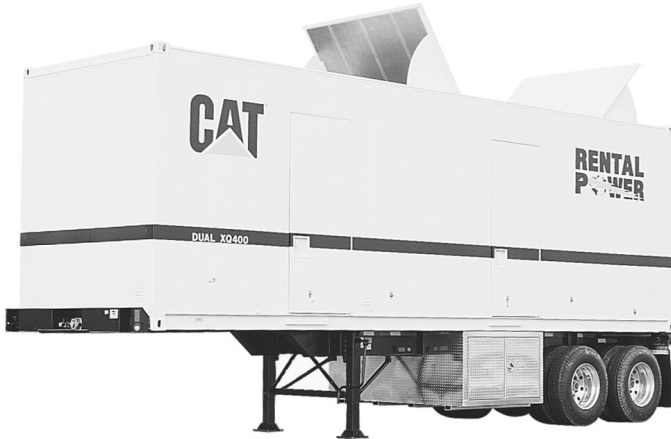




Dual XQ350 Rental Package



SOUND ATTENUATED

700 kW 60 Hz
700 kV-A 50 Hz
Prime Power

TWO CATERPILLAR® 3406 TA ENGINES

In-Line 6, Four-Stroke-Cycle Diesel
Aspiration Turbocharged/Aftercooled
Bore—mm (in) 137 (5.4)
Stroke—mm (in) 165 (6.5)
Displacement—L (cu in) 14.6 (893)
Compression Ratio 14.5:1



FEATURES

■ CAT® GENERATOR SETS

Factory designed, assembled, tested, and delivered to you in a package that is ready to be connected to your fuel and power lines. Completely redundant power for critical loads up to 350 kW, combined power output capacity of 700 kW. Supported 100% by your Caterpillar dealer.

■ RELIABLE, FUEL EFFICIENT DIESEL

The compact, four-stroke-cycle diesel engines combine durability with minimum weight while providing dependability and economy. The fuel systems operate on a variety of fuels.

■ CATERPILLAR® SR4 GENERATOR

Single bearing, wye connected, permanent magnet excited generators that are designed to match the performance and output characteristics of the Caterpillar diesel engines that drive them. Generators are equipped with space heaters to ensure windings remain dry while not in use.

■ SOUND ATTENUATED, ISO CONTAINER

For ease of transportation and protection. Construction meets ISO/TC104, ANSI/MH5.1, and UIC Code 592-1. Sound attenuated for 68 dbA at 50 ft per SAEJ1074 measurement procedure. (See chart on page 4.) Features roof ventilators for intake air and radiator/exhaust discharge.

■ EXCLUSIVE CATERPILLAR® VOLTAGE REGULATOR

Three-phase sensing and Volts-per-Hertz regulation give precise control, excellent block loading, and constant voltage in the normal operating range.

■ CATERPILLAR® COOLING SYSTEM

Sized compatible to rating with energy efficient fan and core design. Unit has additional electric auxiliary fans allowing for high ambient capabilities (110° F/43° C).

■ STAINLESS STEEL CATERPILLAR® SWITCHGEAR

Fully automatic paralleling with cross current compensation for simple, stable operation. Field proven Caterpillar EMCP II electronic engine controls for superior durability. Dual voltage capability via link board, and dual frequency capability for international usage. AC monitoring, generator ammeters, one per phase, for easy monitoring of imbalanced loads, generator voltmeter, frequency meter, watt meter, one percent accuracy. Switchgear also provides protective relays for reverse power, over/under voltage. Circuit breakers, bus-bars, and connection panel are ready to connect. Also features Cam-Lok connections.

