# Cummins Onan



# RV generator set Quiet Gasoline<sup>™</sup> Series RV QG 4000



#### **Features and benefits**

- · Microprocessor control with diagnostics.
- · Exceptionally smooth, quiet operation.
- Sealed connectors.
- Full housing with enclosed muffler.
- 3-year limited warranty.
- Lightweight, compact.
- OHV engine for efficiency, no decarboning.

## Weight, size and sound level

**Weight:** 178 lbs (80.7 kg)

**Size:** Length 30.0 in (762 mm), width 19.7 in

(500.4 mm), height 14.4 in (353.1 mm)

**Sound:** 68 dB(A) readings at 10 ft (3 m) half load

- Meets National Park Service sound level requirements (60 dB(A) @ 50 ft) for use in national parks.
- Typical installation will further reduce sound level.
- Dimensions are representative of 60 Hz models.

# **Models and ratings**

								Circuit
Model	Fuel	Hz	RPM	Watts	Voltage	Amps	Phase	breaker
4KYFR65697	Gasoline	60	3600	4000	100 (1)	40.0	1	20 A, 2-pole
4KYFA26100	Gasoline	60	3600	4000	120	33.3	1	30 A, 1-pole
4KYFA6747*	Gasoline	60	3600	4000	120	33.3	1	30 A, 1-pole
4KYFR11429	Gasoline	60	3600	4000	100 (2)	40.0	1	20 A, 2-pole
3.6KYFA26120	LP	60	3600	3600	120	30.0	1	30 A, 1-pole
3.3KYFR4858	LP	50	3000	3300	230 (2,4)	14.3	1	17 A, 1-pole
3.6KYFR4856	Gasoline	50	3000	3600	230 (2,4)	15.7	1	17 A,1-pole

(1) Isolated neutral, (2) Grounded neutral, (3) Adjustable 220-240, (4) Australia/New Zealand wire colors.

Ambient conditions for rated power output with muffler and RV enclosure, per ISO 8528-1:

- Temperature: 77° F (25° C)
- Altitude: 500 ft (152.4 m), (99 kPa dry)

Typical power output change based on ambient conditions:

- Temperature: Power output decreases 1% for every 10° F (5.5° C) increase
- Altitude: Power output decreases 3.5% for every 1000 ft (305 m) increase

Ratings represent minimums. Actual performance may be significantly higher based on installation and operating conditions.

\* Evaporative spec: For trailer applications required to meet Tier III Evaporative Emissions of the California Air Resources Board.

The 60 Hz 100V and 50 Hz sets are not certified for application in North America.

Effective January 1, 2011, gasoline generator sets on trailers, diesel chassis or any other non-motorized mobile apparatus must have an EVAP generator set, approved tank, EVAP canister, hoses and fittings all meeting the CARB Tier 3 and EPA phase 3 standards and specifications. This law applies in all 50 states.

# Operating temperature range

	Low	High
Gasoline	-20° F (-29° C)	120° F (49° C)
LP	0° F (-18° C)	120° F (49° C)

<sup>-</sup> Depends upon LP tank capacity, surface area and butane content of LPG.

#### Standard features

- · Microprocessor control with digital voltage regulator
- Starter overcrank protection
- Generator set field overload protection
- Over/under frequency and voltage protection
- Loss of AC sense protection
- Mechanical fault protection
- · Detects starter faults
- Reverse connections and high battery voltage protection
- 4-point vibration isolator mounting system
- Magnetic circuit breaker
- Automatic resetting of DC circuit overcurrent protection for set wiring and remote start wiring
- Integral enclosure cover and stamped steel base
- Stationary exhaust pipe attachment point
- · High stability mechanical governor
- Sealed remote start connector
- Fuel filter
- USDA Forest Service-approved, spark-arresting muffler
- Cross-flow pressure cooling
- Automatic choke
- Electric fuel pump with positive fuel safety shutoff (gasoline)
- Electric fuel shutoff solenoid (LPG)
- 125 in (3.2 m) generator set output leads
- Intake silencer, sound deadening material and baffles reduce sound level
- Start-stop/prime rocker switch on control with LED status indicator light for set diagnostics

