

STANDBY GENERATOR

100 kW

LIQUID-COOLED GENERATOR SET

Standby Power Rating

Model HT100 - 100 kW 60Hz



INCLUDES

- Two Line LCD Tri-lingual Digital Sync Controller
- Electronic Governor
- Closed Coolant Recovery System
- Flexible Fuel Line Connector
- UV/OzoneResistant Hoses
- Sound Attenuated Aluminum Enclosure
- CA/MA Emissions Compliant
- Natural Gas or LP Gas Operation
- 2 Year Limited Warranty
- UL 2200 Listed

FEATURES

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of our success in “IMPROVING POWER BY DESIGN.” But it doesn’t stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose Honeywell generators with the confidence that these systems will provide superior performance.
- **TEST CRITERIA**
 - ◆ PROTOTYPE TESTED
 - ◆ SYSTEM TORSIONAL TESTED
 - ◆ NEMA MG1-22 EVALUATION
 - ◆ MOTOR STARTING ABILITY
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION** This state-of-the-art power maximizing regulation system is standard on all Honeywell models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. An unequalled $\pm 1\%$ voltage regulation.
- **SINGLE SOURCE SERVICE RESPONSE** from our extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **Honeywell TRANSFER SWITCHES** The Honeywell generator line offers its own transfer systems and controls for total system compatibility.

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Application & Engineering Data

GENERATOR SPECIFICATIONS

• Type	Synchronous
• Rotor Insulation	Class H
• Stator Insulation	Class H
• Telephone Interference Factor (TIF)	<50
• Alternator Output Leads Phase 3	6/4 wire
• Bearings	Sealed Ball
• Coupling	Gear Drive
• Load Capacity (Standby Rating)	100 kW
• Excitation System	Brushless

ENGINE SPECIFICATIONS

• Make	Generac
• Model	V-type
• Cylinders	10
• Displacement	6.8 Liter
• Bore	3.55
• Stroke	4.17
• Compression Ratio	9:1
• Intake Air System	Naturally Aspirated
• Valve Seats	Hardened
• Lifter Type	Hydraulic

GOVERNOR SPECIFICATIONS

• Type	Electronic	
• Frequency Regulation	Isochronous	
• Steady State Regulation	± 0.25%	
• Adjustments For	Speed	Yes
	Droop	Yes

VOLTAGE REGULATION

• Type	Full Digital
• Sensing	Three Phase
• Regulation	± 0.25%

GENERATOR FEATURES

- Revolving field heavy duty generator
- Directly connected to the engine
- Operating temperature rise 120 °C above a 40 °C ambient
- Insulation is Class H rated at 130 °C rise
- All models are fully prototyped tested

ENGINE LUBRICATION SYSTEM

• Oil Pump	Gear
• Oil Filter	Full flow spin-on cartridge
• Crankcase	5 Quarts

ENGINE COOLING SYSTEM

• Type	Closed
• Water Pump	Belt driven
• Fan Speed	1670
• Fan Diameter	26 inches
• Fan Mode	Puller

FUEL SYSTEM

• Fuel Type	Natural gas, propane vapor
• Carburetor	Down Draft
• Secondary Fuel Regulator	Standard
• Fuel Shut Off Solenoid	Standard
• Operating Fuel Pressure	11" - 14" H ₂ O

ELECTRICAL SYSTEM

• Battery Charge Alternator	12V 30 Amp
• Static Battery Charger	12V, 2 Amp
• Recommended Battery	Group 24F, 12V, 525CCA
• System Voltage	12 Volts

ENCLOSURE FEATURES

- **Aluminum all weather protective enclosure options available** – Ensures protection against mother nature. Electrostatically applied textured epoxy paint for added durability.
- **Enclosed critical grade muffler** – Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
- **Small, compact, attractive** – Makes for an easy, eye appealing installation.
- **SAE** – Sound attenuated enclosure ensures quiet operation.

Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). (All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271).

