



# Spark ignited generator set 100 kW standby



## Features and benefits

- Extremely quiet operation
- Fully automatic operation when used with a Cummins automatic transfer panel
- Available for use with natural gas or LP vapor
- Attractive and discreet sound attenuated housing
- Electronic governor for precise frequency control
- Includes 120 V coolant heater
- Listed to UL 2200
- EPA certified for dual fuel
- Aluminum or steel enclosure for best anti-corrosion performance
- IBC and OSHPD seismic certified

## Size and sound level

**Size:** Length 142 in (3614 mm), width 60 in (1520 mm), height 70 in (1789 mm)

**Sound:** 73 dB(A) measured at 7 m, average at full load with aluminum enclosure;  
71 dB(A) measured at 7 m, average at full load with steel enclosure

## Models and ratings

Order model	Fuel	Voltage	Phase	Rated kW	kVA	Rated amps	Circuit breaker	Enclosure
GGHH	Natural gas/ Propane	120/240	1	100	100	833.3/416.7	500 A, 3 pole	Aluminum or steel
	Natural gas/ Propane	120/208	3	100	100	602.1/347.4	450 A, 3 pole	Aluminum or steel

**Note:** See page 4 of this document for derating factors.

## Standard features

### Engine:

- Electronic ignition
- Electronic governor
- Full-pressure lubrication
- High-capacity oil sump, spin-on oil filter
- Solenoid shift starter
- 65 A, engine-driven battery charger
- 120 V coolant heater
- Oil drain extension

### Control system:

- PCC 2100 control system
- Automatic remote starting
- Controls generator set starting and shutdown
- Control components designed to withstand the vibration levels typical in generator sets
- Field circuit breaker
- High temperature, low oil pressure, low coolant level, overcrank and over speed shutdowns
- Running time meter
- UL Listed circuit breaker
- DC control fuse

### Exhaust muffler:

- Enclosed exhaust silencer
- Low noise

## Engine details

**Engine:** Ford industrial, spark-ignited

**Design:** 10-cylinder V, liquid-cooled, turbocharged

**Compression ratio:** 9.0:1

**Displacement:** 415 cu in (6.8 L)

**Cooling system:** 122° F (50 °C) ambient cooling system

**Oil sump capacity, L (qt):** 6.1 (6.5)

**Operating speed:** 1800 RPM

**Gross engine power output, kWm (bhp):**

Model	Natural Gas	Propane
GGHH	131.3 (176.0)	122.3 (164.0)

### Genset weight:

Model	Enclosure	Weight lbs (kg)
GGHH	Aluminum	2973 (1349)
	Steel	3288 (1491)

## Average fuel consumption

### Fuel consumption – natural gas - GGHH

Load:	1/4	1/2	3/4	Full
Ft <sup>3</sup> /hr	433.2	666.4	914.0	1175.8
M <sup>3</sup> /hr:	12.3	18.9	25.9	33.3

### Fuel consumption – propane - GGHH

Load:	1/4	1/2	3/4	Full
Ft <sup>3</sup> /hr	175.2	269.3	363.3	466.6
M <sup>3</sup> /hr:	5.0	7.6	10.3	13.2

## Alternator details

**Design:** Brushless, revolving field, 12 lead re-connectable, single phase design.

**Insulation system:** Class H per NEMA MG1-1.65.

**Temperature rise:** At rated load is less than 125 °C at standby rating, per NEMA MG1.22.40, IEEE 115 and IEC 34-1.

**Exciter type:** The excitation system derives its power from the main output of the generator, eliminating the need for a separate excitation power source.

**Alternator cooling:** Direct drive centrifugal blower.

**Rotor:** Supported by a pre-lubricated maintenance-free ball bearing.

**AC wave form total harmonic distortion:** Less than 5% total no load to full load, less than 3% for any single harmonic.

