

## STANDBY GENERATOR

# 60 kW

### LIQUID-COOLED GENERATOR SET

Standby Power Rating

Model HT060 - 60 kW 60Hz



## INCLUDES

- PrecisionPower™ Electrical Technology
- 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
- Emissions Compliant
- Natural Gas or LP Gas Operation
- 2 Year Limited Warranty
- UL 2200 Listed

Not for resale in CA/MA

## 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
- **PrecisionPower™ ELECTRICAL TECHNOLOGY** Superior harmonics and sine wave form produce less than 5% Total Harmonic Distortion for utility quality power. This allows confident operation of sensitive electronic equipment and micro-chip based appliances, such as variable speed HVAC.
- **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 ±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.

# 60 kW

## LIQUID-COOLED GENERATOR SET

# 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	4 wire
• Bearings	Sealed Ball
• Coupling	Flexible Disc
• Load Capacity (Standby Rating)	60 kW
• Excitation System	Direct

### ENGINE SPECIFICATIONS

• Make	Generac
• Model	In Line
• Cylinders	4
• Displacement	2.4 Liter
• Bore	3.41
• Stroke	3.94
• Compression Ratio	8.5:1
• Intake Air System	Turbcharged/Aftercooled
• 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	Electronic
• Sensing	Single Phase
• Regulation	± 1%

### 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 150 °C rise
- All models are fully prototyped tested

### ENGINE LUBRICATION SYSTEM

• Oil Pump	Gear
• Oil Filter	Full flow spin-on cartridge
• Crankcase	4 Quarts

### ENGINE COOLING SYSTEM

• Type	Pressurized Closed
• Water Pump	Belt driven
• Fan Speed	2100
• Fan Diameter	22 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	5" - 14" H <sub>2</sub> O

### ELECTRICAL SYSTEM

• Battery Charge Alternator	12V 30 Amp
• Static Battery Charger	2 Amp
• Recommended Battery	Group 26, 525CCA
• System Voltage	12 Volts

### ENCLOSURE FEATURES

- **Galvanized steel weather protective enclosure** – 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

<b>KW RATING (LP/NG)</b>		60/60	
<b>ENGINE SIZE</b>		2.4 Liter 4 cyl. inline	
<b>GENERATOR OUTPUT VOLTAGE/KW - 60Hz</b>		<b>kW LPG</b>	<b>AMP</b>
120/240V, 1-phase, 1.0 pf		60	250
120/208V, 3-phase, 0.8 pf		60	208
120/240V, 3-phase, 0.8 pf		60	180
277/480V, 3-phase, 0.8 pf		60	90
<b>ENGINE FUEL CONSUMPTION (Natural Gas) (Propane)</b>		<b>Natural Gas</b>	<b>Propane</b>
		(ft <sup>3</sup> /hr.)	(gal/hr.)
			cu ft/hr
Exercise cycle		123	49.3
25% of rated load		267	101
50% of rated load		483	183
75% of rated load		672	255
100% of rated load*		862	327
For Btu content, multiply ft <sup>3</sup> /hr x 2520 (LP) or ft <sup>3</sup> /hr x 1000 (NG)			
<b>ENGINE COOLING</b>			
Air flow (inlet air including alternator and combustion air)	ft <sup>3</sup> /min.	3,280	
System coolant capacity	US gal.	2.5	
Heat rejection to coolant	BTU/hr.	270,000	
Max. operating air temp. on radiator	°C (°F)	60 (150)	
Max. ambient temperature	°C (°F)	50 (140)	
<b>COMBUSTION AIR REQUIREMENTS</b>			
Flow at rated power 60 Hz	cfm	180	
<b>SOUND EMISSIONS IN DBA</b>			
Exercising at 7 meters		65	
Normal operation at 7 meters		72	
<b>EXHAUST</b>			
Exhaust flow at rated output 60 Hz	cfm	494	
Exhaust temp. at muffler outlet	°F	1,050	
<b>ENGINE PARAMETERS</b>			
Rated synchronous RPM	60 Hz	3600	
<b>POWER ADJUSTMENT FOR AMBIENT CONDIIONS</b>			
Temperature Deration	3% for every 10 °C above - °C	25	
	1.65% for every 10 °F above - °F	77	
Altitude Deration	1% for every 100 m above - m	915	
	3% for every 1000 ft. above - ft.	3000	

