



Service Manual

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Hydraulic Generator Set

RBAA 20kW (Spec A-C)

RBAA 25kW (Spec A-C)

Table of Contents

SECTION	PAGE
Safety Precautions	ii
Specifications	iii
INTRODUCTION	1
About this Manual	1
Product Description	1
OPERATION	2
Starting and Stopping	2
Display Module	2
MAINTENANCE	3
Oil Level	3
Oil Filter	3
Spline joint	3
Breather Filter	3
Generator	3
SERVICE	4
Hydraulic System	4
Wiring Reconnections	6
Replacing the Display Module	7
Hydraulic Pump Service and Installation	8
Hydraulic Motor Service and Installation	10
Generator Service	11
Control Box	18
Voltage Regulator	20
TROUBLESHOOTING	21
Noisy Pump or Motor	21
No AC Output or Air Discharge—Engine Running	21
No AC Output—Display Module Indicates Voltage	22
Voltage, Current and Frequency Are Present But Not Displayed	23
Hydraulic Oil Temperature Does Not Display	23
No AC Output—Genset Running and Air Discharging	24
Frequency Too High or Too Low or Unstable	24
Voltage Too High or Too Low or Unstable	25
Noisy Generator	25
OUTLINE DRAWING	A-1
WIRING SCHEMATIC	A-2

Safety Precautions

Thoroughly read *Operation and Installation* before operating the genset. Safe operation and top performance can be only be attained when equipment is operated and maintained properly.

The following symbols in this manual alert you to potential hazards to the operator, service person and equipment.

⚠ DANGER alerts you to an immediate hazard that will result in severe personal injury or death.

⚠ WARNING alerts you to a hazard or unsafe practice that can result in severe personal injury or death.

⚠ CAUTION alerts you to a hazard or unsafe practice that can result in personal injury or equipment damage.

Electricity, moving parts, batteries and high-pressure hydraulic fluid present hazards which can result in severe personal injury or death.

GENERAL PRECAUTIONS

- Make sure all fasteners are secure and torqued properly.
- Do not work on the genset when mentally or physically fatigued or after consuming alcohol or drugs.
- You must be trained and experienced to make adjustments while the genset is running—hot, moving or electrically live parts can cause severe personal injury or death.
- Keep multi-class ABC fire extinguishers handy. Class A fires involve ordinary combustible materials such as wood and cloth; Class B fires, combustible and flammable liquid fuels and gaseous fuels; Class C fires, live electrical equipment. (ref. NFPA No. 10)

- Genset installation and operation must comply with all applicable local, state and federal codes and regulations.

GENERATOR VOLTAGE IS DEADLY!

- Generator electrical output connections must be made by a trained and experienced electrician in accordance with applicable codes.
- Use caution when working on live electrical equipment. Remove jewelry, make sure clothing and shoes are dry, stand on a dry wooden platform or rubber insulating mat and use tools with insulated handles.

BATTERY GAS IS EXPLOSIVE

- Wear safety glasses.
- Do not smoke.
- To reduce arcing when disconnecting or reconnecting battery cables, always disconnect the negative (-) battery cable first and reconnect it last.

MOVING PARTS CAN CAUSE SEVERE PERSONAL INJURY OR DEATH

- Do not wear loose clothing or jewelry near moving parts such as PTO shafts, fans, belts and pulleys.
- Keep hands away from moving parts.
- Keep guards in place over fans, belts, pulleys, and other moving parts.

HYDRAULIC FLUID UNDER PRESSURE CAN CAUSE SEVERE PERSONAL INJURY

- Always shut down the engine that drives the hydraulic pump before loosening or tightening fittings.
- The high pressure spray from a leak or fitting in a hydraulic line can penetrate the skin, leading to possible blood poisoning. Wear safety glasses. Do not delay getting proper medical attention if exposed to high pressure oil spray.

Specifications

GENERATOR: 4-Pole Revolving Field, 2-Bearing, Self-Excited, with Electronic Voltage Regulation		
Power (1.0 PF)	20 kW	25 kW
No. of Phases	1	1
Voltage	120 / 240 volts	120 / 240 volts
Frequency	60 Hertz	60 Hertz
Current per Leg (L1 and L2)	83 amps	104 amps
Speed	1800 rpm	1800 rpm
DC SYSTEM:		
Battery Voltage	12 volts	12 volts
Control Circuit Fuse (F1)	20 amp blade-type	20 amp blade-type
INSTALLATION: Hydraulic Pump with Electronic Frequency Regulation		
Min–Max Pump Speed	1150–3900 rpm	1200–3900 rpm
SAE Flange	4-Bolt C Flange	4-Bolt C Flange
SAE C–C Straight Keyed Shaft	1–1/2 inch Diameter, 3/8 inch Key	1–1/2 inch Diameter, 3/8 inch Key
Flow (Heat Exchanger)	5 to 17 gpm	5 to 17 gpm
Maximum Oil Pressure	3500 psi	3500 psi
Hydraulic Fluid	Dextron III	Dextron III
Weight	124 lb (56 Kg)	124 lb (56 Kg)
Maximum Power Draw on Engine	43.2 hp	54 hp
INSTALLATION: Hydraulic Hose & Fittings		
Pump to Motor (Two)	#12, 4000 psi Hose; 37° Fittings (JIC)	#12, 4000 psi Hose; 37° Fittings (JIC)
Pump Case to Genset	#12, 200 psi Hose; 37° Fittings (JIC)	#12, 200 psi Hose; 37° Fittings (JIC)
Genset to Oil Reservoir	#12, 200 psi Hose; 37° Fittings (JIC)	#12, 200 psi Hose; 37° Fittings (JIC)
Oil Reservoir to Pump	#20, 200 psi Hose; 37° Fittings (JIC)	#20, 200 psi Hose; 37° Fittings (JIC)
INSTALLATION: Genset		
Noise	72 dB(A)*	72 dB(A)*
Weight	532 lb (241 Kg)	532 lb (241 Kg)
Dimensions (L x W x H)	44.49 x 19.31 x 17.30 in (1130 x 490.4 x 439 mm)	44.49 x 19.31 x 17.30 in (1130 x 490.4 x 439 mm)
Cooling Air Flow	1330 cfm	1330 cfm
Maximum Ambient Temperature		
Continuous Full Load	120° F (49° C)	120° F (49° C)
Intermittent Load	140° F (60° C)	140° F (60° C)
Maximum Oil Temperature	200° F (93° C)	200° F (93° C)
* @ 10 ft (3 m), before installation, under full load.		

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