## Generator set performance

**Governor regulation class:** ISO 8528 Part 1 Class G3

**Voltage regulation:** 1%, no load to full load.

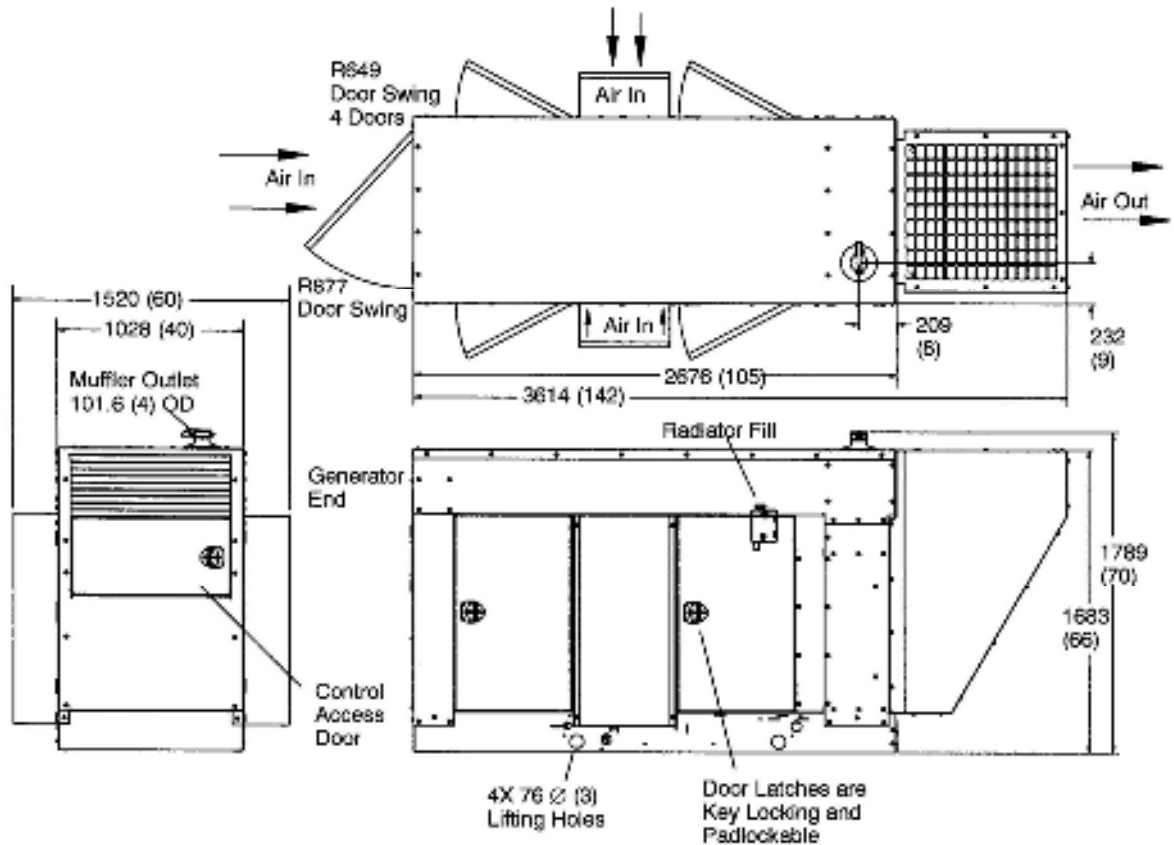
**Frequency regulation:** Isochronous, 0% no load to full load.

