



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

Image shown may not reflect actual configuration

# **Specifications**

Generator Set Specifications	
Rating (Natural Gas)	150 ekW (187.5 kVA)
Rating (LP Vapor)	140 ekW (175 kVA)
Voltage	480 Volts
Frequency	60 Hz
Speed	1800 rpm

Generator Set Configurations	
Emissions/Fuel Strategy	U.S. EPA Certified for Stationary Emergency Application

Engine Specifications		
Engine Model		8.8L V8, 4-cycle
Bore	110.5 mm	4.35 in
Displacement	8.8 L	535 in³
Stroke	114.3 mm	4.5 in
Compression Ratio		10.1:1
Aspiration	Turbocl	harged Air-to-Air Aftercooler
Governor Type		Electronic
Fuel Type		Natural Gas, LP Vapor
Fuel Pressure Operating Range*	2.7 - 3.5 kPa	11 - 14 in. water

Package Dimensions**		
Length	3037 mm	119.6 in
Width	1110 mm	43.7 in
Height	1655 mm	65.2 in
Weight <sup>+</sup>	1616 kg	3563 lb

\*Optional fuel pressure options may be available, please contact your local dealer.

\*\*Note: For reference only – do not use for installation design. Please contact your local dealer for exact weight and dimensions.

<sup>†</sup>Weight includes: Oversize generator, skid base, circuit breaker, oil, and coolant.



# Benefits & Features

#### Generator

- · Matched to the performance and output characteristics of engine
- Industry-leading mechanical and electrical design
- Industry-leading motor starting capabilities
- High efficiency

### **Cat<sup>®</sup> EMCP Control Panel**

The EMCP 4 controller features the reliability and durability you have come to expect from your Cat equipment. EMCP 4 is a scalable control platform designed to ensure reliable generator set operation, providing extensive information about power output and engine operation. EMCP 4 systems can be further customized to meet your needs through programming and expansion modules.

#### **Design Criteria**

- The generator set facilitates compliance with NFPA 110
- Cooling system designed to operate in 50°C/122°F ambient temperatures with an air flow restriction of 0.5 in. water

#### UL 2200/CSA – Optional

- UL 2200 Listed
- CSA Certified

Certain restrictions may apply. Consult with your Cat dealer.

### **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.



# **Standard Equipment**

# Air Inlet

• Single element air filter

# Cooling

- · Radiator and cooling fan complete with protective guards
- Standard ambient temperatures up to 50°C (122°F)

# Exhaust

• Exhaust outlet with 2.5" pipe

# Fuel

- Natural Gas or LP Vapor
- · Dual lock off valves
- NPT connection

#### Generator

- · Matched to the performance and output characteristics of engine
- IP23 protection
- Integrated Voltage Regulator

#### Governor

• Electronic governor (non adjustable)

# **Control Panels**

• EMCP 4.2 Series generator set controller

#### Mounting

Rubber vibration isolators

## Starting/Charging

- 12 volt starting motor
- Batteries with rack and cables



# **Optional Equipment**

## Generator

- Excitation: [] Permanent Magnet Excited (PM)
- Oversize and premium generators
- Anti Condenstation heater

# Starting/Charging

- Battery charger UL Listed 10 amp
- Jacket water heater
- Battery heater
- Lube oil sump heater

#### General

- UL 2200 Listed
- CSA Certified
- Enclosures: sound attenuated, weather protective
- Automatic transfer switches (ATS)
- Suitable for Use as Service Equipment (SUSE)

DG150-2 150 ekW/ 187.5 kVA/ 60 Hz/ 1800 rpm/ 480V/ 0.8 Power Factor



Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Application



DG150-2 150 ekW/ 187.5 kVA 60 Hz/ 1800 rpm/ 480V

Image shown may not reflect actual configuration

Package Performance		
Fuel	Natural Gas	LP Vapor
Generator Set Power Rating with Fan @ 0.8 Power Factor	150 ekW	140 ekW
Generator Set Power Rating	187.5 kVA	175 kVA

Fuel Consumption with Natural Gas		
100% Load With Fan	50.4 m³/hr	1778 ft³/hr
75% Load With Fan	40.3 m³/hr	1423 ft³/hr
50% Load With Fan	30.5 m³/hr	1079 ft³/hr

Fuel Consumption with LP Vapor		
100% Load With Fan	19.6 m³/hr	691 ft³/hr
75% Load With Fan	15.4 m³/hr	542 ft³/hr
50% Load With Fan	11.6 m³/hr	409 ft <sup>3</sup> /hr

Cooling System <sup>1</sup>		
Engine Coolant Capacity	13.7 L	3.6 gal
Radiator Coolant Capacity	11.8 L	3.1 gal
Engine Coolant Capacity with Radiator/Exp Tank	25.5 L	6.7 gal
Air Flow Restriction (System)	0.12 kPa	0.48 in. water

Inlet Air		
Combustion Air Inlet Flow Rate	10.3 m³/min	365 cfm



# DG150-2 150 ekW/ 187.5 kVA/ 60 Hz/ 1800 rpm/ 480V/ 0.8 Power Factor

Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Application

Exhaust System		
Exhaust Stack Gas Temperature	690°C	1274°F
Exhaust Gas Flow Rate	33.3 m³/min	1178 cfm
Exhaust System Backpressure (maximum allowable)	10.2 kPa	40.9 in. water

Heat Rejection		
Heat Rejection to Coolant (total)	88.3 kW	5021 Btu/min
Heat Rejection to Atmosphere from Generator	10.8 kW	614 Btu/min

Alternator <sup>2</sup>		
Motor Starting Capability @ 30% Voltage Dip	452	skVA
Frame	LC3114J	
Temperature Rise	130°C 234°F	
Excitation	Self Excited	

Lube System		
Sump Refill with Filter	7.6 L	2.00 gal

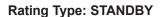
Emissions (Nominal) <sup>3</sup>		
NOx + HC	2.7 g/kW-hr	
CO	4.4 g/kW-hr	

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

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

<sup>3</sup>The nominal emissions data shown is subject to environment, instrumentation, measurement, facility and engine to engine variations.

DG150-2 150 ekW/ 187.5 kVA/ 60 Hz/ 1800 rpm/ 480V/ 0.8 Power Factor



Emissions: U.S. EPA Certified for Stationary Emergency Application

# **DEFINITIONS AND CONDITIONS**

#### Applicable Codes and Standards:

CSA C22.2 No 100-04, UL 489, UL 869, UL 2200, NFPA 37, NFPA 70, NFPA 99, NFPA 110, IBC, IEC60034-1, ISO3046, NEMA MG 1-22, NEMA MG 1-33.

**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 heat values of 1015 BTU/SCF for Natural Gas and 2500 BTU/SFC for Propane Vapor @77°F (25°C) and 328 ft (100m) above sea level.

Additional ratings may be available for specific customer requirements, contact your Cat representative for details.

Genset Ratings are based on ambient temperature of 77°F and elevation of 1200 ft above sea level.

For higher temperatures and elevations the following derate specifications are to be used: Altitude: Derate 2.5% per every 1000ft (305 m.) above 1200ft (365 m.) Temperature: Derate 1.5% per 10°F (5.55°C) temperature above 77°F (25°C)

Feature Code: 88LGE02 Generator Arrangement: 454-5283 Date: 12/03/2018 Source Country: U.S.

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, ADEM, S•O•S, "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.