ENGINES

Air Inlet System

Aftercooler cores – copper
Air cleaners – heavy duty with service indicators
Turbochargers

Control System

Woodward EG3P governors with 2301A load share controller

Cooling System

Ambient capability 43° C (110° F)
Floor mounted radiators with 83 cm (33 in) blower fans and fan drive with guards plus auxiliary electric fans

Jacket water pumps
Thermostat (full open temp 92° C (198° F)
Three-kW jacket water heaters

Exhaust System

Dry exhaust manifolds, 152 mm (6 in)
Silencers with 1 in soft-wrap insulating blankets

Fuel System

One 400 fuel tank (each engine connected individually)
Fuel filters (one left side, one right side – accessible through engine service doors)

Fuel transfer system (two-way)
Fuel water separators (bypass valve for servicing)

Lube System

Crankcase breathers
Oil coolers
Oil fillers (one left side, one right side – accessible through engine service doors)
Oil filters (one left side, one right side – accessible through engine service doors)
Dual 10A battery charger

Starting System

Two sets two batteries – 24 volt 1250 amps, cold cranking capability per set, 210 amps per set, stainless steel battery racks
24 volt electric starting motors

ENCLOSURE

20 foot ISO container
stainless steel hinges, pins and corrosion resistant hardware

Aluminum sides

Double-wide cable storage box

Engine-side access doors, 2-1/2 foot square

Exterior fuel line connections with interior shutoff valves, quick connect fittings

Exterior painted white with Cat® Rental logo

Four-inch thick sound attenuated panels in interior walls & ceiling

Electrically operated roof openings for intake and radiator exhaust discharge

Non-permit load

Optional

Stabilizing jacks
Two personal ladders
Undercarriage 20 ft, two-axle



STANDARD EQUIPMENT

Switchgear

Floorstanding switchgear with EMCP II components
 Dual voltage/frequency, 120/208 V or 277/480 V at 60 Hz
 230/400 V at 50 Hz

Stainless Steel Cabinet

Automatic Start/Stop with Cycle Crank and Cooldown Timer

2 x 1200A circuit breakers, electrically operated
 1 x 1200A tie switch, electrically operated

2301A Load Sharing Governor

Automatic Paralleling

Metering

The GSC provides metering for three-phase generator voltage (L-L), generator frequency, and three-phase generator current. kVAR, kW, PF metering are provided.

Protection

27, 32, 59, 51 (for 480 and 400 V operation)

Connection Terminals

Color coded Cam-Lok, receptacles are provided for each of the phases — neutral and ground. Bus bars are also available.

Auxiliary Power Connections

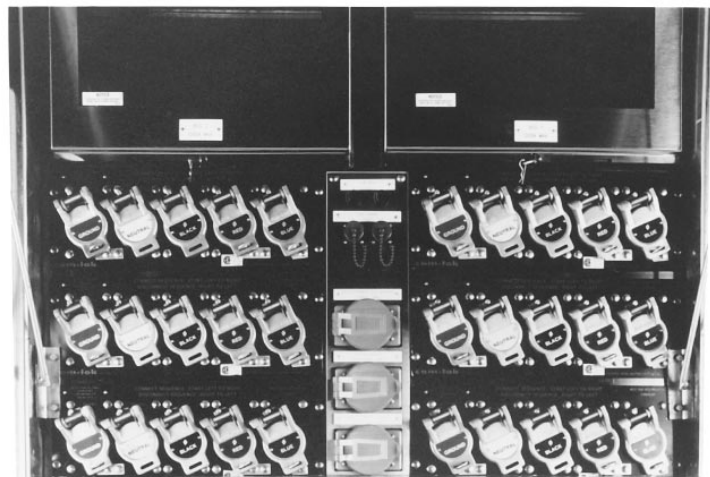
For jacket water heater, battery charger, and space heaters



