



Specification Sheet

Commercial Mobile Generator

Hydraulic Series HG 8000 50Hz



Features and benefits

- Cummins custom engineered hydraulic generator set system
- High motor starting capability
- Meets NFPA 120°F (49°C) ambient*standard
- Single side serviceability
- Powder coated steel housing
- Multiple air inlets (5)
- Four-point vibration isolated mounting system
- Digitally controlled pump flow for minimal voltage and frequency variation
- Hydraulic circuit has over speed and under speed protection
- Five year, 1000 hour limited warranty
- Hall Effect sensor for frequency control (patent pending)
 - Higher sample rate of sensor improves frequency stability at all loads
 - Sensor not as susceptible to conducted emittance created by non-linear loads (variable fans or extraction tool pumps)
- Maintains better frequency control with rapid engine speed changes
- Dual valve flow control

Weight, size and sound level

Weight: Total 247 lb (112 kg)
 Generator set 179 lb (81 kg)
 Pump/manifold 55 lb (25 kg)
 Reservoir 13 lb (6 kg)

Size: Length 31.0 in (787 mm), width 16.0 in (405 mm), height 13.8 in (350 mm)

Models and Ratings

Model	Hz	Watts	Voltage	Amps	PF	Phase	Circuit breaker
8RBAB50-2010	50	8000	115/230	67/33	1.0	1	Installer supplied

Pump Model	Model Number	Rotation	Shaft	Pump Shaft Seal
PUMP-RBAB-10R15S	A050J880	RH	15 Tooth Spline	Single
PUMP-RBAB-10R1KS	A050J882	RH	1" Keyed	Single
PUMP-RBAB-10L15S	A050J885	LH	15 Tooth Spline	Single
PUMP-RBAB-10L1KS	A050J888	LH	1" Keyed	Single
PUMP-RBAB-10R13S	A050J892	RH	13 Tooth Spline	Single
PUMP-RBAB-10L13S	A050J893	LH	13 Tooth Spline	Single
PUMP-RBAB-10R15D	A050J895	RH	15 Tooth Spline	Dual
PUMP-RBAB-10R13D	A050J897	RH	13 Tooth Spline	Dual



Digital display included

- All 50 Hz models operate at 3000 r/min.

- Required pump speed 850-3200 r/min.

* Cummins tested for operation with cooling air inlet temperature up to 120°F (49°C). Ambient is defined as the air temperature measured at the cooling air inlet to the set.

Pumps are ordered separately from generator and are required for generator operation

Standard features

- Hydraulic components:
 - Variable displacement piston pump
 - Gear motor drive
 - Digital control maintains tight frequency control
 - Electronically controlled orifice stops fluid flow when system is off
 - Largest heat exchanger in the industry
- Generator set housing:
 - Powder and clear coated steel
 - Single side serviceability
 - Multiple air inlet locations (5)
 - Single side interface for all hook-ups
 - Installs without removing housing
 - Four-point vibration isolated mounting system
- Generator set output:
 - 115/230 single phase, 4-lead
 - 10 ft power leads in non-metallic conduit
 - Digital PWM control maintains stable frequency
 - Circuit breakers (OEM/distributor supplied)
 - Capped voltage regulator
 - Factory load tested
- Controls and displays:
 - Cummins display by FRC with 15 ft harness; displays Hz, volt, amps, oil temperature and hours
 - Continuous on/off switch for generator set (customer supplied)
 - Solid state voltage regulation
- Reservoir:
 - 3 Gal hydraulic tank with integral filter
 - Filter with element condition indicator gauge, breather, and fill port
 - Mounting tabs for universal mounting
- Accessories:
 - Side discharge duct kit (P/N 541-0873)
 - Extension harnesses (see Operation and Installation manual)

Alternator details

Design: Cummins AC, 2-pole self-excited revolving field, permanently aligned to hydraulic motor by a splined shaft