# **Engine details**

Model: Cummins Onan E095H

**Design:** 4-cycle, OHV, single horizontal cylinder

**Displacement:** 18.5 in<sup>3</sup> (304 cm<sup>3</sup>) **Compression ratio:** 8.5:1 **Maximum power at 60 Hz:** 

LPG - 8.6 bhp (6.4 kW); Gasoline: - 9.5 bhp (7 kW)

Maximum power at 50 Hz:

LPG - 7.6 bhp (5.7 kW); Gasoline - 8.3 bhp (6.2 kW)

Cooling: Cross flow air - pressure type

Cooling air volume: Includes engine cooling air volume

**60 Hz:** 300 ft³/min (8.5 m³/min) **50 Hz:** 250 ft³/min (7.1 m³/min) **Combustion air volume: 60 Hz:** 19 ft³/min (0.5 m³/min) **50 Hz:** 16 ft³/min (0.45 m³/min)

**Side draft carburetor:** KY (gasoline)

Electric fuel pump: Positive fuel shutoff (3 psi), fuel lift

3 ft (914 mm)

Air cleaner: Replaceable dry element; patented

automatic choke

Vapor withdrawal system with demand regulator:

KY (LPG)

**Ignition system:** Electronic magneto type

**Starting system:** Remote, 12 V, 3-wire negative ground **Starter:** Automotive type with environmentally protected

pinion; automatic start disconnect **Lubrication:** Splash lubrication **Oil capacity:** 1.6 gt (1.5 L)

Cylinder crankcase: Aluminum alloy with iron cylinder

liner cast into the block, aluminum alloy oil base **Cylinder head:** Aluminum, valves in head, removable

#### Average fuel consumption

Gasoline	No load	Half load	Full load		
60 Hz 4.0 KY	0.3 Gal/h (1.1 L/h)	0.5 Gal/h (1.8 L/h)	0.7 Gal/h (2.7 L/h)		
50 Hz 3.6 KY	0.2 Gal/h (0.8 L/h)	0.4 Gal/h (1.4 L/h)	0.6 Gal/h (2.2 L/h)		
LPG	No load	Half load	Full load		
60 Hz 3.6 KY	0.4 Gal/h (1.5 lb/h) 0.7 kg/h	0.6 Gal/h (2.4 lb/h) 1.1 kg/h	0.7 Gal/h (3.1 lb/h) 1.4 kg/h		
50 Hz 3.3 KY	0.3 Gal/h (1.1 lb/h) 0.5 kg/h	0.5 Gal/h (2.2 lb/h) 1.0 kg/h	0.7 Gal/h (2.9 lb/h) 1.3 kg/h		

#### **Alternator details**

**Design:** Cummins Onan revolving field, AC, 2-pole self-excited; permanently aligned to engine by a tapered shaft; drip-proof construction

**Insulation system and temperature rise:** Meets ANSI/RVIA-EGS-1-1998 and CSA TIL RV-06 requirements.

**Cooling:** Direct drive centrifugal blower, cast aluminum housing for excellent heat transfer

**Voltage regulation:** Microprocessor control with digital voltage regulator

**Rotor:** Laminated electrical steel assembly press fitted to shaft, balanced; heavy insulated copper wire windings; amortisseur windings for improved waveform and motor starting

**Stator:** Laminated electrical steel assembly; heavy insulated copper wire windings

**DC brushes:** Electrographite; long life

Bearing: Double-sealed, pre-lubricated ball bearing

#### **Generator set performance**

**Air conditioner starting:** (60 Hz - gasoline) one 13500 Btu air conditioner with 2000 W base load at 500 ft

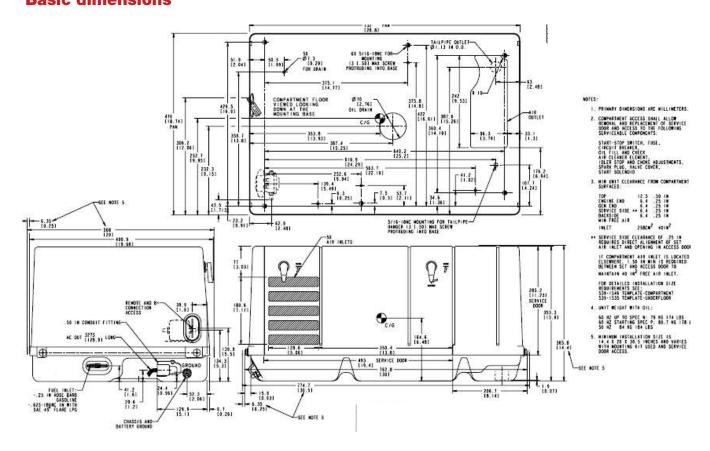
(152.4 m) and 100° F (38° C)