OPTIONAL EQUIPMENT

Switchgear

CIM, CCM, remote annunciation
 Posi-Lok receptacles shown are optional



TWO CATERPILLAR® SR4 GENERATORS

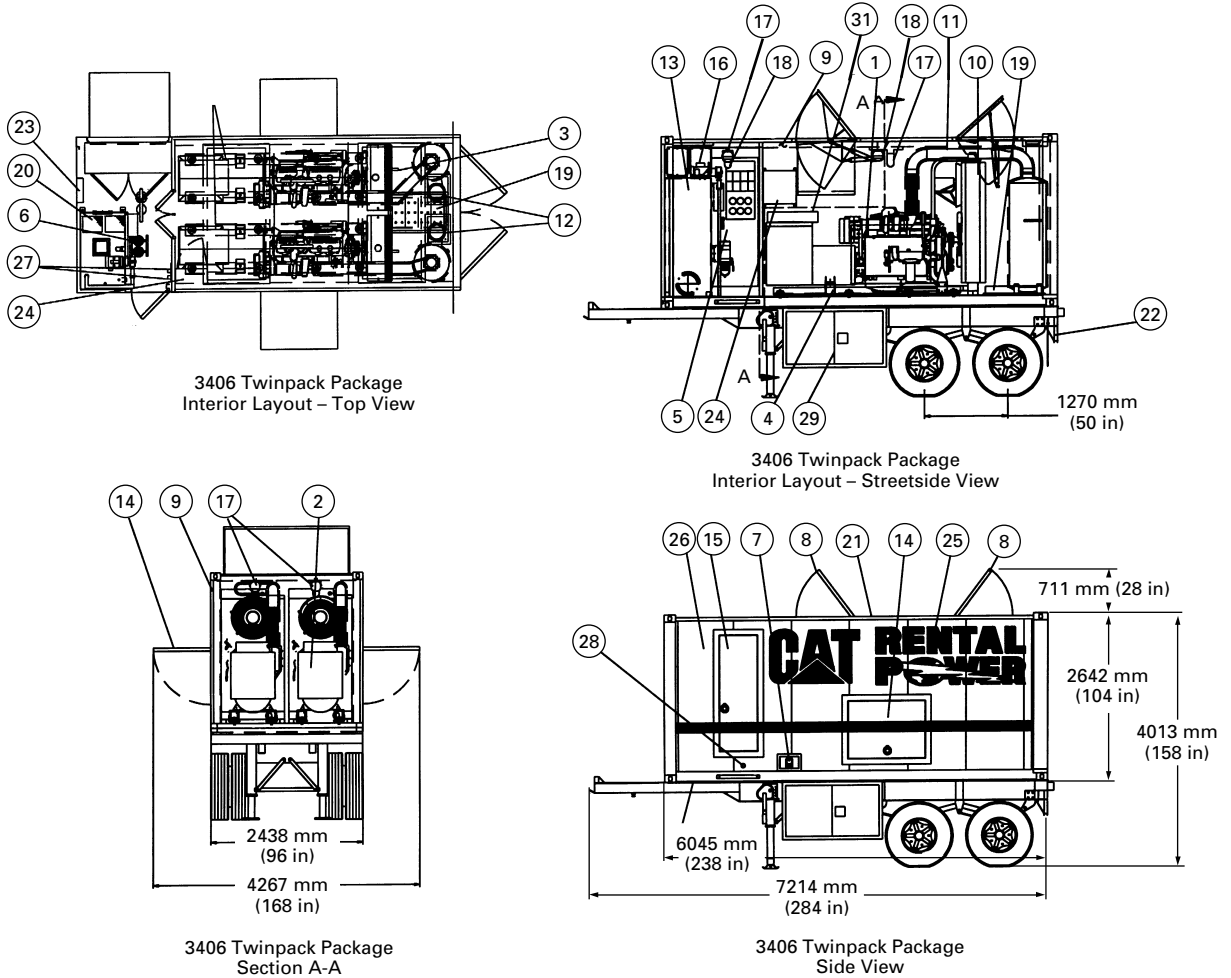
Type Permanent magnet exciter,
 450 frame size, 10-lead
 VAC 208, 240, 440, 480
 Construction Single bearing, close coupled
 Three phase Wye connected
 Insulation Class F with tropicalization
 and antiabrasion
 Alignment Pilot shaft
 Overspeed capability 150%
 Wave form Less than 5% deviation

