
Shipping Weight (Dry)			
Unit with trailer	kg (lb)	12,324 (27,170)	
Unit without trailer	kg (lb)	9,512 (20,970)	
Maximum Fuel Capacity Weight			
Unit with trailer	kg (lb)	14,365 (31,670)	
Unit without trailer	kg (lb)	11,553 (25,470)	
Engine Lube Oil Capacity	l (qts.)	38 (40)	
Engine Cooling System Capacity	l (qts.)	74.2 (78.4)	
Fuel Tank Capacity — Gross	l (gal)	2445 (646)	
— Usable	l (gal)	2271 (600)	
Running Time @ 75% Prime	hours	24	
Sound Level @ 7 m (23 ft.)			
Standby Rating	dBA	70.8	
350kW	dBA	70.2	
No load	dBA	69.1	
Emissions*			
NOX	g/hp-hr	<6.9	<6.9
CO	g/hp-hr	<8.5	<8.5
HC	g/hp-hr	<1.0	<1.0
PM	g/hp-hr	<0.4	<0.4

*Emissions data measurements are consistent with those described in EPA CFR 40 Part 89 Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOX. Engine exhaust emissions are in compliance with the EPA and California non-road regulations referenced in the above table.

RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications:

- ABGSM TM3, AS1359, AS2789, BS4999, BS5000, BS5514, DIN6271, DIN6280, EGSA101P, IEC34/1, ISO3046/1, ISO8528, JEM1359, NEMA MG1-22, VDE0530, 89/392/EEC, 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.

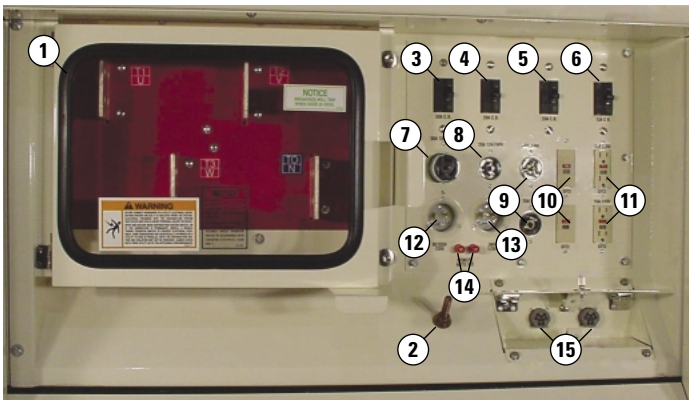
Prime — Output available with varying load for an unlimited time. Prime power in accordance with ISO8528. 10% overload power in accordance with ISO3046/1, AS2789, DIN6271, and BS5514 available on request.

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 lbs/U.S. gal.).

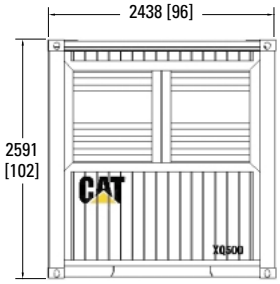
Additional ratings may be available for specific customer Requirements. Consult your Caterpillar representative for details.

DISTRIBUTION PANEL

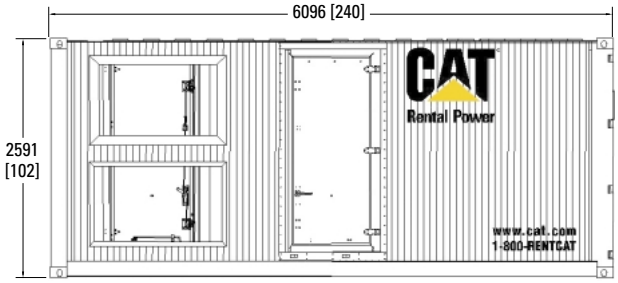


1. Load connection bus board
2. Ground stud — ½" NC, 4" L
3. 50 amp 240V branch breaker
4. 20 amp 240V branch breaker
5. 20 amp 120V branch breaker
6. 15 amp 120V branch breaker
7. 50 amp 240V twistlock receptacle
8. 20 amp 240V twistlock receptacle
9. 20 amp 120V twistlock receptacle
10. 20 amp 120V ground fault interrupter
11. 15 amp 120V ground fault interrupter duplex receptacle
12. 30 amp 120V battery charger/ generator space heater receptacle
13. 30 amp 120V JWH receptacle
14. Remote start/stop contacts
15. Paralleling interface connections

CONTAINER DIMENSIONS — FRONT VIEW



CONTAINER DIMENSIONS — STREETSIDE VIEW



Package Dimensions				
	Container		With Trailer	
Length	6096 mm	240 in	7213 mm	284 in
Width	2438 mm	96 in	2438 mm	96 in
Height	2591 mm	102 in	4115 mm	162 in

www.CAT-ElectricPower.com

U.S. sourced

TMI Reference No.: DM6217-01, DM6218-01

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The International System of Units (SI) is used in this publication.