

Standby Power Rating

70 kW, 88 kVA, 50 Hz

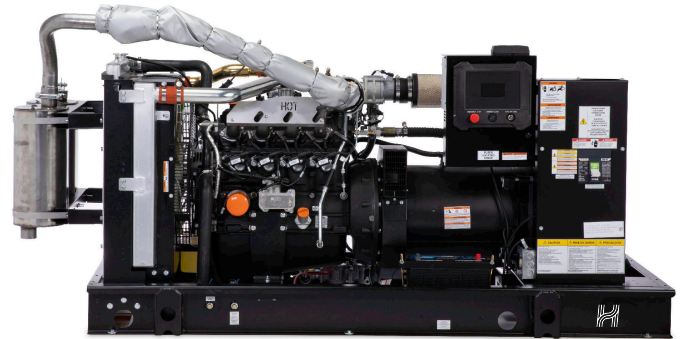


Image used for illustration purposes only

Codes and Standards

Generac products are designed to the following standards:



UL2200, UL6200, UL1236, UL489



CSA C22.2, ULC S601



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708

FEATURES

Honny ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Honny also makes its own spark-ignited engines, and you'll find them on every Honny gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout China. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Honny Company Limited's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Honny spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer/Catalyst

Fuel System

- Fuel Connection on Frame
- Primary and Secondary Fuel Shutoff

Cooling System

- Closed Coolant Recovery System
- Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

Electrical System

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- Main Line Circuit Breaker
- Fault Protector
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearings
- Amortisseur Winding
- Full Load Capacity Alternator

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Units Only)
- Ready to Accept Full Load in <10 Seconds

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hood (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- Textured Polyester Powder Coat

CONTROL SYSTEM



Digital Control Panel
UK-DSE

Program Functions

- Programmable Crank Limiter
- Programmable Exerciser
- Programmable Logic Controller
- RS-232/485 Communications
- All Phase Sensing Digital Voltage Regulator
- 2-Wire Start Capability

- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/Sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop
- Programmable
- Customizable Alarms, Warnings, and Events
- Modbus® Protocol
- Predictive Maintenance Algorithm
- Sealed Boards
- Password Parameter Adjustment Protection
- Single Point Ground
- 16 Channel Remote Trending
- 0.2 Msec High Speed Remote Trending
- Alarm Information Automatically Annunciated on the Display

Full System Status Display

- Power Output (kW)
- Power Factor

- kW Hours, Total, and Last Run
- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency

Alarms and Warnings

- Oil Pressure
- Coolant Temperature
- Coolant Level
- Low Fuel Pressure
- Engine Overspeed
- Battery Voltage
- Alarms and Warnings Time and Date Stamped
- Snap Shots of Key Operation Parameters During Alarms and Warnings
- Alarms and Warnings Spelled Out (No Alarm Codes)

PARALLELING CONTROLS (If Selected)

- Auto-Synchronization Process
- Isochronous Load Sharing
- Reverse Power Protection
- Maximum Power Protection
- Electrically Operated, Mechanically Held Paralleling Switch
- Sync Check System
- Independent On-Board Paralleling

- Optional Programmable Logic Full Auto Back-Up Controls
- Shunt Trip and Auxiliary Contact

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Engine Block Heater
- Oil Heater
- Air Filter Restriction Indicator
- Radiator Stone Guard (Open Set Only)
- Baseframe Cover/Rodent Guard
- Level 1 Fan and Belt Guards (Enclosed Units Only)
- Shipped Loose Critical Silencer (Open Set Only)

FUEL SYSTEM

- Flexible Fuel Line

ELECTRICAL SYSTEM

- Battery Charger
- Battery Wires

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- Demand Response Rating
- Extended Factory Testing (3-Phase Only)
- IBC Seismic Certification
- 12 Position Load Center

WEATHER PROTECTED ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Enclosure Heaters
- Door Open Alarm Switch

