RV Quiet Diesel 10,000/12,500 GenSet

RV GenSet

- 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

<table>
<thead>
<tr>
<th>Models and Ratings</th>
<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>10.0 HDKCA/11506</td>
<td>Internal</td>
<td>Internal</td>
<td>60</td>
<td>10,000</td>
<td>120/240</td>
<td>83.3/41.7</td>
<td>1</td>
<td>2 Pole 45 A</td>
</tr>
<tr>
<td>12.5 HDKCB/11506</td>
<td>Internal</td>
<td>Internal</td>
<td>60</td>
<td>12,500</td>
<td>120/240</td>
<td>104.0/52.0</td>
<td>1</td>
<td>2 Pole 50 A</td>
</tr>
</tbody>
</table>

Maximum power capability decreases 3.5% for each 1,000 ft (305 m) above 500 ft. (153 m) and 1% for each 10°F (5.5°C) increase in ambient* temperature above 85°F (29°C).

Ratings are at intermittent power output. Continuous ratings are 95% of intermittent.

* Ambient is defined as the air temperature measured at the cooling air inlet to the set.

Weight, Size and Sound Level

- **Weight:** 10.0 kW 775 lbs (352 kg); 12.5 kW 794 lbs (360 kg)
- **Size:** Length 41.4 in, width 24.5 in, height 27 in
- **Sound:** Readings at 10 ft (3 m) half load: 68 dB(A)

Lower than National Park Service Sound Level Requirements (60 dB(A) at 50 ft.) Can be used in National Parks.

*Typical installation will further reduce sound level.*
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
- Automotive type starter
- Hourmeter
- Meets applicable U.S. EPA and California emissions standards
- Waterproof connector for remote operation
- Focalized mounting system
- Overvoltage, low oil pressure, overtemp, overspeed, 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 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 and engine control
- User and service personnel accessible diagnostics
- Overvoltage safety
- Low oil pressure safety
- Overspeed safety
- Overload safety
- AC alternator over temp safety
- Automatic timed glow plugs
- One touch stop

Engine Detail

**Design:** 4-cycle, liquid-cooled Diesel engine  
**Cylinders:** 3, inline vertical  
**Bore:** 87.0 mm (3.43 in)  
**Stroke:** 92.4 mm (3.64 in)  
**Displacement:** 1647 cc (100.5 cu in)  
**Compression Ratio:** 23 to 1  
**Lube Oil Capacity:** 5.9 qt (5.6 L)  
**Average Fuel Consumption:**

<table>
<thead>
<tr>
<th>Diesel</th>
<th>No Load</th>
<th>Half Load</th>
<th>Full Load</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gal/h</td>
<td>l/h</td>
<td>gal/h</td>
</tr>
<tr>
<td>10.0HDKCA</td>
<td>0.1</td>
<td>2.4</td>
<td>0.43</td>
</tr>
<tr>
<td>12.5HDKCB</td>
<td>0.1</td>
<td>4.0</td>
<td>0.48</td>
</tr>
</tbody>
</table>

**Cooling System Capacity:** 6.6 qt (6.2 L)  
**Power (max) @ 1800 rpm:** 27 hp (20.2 kW)  
**SAE Net Intermittent Starting System:** Remote, 12 V  
**Fuel Injection Pump:** Zexel, licensed Bosch PFR  
**Combustion Chamber:** IDI

Generator Detail

**Design:** 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:** Electronic voltage regulator  
**Bearings:** Double sealed, prelubricated ball bearing  
**Cooling:** Direct drive centrifugal blower

GenSet 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-watt at 100°F and 500 ft altitude
Basic Dimensions

This outline drawing is provided for general reference only and is not intended for design or installation. For more information see Operation and Installation manual or obtain outline drawing 500-4040 and wiring diagram from your Distributor/Dealer.

Options and Accessories

- Exhaust elbow (P/N 155-3194)
- Exhaust adapter - 7 in (P/N 155-2424)
- Exhaust adapter - 3 in (P/N 155-2610)
- Remote control panels:
  - Switch only (P/N 300-4942)
  - Switch and hourmeter (P/N 300-4943)
  - Switch and DC voltmeter (P/N 300-4944)
- Remote control pigtail (P/N 300-4947)
- Remote wiring harnesses for use with remote panels:
  - 10 ft (P/N 338-3490-01)
  - 30 ft (P/N 338-3490-02)
Onan 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, battery chargers.
Tested installed. Onan owns 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 models listed by SGS United States Testing Company, Inc. per ANSI/EGS-1 and CSA-certified per Electrical Bulletin 946.
60 Hz models meet applicable U.S. EPA and California emissions standards.

Warranty Policy

The Onan 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 Onan will make minor adjustments to your new genset during the first three months you own it - free of charge! Please note: The Onan 3-year Limited Warranty applies to RV generators used in RV applications only, and does not apply to RV generators used in commercial mobile applications.

For complete Onan Limited Warranty details see your Cummins Distributor or Authorized Onan RV Service and Parts Dealer.

After Sale Support

For your ongoing satisfaction and the dependability of your Onan RV generator, Onan offers a complete line of replacement and tune-up parts and oil and maintenance chemicals specifically designed for RV generators. Easy to find at certified Onan RV Service and Parts Dealers coast-to-coast, Onan Green Label Parts™ are packaged for correct selection and convenient on-board storage.

**EASY TO LOCATE ONAN AUTHORIZED RV SERVICE AND PARTS DEALER** - Onan has trained, tested, and certified over 700 dealers covering most major metropolitan areas in the U.S. and Canada. To easily locate an authorized dealer, no matter where you travel, call 1-800-888-ONAN and ask us to send you an RV Service and Parts Dealer Directory (F-919) or visit www.onan.com.

See Your Onan Distributor:

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www.onan.com

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**WARNING:** Backfeed 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.