

Residential generator system RS Series 12000



Cummins Onan

Performance you rely on.™



Features and benefits

- Very quiet operation - less than 64 dB(A) at 7 m at full load
- Internet remote monitoring and email notification
- Automatic load management - works with the service entrance transfer switch to maximize utilization of generator and turns off nonessential loads automatically for maximum utilization of the generator
- Powered by Subaru EH 72 engine with Cummins Onan designed fuel system
- Cummins Onan designed alternator and electronic control
- Powerful motor starting – starts and runs a 4 ton A/C* unit at 122 °F (50 °C) and full pre-load
- 120 volt GFCI protected outlet on genset
- Self-diagnostic capability
- Service and maintenance information displayed on in home display
- Easy installation with innovative molded polymer installation base - no need for a concrete pad

- Electronic governor for precise frequency control
- Flexible 20 inch fuel line provided with genset
- Generator designed and manufactured in the USA
- Emissions certified (60 Hz models)
- UL 2200, CUL and CSA listed generator and transfer switch for your protection
- Utility grade power output, less than 5% THD.
- Battery requirement - 12 V, group 26R, 530 CCA

Weight, size and sound level

Weight: 460 lb (209 kg)

Size: Length 48 in (1219 mm), width 34 in (864 mm), height 31.5 in (800 mm)

Generator w/cover: length 53 in (1346 mm), width 43 in (1092 mm), height 31.5 in (800 mm)

Sound: Less than 64 dB(A) at 23 ft (7 m) at full load

Models and ratings

Order model	Fuel	Voltage	Rated kW**	Rated amps**	Circuit breaker
12GSAA-6707	Natural gas	120/240	10.5 kW	87.5/43.75	50 A, 2 pole
12GSAA-6707	LP vapor	120/240	12 kW	100/50	50 A, 2 pole

* Derating guidelines: Full rated power available at 60 °F (15.5 °C) at sea level. Derate 3.5% for each 1000 ft (304.8 m) above sea level and 1.5% for each 10 °F (-12.5 °C) increase in ambient temperature above 60 °F (15.5 °C)

** Prototype tested @ 122 °F (50 °C) with TRANE® 4 ton A/C unit (model 4TCX3048A1000A) with an additional 5 kW pre-load applied. Contact an HVAC specialist for proper generator sizing guidelines.

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Engine

Model: Subaru EH 72, 4-cycle, air-cooled, 2-cylinders OHV

Compression ratio: 8.3:1

Displacement: 40.9 cu in (720 cc)

Cooling air volume: 759 cfm

Oil sump capacity: 1.80 qt (1.7 L) with filter

Operating speed: 3600 rpm

Fuel supply pressure: NG 5-11 in H₂O, LP 7-11 in H₂O

- Cummins Onan designed fuel system for max power output and durability
- Integrated oil drain valve and extension tube included
- Simple fuel conversion between natural gas and LP
- 15 A battery charger
- Highly reliable solenoid shift starter
- Transistorized magneto ignition
- Automotive-style lubrication system
- Oil cooler
- Spin-on oil filter
- Electronic governor
- Large-capacity air cleaner
- CARB Certified, EPA Certified

Weather protective sound enclosure:

- Thick 11 gauge aluminum enclosure with resilient architectural grade powder coat paint
- Durable polypropylene base eliminates need for concrete pad
- UL Listed, impact resistant, fully colored, automotive grade polypropylene cover with UV stabilizer
- All maintenance points are accessible without the use of tools
- “Under the hood” oil dipstick check and fill
- Electrical stub-up and side knockouts provided on genset for installation flexibility
- Patented, innovative, compact and neighborhood friendly design blends into any residential setting
- Rust proof design
- No exposed fasteners
- Key lockable
- High intake and exhaust to reduce rain ingestion and snow blockage

Control system:

- Electronic control with self diagnostics and generator set protection and safeties built-in
- Automatically identifies power outage and starts generator
- Microprocessor control manages generator set operation, fault detection and service diagnostics
- Illuminated run/off/auto switch
- 50 A UL Listed circuit breaker
- Convenient access to all connection points
- Fully automatic operation

Exhaust muffler:

- Corrosion resistant stainless steel muffler manifold and body
- Low noise

Transfer switch:

Automatic transfer switch NEMA 3R and service entrance rated (U.S. only).

- Fully automatic operation with Cummins Onan RSS model automatic transfer switch.
- Reduces installation time with indoor/outdoor flexibility and whole house install.
- Gives user flexibility to select and manage loads during outage.
- **U.S. - UL 1008 Listed:** Service Entrance Rated, RSS100-6868, RSS200-6869
- **Canada - CSA Approved and UL 1008 Listed:** RSS100-6634, RSS200-6635

Internet/email capability:

- Sends you or your service technician an email if service or maintenance is required and allows user to check on home and family from anywhere in the world in the event of an emergency.

