

Diesel
12 kW 60 Hz



Commercial GenSet

- 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
- High quality, pure sine wave electrical output maximizes sensitive equipment performance

Models and Ratings

<u>Model</u>	<u>Fan</u>	<u>Hz</u>	<u>Watts</u>	<u>Voltage</u>	<u>Amps</u>	<u>PF</u>	<u>Phase</u>	<u>Circuit Breaker</u>
12.0 HDKCD2209	Internal	60	12,000	120/240	100/50	1.0	1	(1) 2 pole, 50 Amp

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

-Ratings apply up to 500 ft (153 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 (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

- 816 lb (370.1 kg) wet
- Length 41.5 in (1053.6 mm), Width 24.5 in (621.1 mm), Height 27 in (685.8 mm)
- 68 dB(A) at 10 ft (3 m) before installation, full load⁺

⁺ Variations in installation can change sound levels.

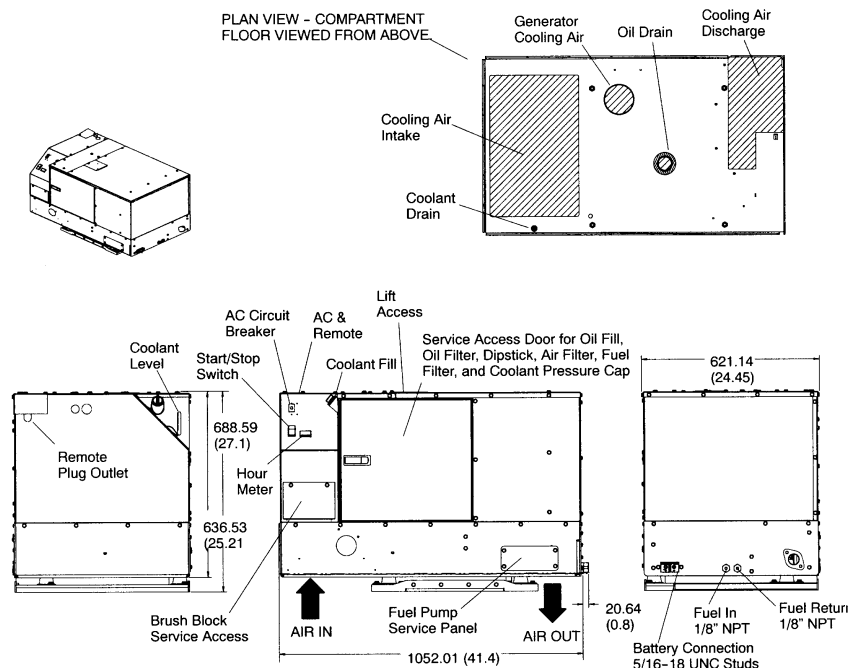
Standard Features

- 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
- Hourmeter
- Waterproof connector for remote operation
- Focalized mounting system with 3-point vibration isolation
- Overvoltage, low oil pressure, overtemp, overspeed, overload and AC alternator overtemp 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

Accessories

- Exhaust elbow, 90° (part #155-3194)
- Exhaust adapter, 3-inch (part #155-2610), 7-inch (part #155-2424)
- Remote control pigtail (part #300-4947)
- Remote control harness pigtail at panel (part #338-3573)
- Remote control panel, switch only (part #300-4942)
- Remote control panel, switch and hourmeter (part #300-4943)
- Remote control panel, switch and DC voltmeter (part #300-4944)
- Battery 12 V, 660 cold cranking amps at 0° F (-17.8° C) (wet) (part #416-0796)
- Battery 12 V, 620 cold cranking amps at 0° F (-17.8° C) (dry) (part #416-0823)
- Remote harness (for use with remote panels), 10 ft (part #338-3490-01), 30 ft (part #338-3490-02)

Basic Dimensions



This outline drawing is provided for general reference only is not intend for design or installation. See installation manual and obtain outline drawing number 500-4040 for more information (available from your Distributor/Dealer).

Engine Detail

Model: Kubota
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

Typical fuel consumption

No. 2 diesel fuel, Gal/hr (L/hr)

	No load	Half load	Full load
12.0 HDKCD	0.11 (0.4)	0.48 (1.82)	1.20 (4.54)

Alternator Detail

Design: 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 prelubricated ball bearing
Cooling: Direct drive centrifugal blower

GenSet Performance

Voltage regulation - no load to full load:	±2.0%
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%

Warranty Policy

The ONAN limited warranty covers virtually everything except routine maintenance for the first two years 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 Onan will make minor adjustments to your new genset during the first three months you own it - free of charge!

For complete Onan limited warranty details see your certified Onan Distributor/Dealer.

After Sale Support

EASY TO LOCATE CERTIFIED ONAN SERVICE AND PARTS DEALERS - Onan has the largest and best-trained worldwide certified Distributor/Dealer network in the industry, offering on-time parts and service, and installation assistance. Cummins Onan Distributor/Dealers stock and sell commonly used Onan GenSet maintenance parts, accessories and products, plus operator manuals and literature on current Onan GenSets. They can help you select and install the right genset or accessories on older models, or provide answers to questions on proper operation and maintenance procedures.

MANUALS - Installation and operators manuals are shipped with the genset. To obtain additional copies or other manuals for this model, see your Cummins Onan Distributor/Dealer and request the following part numbers: Operators Manual (981-0173), Parts Manual (981-0277), Service Manual (981-0540), and Installation Manual (981-0640).

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.

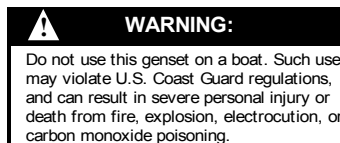
Tested in salt spray conditions - no direct spray allowed.

Tested in heavy air borne dust conditions.

Field Test Program.

This product meets U.S. EPA Tier 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.



Contact your Distributor/Dealer for more information



To easily locate the nearest Onan Distributor/Dealer, or for more information, contact Onan at 1-800-888-ONAN or 763-574-5000; 1400 73rd Avenue N.E., Minneapolis, MN 55432 U.S.A.; fax 763-574-5298; e-mail feedback@onan.com; www.onan.com.

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WARNING: Backfeed to utility systems can cause electrocution or property damage. Do not connect to building electrical except through approved device and after building main breaker is opened.