

Commercial generator set Quiet Diesel™ Series QD 6000/7500/8000



Cummins Onan

Performance you rely on.™



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

Model	Fan	Hz	Watts	Voltage	Amps	PF	Phase	Circuit breaker
6 HDKAV/41934	Internal	60	6000	120	50	1.0	1	(1) 2-pole, 30 A
7.5 HDKAT/41934	Internal	60	7500	120	62.5	1.0	1	(1) 2-pole, 35 A
8 HDKAU/41934	Internal	60	8000	120	66.6	1.0	1	(1) 2-pole, 35 A

- 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.

* 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

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

Alternator details

Design: Cummins Onan, permanent magnet

Insulation system: Class H

Exciter system: None

Brushes: None

Bearings: None

Cooling: Main engine fan cooled

Voltage regulation:

Frequency regulation:

Engine details

Model: Kubota 722

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 in³ (719 cm³)

Compression ratio: 23:1

Lube oil capacity: 2.8 qt (2.61 L)

Cooling system capacity: 4 qt (4.2 L)

Power (max): At 3600 r/min: 16.6 hp

SAE net intermittent

Starting system: Remote, 12 V

Fuel injection pump: Bosch MD type

Combustion chamber: Spherical (T.V.C.S.)

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

No load/full load

±1%

±0.1%

Constant load

±2%

±0.5%

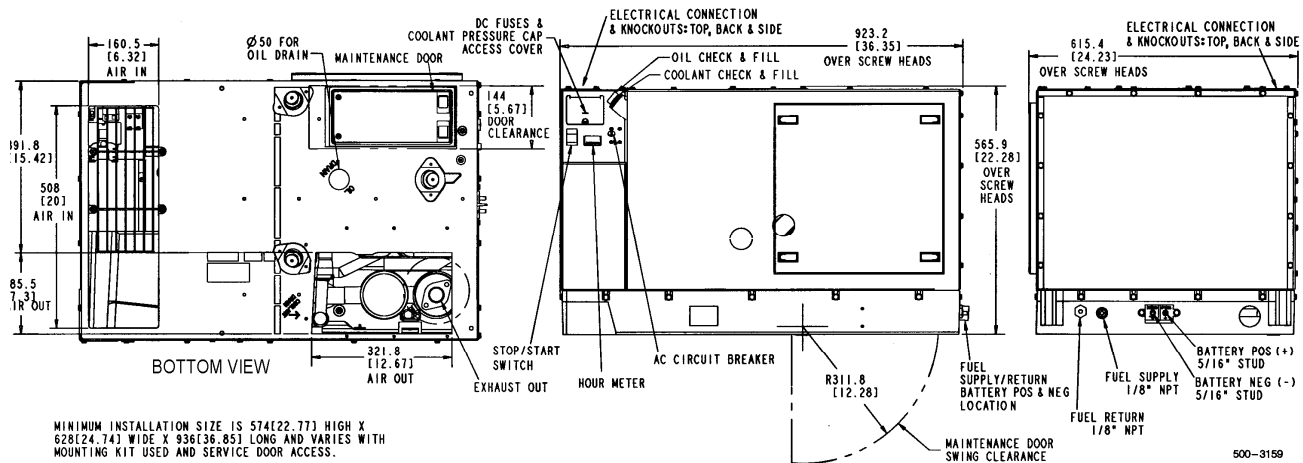
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Basic dimensions



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)

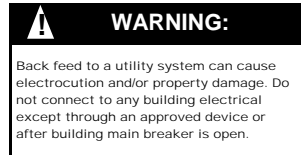
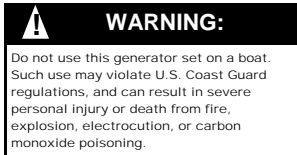
Standards and testing

- 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 air borne dust conditions
- Field test program
- This product meets U.S. EPA Tier IV
- 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!



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.

Contact your distributor/dealer for more information

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