



Spark ignited generator set 20 kW standby



Features and benefits

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

Weight, size and sound level

Weight: 1105 lbs (501 kg)

Size: Footprint dimensions (for recommended installation): length 64.4 in (1635 mm), width 30 in (762 mm), height 46.7 in (1184.89 mm)

Overall dimensions: length 85.3 in (2166.68 mm), width 30 in (762 mm), height 46.7 in (1184.89 mm)

Sound: 66 dB(A) at 7 m, at full load

Models and ratings

Order model	Fuel	Voltage	Rated kW	kVa	Rated amps	Circuit breaker	Enclosure
GGMA	Natural gas/propane dual fuel	120/240	20	20	166.7/83.3	100 A, 2 pole	Aluminum

Engine power available up to 3000 ft (915 m) at ambient temperatures up to 104 °F (40 °C). Above 3000 ft (915 m) derate at 4% per 1000 ft (305 m), and 1.1% per 10 °F (2% per 10 °C) above 104 °F (40 °C).

Standard features

Engine:

- Electronic ignition
- Electronic governor
- Full-pressure lubrication
- High-capacity oil sump, spin-on oil filter
- Solenoid shift starter
- 60 A, engine-driven battery charger

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, overcrank and over speed shutdowns
- Running time meter
- 100 A UL Listed circuit breaker
- DC control fuse

Exhaust muffler:

- Enclosed exhaust silencer
- Low noise

Engine details

Engine: GM Industrial, spark-ignited

Design: In-line 4-cylinder, liquid-cooled

Compression ratio: 10.5:1

Displacement: 181 cu in (3.0 L)

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

Oil sump capacity: 4.5 qt (4.3 L) with filter

Operating speed: 1800 RPM

Gross engine power output, kWm (bhp): 23.8 (31.9)

Average fuel consumption

Fuel consumption – natural gas

Load:	1/4	1/2	3/4	Full
Cfh	156.3	203.7	251.1	298.4
M ³ /hr:	4.3	5.9	7.6	9.5

Fuel consumption - propane

Load:	1/4	1/2	3/4	Full
Cfh	59.8	78.8	97.7	116.6
M ³ /hr:	1.7	2.7	2.8	3.3
Gal/hr	1.6	2.2	2.7	3.2

Conversion factor:

8.58 ft³ = 1 lb

0.535m³ = 1 kg

36.39 ft³ = 1 gal

Alternator details

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

Insulation system: Class H per NEMA MG1-1.65 and BS2757.

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 derived is a self-excited (shunt) system with the voltage directly from the generator set output.

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

Voltage: 120/240 V AC, single phase, 1.0 pf.

Governor regulation class: ISO 8528 Part 1 Class G3

Motor starting kVA (at 90% sustained voltage): 46

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

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

Random frequency variation: ±0.5% at 60 Hz.