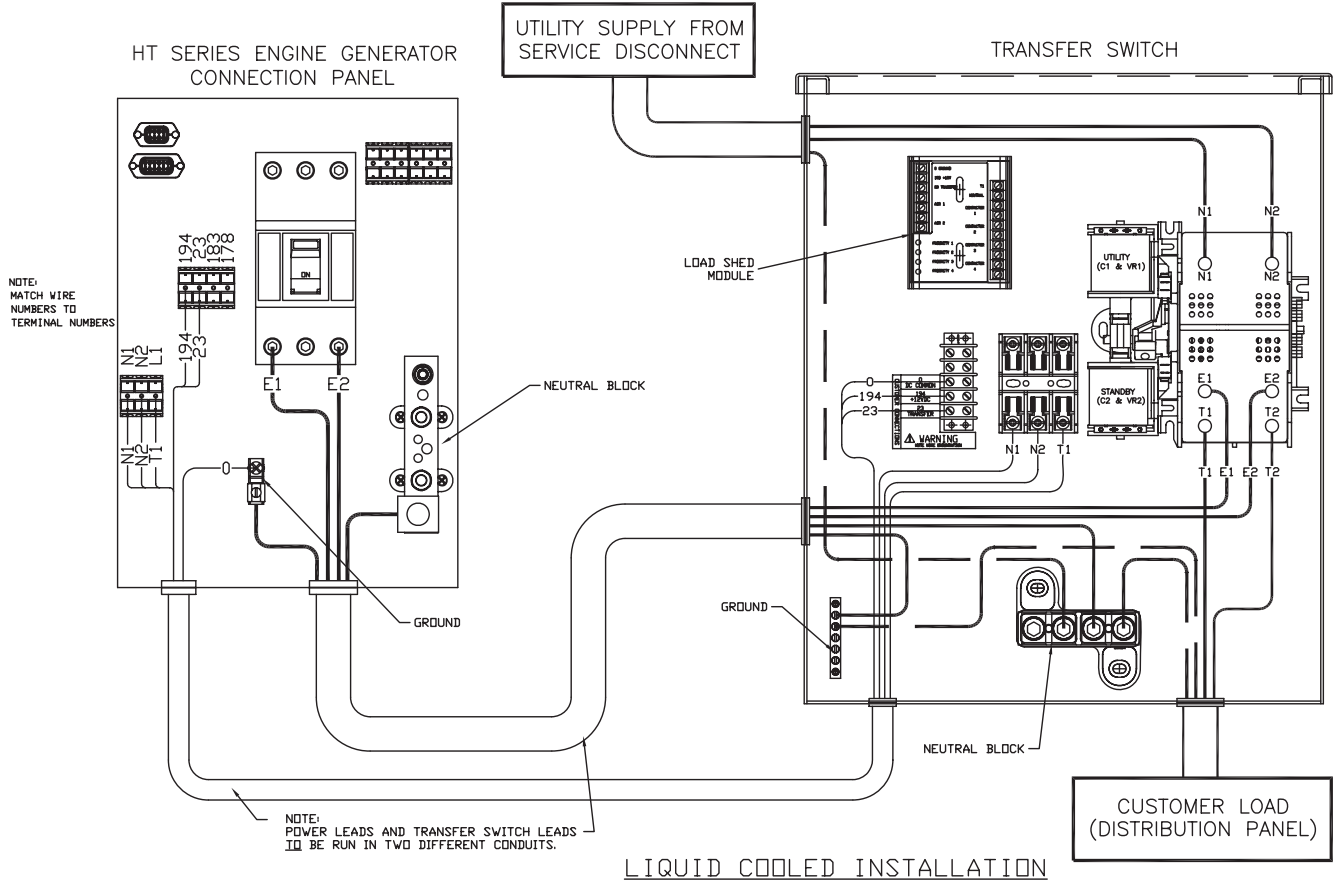
Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.

