RV generator set
Quiet Diesel™
Series RV QD
10000/12500

Features and benefits
• Computer-controlled constant speed operation - quiet diesel performance for larger RVs.
• Special sound-controlling housing encloses cooling system and muffler.
• Three-point, fully focalized internal mounting system reduces vibration.
• Self-diagnostic capabilities simplify troubleshooting.
• Easy, accessible maintenance points.
• Runs two or three rooftop air conditioners with power to spare.
• High quality, pure sine wave electrical output helps prevent damage to appliances.

Weight, size and sound level
Weight: 767 lbs (348 kg) 10.0 kW
787 lbs (357 kg) 12.5 kW
Size: Length 41.4 in (1051 mm), width 24.5 in (622 mm), height 27 in (685 mm)
Sound: 70 dB(A) readings at 10 ft (3 m) half load
• Meets National Park Service sound level requirements (60 dB(A) @ 50 ft) for national park use.
• Typical installation will further reduce sound level.

Models and ratings

<table>
<thead>
<tr>
<th>Model</th>
<th>Fan</th>
<th>Hz</th>
<th>Watts</th>
<th>Voltage</th>
<th>Amps</th>
<th>Phase</th>
<th>Circuit breaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.5 HDKCB-11506</td>
<td>Internal</td>
<td>60</td>
<td>12500</td>
<td>120/240</td>
<td>104.0/52.0</td>
<td>1</td>
<td>50 A, 2-pole</td>
</tr>
<tr>
<td>10.0 HDKCA-11506</td>
<td>Internal</td>
<td>60</td>
<td>10000</td>
<td>120/240</td>
<td>83.3/41.7</td>
<td>1</td>
<td>45 A, 2-pole</td>
</tr>
</tbody>
</table>

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

Actual performance may vary slightly based on installation and operating conditions.
Sound levels may vary based on installation and environmental conditions.
**Standard features**

- 3 cylinder diesel engine
- Brush type AC alternator
- 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
- Hour meter
- Meets applicable U.S. EPA and California emissions standards
- Waterproof connector for remote operation
- Focalized mounting system
- Over voltage, low oil pressure, over temp, over speed, overload and AC alternator over temp safeties
- Bulkhead type connections for fuel and battery
- Terminal block connection for AC output
- Electric fuel pump
- Fuel filter
- Full flow oil and fuel filter
- Service and maintenance through service doors
- Automatic timed glow plugs for quick, easy start
- Instant one-touch stop

**Control system**

- Microprocessor control
- Integrated generator set and engine control
- User and service personnel accessible diagnostics
- Over voltage, over speed and overload safety
- Low oil pressure safety
- AC alternator over temp safety
- Automatic timed glow plugs
- One-touch stop

**Engine details**

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

**Cylinders:** 3, inline vertical

**Bore:** 3.27 in (83 mm)

**Stroke:** 3.64 in (92.4 mm)

**Displacement:** 91.44 cu in (1499 cc)

**Compression ratio:** 23:1

**Lube oil capacity:** 5.9 qt (5.6 L)

**Cooling system capacity:** 6.6 qt (6.2 L)

**Power (max) at 1800 rpm:** 24.8 hp (18.5 kW) (EPA Tier 4)

**Starting system:** Remote, 12 V

**Fuel injection pump:** Zexel, licensed Bosch PFR

**Combustion chamber:** IDI

**Alternator details**

**Design:** Cummins Onan brush type, drip-proof construction

**Insulation system:** Class H per NEMA MGI-1.65 and BS 2757, insulating varnish conforms to MIL-1-24092, Grade CB, Class 155C

**Exciter system:** Electronite voltage regulator

**Bearings:** Double sealed, pre-lubricated ball bearing

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

**Generator set performance**

**Voltage regulation no load to full load:** ± 2%

**Frequency regulation no load to full load:**

± 0.1%

**Random frequency variation for constant loads:**

± 0.6%.

**Random voltage variation for constant loads:**

± 0.5%

**Air conditioner operation:** Will operate with three 15000 Btu air conditioners and an additional load of up to 4000 W at at 100 °F and 500 ft. (152.4 m) altitude

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**Average fuel consumption**

<table>
<thead>
<tr>
<th>Diesel, Gal/h (L/h)</th>
<th>No load</th>
<th>Half load</th>
<th>Full load</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0HDKCA</td>
<td>0.33 (1.2)</td>
<td>0.54 (2.0)</td>
<td>0.78 (3.0)</td>
</tr>
<tr>
<td>12.5HDKCB</td>
<td>0.38 (1.4)</td>
<td>0.71 (2.7)</td>
<td>1.28 (4.8)</td>
</tr>
</tbody>
</table>
**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 500-4040 and wiring diagram from your distributor/dealer.

**Accessories**

- Exhaust elbow (P/N 155-3194)
- Exhaust adapter - 7 in (P/N 155-2424)
- Exhaust adapter - 3 in (P/N 155-2610)
- 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)
- 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 Onan 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 (A043D713), Installation (A043D717), Parts (A043T420), Service (A043M526).

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.

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