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

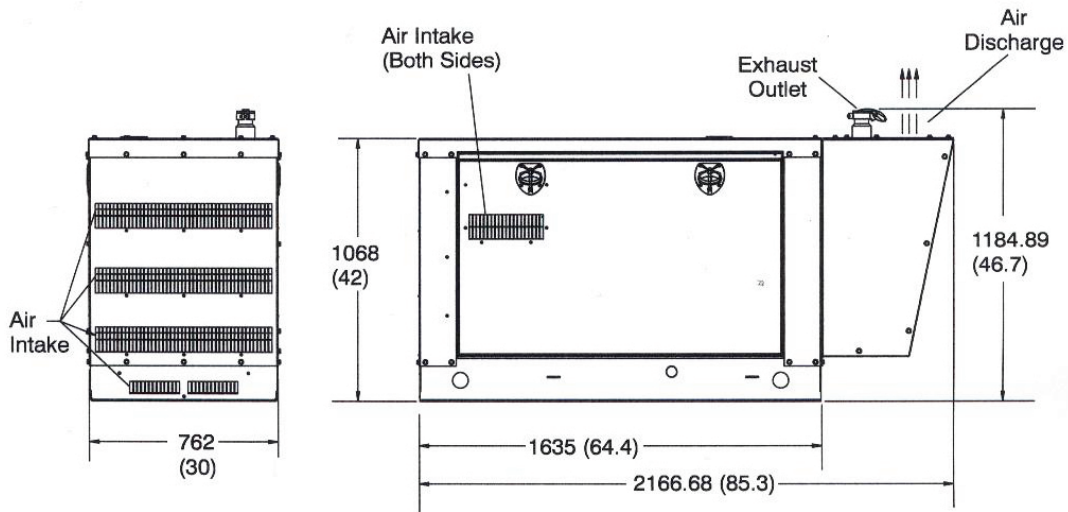
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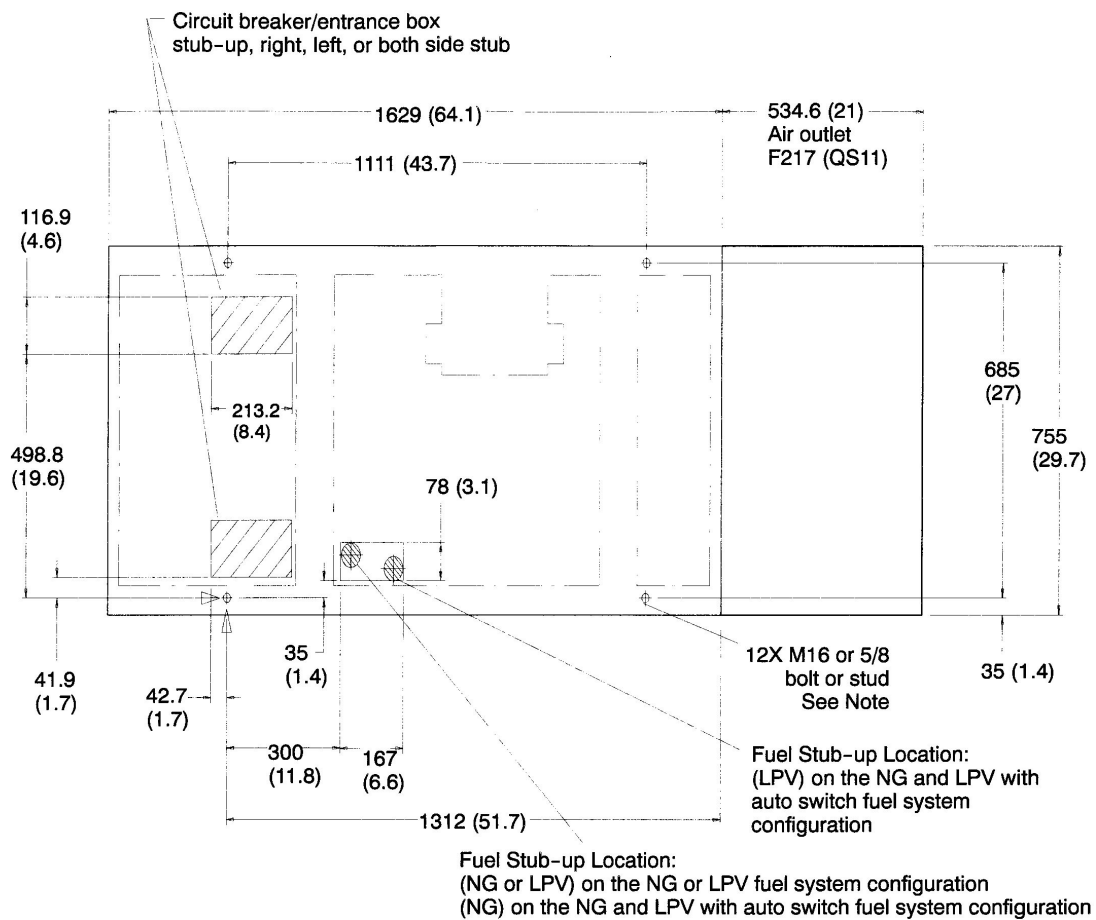
Basic dimensions

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 or obtain drawing 500-4511 or 500-4512 and wiring diagram from your distributor/dealer.

Installation drawing



Note: Skid-base has a flange thickness of 3.42 mm (.135 inches)
Allow extra length on hardware for unevenness of mounting surface.

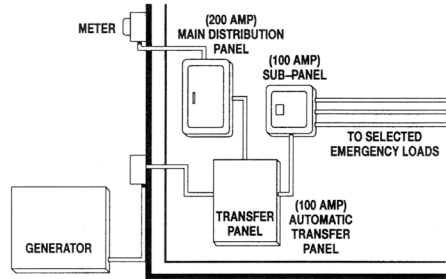
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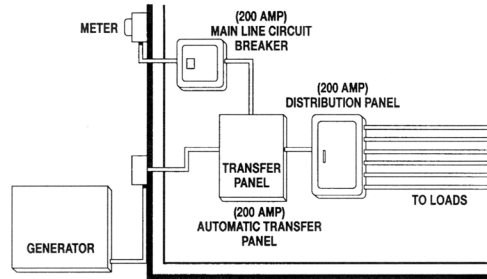
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Automatic transfer panel configurations



Dedicated emergency standby service system (100 A)



Full-service rating standby system (200 A)

Options and accessories

- Battery, 12 V, 325 cca (P/N 416-0774)
- Battery heater kit (P/N 333-0469)
- LCD Display Interface (P/N 0179-4861-05)
- Full line of complementing automatic transfer panels

Housing features

- Sound attenuated design, two easy service access doors - key-lockable
- Internal starting battery tray and tie down
- Heavy-duty aluminum housing

Testing and standards

- Listed to UL 2200
- This generator set was designed and manufactured in facilities certified to ISO 9001.
- CSA-certified for electrical equipment. Meets CSA C22.2.
- Engine certified to U.S. EPA SI Stationary Emission Regulation 40 CFR, Part 60



U.S. EPA

Warranty policy

Cummins Onan generators come with a standard two year warranty. Additional two and five-year warranty options are available. See your certified distributor or dealer for details.

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

<p>WARNING:</p>
<p>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 ISO9046, AS2789, DIN6271 and BS5514.) nominally rated.</p>

<p>WARNING:</p>
<p>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.</p>

After sale support

Largest distributor/dealer support network

Cummins Onan generator sets are supported by the largest and best trained worldwide certified distributor/dealer network in the industry. This network of knowledgeable Cummins Onan 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 Onan distributor/dealer and request the following manual numbers: Operation (961-0117), Installation (961-0615), Parts (961-0214), Service (961-0510).

To easily locate the nearest Cummins Onan distributor/dealer in your area, or for more information, contact us at 1-800-888-6626 (or 763-574-5000) or visit www.cumminsonan.com.

Contact your distributor/dealer for more information.

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