

# Commercial generator set Standard Diesel™ Series SD 6000



## Cummins Onan

Performance you rely on.™



### Features and benefits

- Smooth operation - focalized mounting system with 4-point vibration isolation
- Glow plugs for reliable all-weather starting
- Installation flexibility with remountable 90° exhaust elbow, remountable DC control and multiple oil fill/check points
- Cross-flow radiator for increased cooling efficiency
- Water resistant controls
- Low harmonic distortion for SCR loads

### Weight, size and sound level

**Weight:** 490 lb (223 kg), wet

**Size:** Length 37.3 in (947 mm), width 21.0 in (535 mm), height 23.9 in (607 mm)

**Sound:** 76 dB(A) at 10 ft (3 m), 63 dB(A) at 50 ft (15 m) before installation, full load

### Models and ratings

Model	Fan	Hz	Watts	Voltage	Amps	PF	Phase	Circuit breaker
<b>6HDKAS-11</b>	Pusher	60	6000	120/240	50.0/25.0	1.0	1	2-pole, 25 A
<b>6HDKAS-12</b>	Suction	60	6000	120/240	50.0/25.0	1.0	1	2-pole, 25 A
<b>6HDKAS-13</b>	Pusher	60	6000	120/240*	18.0	0.8	3	3-pole, kit
<b>6HDKAS-14</b>	Suction	60	6000	120/240*	18.0	0.8	3	3-pole, kit

- 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).

\* Three-phase models are 12-lead reconnectable for a broad range of voltage applications.

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## Standard features

- 3-cylinder diesel engine
- Brush type AC alternator
- Focalized mounting system with 4-point vibration isolators
- Cross-flow radiator
- Full flow lube oil filter
- Fuel filter/water separator
- Vertically mounted fuel and oil filters
- Replaceable element air cleaner
- Remote mountable DC control box
- 4-position exhaust elbow
- 30 A battery charging DC alternator
- Lifting bracket
- Glow plugs for easy starting
- Base pan for drip control
- Electric fuel pump
- Top and side oil fill and check for platform or compartment installations

## Typical fuel consumption

No. 2 diesel fuel, Gal/hr (L/hr)	No load	Half load	Full load
<b>6.0HDKAS</b>	0.23 (0.87)	0.46 (1.74)	0.80 (3.03)

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## Alternator details

**Design:** Cummins Onan, brush type, drip proof construction

**Insulation system:** Class F, per NEMA MGI-1.65 and BS 2757; insulating varnish conforms to MIL-I-24092, grade CB, Class 155 C environmentally protected rotor and stator with epoxy VPI dip impregnation process

**Three-phase models:** Broad range reconnectable design for installed voltage flexibility

**Exciter system:** Electronic voltage regulation

**Bearing:** Double sealed, pre-lubricated ball bearing

**Cooling:** Direct drive centrifugal blower

**Damper bar system:** Generator design incorporates a damper bar system for low harmonic waveform distortion. This design feature becomes significant when powering SCR type loads (converters, etc.)

**Voltage regulation:**

**Frequency regulation:**

## Engine details

**Model:** Kubota D905

**Design:** 4-cycle, liquid-cooled diesel engine

**Cylinders:** 3, inline vertical

**Bore:** 2.83 in (72.0 mm)

**Stroke:** 2.90 in (73.6 mm)

**Displacement:** 54.8 in<sup>3</sup> (898 cm<sup>3</sup>)

**Compression ratio:** 23:1

**Lube oil capacity:** 4 qt (3.8 L), including filter

**Power (max):** At 1800 r/min: 11.9 hp

**Cooling system capacity:** 1.25 Gal (4.73 L)

**Starting system:** Remote, 12 V, 1.2 kW starter

**Fuel injection pump:** Bosch K mini

**Fuel pump:** Electric

**Combustion chamber:** Spherical

## Generator set details

### Control

- Unit mounted, drip-proof, vibration isolated console

### DC Controls, 12 V system

- Start/stop/preheat switch
- Remote connector for start/stop/preheat switch and gauge package
- Manual reset fault relay indicating engine shutdown for high coolant temperature, low oil pressure
- Hour meter

