

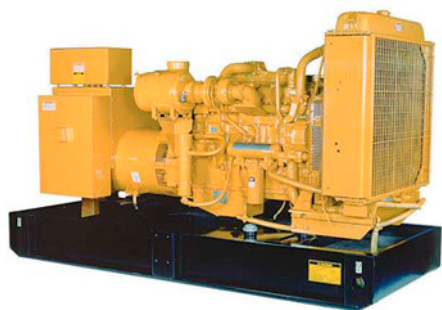


Image shown may not reflect actual package.

STANDBY

**240 ekW 300 kVA
50 Hz 1500 rpm 400 Volts**

Caterpillar is leading the power generation marketplace with Power Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.

FEATURES

FUEL/EMISSIONS STRATEGY

- Low Fuel consumption

FULL RANGE OF ATTACHMENTS

- Wide range of bolt-on system expansion attachments, factory designed and tested
- Flexible packaging options for easy and cost effective installation

COMPLETE, READY-TO-RUN SYSTEM

- Fully configured generator set
- Full range of attachments and options available

ENCLOSURES (Optional)

- Weather protective

SINGLE-SOURCE SUPPLIER

- Fully prototype tested with certified torsional vibration analysis available

WORLDWIDE PRODUCT SUPPORT

- Cat dealers provide extensive post sale support including maintenance and repair agreements
- Cat dealers have over 1,800 dealer branch stores operating in 200 countries
- The Cat® S•O•SSM program cost effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products

CAT® 3406C TA DIESEL ENGINE

- High efficiency, four-stroke-cycle engine designed for thousands of trouble-free hours of operation
- Field-proven in thousands of applications

CAT GENERATOR

- Matched to the performance and output characteristics of Cat engines
- Load adjustment module provides engine relief upon load impact and improves load acceptance and recovery time
- UL 1446 Recognized Class H insulation

CAT EMCP 4 CONTROL PANELS

- Simple user friendly interface and navigation
- Scalable system to meet a wide range of customer needs
- Integrated Control System and Communications Gateway

STANDBY 240 ekW 300 kVA

50 Hz 1500 rpm 400 Volts



FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

System	Standard	Optional
Air Inlet	• Air cleaner	
Cooling	• Package mounted radiator	
Exhaust	• Exhaust flange outlet	☐ Industrial ☐ Residential ☐ Critical Mufflers
Fuel	• Primary fuel filter with integral water separator • Secondary fuel filters • Fuel priming pump	
Generator	• Matched to the performance and output characteristics of Cat engines • Load adjustment module provides engine relief upon load impact and improves load acceptance and recovery time • IP23 protection	☐ Oversize and premium generators ☐ Permanent magnet excitation (PMG) ☐ Internal excited (IE) ☐ Anti-condensation space heaters
Power Termination	• Bus bar	☐ Circuit breakers, UL listed ☐ Circuit breakers, IEC compliant
Control Panel	• EMCP 4 Genset Controller	☐ EMCP 4.2 ☐ EMCP 4.3 ☐ EMCP 4.4 ☐ Local and remote annunciator modules ☐ Load share module ☐ Digital I/O module ☐ Remote monitoring software
Mounting	• Rubber vibration isolators	
Starting/Charging	• 24 volt starting motor • Batteries	☐ Battery chargers ☐ Oversize batteries ☐ Jacket water heater ☐ Heavy duty starting system ☐ Charging alternator
General	• Paint - Caterpillar Yellow except rails and radiators gloss black	The following options are based on regional and product configuration: ☐ Seismic Certification per Applicable Building Codes: IBC 2000, IBC 2003, IBC 2006, IBC 2009, CBC 2007 ☐ UL 2200 package ☐ EU Certificate of Conformance (CE) ☐ CSA Certification ☐ EEC Declaration of Conformity ☐ Narrow, wide or skid base ☐ Sound attenuated, weather protective or high ambient weather protective enclosures ☐ Single or dual wall integral fuel tanks ☐ Single or dual wall sub-base fuel tanks ☐ Integral & sub-base UL listed dual wall fuel tanks ☐ Automatic transfer switches (ATS)

STANDBY 240 ekW 300 kVA

50 Hz 1500 rpm 400 Volts



SPECIFICATIONS

CAT GENERATOR

Frame size.....LC5014J
Excitation..... Self Excitation
Pitch..... 0.6666
Number of poles..... 4
Number of bearings..... Single bearing
Number of Leads..... 012
Insulation..... UL 1446 Recognized Class H with
tropicalization and antiabrasion
- Consult your Caterpillar dealer for available voltages
IP Rating..... IP23
Alignment..... Pilot Shaft
Overspeed capability..... 150
Wave form Deviation (Line to Line)..... 002.00
Voltage regulator..... Three phase sensing
Voltage regulation..... Less than +/- 1/2% (steady state)
Less than +/- 1% (no load to full load)

