Residential generator RS Liquid Cooled Series RS50 Model GGPC



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: 2891 lb (1311 kg) steel enclosure, 2634 lb (1195 kg) aluminum enclosure

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

Sound: 65 dB(A)* at 7 m, average at full load

* Add 2 dB(A) for aluminum enclosure

Models and ratings

Order Model	Part Number	Fuel	Voltage	Rated kW	kVa	Rated amps	Circuit breaker	Enclosure
45GGPC-6126A	A029V083	Natural gas	120/240	45	45	375/187.5	200 A, 2 pole	Steel
50GGPC-6128A	A029V085	LP vapor	120/240	50	50	416/208	200 A, 2 pole	Steel
45GGPC-6127A	A029V084	Natural gas	120/240	45	45	375/187.5	200 A, 2 pole	Aluminum
50GGPC-6129A	A029V086	LP vapor	120/240	50	50	416/208	200 A, 2 pole	Aluminum

⁻ Ratings apply at 1300 ft (396m), 104 °F (40 °C). Total power available will decrease 4% for each 1000 ft (304.8 m) above 1300 ft (396m) and 2% for each 10 °F (5.5 °C) increase in ambient temperature above 104 °F (40 °C).

Standard features

Engine:

- Electronic ignition
- Electronic governor
- Full-pressure lubrication
- · High-capacity oil sump
- · Single spin-on canister-combination full flow with bypass
- · Solenoid shift starter
- 70 A, engine-driven battery charger
- 120 V coolant heater
- Engine oil drain extension

Control system:

Provides total genset system integration including:

- Automatic remote starting/stopping
- Precise frequency and voltage regulation
- Alarm and status message display
- AmpSentry™ protection
- · Output metering
- · Auto-shutdown at fault detection
- NFPA 110 Level 1 compliance
- · Low coolant level shut-down

Exhaust muffler:

- Enclosed exhaust silencer
- Low noise

Average fuel consumption:

Fuel consumption-natural gas

Load	1/4	1/2	3/4	Full
ft³/hr	282.0	392.8	512.0	645.9
m³/hr	8.0	11.1	14.5	18.3

Engine details

system

Compression ratio: 9.4:1

Displacement: 5L (305 in³)

Oil Sump capacity: 5.8 qt

Operating speed: 1800 RPM

Gross engine power, kWm (bhp):

Natural gas: 57.6 (77.3), Propane: 63.6 (85.3)

Engine: GM, industrial, spark-ignited

Design: Cast iron V8 cylinder, liquid-cooled

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

Fuel consumption-LP vap

Load	1/4	1/2	3/4	Full
ft³/hr	113.3	160.6	215.4	270.2
m³/hr	3.2	4.5	6.1	7.7
Gal/hr	3.1	4.4	5.9	7.4
L/hr	11.8	16.8	22.5	28.2

Conversion factor: $8.58 \text{ ft}^3 = 1 \text{ lb}$

 $0.535m^3 = 1 \text{ kg}$

 $36.39 \text{ ft}^3 = 1 \text{ gal}$

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 performance

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

Governor regulation class: ISO 8528 Part 1 Class

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

Frequency regulation: Isochronous, 0% no load to

full load.

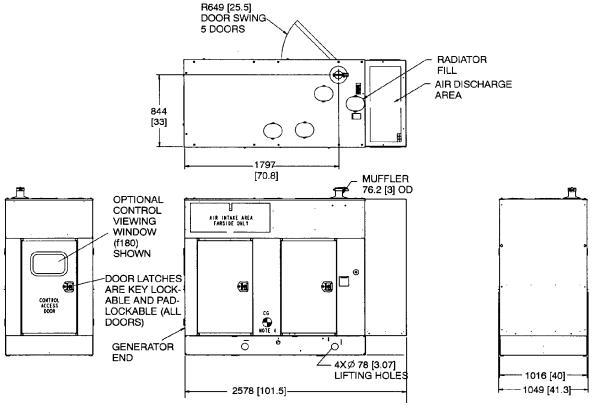
Operating temperature: -20 °F (-28.8 °C) to 122 °F

Motor starting kVA (at 90% sustained

voltage): 130

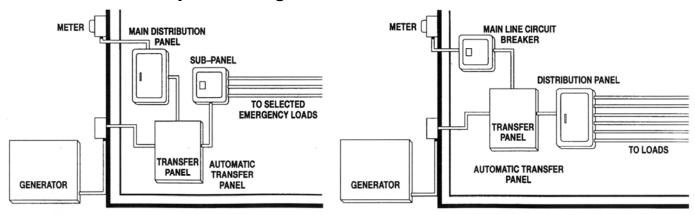
Dimensions: mm (in)

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

Testing and standards

- Listed to UL 2200
- This generator set was designed and manufactured in facilities certified to ISO 9001.
- All low voltage models are CSA certified to product class 4215-01.







U.S. EPA

Warranty policy

The Cummins Onan RS50 home standby system comes with a standard two-year warranty. Additional two and five-year warranty options are available. Some limitations apply. See your certified distributor or dealer for details.

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

IMPORTANT

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 BSS514.) 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.

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.

To easily locate the nearest certified distributor/dealer for Cummins Onan generators in your area, or for more information, contact us at 1-800-344-0039 or visit www.cumminsonan.com.

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Cummins Onan

Cummins Power Generation

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