

# RV generator set

## Quiet Diesel™ Series

### RV QD 6000/8000



# Cummins Onan

Performance you rely on.™



## Features and benefits

- Computer-controlled variable speed operation matches engine speed to load demand, minimizing noise level.
- Special sound-controlling housing encloses cooling system and muffler.
- Three-point, fully focalized mounting system reduces vibration.
- Self-diagnostic capabilities simplify troubleshooting.
- Easy, accessible maintenance points.
- Runs two 15000 Btu air conditioners with power to spare.
- High quality, pure sine wave electrical output helps prevent damage to appliances.

## Weight, size and sound level

<b>Weight</b>	420 lbs	(191 kg)
<b>Length</b>	36.3 in	(922 mm)
<b>Width</b>	23.6 in	(599 mm)
<b>Height</b>	22.3 in	(566 mm)
<b>Sound</b>	66 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.

## Models and ratings

Model	Fan	Hz	Watts	Voltage	Amps	Phase	Circuit breaker
<b>8.0 HDKAK/1046</b>	Internal	60	8000	120	66.6	1	35 A, 2-pole
<b>6.0 HDKAH-1044</b>	Internal	60	6000	120	50	1	30 A, 2-pole

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.

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## Standard features

- 3-cylinder diesel engine
- Permanent magnet alternator
- Pure sine wave output
- Digital voltage regulation w/no adjustments required
- Bottom air inlet and outlet
- Integral enclosed muffler with stationary exhaust pipe connection point
- USDA-approved spark arrestor
- Internal radiator
- Sound-insulated cover with cooling air inlet and outlet ducts
- Intake silencer
- Heavy-duty air cleaner
- Maintenance-free electronic governor
- Fused DC circuits
- Meets applicable U.S. EPA and California emissions standards
- Waterproof connector for remote operation
- Focalized mounting system
- Overvoltage, low oil pressure, over temp, over speed and overload safeties
- Bulkhead type connections for fuel and battery
- Terminal block connection for AC output
- Electric fuel pump
- Full flow oil and fuel filter
- Service and maintenance from below
- Automatic timed glow plugs for quick, easy start
- Instant one-touch stop
- Hour meter

### Average fuel consumption:

Diesel	No load	Half load	Full load
<b>8.OHDKAK</b>	0.13 Gal/h (0.49 L/h)	0.49 Gal/h (1.85 L/h)	1.02 Gal/h (3.86 L/h)
<b>6.OHDKAH</b>	0.13 Gal/h (0.49 L/h)	0.40 Gal/h (1.5 L/h)	0.70 Gal/h (2.65 L/h)

## Control system

- Microprocessor control
- Integrated generator set and engine control
- User and service personnel accessible diagnostics
- Fused DC circuits
- Overvoltage safety
- Low oil pressure safety
- Over speed safety
- Overload safety
- Automatic timed glow plugs
- One-touch stop