Automatic paralleling capability With cross
 current compensation
 Voltage regulator Three-phase sensing with
 Volts-per-Hertz
 Voltage regulation Less than ±1/2%
 (steady state)
 Less than ± 1% (no load to full load)
 Voltage gain Adjustable to compensate for
 engine speed droop and line loss

TECHNICAL DATA

3406B Prime Power Generator Sets			50 Hz–1500 rpm				60 Hz–1800 rpm			
			Single		Dual		Single		Dual	
			Prime	+10%	Prime	+10%	Prime	+10%	Prime	+10%
Rating Information	Power Rating @ 0.8 PF with Fan	kW kV•A	256 320	280 350	512 640	560 700	320 400	350 438	640 800	700 875
	Engine bhp w/o Fan		380	415	760	830	475	519	950	1038
	Radiator Data									
	Air Flow (Max @ Rated Speed)	m³/min cf	346 12 200	346 12 200	692 24 400	692 24 400	401 14 150	401 14 150	802 28 300	802 28 300
	Ambient Air Temperature with 50% glycol	° C ° F	58.2 105	58.2 105	58.2 105	58.2 105	61 110	61 110	61 110	61 110
Fuel Consumption Data										
@ 100% of Rating with Fan	gal/hr	20.1	21.2	40.2	42.4	24.9	26.6	49.8	53.2	
@ 75% of Rating with Fan	gal/hr	15.4	16.1	30.8	32.2	18.9	20.1	37.8	40.2	
Physical Factors			With Undercarriage				Without Undercarriage			
	Length	mm in	7925 312				6096 240			
	Width	mm in	2438 96				2438 96			
	Height	mm in	3734 147				2540 100			
	Shipping Weight	kg lbs	14 877 32 840				11 950 26 380			
	Rear Axle Weight	kg lbs	9749 21 520				NA NA			
Liquid Capacities	Engine Lubricating Oil Capacity per Generator Set	L qts					37.9 40			
	Engine Cooling Capacity per Generator Set	L qts					82 87			
	Fuel Tank Capacity	L gal					1514 400			
Sound Attenuation	Engine(s) Running at Prime Rating of 320 kW @ 16 m or 52 ft @ 1 m or 3.2 ft		Single Engine				Both Engines			
			63 dbA 74 dbA				67 dbA 82 dbA			

DIMENSIONS



- | | | |
|---|---|--|
| ① Dual 3406 PGS – Standby 350 kW each | ⑩ Custom radiators w/ dual fans | ⑲ Enclosed battery box w/ 4 batteries |
| ② Permanent magnet generator | ⑪ Exhaust system w/ soft wrap | ⑳ Dual 20 amp battery chargers |
| ③ Radiator drain | ⑫ Exhaust cap boxes w/ drains | ㉑ 20 ft. ISO container |
| ④ Custom engine bases | ⑬ 400 gal. (usable) fuel tank w/clean out | ㉒ Undercarriage arrgmt. |
| ⑤ Switchgear | ⑭ Engine side access door | ㉓ Customer communication box |
| ⑥ Fuel/water separators w/ service bypass | ⑮ 24 inch entrance door | ㉔ Motor control center |
| ⑦ Exterior fuel line quick connections | ⑯ Fuel transfer pump | ㉕ Rental decal |
| ⑧ Actuated roof openings | ⑰ Service lights (DC) | ㉖ Aluminum sides |
| ⑨ Sound attenuated walls and ceiling | ⑱ Interior lights (AC) | ㉗ Light switch |
| | | ㉘ Fuel drain/supply fitting (1.5 inch NPT) |

NOTE:

The container must have support under the center when set on the ground.
 The maximum weight allowed on U.S. interstate highways is 80 000 lbs. (trailer, chassis, and module).
 This 3406 twinpack module typically weighs 34 500 lbs. as shipped. An empty chassis weighs 5800 lbs.
 These weights do not include a tractor.

RATING DEFINITIONS AND CONDITIONS

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 ISO3046 and on fuel oil of 35° API (16° C or 60° F) gravity having a 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.).