CONTROL SYSTEM

- NFPA 110 Compliant Level 1 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 10A Engine Run Relay
- Ground Fault Annunciator
- 100 dB Alarm Horn
- Damper Alarm Contacts (Motorized Dampers Only)
- 120V GFCI and 240V Outlets
- Auxiliary Circuit Breaker Contacts to Controller

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

ENGINEERED OPTIONS

ENGINE SYSTEM

- Fluid Containment Pans

CONTROL SYSTEM

- Battery Disconnect Switch

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing
- Battery Box

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General	
Make	Honny
Cylinder #	4
Type	In-Line
Displacement - in³ (L)	275.0 (4.5)
Bore: in (mm)	4.5 (114.3)
Stroke: in (mm)	4.25 (107.95)
Compression Ratio	9.1:1
Intake Air Method	Turbocharged
Number of Main Bearings	5
Connecting Rods	Forged Steel, Fractured Split, Bushingless
Cylinder Head	Cast Iron
Cylinder Liners	Cast Iron
Ignition	Coil Near Plug Solid State Inductive
Piston Type	Cast Aluminum Flat Top
Crankshaft Type	Forged Steel
Lifter Type	Hydraulic Roller
Intake Valve Material	Stainless Steel
Exhaust Valve Material	Stainless Steel
Hardened Valve Seats	High Steel Iron Alloy
Engine Governing	
Governor	Electronic
Frequency Regulation (Steady State)	0.25
Lubrication System	
Oil Pump	Gear Driven
Oil Filter Type	Full Flow Spin-On Cartridge
Engine Oil Capacity: qt (L)	21 (20)

Cooling System	
Cooling System Type	Pressurized Closed
Fan Type	Pusher
Fan Speed (rpm)	2,100
Fan Diameter - in (mm)	22 (533)

Fuel System	
Fuel Type	Natural Gas, Propane
Fuel Injection	Electronic
Fuel Shutoff	Generac
Operating Fuel Pressure (NG) - in H ₂ O (kPa)	5 - 14 (1.2 - 3.5)
Operating Fuel Pressure (LP) - in H ₂ O (kPa)	7 - 14 (1.7 - 3.5)

Engine Electrical System	
System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative (-)

ALTERNATOR SPECIFICATIONS

Standard Model	K0080124Y12	Standard Excitation	Brushless Excitation
Poles	4	Bearings	Sealed Ball
Field Type	Revolving	Coupling	Direct via Flexible Disc
Insulation Class — Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class — Stator	H	Voltage Regulator Type	Full Digital
Total Harmonic Distortion (THD)	<5%	Number of Sensed Phases	All
Telephone Interference Factor (TIF)	<50	Regulation Accuracy (Steady State)	±0.25%

OPERATING DATA

POWER RATINGS NATURAL GAS/PROPANE VAPOR

		Standby
Single-Phase 120/240 VAC @1.0pf	70 kW/70 kVA	Amps: 292
Three-Phase 120/208 VAC @0.8pf	70 kW/88 kVA	Amps: 243
Three-Phase 120/240 VAC @0.8pf	70 kW/88 kVA	Amps: 211
Three-Phase 277/480 VAC @0.8pf	70 kW/88 kVA	Amps: 105
Three-Phase 346/600 VAC @0.8pf	70 kW/88 kVA	Amps: 84

STARTING CAPABILITIES (SKVA)

sKVA vs. Voltage Dip					
120/240 VAC 1Ø	30%	277/480 VAC 3Ø	30%	208/240 VAC 3Ø	30%
A0080044N12	58	K0080124Y12	172	K0045124Y12	132
A0130044N12	67	K0100124Y12	227	K0060124Y12	171

FUEL CONSUMPTION RATES*

Natural Gas – scfh (m³/hr)		Propane Vapor – scfh (m³/hr)		Propane Liquid – gph (Lph)	
Percent Load	Standby	Percent Load	Standby	Percent Load	Standby
25%	261 (7.4)	25%	80 (2.3)	25%	2.5 (9.6)
50%	475 (13.5)	50%	180 (5.1)	50%	5.1 (19.1)
75%	697 (19.7)	75%	270 (7.6)	75%	7.6 (28.7)
100%	928 (26.3)	100%	350 (9.9)	100%	10.1 (38.3)

*Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Air Flow (Fan Air Flow Across Radiator) - Open Set	cfm (m³/min)	4,343 (123)
Coolant Flow	gpm (Lpm)	24 (90)
Coolant System Capacity	gal (L)	9 (34)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 0199270SSD
Maximum Radiator Backpressure	in H2O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm (m³/min)	157 (4.4)

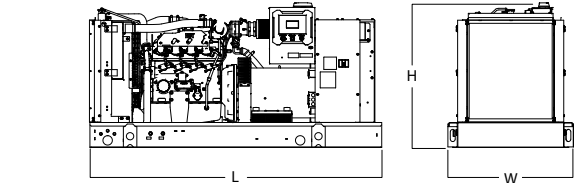
ENGINE

		Standby
Rated Engine Speed: RPM	rpm	1,500
Horsepower at Rated kW**	hp	113
Piston Speed	ft/min (m/min)	1,275 (389)
BMEP	psi (kPa)	188 (1,296)

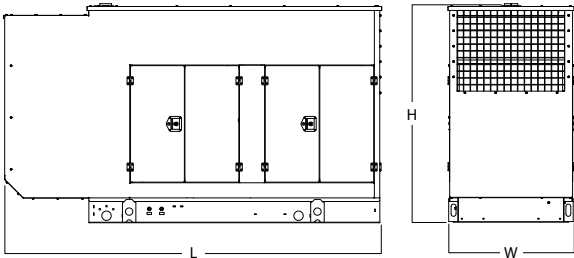
EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m³/min)	390 (11.0)
Maximum Exhaust Back Pressure	in Hg (Kpa)	0.75 (2.54)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,362 (739)

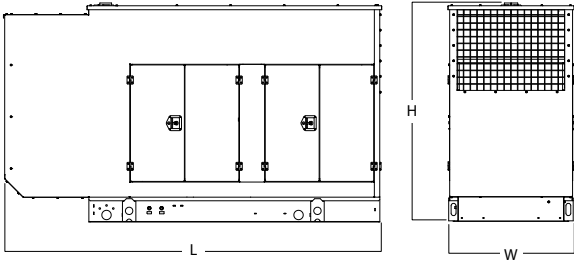
DIMENSIONS AND WEIGHTS*



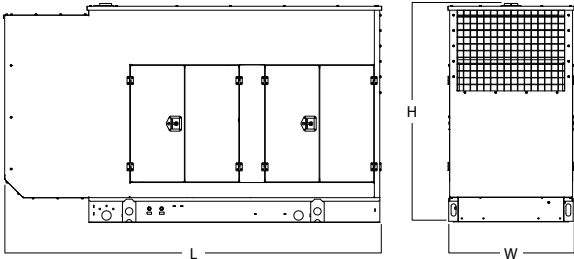
OPEN SET (Includes Exhaust Flex)		
L x W x H - in (mm)	92.9 (2,360) x 39.9 (1,014) x 46.0 (1,170)	
Weight lbs (kg)	1,967- 1,978 (982 - 897)	



WEATHER PROTECTED ENCLOSURE		
L x W x H - in (mm)	120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754)	
Weight lbs (kg)	Steel: 2,705 - 2,717 (1,227 - 1,232) Aluminum: 2,353 - 2,365 (1,068 - 1,073)	



LEVEL 1 ACOUSTIC ENCLOSURE		
L x W x H - in (mm)	120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754)	
Weight lbs (kg)	Steel: 2,796 - 2,808 (1,268 - 1,274) Aluminum: 2,444 - 2,456 (1,109 - 1,114)	



LEVEL 2 ACOUSTIC ENCLOSURE		
L x W x H - in (mm)	120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754)	
Weight lbs (kg)	Steel: 2,874 - 2,886 (1,304 - 1,309) Aluminum: 2,505 - 2,513 (1,135 - 1,140)	

* All measurements are approximate and for estimation purposes only.

Specification characteristics may change without notice. Please consult www.honny.com for detailed installation drawings.