Operating Data

KW RATING (LP/NG)		100/100			
ENGINE SIZE		6.8 Liter V-10			
GENERATOR OUTPUT VOLTAGE/KW - 60Hz		kW LPG	AMP	kW Nat. Gas	AMP
120/240V, 1-phase, 1.0 pf		100	417	89	371
120/208V, 3-phase, 0.8 pf		100	347	94	326
120/240V, 3-phase, 0.8 pf		100	301	94	283
277/480V, 3-phase, 0.8 pf		100	150	94	141
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35%					
Single phase or 208-240 3-phase		200			
480V 3-phase		240			
ENGINE FUEL CONSUMPTION (Natural Gas) (Propane)		Natural Gas		Propane	
		(ft ³ /hr.)	(gal/hr.)	cu ft/hr	
Exercise cycle		130	1.4	52	
25% of rated load		371	4.1	149	
50% of rated load		713	7.9	287	
75% of rated load		991	11	400	
100% of rated load*		1260	13.9	507	
For Btu content, multiply ft ³ /hr x 2520 (LP) or ft ³ /hr x 1000 (NG)					
ENGINE COOLING					
Air flow (inlet air including alternator and combustion air)		ft ³ /min.		5,500	
System coolant capacity		US gal.		4.5	
Heat rejection to coolant		BTU/hr.		342,000	
Max. operating air temp. on radiator		°C (°F)		60 (150)	
Max. ambient temperature		°C (°F)		50 (140)	
COMBUSTION AIR REQUIREMENTS					
Flow at rated power 60 Hz		cfm		262	
SOUND EMISSIONS IN DBA					
Exercising at 7 meters		61			
Normal operation at 7 meters		72			
EXHAUST					
Exhaust flow at rated output 60 Hz		cfm		888	
Exhaust temp. at muffler outlet		°C (°F)		516 (960)	
ENGINE PARAMETERS					
Rated synchronous RPM		60 Hz		2300	
POWER ADJUSTMENT FOR AMBIENT CONDIIIONS					
Temperature Deration		3% for every 10 °C above - °C 1.65% for every 10 °F above - °F		25 77	
Altitude Deration		1% for every 100 m above - m 3% for every 1000 ft. above - ft.		183 600	

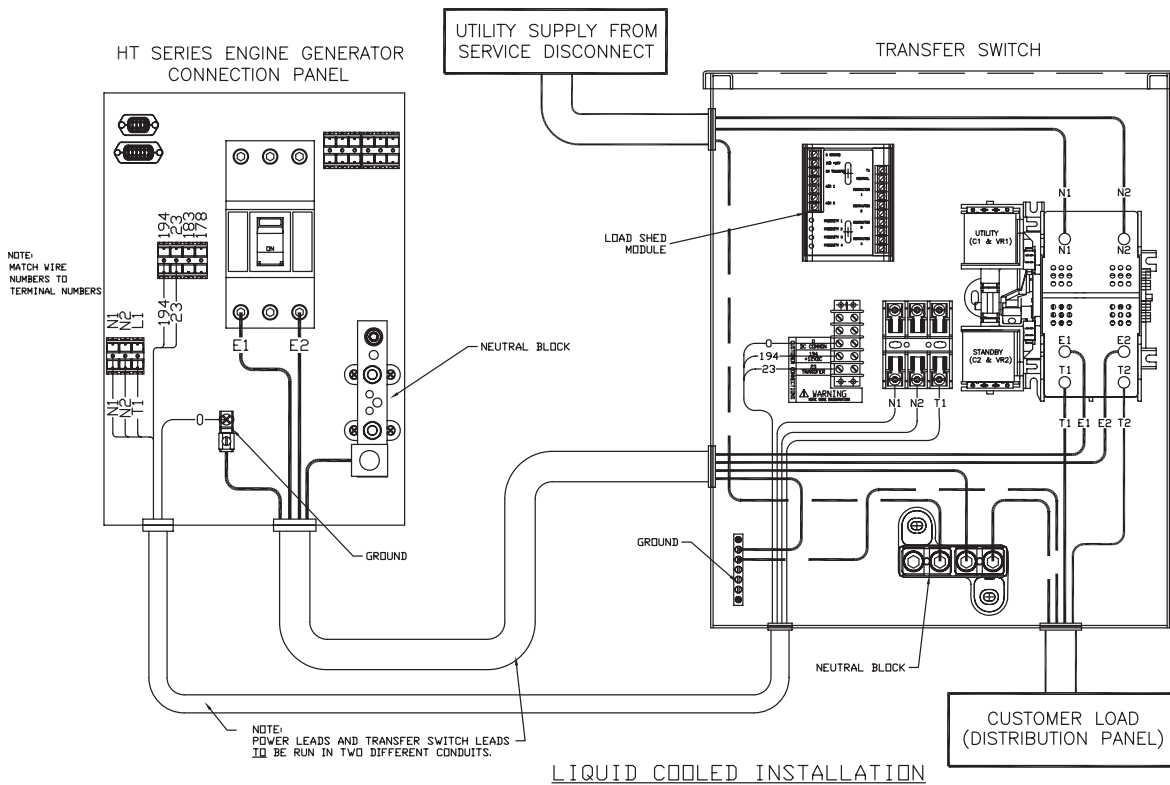
Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.

RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.

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LIQUID-COOLED GENERATOR SETS

Interconnections



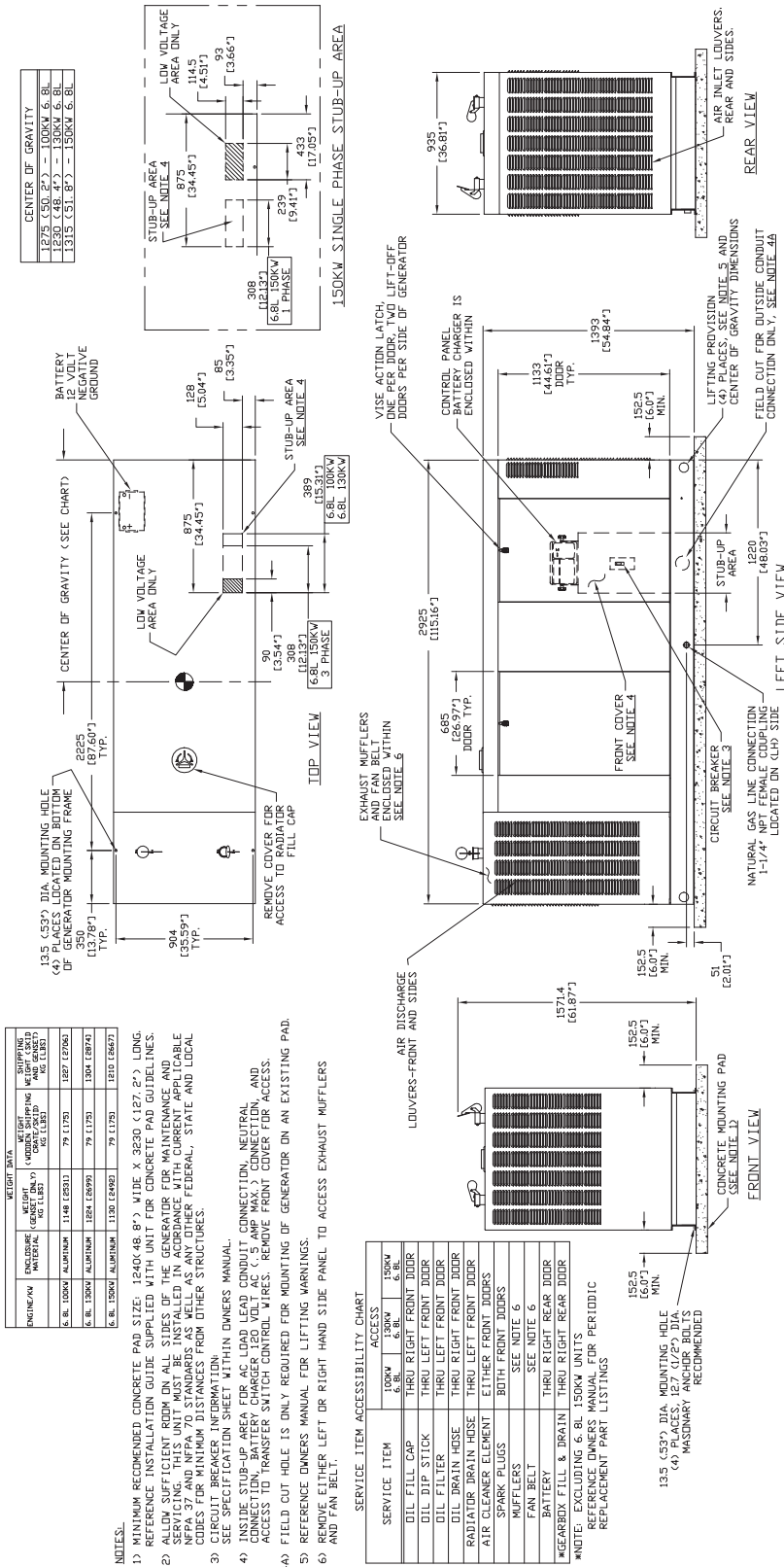
CIRCUIT BREAKER WIRE AND CONDUIT SIZE			
kW	VOLTS	CB AMPS	LUG SIZE
100	240 1 Ø	450	3-2/0 to 400 mcm
100	240 3 Ø	350	(1) 600 mcm to #4 or (2) 250 mcm to 1/0
100	208 3 Ø	400	(1) 600 mcm to #4 or (2) 250 mcm to 1/0
100	480 3 Ø	175	#6 to 300 mcm

