



Image shown may not reflect actual package.

STANDBY

13 ekW 16 kVA

60 Hz 1800 rpm 480 Volts

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

FEATURES

Caterpillar Model D13-4 3 phase

FUEL/EMISSIONS STRATEGY

- EPA Tier 4 interim

DESIGN CRITERIA

- The generator set accepts 100% rated load in one step per NFPA 110 and meets ISO 8528-5 transient response.

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

SINGLE-SOURCE SUPPLIER

- Fully prototype tested with certified torsional vibration analysis available

WORLDWIDE PRODUCT SUPPORT

- Caterpillar® dealers provide extensive post sale support including maintenance and repair agreements
- Caterpillar dealers have over 1,600 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® C1.5 DIESEL ENGINE

- Reliable, rugged, durable design
- Field-proven in thousands of applications worldwide
- Four-stroke diesel engine combines consistent performance and excellent fuel economy with minimum weight
- Electronic engine control

GENERATOR SET

- Complete system designed and built at ISO 9001 certified facilities
- Factory tested to design specifications at full load conditions

CONTROL SYSTEM

- EMCP 3.1 digital control panel
- Vibration isolated NEMA 1 enclosure with lockable hinged door
- DC and AC wiring harnesses

STANDBY 13 ekW 16 kVA

60 Hz 1800 rpm 480 Volts



FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

System	Standard	Optional
Air Inlet	<ul style="list-style-type: none">• Dry replaceable paper element type with restriction indicator	
Cooling	<ul style="list-style-type: none">• Radiator and cooling fan complete with protective guards• Standard ambient temperatures up to 40 degrees C (104 degrees F)	<ul style="list-style-type: none">• Coolant heater
Engine	<ul style="list-style-type: none">• Governor, mechanical• Electrical system, 12 VDC• Cartridge type filters• Battery rack and cables• Coolant and lube drains piped to edge of base	<ul style="list-style-type: none">• Governor, electronic• Battery heater• Lube oil drain pump• High lube oil temperature shutdown• Lube oil sump heater
Generator	<ul style="list-style-type: none">• Class H insulation• Drip proof generator air intake (NEMA 2,IP23)• Electrical design in accordance with BS5000 Part 99, EN61000-6, IEC60034-1, NEMA MG-1.33• IP23 Protection	<ul style="list-style-type: none">• Anti-condensation space heater
Circuit Breaker	<ul style="list-style-type: none">• UL/CSA listed• 3-pole with solid neutral• NEMA 1 steel enclosure, vibration isolated• Electrical stub-up area directly below circuit breaker	<ul style="list-style-type: none">• Auxiliary voltfree contacts
Control Panels	<ul style="list-style-type: none">• EMCP 3.1 digital control panel• Vibration isolated NEMA 1 enclosure with lockable hinged door• DC and AC Wiring harnesses	<ul style="list-style-type: none">• EMCP 3.2 digital control panel
Mounting	<ul style="list-style-type: none">• Heavy-duty fabricated steel base with lifting points• Anti vibration pads• Directly mounted to 10 dB(A) silencer• Complete OSHA guarding• Flexible fuel lines to base with NPT connections• Stub-up pipe	
General	<ul style="list-style-type: none">• High gloss polyurethane paint, Caterpillar yellow except rails and radiators gloss black• Anticorrosive paint protection• All electroplated hardware	<ul style="list-style-type: none">• Toolkit• Additional operator's manual pack• Special enclosure color• UL Listing, CSA Certification• French or Spanish language labels

STANDBY 13 ekW 16 kVA

60 Hz 1800 rpm 480 Volts



SPECIFICATIONS

CAT GENERATOR

Frame Size.....LC1014H
Excitation.....Self Excited
Pitch.....0.6667
Number of Poles.....4
Number of bearings..... Single Bearing
Number of Leads.....012
IP Rating.....IP23
Overspeed capability.....125
Wave form deviation (Line Wave Form to Line).....002.00
Paralleling kit droop transformer..... Standard
Voltage regulator.3 Phase sensing with selectible volts/Hz
Telephone Influence Factor..... Less than 50

CAT ENGINE

C1.5 In-line-3, 4-cycle diesel
Bore - mm..... 84.00 mm (3.31 in)
Stroke - mm..... 90.00 mm (3.54 in)
Displacement-L..... 1.50 L (91.54 in³)
Compression ratio..... 22.2:1
Aspiration..... NA

Control Panel

Heavy duty sheet steel enclosure with lockable hinged door
Vibration isolated from generating set
LCD display
AC metering
DC metering
Fail to start shutdown
Low oil pressure shutdown
High engine temperature
Low / high battery voltage
Underspeed/overspeed
Loss of engine speed detection
2 spare fault channels
20 event fault log
2 LED status indicators
Lockdown emergency stop push button

STANDBY 13 ekW 16 kVA

60 Hz 1800 rpm 480 Volts



TECHNICAL DATA

Open Generator Set - - 1800 rpm/60 Hz/480 Volts	P3532A	
EPA Tier 4 interim		
Generator Set Package Performance Genset Power rating @ 0.8 pf Genset Power rating with fan	16.25 kVA 13 ekW	
Fuel Consumption 100% load with fan	4.9 L/hr	1.3 Gal/hr
Cooling System¹ Air flow restriction (system) Engine coolant capacity	0.12 kPa 2.5 L	0.48 in. water 0.7 gal
Inlet Air Combustion air inlet flow rate	1.1 m ³ /min	38.8 cfm
Exhaust System Exhaust gas flow rate Exhaust flange size (internal diameter)	2.6 m ³ /min 6.4 mm	91.8 cfm 0.3 in
Heat Rejection Heat rejection to exhaust (total) Heat rejection to atmosphere from generator	12 kW 2.4 kW	682 Btu/min 136.5 Btu/min
Alternator² Motor starting capability @ 30% voltage dip Frame Temperature Rise	27 skVA LC1014H 105 ° C	189 ° F
Emissions (Nominal)³ NOx g/hp-hr CO g/hp-hr HC g/hp-hr PM g/hp-hr	6.36 g/hp-hr 1.49 g/hp-hr .27 g/hp-hr .197 g/hp-hr	

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

² Generator temperature rise is based on a 40° C (104° F) ambient per NEMA MG1-32.

³ Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77°F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 btu/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

STANDBY 13 ekW 16 kVA

60 Hz 1800 rpm 480 Volts



RATING DEFINITIONS AND CONDITIONS

Meets or Exceeds International Specifications: AS1359, CSA, IEC60034-1, ISO3046, ISO8528, NEMA MG 1-22, NEMA MG 1-33, UL508A, 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. Standby power in accordance with ISO8528. Fuel stop power in accordance with ISO3046. Standby ambients shown indicate ambient temperature at 100% load which results in a coolant top tank temperature just below the shutdown temperature.

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 (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, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Caterpillar dealer.

STANDBY 13 ekW 16 kVA
60 Hz 1800 rpm 480 Volts



DIMENSIONS

Package Dimensions		
Length	1409.9 mm	55.51 in
Width	552.0 mm	21.73 in
Height	1051.1 mm	41.38 in
Weight	374 kg	825 lb

NOTE: For reference only - do not use for installation design. Please contact your local dealer for exact weight and dimensions.

Performance No.: P3532A

Feature Code: NAC095P

Gen. Arr. Number: 2652634

Sourced: U.S. Sourced

LEHE0072-00 (12/09)

www.Cat-ElectricPower.com

©2009 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, SAFETY.CAT.COM 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.