Features and benefits

- Dramatically lower noise, vibration, harshness (NVH)
- Up to 15 dB(A) quieter than conventional diesel generator sets
- Load-matching, variable speed operation
- Enclosed muffler for added quietness, easy installation
- Automatic glow plug eliminates preheat time uncertainty
- Self-diagnostic capability simplifies troubleshooting
- Pure sine wave output for high quality power
- Convenient, top-mounted switches and coolant level check/fills
- Complete, integrated package for easy, low-cost installation
- Service and maintenance points accessible through easy-latch side service door

Weight, size and sound level

**Weight:** 420 lbs (190.9 kg), wet

**Size:** Length 36.35 in (923.2 mm), width 24.23 in (615.4 mm), height 22.28 in (565.9 mm)

**Sound:** Before installation

- **6000:**
  - 64 dB(A) at 10 ft (3 m), no load
  - 65 dB(A) at 10 ft (3 m), 1/2 load
  - 69 dB(A) at 10 ft (3 m), full load

- **7500:**
  - 64 dB(A) at 10 ft (3 m), no load
  - 66 dB(A) at 10 ft (3 m), 1/2 load
  - 71 dB(A) at 10 ft (3 m), full load

- **8000:**
  - 64 dB(A) at 10 ft (3 m), no load
  - 66 dB(A) at 10 ft (3 m), 1/2 load
  - 72 dB(A) at 10 ft (3 m), full load

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>PF</th>
<th>Phase</th>
<th>Circuit breaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 HDKAV/41934</td>
<td>Internal</td>
<td>60</td>
<td>6000</td>
<td>120</td>
<td>50</td>
<td>1.0</td>
<td>1</td>
<td>(1) 2-pole, 30 A</td>
</tr>
<tr>
<td>7.5 HDKAT/41934</td>
<td>Internal</td>
<td>60</td>
<td>7500</td>
<td>120</td>
<td>62.5</td>
<td>1.0</td>
<td>1</td>
<td>(1) 2-pole, 35 A</td>
</tr>
<tr>
<td>8 HDKAU/41934</td>
<td>Internal</td>
<td>60</td>
<td>8000</td>
<td>120</td>
<td>66.6</td>
<td>1.0</td>
<td>1</td>
<td>(1) 2-pole, 35 A</td>
</tr>
</tbody>
</table>

- Ratings apply up to 500 ft (152.4 m) altitude, 85° F (29° C) ambient* with No. 2 diesel fuel.
- Maximum power capability decreases 3.5% for each 1000 ft (305 m) above 500 ft (152.4 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 90% of intermittent.

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

- 3-cylinder diesel engine
- Permanent magnet alternator
- Pure sine wave output
- Digital voltage regulation with no adjustments required
- Bottom air inlet and outlet configuration
- 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
- Automotive type starter
- 10 A battery charging
- Hour meter
- Waterproof connector for remote operation
- Focalized mounting system with 3-point vibration isolation
- Over voltage, 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
- Fuel filter
- Full flow oil filter
- Service and maintenance from below or side service access panel
- Automatic timed glow plugs for quick easy start
- Instant one touch stop
- Water resistant controls

Typical fuel consumption

<table>
<thead>
<tr>
<th>No. 2 diesel fuel, Gal/hr (L/hr)</th>
<th>No load</th>
<th>Half load</th>
<th>Full load</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 HDKAV</td>
<td>0.21 (0.79)</td>
<td>0.40 (1.50)</td>
<td>0.70 (2.65)</td>
</tr>
<tr>
<td>7.5 HDKAT</td>
<td>0.21 (0.79)</td>
<td>0.56 (2.12)</td>
<td>0.96 (3.63)</td>
</tr>
<tr>
<td>8.0 HDKAU</td>
<td>0.21 (0.79)</td>
<td>0.61 (2.31)</td>
<td>1.02 (3.86)</td>
</tr>
</tbody>
</table>

Alternator details

- **Design**: Cummins Onan, permanent magnet
- **Insulation system**: Class H
- **Exciter system**: None
- **Brushes**: None
- **Bearings**: None
- **Cooling**: Main engine fan cooled

Generator set performance

- **Control**
  - Microprocessor control
  - Integrated generator set and engine control
  - User and service personnel accessible diagnostics
  - Fused DC circuits
  - Over voltage safety
  - Hour meter
  - Water resistant control switches
  - Low oil pressure safety
  - Over speed safety
  - Overload safety
  - Automatic times glow plugs
  - One touch stop

Voltage regulation:

- ±1% for no load/full load
- ±2% for constant load

Frequency regulation:

- ±0.1% for no load/full load
- ±0.5% for constant load
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 500-3159 and wiring diagram from your distributor/dealer.

Options and accessories

- Remote air cleaner kit (P/N 541-0531)
- Auxiliary fuel pump kit (P/N 541-0530)
- Remote control panel, switch only (P/N 300-4942)
- Remote control panel, switch and hour meter (P/N 300-4943)
- Remote control panel, switch and DC voltmeter (P/N 300-4944)
- Remote gauge panel, switch, DC voltmeter, water temperature gauge, oil pressure switch and hour meter (P/N 300-5218 Spec A, P/N 300-5027 Spec B and later)
- Remote harness (for use with remote panels), 10 ft (P/N 338-3490-01), 30 ft P/N 338-3490-02
- Remote control harness pigtail (P/N 300-4947)
- Remote harness pigtail at panel (P/N 338-3573)
- Exhaust adapter, 7 in (P/N 155-2424), 3 in (P/N 155-2610)
- Exhaust elbow, 90° (P/N 155-2982)
Standards and testing
- Tested at extremes of temperature -20° F (-29° C) to 120° F (49° C) for starting and operation
- Tested with commercial loads
- Tested in high humidity conditions
- Tested in salt spray conditions
- Tested in heavy airborne dust conditions
- Field test program
- This product meets U.S. EPA Tier II
- This generator set was designed and manufactured in facilities certified to ISO 9001
- CSA certified for CSA C22.2 std 100 and std 14

Warranty policy
The Cummins Onan limited warranty covers virtually everything except routine maintenance for the first two years that you own your generator set, or the first 2,000 hours of operation, whichever comes first. In addition, it includes a free 90-day adjustment policy, which provides that Cummins Inc. will make minor adjustments to your new generator set during the first three months you own it - free of charge!

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
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.