In-home display:



- Wired in-home LED display standard on every set.
- Reliably hardwired to genset battery and charging system.
- Easy set weekly exerciser clock.
- Start and stop genset from comfort of your own home.
- Displays maintenance and service reminders.
- Percent load is displayed allowing user to manage load.

Average fuel consumption:

Fuel consumption-natural gas	<u>Load:</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>	<u>Full</u>
	ft ³ /hr:	103	122	172	191
	m ³ /hr:	2.9	3.5	4.19	5.4
	Kg/hr	2.1	2.5	3.5	3.9
Nominal fuel rating - 37 MJ/m ³ (1000 Btu/ft ³).					

Fuel consumption-LP vapor	<u>Load:</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>	<u>Full</u>	<u>Conversion factor</u>
	ft ³ /hr:	42	53	71	88	8.58 ft ³ = 1 lb
	m ³ /hr:	1.2	1.5	2.0	2.5	0.535 m ³ = 1kg
	Gal/hr:	1.2	1.5	2.0	2.4	36.39 ft ³ = 1 Gal
	L/hr:	4.5	5.7	7.6	9.1	
	Kg/hr	2.2	2.8	3.7	4.7	
Nominal fuel rating - 93 MJ/m ³ (2500 Btu/ft ³).						

Alternator details

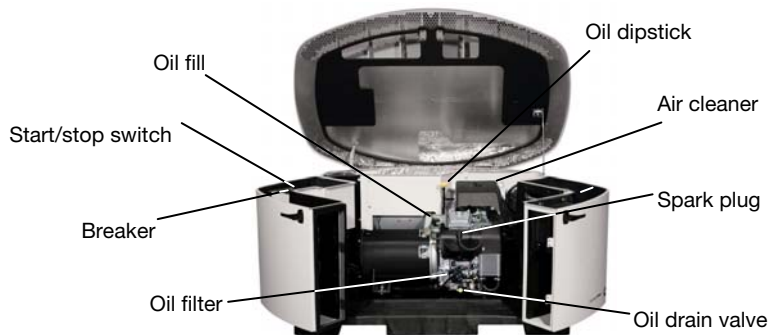
Design: Cummins Onan 2-pole, self-excited revolving field. Permanently aligned to engine by a tapered shaft.
Clean utility grade power – Less than 5% THD (total harmonic distortion). Computer and motor friendly power output. Electronic speed and voltage control.
Insulation system and temperature rise: Class H insulation per NEMA MG-1-1-66.
Cooling: Direct-drive, centrifugal blower.
Rotor: Laminated electrical steel assembly skewed for improved voltage waveform, heavy insulated copper wire windings.

Bearing: Double-sealed pre-lubricated ball bearing.
DC brushes: Electrographitic, long life, easily serviced.

Generator set performance

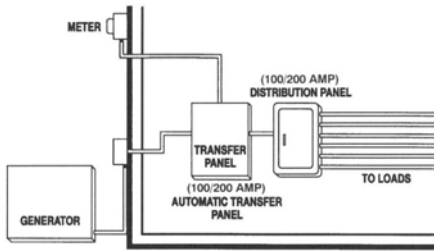
Voltage: 120/240 V AC, single phase, 1.0 pf.
Voltage regulation: ±1.5% no load to full load.
Frequency regulation: Isochronous, 0% no load to full load.
Operating temperature: -20 °F (-29 °C) to 122 °F (50 °C). Must utilize cold weather starting kit for operation below 32 °F (0 °C).

Maintenance and user interface locations

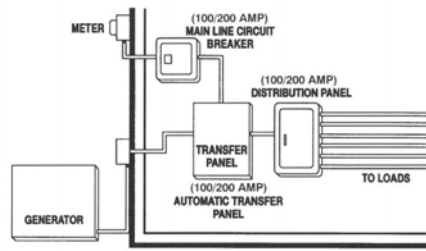


Note: For more information see Operator and Installation manuals, obtain drawing 0500-4905, and wiring diagram 0630-3514 from your distributor/dealer.