Cooling: Direct drive blower wheel

Rotor: Laminated electrical steel assembly press-fitted to shaft, balanced; heavy insulated, Class 200 copper wire windings, optimized air gap for improved wave form and motor starting

Stator: Laminated electrical steel assembly, skewed for improved waveform; heavy insulated, Class 200 copper wire windings

DC brushes: Electrographic; long life

Bearing: Double-sealed pre-lubricated ball bearing

Exciter: Power Scan® regulator and bridge rectifier supply field current through slip rings

Hydraulic details

Cooling:

- High efficiency forward-inclined blade, plug fan
- Pressurized box with distribution volutes for optimum air velocity across heat exchanger
- Welded blades, 4 brace rods and epoxy powder coated for best fan durability
- Heat exchanger sized relative to kW

Hydraulic power:

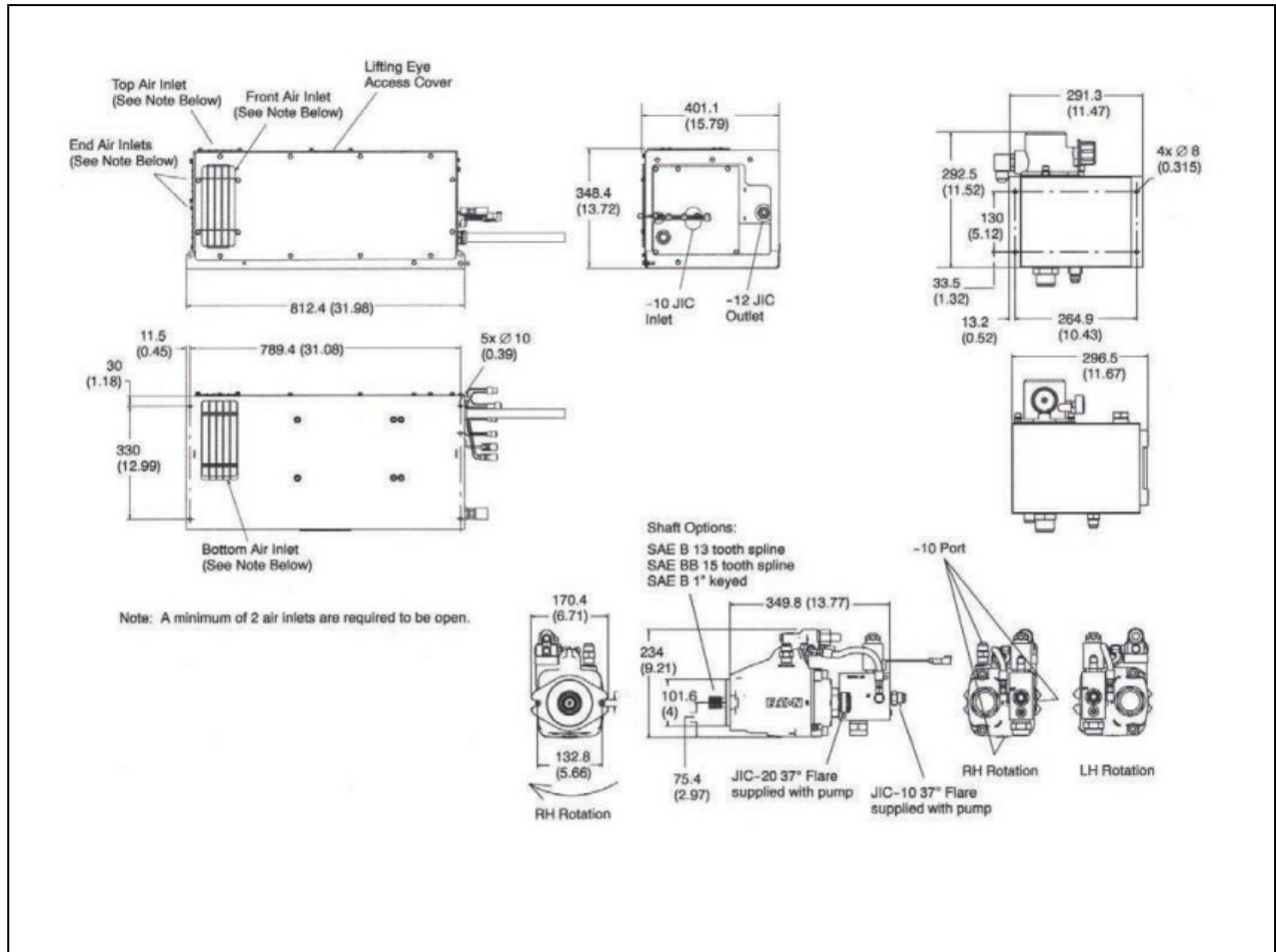
- Operating flow and pressure range 12.2 Gal/min, 2700 psi
- Pump control is pressure compensated load sense system
- Solenoid PWM controls flow and closes fully when generator set is switched off
- Required pump speed 850-3200 r/min maximum
- Generator set requires 23.0 hp from drive engine at full load
- Generator set drive motor – fixed displacement gear
- Fluid Dexron III or 10 wt antiwear hydraulic oil ~5 Gal – total

