# RV generator set Quiet Gasoline™ Series RV QG 2800



# Cummins Onan

Performance you rely on.™



## **Features and benefits**

- Perfect for travel trailers, truck campers and folding camping trailers.
- Runs one air conditioner with power to spare.
- Lightweight, compact and easy to install.
- Easy maintenance with single-side service.
- Low fuel consumption.
- Gasoline or LP fueled.
- 3-year limited warranty.

## Weight, size and sound level

Weight	107 lbs	(48 kg)
Length Width Height	19.6 in 16.7 in 12.3 in	(498 mm) (424 mm) (312 mm)
Sound	60 Hz 71dB(A) 50 Hz	(readings at 10 ft (3 m) half load)

Meets National Park Service sound level requirements (60 dB(A)
 © 50 ft) for national park use.

(readings at 10 ft (3 m) half load)

- Typical installation will further reduce sound level.

64 dB(A)

# **Models and ratings**

Model	Fuel	Hz	RPM	Watts	Voltage	Amps	Phase	Circuit breaker
2.8 KVD-2090	Gasoline	60	3600	2800	120	23.3	1	25 A
2.5 KVD-2089	LP vapor	60	3600	2500	120	20.8	1	25 A
2.3 KVD-3729	Gasoline	50	3000	2300	230	10.0	1	10 A
2.0 KVD-3730	LP vapor	50	3000	2000	230	8.7	1	10 A
2.3 KVD-5905	Gasoline	50	3000	2300	230(1)	10.0	1	10 A
2.0 KVD-5904	LP vapor	50	3000	2000	230(1)	8.7	1	10 A

(1) 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.

# **Operating temperature range**

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

- Depends upon LP tank capacity, surface area and butane content of LPG.

#### Standard features

- · Cummins Onan sound-attenuating enclosure
- · Focalized mounting system with vibration isolators
- · Cross-flow cooling
- Sheet steel drip controlling base
- USDA Forest Service approved spark arrestor muffler kits available
- Adjustable mechanical governor
- · Automatic choke
- · Overhead valves
- Single-side service
- Electric fuel pump (gasoline); electric fuel solenoid (LP)
- Mounted control panel
- · Sealed remote start connector
- Electric start
- Fused DC circuits to protect set wiring and remote control wiring
- · Magnetic circuit breaker
- 120 in (3 m) generator set output leads
- Solid-state ignition

Average fuel consumption:

Gasoline	No load	Half load
60 Hz 2.8 KVD	0.2 Gal/h (0.8 L/h)	0.3 Gal/h (1.1 L/h)
50 Hz 2.3 KVD	0.2 Gal/h (0.8 L/h)	0.2 Gal/h (0.9 L/h)
LP	No load	Half load
60 Hz 2.5 KVD	0.2 Gal/h (0.9 lb/h) 0.4 kg/h	0.4 Gal/h (1.5 lb/h) 0.7 kg/h
50 Hz 2.0 KVD	0.2 Gal/h (0.9 lb/h) 0.4 kg/h	0.3 Gal/h (1.3 lb/h) 0.6

## **Engine detail**

Model: Cummins Onan GH-200
Design: 4-cycle, single cylinder, OHV
Displacement: 12 in<sup>3</sup> (197 cm<sup>3</sup>)
Compression ratio: 8.5:1
Power: 7.0 bhp (max) at 3600 r/min

Cooling: Pressurized air

**Fuel system:** (Gasoline) electric fuel pump, fuel lift 3 ft (914 mm); (LP) electric fuel solenoid; automatic choke **Cooling air volume:** Includes engine cooling air **60 Hz:** at 3600 r/min 300 ft³/m (8.5 m³/min) **50 Hz:** at 3000 r/min 250 ft³/m (7.1 m³/min)

**Combustion Air:** 

**60 Hz:** at 3600 r/min 12.5 ft³/m (0.35 m³/min) **50 Hz:** at 3000 r/min 10.4 ft³/m (0.3 m³/min) **Ignition system:** Breakerless, electronic

Starting system: Remote, 12 V, 3-wire negative

ground, start-stop rocker switch on control

Connector for remote start cable **Lubrication:** Splash lubrication **Oil capacity:** 1 qt (0.95 L)