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.

# 60 kW

## LIQUID-COOLED GENERATOR SETS

## Interconnections



### CONTROL FEATURES

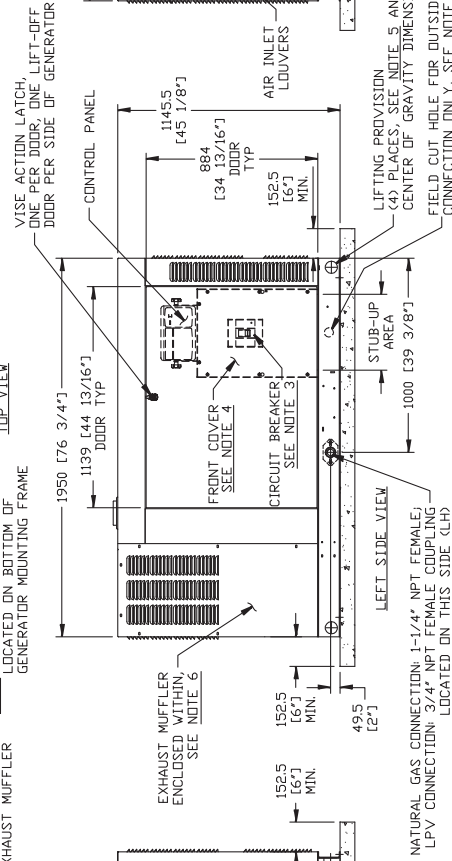
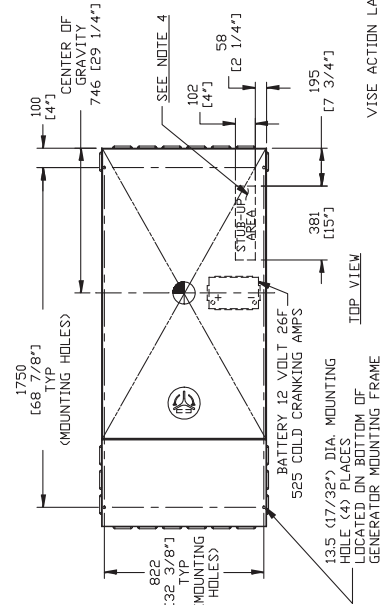
<ul style="list-style-type: none"> <li>• 2-Line Plain Text LCD Display</li> <li>• Mode Switch               <ul style="list-style-type: none"> <li>-Auto</li> <li>-Off</li> <li>-Manual/Test (start)</li> </ul> </li> <li>• Programmable start delay between 10-30 seconds</li> <li>• Engine Start Sequence               <ul style="list-style-type: none"> <li>• Engine Warm-up</li> <li>• Engine Cool-Down</li> <li>• Starter Lock-out</li> </ul> </li> <li>• Smart Battery Charger</li> <li>• Automatic Voltage Regulation with Over and Under Voltage Protection</li> </ul>	<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"> <li>• Automatic Low Oil Pressure Shutdown</li> <li>• Overspeed Shutdown</li> <li>• High Temperature Shutdown</li> <li>• Overcrank Protection</li> <li>• Safety Fused</li> <li>• Failure to Transfer Protectio</li> <li>• Low Battery Protection</li> <li>• 50 Event Run Log</li> <li>• Future Set Capable Exerciser</li> <li>• Incorrect Wiring Protection</li> <li>• Internal Fault Protection</li> <li>• Common External Fault Capability</li> <li>• Governor Failure Protection</li> </ul>	<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> <p>Standard</p>
--	---	--	---

Single and three phase connections may vary , refer to the owner's manual for specific connection information.