## Engine details

**Design:** 4-cycle, liquid-cooled diesel engine

**Cylinders:** 3, inline vertical

**Bore:** 2.64 in (67 mm)

**Stroke:** 2.68 in (68 mm)

**Displacement:** 43.88 cu in (719 cc)

**Compression ratio:** 23 to 1

**Lube oil capacity:** 2.8 qt (2.61 L)

**Cooling system capacity:** 4 qt (4.21 L)

**Power (max) at 3600 rpm:** 16.6 hp (12.4 kW) SAE net intermittent

**Starting system:** Remote, 12 V

**Fuel injection pump:** Bosch MD type

**Combustion chamber:** Spherical (TVCS)

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## Alternator details

**Design:** Cummins Onan, permanent magnet

**Insulation system:** Class H

**Exciter system:** None

**DC brushes:** None

**Bearings:** None

**Cooling:** Main engine fan cooled

## Generator set performance

**Voltage regulation no load to full load:**  $\pm 1\%$

**Frequency regulation no load to full load:**  
 $\pm 0.1\%$

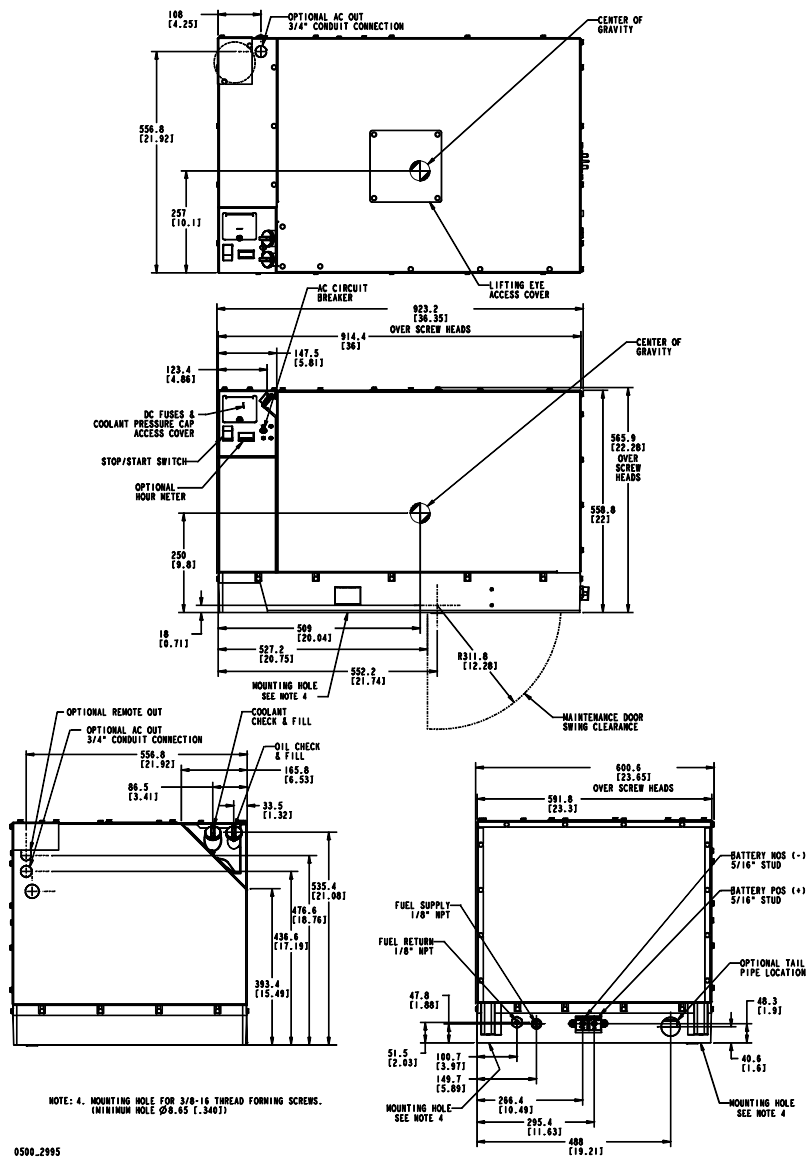
**Random frequency variation for constant loads:**  $\pm 0.5\%$

**Random voltage variation for constant loads:**  $\pm 0.2\%$

**Maximum operating ambient:** Efficient radiator cooling system permits operation at ambient temperatures to 120° F

**Air conditioner operation:** Will operate with two 15000 Btu air conditioners and an additional load of up to:  
6000 kW - 1600 W at 100° F and 500 ft (152.4 m) altitude  
8000 kW - 3100 W at 100° F and 500 ft (152.4 m) altitude

## 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 500-2995 drawing and wiring diagram from your distributor/dealer.

- Conventional compartment mount

## Accessories

- Exhaust elbow (P/N 155-2982)
- Exhaust adapter: 7 in (P/N 155-2424), 3 in (P/N 155-2610)
- Battery: 12 V, 475 CCA at 0° F (-17.8° C) (P/N 416-0795)
- Remote wiring harnesses for use with remote panels: 10 ft (P/N 338-3490-01), 30 ft (P/N 338-3490-02)
- Remote control pigtail (P/N 300-4947)
- Remote control panels:
  - Switch only (P/N 300-4942)
  - Switch and hour meter (P/N 300-4943)
  - Switch and DC voltmeter (P/N 300-4944)
  - Full gage panel (P/N 300-5027)
- 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)

**Note:** Protected by one or more of the following patents: US 5,006,781, US 5,158,208, US 5,096,153, US 5,175,458, US 5,240,222. Other patents pending.

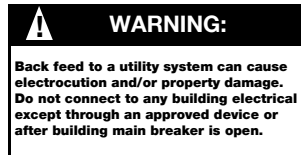
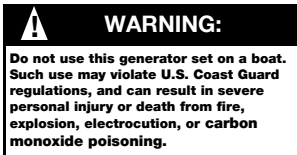
## Testing for RV application

- 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 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.



## 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 (981-0161), Installation (981-0623), Parts (981-0200), Service (981-0522).

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).

## Contact your distributor/dealer for more information

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