### AC Controls

- Electronic voltage regulator
- Three-phase models, factory shipped reconnectable (no breaker)
- Three-phase breaker kits available for field fitted installation

No load/full load

±2.5%

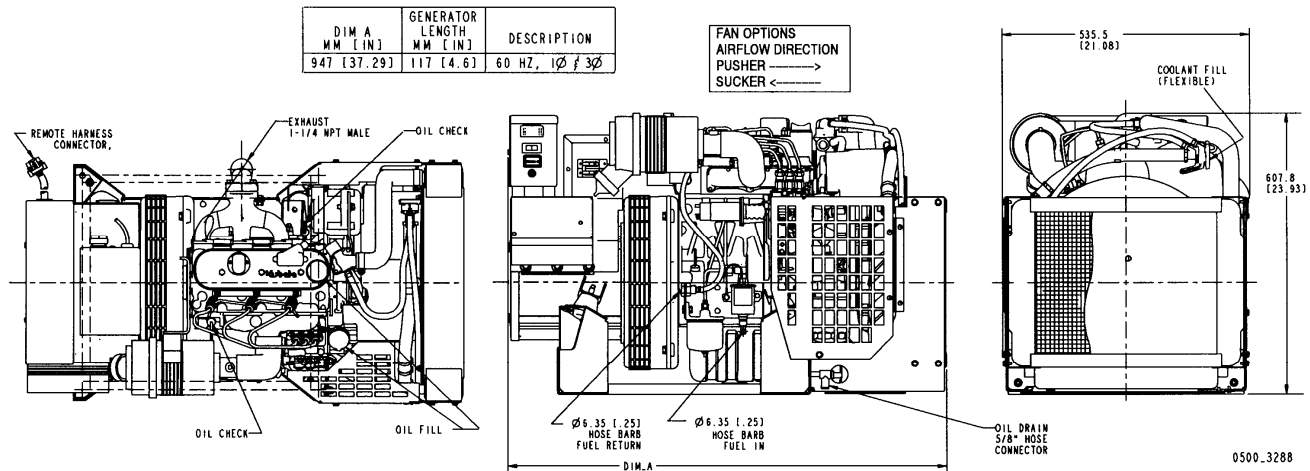
±2.5%

Constant load

±1%

±1%

## 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 500-3288 and wiring diagram from your distributor/dealer.

## Options and accessories

- USDA Forest Service approved spark arrestor muffler (P/N 155-2068)
- Exhaust resonator (P/N 155-2653)
- Remote gauge package with start/stop/preheat switch, DC voltage meter, water temperature gauge, running time meter (P/N 300-5026)
- DC gauge package - DC voltage meter, water temperature gauge, oil pressure gauge - can be set mounted or remote mounted (P/N 300-4966)
- Junction harness (for use with DC gauge package and a remote control panel) (P/N 338-3526)
- Oil pressure sender (P/N 193-0244-99)
- Water temp sender (P/N 193-0318)
- Remote control panel, switch only (P/N 300-4939)
- Remote control panel, switch and hour meter (P/N 300-4940)
- Remote control panel, switch and DC voltmeter (P/N 300-4941)
- Remote harness (for use with above panels) 10 ft (P/N 338-3490-01), 30 ft (P/N 338-3490-02)
- Remote harness pigtail (P/N 300-4947)
- Remote harness pigtail at panel (P/N 338-3573)
- Engine block heater (P/N 333-0593)
- Racor® fuel filter/water separator (P/N 149-2573)
- Auxiliary alternator air cooling kit on suction fan units for compartment mounted generator sets (P/N 140-3214)

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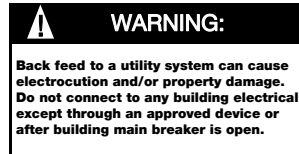
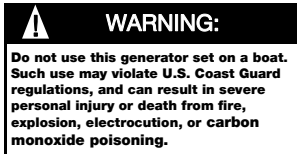
## Standards and testing

- 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 IV
- This generator set was designed and manufactured in facilities certified to ISO 9001



## Warranty policy

The Cummins 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 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 (981-0104), Installation (981-0613), Parts (981-0256), Service (981-0523).

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](http://www.cumminsonan.com).

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## Contact your distributor/dealer for more information

# Cummins Onan

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