CONTROL FEATURES

<ul style="list-style-type: none"> • 2-Line Plain Text LCD Display • Mode Switch <ul style="list-style-type: none"> -Auto -Off -Manual/Test (start) • Programmable start delay between 10-30 seconds • Engine Start Sequence <ul style="list-style-type: none"> • Engine Warm-up • Engine Cool-Down • Starter Lock-out • Smart Battery Charger • Automatic Voltage Regulation with Over and Under Voltage Protection 	<p>Simple user interface for ease of operation</p> <p>Automatic Start on Utility failure. 7 day exerciser</p> <p>Stops unit. Power is removed. Control and charger still operate.</p> <p>Start with starter control, unit stays on. If utility fails, transfer to load takes place.</p> <p>Standard</p> <p>Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration)</p> <p>5 seconds</p> <p>1 minute</p> <p>Starter cannot re-engage until 5 sec. after engine has stopped.</p> <p>Standard</p> <p>Standard</p>	<ul style="list-style-type: none"> • Automatic Low Oil Pressure Shutdown • Overspeed Shutdown • High Temperature Shutdown • Overcrank Protection • Safety Fused • Failure to Transfer Protectio • Low Battery Protection • 50 Event Run Log • Future Set Capable Exerciser • Incorrect Wiring Protection • Internal Fault Protection • Common External Fault Capability • Governor Failure Protection 	<p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p> <p>Standard</p>
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Single and three phase connections may vary, refer to the owner's manual for specific connection information.

Installation Layout



Installation Layout

AVAILABLE ACCESSORIES

Model #	Product	Description
5633	Cold Weather Kit	If the temperature regularly falls below 32° F, install a cold weather kit to maintain optimal battery temperature. Kit consists of battery warmer with thermostat built into the wrap.
5620	Extreme Cold Weather Kit	Recommended where the temperature regularly falls below 32° F for extended periods of time. For liquid cooled units only.
6160	Paint Kit	Industrial Grey Kit
5660	Scheduled Maintenance Kit	The Liquid-Cooled Scheduled Maintenance Kits offer all the hardware necessary to perform a complete maintenance on Honeywell liquid-cooled generators.
5951	Sync Wireless Remote	Remotely control generator functions with the advanced model's LCD display. In addition to remote testing of the generator, set the exercise cycle and maintenance interval reminders

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