**Operating temperature:** -20 °F (-28.8 °C) to 122 °F (50 °C).

**Motor starting kVA (at 90% sustained voltage):**  
GGHG: 250, GGHH: 305

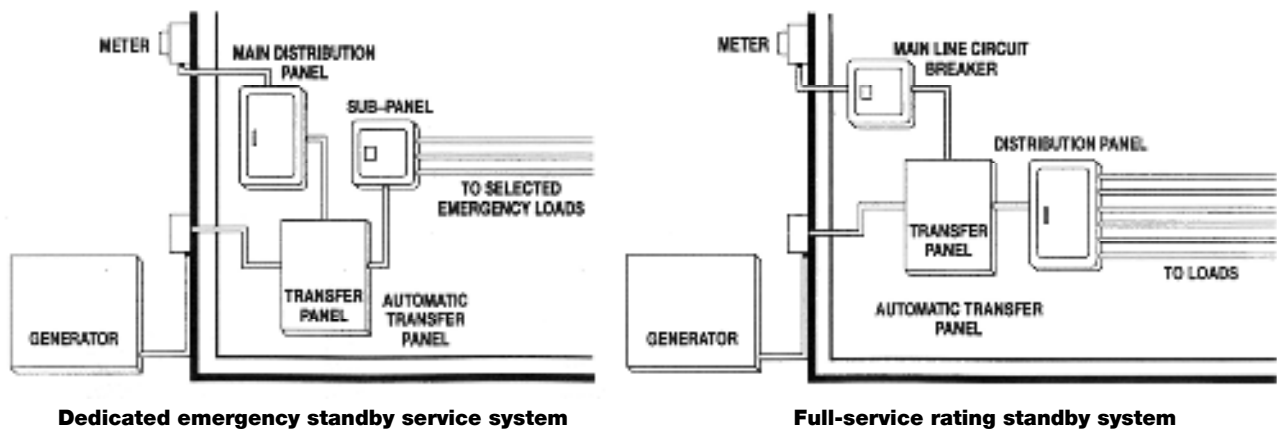
## Basic dimensions

Dimensions: mm/in



**Note:** This outline drawing is provided for general reference only and is not intended for design or installation. For more information see Operation and Installation manuals.

## Automatic transfer panel configurations



## Options and accessories

- Battery, 12 V, 620 cca (P/N 416-0823)
- Battery heater kit (P/N 333-0469)
- Full line of complementing automatic transfer panels

## Housing features

- Sound attenuated, weather protective design, key-lockable service access doors
- Internal starting battery tray and tie down
- Heavy-duty aluminum or steel housing, stainless steel fasteners

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## Derating factors

### 100GGHH Model, Natural Gas

Engine power available up to 594 m (1950 ft) at ambient temperatures up to 40 °C (104 °F). Above 594 m (1950 ft) derate at 4% per 305 m (1000 ft), and 2% per 11 °C (1% per 10 °F) above 40 °C (104 °F).

### 100GGHH Model, Propane

Engine power available up to 305 m (1000 ft) at ambient temperatures up to 25 °C (77 °F). Above 305 m (1000 ft) derate at 4% per 305 m (1000 ft), and 2% per 11 °C (1% per 10 °F) above 25 °C (77 °F).

## Testing and standards



This generator set is designed in facilities certified to ISO 9001 and manufactured in facilities certified to ISO 9001 or ISO 9002.



The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins Power Generation products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.



All low voltage models are CSA certified to product class 4215-01.



The generator set is available Listed to UL 2200, Stationary Engine Generator Assemblies. The PowerCommand control is Listed to UL 508 - Category NITW7 for U.S. and Canadian usage.

### U.S. EPA

Engine certified to U.S. EPA SI Stationary Emergency Emission Regulation 40 CFR, Part 60.

## After sale support

### Largest distributor/dealer support network

Cummins generator sets are supported by the largest and best trained worldwide certified distributor/dealer network in the industry. This network of knowledgeable Cummins distributor/dealers will help you select and install the right generator set and accessories to meet the requirements of your specific application. This same network offers a complete selection of commonly used generator set maintenance parts, accessories and products plus manuals and specification sheets. Plus, they can answer your questions regarding proper operation, maintenance schedules and more.

**Manuals:** Operation and installation manuals ship with the generator set. To obtain additional copies or other manuals for this model, see your Cummins distributor/dealer.

To easily locate the nearest Cummins distributor/dealer in your area, visit [www.cumminsonan.com](http://www.cumminsonan.com) or [www.cumminspower.com](http://www.cumminspower.com).

### Warranty policy

Cummins generators come with a standard two-year warranty. Additional two and five-year warranty options are available. Some restrictions apply.

This product is EPA Emissions certified for emergency standby use only.



#### WARNING:

Standby rating based on: Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. (Equivalent to fuel stop power in accordance with ISO3046, AS2789, DIN6271 and BS5514.) nominally rated.



#### WARNING:

Back feed to a utility system can cause electrocution and/or property damage. Do not connect to any building electrical except through an approved device or after building main breaker is open.

## Contact your distributor/dealer for more information.

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