Generator set performance

	No load – full load	Constant load
Voltage regulation (steady state conditions)	±0.5%	±0.5%
Frequency regulation (steady state conditions)	50.5 to 49.5 Hz (±1%)	±1% or ±0.5 Hz

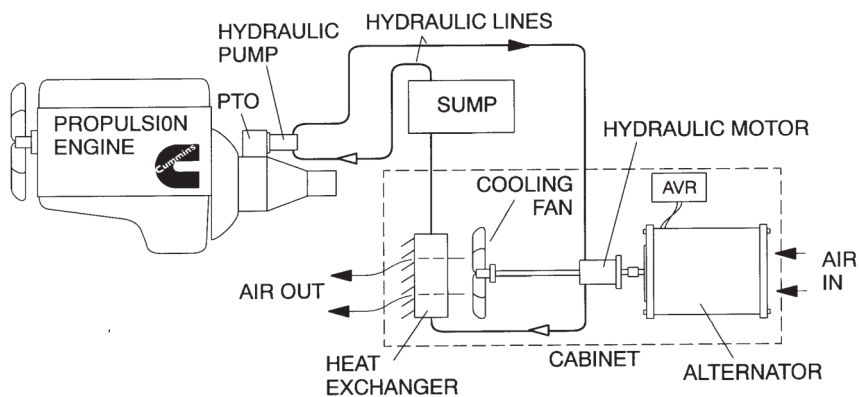
Basic Dimensions

Dimensions mm (in)



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 A050N691 and wiring diagram 625-4772 from your distributor/dealer.

Hydraulic operational schematic



Standards and Testing

- Tested at extremes of temperature -20 °F (-29 °C) to 120 °F (49 °C) for starting and operation
- Tested installed
- Tested with commercial loads
- Field test program
- This generator set was designed and manufactured in facilities certified to ISO 9001
- CSA certified for CSA C22.2 std 100 and std 14 for operation up to 40°C only





Warranty Policy

The Cummins limited warranty covers virtually everything except routine maintenance for the first five years that you own your generator set, or the first 1,000 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!

Warranty only applies if Cummins generator set is used with Cummins hydraulic pump.

Travel time repair allowance: In addition to the 5-year, 1000-hour warranty, a travel time repair allowance of 2.5 hours and mileage cost up to 100 miles is included for the first 2 years.

 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 generator sets are supported by the largest and best trained worldwide authorized distributor/dealer network in the industry. This network of knowledgeable Cummins 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. 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 sales or service representatives and request the following manual numbers: Owner's (943-0103), Parts (943-0204).

To easily locate the nearest Cummins distributor/dealer in your area, or for more information, contact us at 1-800-CUMMINS, or www.power.cummins.com

Contact your distributor/dealer for more information.



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