

Commercial generator set Quiet Diesel™ Series QD 12000



Cummins Onan



Performance you rely on.™

Features and benefits

- Computer-controlled constant speed operation
- Unique sound-controlled housing encloses cooling system and muffler - simplifies installation
- Three-point, fully focalized internal mounting system reduces vibration
- Self-diagnostic capabilities simplify troubleshooting
- Service and maintenance points accessible through easy-latch side service door
- Convenient, top-mounted switches and coolant level check/fills
- Automatic glow plug eliminates preheat time uncertainty

Weight, size and sound level

Weight: 816 lb (370.1 kg) wet

Size: Length 41.5 in (1053.6 mm), width 24.5 in (621.1 mm), height 27 in (685.8 mm)

Sound: 68 dB(A) at 10 ft (3 m), before installation, full load

Models and ratings

Model	Fan	Hz	Watts	Voltage	Amps	PF	Phase	Circuit breaker
12.0 HDKCD-2209	Internal	60	12000	120/240	100/50	1.0	1	(1) 2 pole, 50 A
12.0 HDKCD-5241#	Internal	60	12000	120/240	100/50	1.0	1	(1) 2 pole, 50 A

- All 60 Hz models operate at 1800 r/min.
- 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.

With export packaging.

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Specifications are subject to change without notice

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A-1474c (8/10)

Standard features

- 3 cylinder diesel engine
- Brush type AC alternator
- Digital voltage regulation
- Bottom air inlet and outlet configuration
- Integral enclosed muffler with stationary exhaust pipe connection point
- USDA approved spark arresting muffler
- Internal radiator
- Sound attenuated housing
- Intake silencer
- Heavy duty air cleaner
- Maintenance free electronic governor
- Regulated-voltage 15 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, 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 from side service door
- Automatic timed glow plugs for quick easy start
- Instant one touch stop

Typical fuel consumption

No. 2 diesel fuel, Gal/hr (L/hr)	<u>No load</u>	<u>Half load</u>	<u>Full load</u>
12.0 HDKCD	0.11 (0.4)	0.48 (1.82)	1.20 (4.54)

Engine details

Model: Kubota D1703-M
 Design: 4-cycle, liquid-cooled diesel engine
 Cylinders: 3, inline vertical
 Bore: 3.43 in (87.0 mm)
 Stroke: 3.64 in (92.4 mm)
 Displacement: 100.5 in³ (1647 cm³)
 Compression ratio: 23.0:1
 Lube oil capacity: 5.9 qt (5.6 L)
 Cooling system capacity: 6.6 qt (6.2 L)
 Power (max): At 1800 r/min: 27 hp (20.2 kW) (EPA Tier 2)
 Starting system: Remote, 12 V
 Fuel injection pump: Bosch
 Combustion chamber: IDI

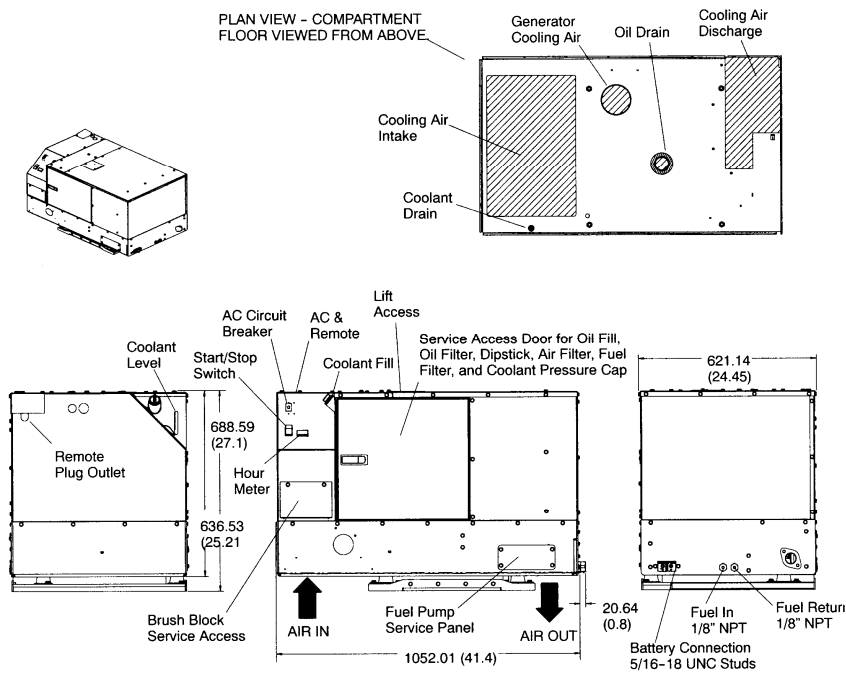
Alternator details

Design: Cummins Onan, brush type, drip-proof construction, 4 pole
 Insulation system: Class H per NEMA MG1-1.66
 Exciter system: Electronic voltage regulator
 Bearings: Double sealed pre-lubricated ball bearing
 Cooling: Direct drive centrifugal blower

Generator set performance

Frequency regulation	No load/Full load	+/- 0.1%	Frequency variation	Constant load	+/- 0.6%
Voltage regulation	No load/Full load	+/- 2%	Voltage variation	Constant load	+/- 0.5%

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.

Options and accessories

- Exhaust elbow, 90° (P/N 155-3194)
- Exhaust adapter, 3-inch (P/N 155-2610), 7-inch (P/N 155-2424)
- Remote control pigtail (P/N 300-4947)
- Remote control harness pigtail at panel (P/N 338-3573)
- 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 harness (for use with remote panels), 10 ft (P/N 338-3490-01), 30 ft (P/N 338-3490-02)

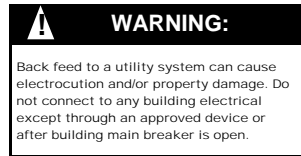
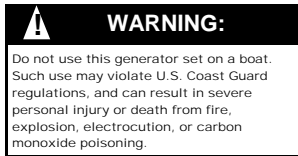
Standards and testing

- 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 - no direct spray allowed
- 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 (981-0173), Installation (981-0640), Parts (981-0277), Service (981-0540).

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

Cummins Onan

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