

# Residential generator

## RS Series

### 45000



# Cummins Onan



Performance you rely on.™

#### Features and benefits

- Very quiet operation
- Fully automatic operation when used with a Cummins Onan 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
- Aluminum enclosure available

#### Weight, size and sound level

Weight: 2668 lb (1160 kg) natural gas, 2752 lb (1197 kg) LP

Size: Length 101.5 in (2578 mm), width 41.3 in (1049 mm), height 71.8 in (1824 mm)

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

\* Add 2 dB(A) for aluminum enclosure

#### Models and ratings

Order Model	Fuel	Voltage	Rated kW	kVa	Rated amps	Circuit breaker	Enclosure
<b>42GGFE-6098</b>	Natural gas	120/240	42	42	350/175	175 A, 2 pole	Steel
<b>47GGFE-6101</b>	LP vapor	120/240	47	47	392/196	200 A, 2 pole	Steel
<b>42GGFE-6099K</b>	Natural gas	120/240	42	42	350/175	175 A, 2 pole	Aluminum
<b>47GGFE-6102K</b>	LP vapor	120/240	47	47	392/196	200 A, 2 pole	Aluminum

- Ratings apply at 500 ft (152m), 104 °F (40 °C). Total power available will decrease 4% for each 1000 ft (304.8 m) above sea level and 1.0% for each 10 °F (5.5 °C) increase in ambient temperature above 85 °F (30 °C).

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## Standard features

Engine:

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

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
- UL Listed circuit breaker
- DC control fuse

Exhaust muffler:

- Enclosed exhaust silencer
- Low noise

Average fuel consumption:

Fuel consumption-natural gas

<b>Load</b>	<b>¼</b>	<b>½</b>	<b>¾</b>	<b>Full</b>
ft <sup>3</sup> /hr	216	331	466	576
m <sup>3</sup> /hr	6.1	9.4	13.2	16.3

Fuel consumption-LP vapor

<b>Load</b>	<b>¼</b>	<b>½</b>	<b>¾</b>	<b>Full</b>
ft <sup>3</sup> /hr	90	140	196	246
m <sup>3</sup> /hr	2.5	4.0	5.5	7.0
Gal/hr	2.5	3.8	5.4	6.8
L/hr	9.5	14.4	20.5	25.8

Conversion factor:

8.58 ft<sup>3</sup> = 1 lb

0.535m<sup>3</sup> = 1 kg

36.39 ft<sup>3</sup> = 1 gal

## Engine details

Engine: Ford, industrial, spark-ignited

Design: 6-cylinder V, liquid-cooled

Compression ratio: 9.3

Displacement: 256 cu in (4.2 L)

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

Oil Sump capacity: 6 qt

Operating speed: 1800 RPM

Gross engine power, kWm (bhp):

Natural gas: 50.0 (67.0), Propane: 55.2 (74.0)

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## Alternator details

Design: Brushless, revolving field, 4-lead 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.

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## Generator performance

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

Governor regulation class: ISO 8528 Part 1 Class G3.