Cylinder crankcase: Alloy aluminum with iron

cylinder liner cast into the block

Oil base: Aluminum

Cylinder head: Alloy aluminum, removable

Half load	Full load
0.3 Gal/h (1.1 L/h)	0.4 Gal/h (1.6 L/h)
0.2 Gal/h (0.9 L/h)	0.4 Gal/h (1.5 L/h)
Half load	Full load
0.4 Gal/h (1.5 lb/h) 0.7 kg/h	0.6 Gal/h (2.4 lb/h) 1.1 kg/h

# Alternator details

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

**Insulation system and temperature rise:** Meets ANSI/RVIA EGS-1, BS-4999 standards and CSA Electrical Bulleting 946 standards

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

**Rotor:** Laminated electrical steel assembly press-fitted to shaft, balanced, heavy insulated copper wire windings **Stator:** Laminated electrical steel assembly skewed for excellent waveform; heavy insulated copper wire windings

**Voltage regulator:** Electronic **DC brushes:** Electrographite

## **Generator set performance**

#### Air conditioner operation:

**60 Hz:** at 500 ft. (152.4 m and 100° F (38° C); 2.8 KVD generator set will start and run one approved 13500 Btu air conditioner (14.7 cooling amps or less) plus a 600 W base load, or one approved 11000 Btu air conditioner plus a 1000 W base load;

0.5 Gal/h (2.2 lb/h) 1.0 kg/h

2.5 KVD will start and run one approved 13500 Btu air conditioner plus a 300 W base load, or one approved 11000 Btu air conditioner plus a 600 W base load

**50 Hz:** at 500 ft (152.4 m) and 100° F (38° C) 2.3 KVD will start and run one 7800 Btu air conditioner (5.5 cooling amps or less) with a 600 W base load; 2.0 KVD will start and run one 7800 Btu air conditioner (5.5 cooling amps or less) with a 300 W base load

Voltage regulation: Exceeds requirements of

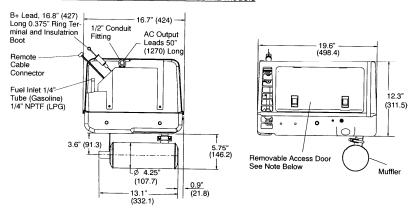
ANSI/RVIA EGS-1 ±10%

**Frequency regulation:** Exceeds requirements of ANSI/RVIA EGA-1 ± 5%

**Note:** Air conditioners operating on engine driven generator set require "easy start" circuits.

#### **Basic dimensions**

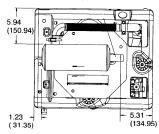
# Muffler Kit 541-0618 - Not for use on 50 Hz models

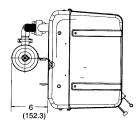


Note: Removable access cover for start/stop switch, fuse, oil check and fill, air cleaner service, governor adjustments, and carburetor adjustments.

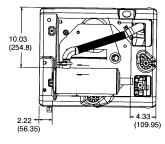
# Muffler Kit 541-1050 - For use on 60 Hz and 50 Hz models

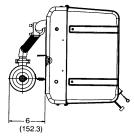
Muffler mounted in forward position





Muffler mounted in rear position





**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 500-3389 drawing and wiring diagram from your distributor/dealer.

#### **Accessories**

- Remote start/stop rocker switch (P/N 300-4936)
- Remote control with start/stop switch and running time meter (P/N 300-4937)
- Remote control w/start/stop switch and DC voltmeter (P/N 300-4938)
- Remote control plug and wire harness:
   10 ft (P/N 338-3489-01), 30 ft (P/N 338-3489-02)
- Remote harness (P/N 300-4946)
- Battery, 12 V, 360 cold cranking amps at 0° F (-18° C) (P/N 416-0717)
- Under floor mounting kit (P/N 541-0661) USDA Forest Service approved spark arrester muffler kits available (P/N 541-0618 and P/N 541-1050)

- Exhaust resonator (P/N 155-2449)
- Compartment mount installation template (P/N 539-2145)
- Under floor mount installation template (P/N 539-2146) (included in mounting kit P/N 541-0661)
- 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-15W (P/N 018-02015)

## **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 Electrical Bulletin 946
- This generator set was designed and manufactured in facilities certified to ISO 9001
- 60 Hz models meet 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 electrica 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 (981-0164), Installation (981-0631), Parts (981-0238), Service (981-0518).

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** 

1400 73rd Ave. NE
Minneapolis, MN 55432 USA
Phone 1 763 574 5000
Toll-free 1 800 888 6626
Fax 1 763 574 5298
Email www.cumminsonan.com/contact
www.cumminsonan.com