Frequency and voltage regulation: Exceeds

requirements of ANSI/RVIA EGS-1

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 500-3297 and wiring diagram from your distributor/dealer.

#### **Accessories**

- Standard under floor mounting kit (P/N 403-3670) bolts through floor
- Under floor mount template (P/N 539-1535) for use with under floor kit (P/N 403-3670)
- Template for compartment mount (P/N 539-1546)
- Base adapter under floor mounting kit (P/N 403-3630) allows unit to mount using RV QG 5500 mounting kit and for use with RV QG 5500 housing kit (P/N 405-4241) or equivalent
- Housing kit for under floor mounting (P/N 405-4241) requires base adapter (P/N 403-3630)
- Battery, 12 V, minimum 460 cold cranking amps at 0° F (-18° C)
- Remote control panel including start-stop/prime switch with status indicator light (P/N 300-5331)
- Remote control panel including start-stop/prime switch with status indicator light and hour meter (P/N 300-5332)

- Remote control panel including start-stop/prime switch with status indicator light and DC voltmeter (P/N 300-5333)
- Remote control pigtail adapter (P/N 300-4946)
- Remote control plug and wire harness 10 ft (P/N 338-3489-01), 30 ft (P/N 338-3489-02)
- Exhaust tailpipe kit (P/N 155-2845) tailpipe and special hanger
- Exhaust kit 1.5 in (P/N 155-2847) 90° elbow
- Exhaust kit adapter (P/N 155-2850) straight tube adapter
- Energy command auto generator start EC-30 (P/N 018-02030)
- Energy command remote start/stop with diagnostics EC-20 (P/N 018-02020)
- Energy command wireless start/stop EC-30W (P/N 018-03000)

# **Testing for RV application**

- Tested at extremes of temperature -20 °F (-29 °C) to 120 °F (49 °C) for starting and operation
- Tested with RV loads, air conditioners, microwaves, converter, TVs, VCRs
- Tested installed; Cummins owned RVs used for product development testing
- Tested in high humidity conditions
- Tested in salt spray conditions
- Tested in heavy airborne dust conditions
- Field test program
- 60 Hz (120 V only) models listed by SGS United States Testing Company, Inc. per ANSI/RVIA EGS-1 and CSA-certified per Std. 100 Motors and Generators and TIL RV-06.
- This generator set was designed and manufactured in facilities certified to ISO 9001
- 60 Hz 120V models meet all applicable U.S. EPA and California emissions standards











## **Warranty policy**

This limited warranty covers virtually everything except routine maintenance for the first two years you own your RV generator set, and covers parts and labor on major power train and generator set parts during the third year. In addition, it also includes a free 90-day adjustment policy, which provides that Cummins Inc. will make minor adjustments during the first three months you own it - free of charge! Please note: This 3-year limited warranty applies to RV generator sets used in RV applications only, and does not apply to RV generator sets used in commercial mobile applications.

# **▲** WARNING:

Do not use this generator set on a boat. Such use may violate U.S. Coast Guard regulations, and can result in severe personal injury or death from fire, explosion, electrocution, or carbon monoxide poisoning.

# **∆** 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**

#### **Complete line of parts and accessories**

Cummins Inc offers replacement and tune-up parts, accessories, oil and maintenance chemicals - all

specially designed to help keep your Cummins Onan generator set running at peak performance. Cummins Inc. also provides genuine Onan Green Label Parts™ that exactly match generator set specifications and will help maximize power output and extend the life of your generator set.



#### 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 (A041D131), Installation (A041D129), Parts (0981-0246), Service (A041D133).

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**

#### **Cummins Power Generation**

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