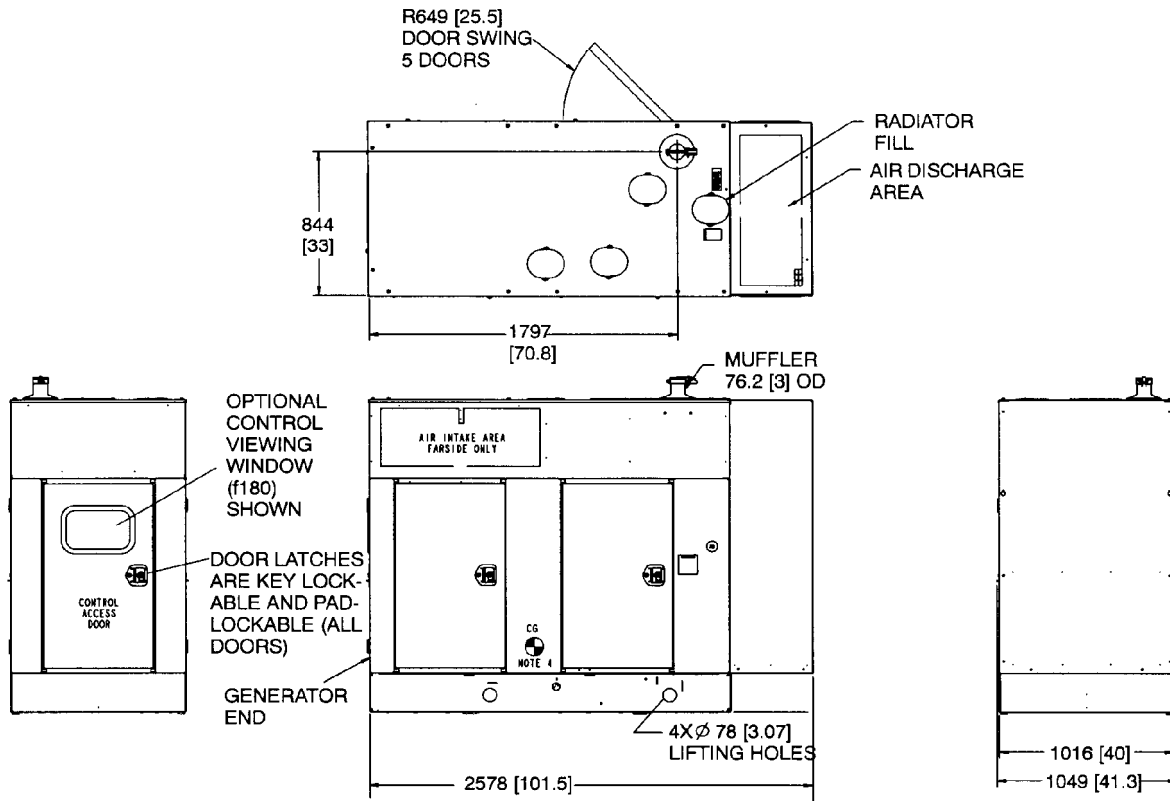
Voltage regulation: 1%, no load to full load.

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

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

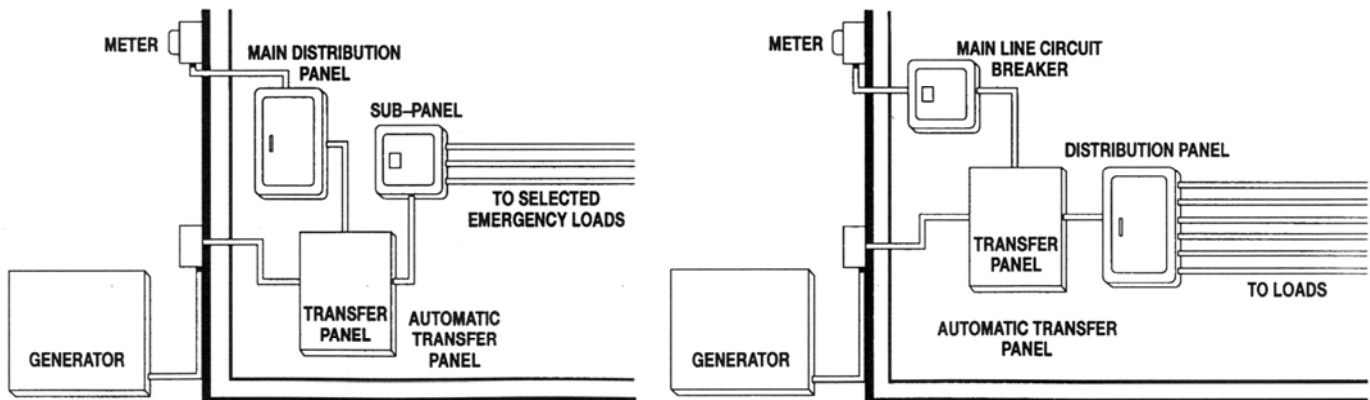
Motor starting kVA (at 90% sustained voltage): 113

## Basic dimensions



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 500-3167 and wiring diagram from your distributor/dealer.

## Automatic transfer panel configurations



Dedicated emergency standby service system

Full-service rating standby system

## 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 steel housing, stainless steel fasteners

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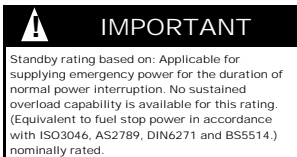
## Testing and standards

- 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.



## Warranty policy

The Cummins Onan RS 45000 home standby system comes with a standard two-year warranty. Additional two and five-year warranty options are available. Some limitations apply. See AB2023-02 document for more information.



## 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 (928-0136), Installation (928-0614), Parts (928-0240), Service (928-0560).

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](http://www.cumminsonan.com).

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Contact your distributor/dealer for more information.

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