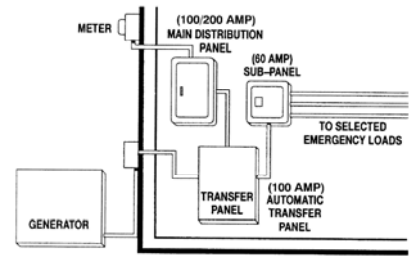
Automatic transfer panel configurations



**Full service rating standby system
(200 A)
Service entrance installation (USA)
(100/200 A)**

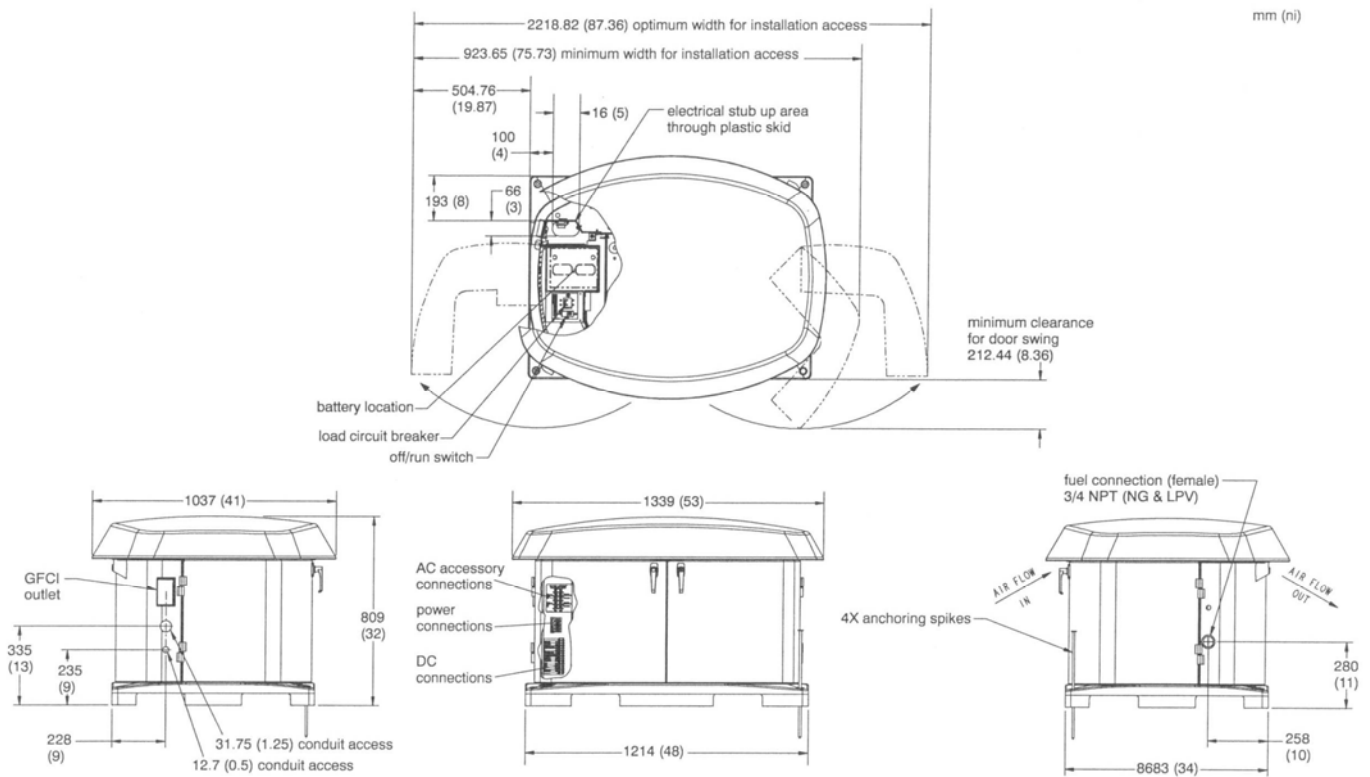


**Full service rating standby system
(200 A)
Service entrance installation (Canada)
(100/200 A)**



**Dedicated emergency standby
service system (100/200 A)**

Dimensions

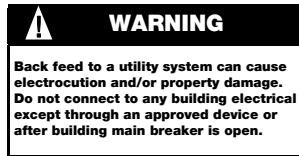
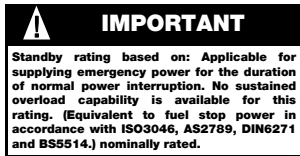


Options and accessories

- Battery heater kit (P/N 0333-0770)
- Cold weather starting kit (P/N 0333-0771)
- Installation wheel kit (P/N 0541-1624)

Testing and standards

- Generator Listed to UL 2200 and CSA, transfer switch Listed to UL 1008.
- This generator set was designed and manufactured in facilities certified to ISO 9001.
- RSS Canada meets CSA requirements.



(See T-030 document for more information.)

Warranty policy

The Cummins Onan RS 12000 home standby system comes with a two year warranty on labor and parts. Additional five-year warranty options are available. Warranty is valid on all RS 12000 generator sets sold with automatic transfer switches. The RS 12000 generator set and U.S. transfer switch are specifically designed to function together. Using any other product in conjunction with either product will void the warranty. The transfer switch for Canada may be used with other generators.

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 (983-0104), Installation (983-0603) Parts (983-0204) Service (983-0503).

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.

Cummins Onan

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