CAT DIESEL ENGINE

3406C TA, I-6, 4-Stroke Water-cooled Diesel
Bore..... 137.20 mm (5.4 in)
Stroke..... 165.10 mm (6.5 in)
Displacement..... 14.64 L (893.39 in³)
Compression Ratio..... 14.5:1
Aspiration..... TA
Fuel System
Governor Type..... Hydra-mechanical

CAT EMCP 4 SERIES CONTROLS

EMCP 4 controls including:

- Run / Auto / Stop Control
- Speed and Voltage Adjust
- Engine Cycle Crank
- 24-volt DC operation
- Environmental sealed front face
- Text alarm/event descriptions

Digital indication for:

- RPM
- DC volts
- Operating hours
- Oil pressure (psi, kPa or bar)
- Coolant temperature
- Volts (L-L & L-N), frequency (Hz)
- Amps (per phase & average)
- ekW, kVA, kVAR, kW-hr, %kW, PF (4.2 only)

Warning/shutdown with common LED indication of:

- Low oil pressure
- High coolant temperature
- Overspeed
- Emergency stop
- Failure to start (overcrank)
- Low coolant temperature
- Low coolant level

Programmable protective relaying functions:

- Generator phase sequence
- Over/Under voltage (27/59)
- Over/Under Frequency (81 o/u)
- Reverse Power (kW) (32) (4.2 only)
- Reverse reactive power (kVAr) (32RV)
- Overcurrent (50/51)

Communications:

- Four digital inputs (4.1)
- Six digital inputs (4.2 only)
- Four relay outputs (Form A)
- Two relay outputs (Form C)
- Two digital outputs
- Customer data link (Modbus RTU) (4.2 only)
- Accessory module data link (4.2 only)
- Serial annunciator module data link (4.2 only)
- Emergency stop pushbutton

Compatible with the following:

- Digital I/O module
- Local Annunciator
- Remote CAN annunciator
- Remote serial annunciator

STANDBY 240 ekW 300 kVA

50 Hz 1500 rpm 400 Volts



TECHNICAL DATA

Open Generator Set - - 1500 rpm/50 Hz/400 Volts		DM7523	
Low Fuel Consumption			
Generator Set Package Performance			
Genset Power rating @ 0.8 pf		300 kVA	
Genset Power rating with fan		240 ekW	
Fuel Consumption			
100% load with fan		69.3 L/hr	18.3 Gal/hr
75% load with fan		53.8 L/hr	14.2 Gal/hr
50% load with fan		38.5 L/hr	10.2 Gal/hr
Cooling System¹			
Air flow restriction (system)		0.12 kPa	0.48 in. water
Air flow (max @ rated speed for radiator arrangement)		522 m ³ /min	18434 cfm
Engine Coolant capacity with radiator/exp. tank		57.8 L	15.3 gal
Engine coolant capacity		20.8 L	5.5 gal
Radiator coolant capacity		37.0 L	9.8 gal
Inlet Air			
Combustion air inlet flow rate		17.7 m ³ /min	625.1 cfm
Exhaust System			
Exhaust stack gas temperature		580.6 °C	1077.1 °F
Exhaust gas flow rate		52.9 m ³ /min	1868.1 cfm
Exhaust flange size (internal diameter)		152.4 mm	6.0 in
Exhaust system backpressure (maximum allowable)		6.7 kPa	26.9 in. water
Heat rejection			
Heat rejection to atmosphere from generator		18.6 kW	1057.8 Btu/min
Alternator²			
Motor starting capability @ 30% voltage dip		586 skVA	
Frame		LC5014J	
Temperature Rise		163 °C	293 °F
Lube System			
Sump refill with filter		38.0 L	10.0 gal

¹ For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

² UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40°C ambient per NEMA MG1-32.

STANDBY 240 ekW 300 kVA

50 Hz 1500 rpm 400 Volts



RATING DEFINITIONS AND CONDITIONS

Applicable Codes and Standards: AS1359, CSA C22.2 No 100-04, UL142, UL489, UL601, UL869, UL2200, NFPA 37, NFPA 70, NFPA 99, NFPA 110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, 72/23/EEC, 98/37/EC, 2004/108/EC

Standby - Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Ratings are based on SAE J1349 standard conditions.

These ratings also apply at ISO3046 standard conditions.

Fuel Rates are based on fuel oil of 35° API (16° C or 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 Cat representative for details.

STANDBY 240 ekW 300 kVA

50 Hz 1500 rpm 400 Volts



DIMENSIONS

Package Dimensions		
Length	4264.3 mm	167.89 in
Width	1110.0 mm	43.7 in
Height	2150.0 mm	84.65 in

NOTE: For reference only - do not use for installation design. Please contact your local dealer for exact weight and dimensions. (General Dimension Drawing #3206987).

Performance No.: DM7523

Feature Code: 406DE2F

Gen. Arr. Number: 2377184

Source: China

February 27 2013

21358279

www.Cat-ElectricPower.com

2013 Caterpillar
All rights reserved.

Materials and specifications are subject to change without notice.
The International System of Units (SI) is used in this publication.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.