# Installation Layout

SERVICE ITEM	2, 4L
OIL FILL CAP	THRU RIGHT DOOR
OIL DIP STICK	THRU RIGHT DOOR
OIL FILTER	THRU LEFT DOOR
RADIATOR DRAIN HOSE	THRU LEFT DOOR
AIR CLEANER ELEMENT	THRU LEFT DOOR
MUFFLER	SEE NOTE 6
FAN BELT	SEE NOTE 6
BATTERY	THRU LEFT DOOR

REFERENCE OWNERS MANUAL FOR PERIODIC REPLACEMENT PART LISTINGS



- NOTES:**
- 1) MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1185 (45 1/2") WIDE X 2855 (88 7/8") LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES.
  - 2) ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE ACCESS. SEE OWNERS MANUAL FOR MAINTENANCE ACCESS REQUIREMENTS. APPLY CLEARANCE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL, STATE AND LOCAL CODES FOR MINIMUM DISTANCES FROM OTHER STRUCTURES.
  - 3) CIRCUIT BREAKER INFORMATION: SEE SPECIFICATION SHEET WITHIN OWNERS MANUAL.
  - 4) INSIDE STUB-UP AREA FOR AC LOAD LEAD CONDUIT CONNECTION, NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (0.5 AMP MAX.) CONNECTION, AND ACCESS TO TRANSFER SWITCH CONTROL WIRES. REMOVE FRONT COVER FOR ACCESS.
  - 4A) FIELD CUT HOLE IS ONLY REQUIRED FOR MOUNTING OF GENERATOR ON AN EXISTING PAD.
  - 5) REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
  - 6) REMOVE EITHER LEFT OR RIGHT HAND SIDE PANEL TO ACCESS EXHAUST MUFFLER AND FAN BELT.

EXHAUST AND AIR DISCHARGE LOUVERS - FRONT AND SIDES

13.5 (17/32") DIA. MOUNTING HOLE (4) PLACES, 12.7 (1/2") DIA. MASONRY ANCHOR BOLTS RECOMMENDED

CONCRETE MOUNTING PAD (SEE NOTE 1)

ENCLOSURE MATERIAL	WEIGHT (GENSET ONLY) (KG (LBS))	WEIGHT (SHIPPING PAD) (KG (LBS))	SHIPPING WEIGHT (GENSET AND PAD) (KG (LBS))
STEEL	654 (1441)	44 (98)	699 (1539)
ALUMINUM	600 (1324)	44 (98)	645 (1422)

WEIGHT DATA

ENCLOSURE MATERIAL	WEIGHT (GENSET ONLY) (KG (LBS))	WEIGHT (SHIPPING PAD) (KG (LBS))	SHIPPING WEIGHT (GENSET AND PAD) (KG (LBS))
STEEL	654 (1441)	44 (98)	699 (1539)
ALUMINUM	600 (1324)	44 (98)	645 (1422)

## AVAILABLE ACCESSORIES

Model #	Product	Description
5630	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.
5616	Extreme Cold Weather Kit	Recommended where the temperature regularly falls below 32° F for extended periods of time. For liquid-cooled units only.
5984	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 LED display. In addition to remote testing of the generator, set the exercise cycle and maintenance interval reminders
6160	Paint Kit	Industrial Grey

### Generac Power Systems, Inc.

S45 W29290 Hwy. 59

Waukesha, WI 53187

Tel: 1-855-GEN-INFO

honeywellgenerators.com

0191010SBY-B

May 2011

© Generac Power Systems, Inc. All rights reserved.  
Specifications subject to change without notice.

The Honeywell Trademark is used under  
license from Honeywell International Inc.

Honeywell International Inc. makes no representation  
or warranties with respect to this product.

