

**Standby Power Rating**

80 kW, 100 kVA, 50 Hz

**Prime Power Rating\***

72 kW, 90 kVA, 50 Hz

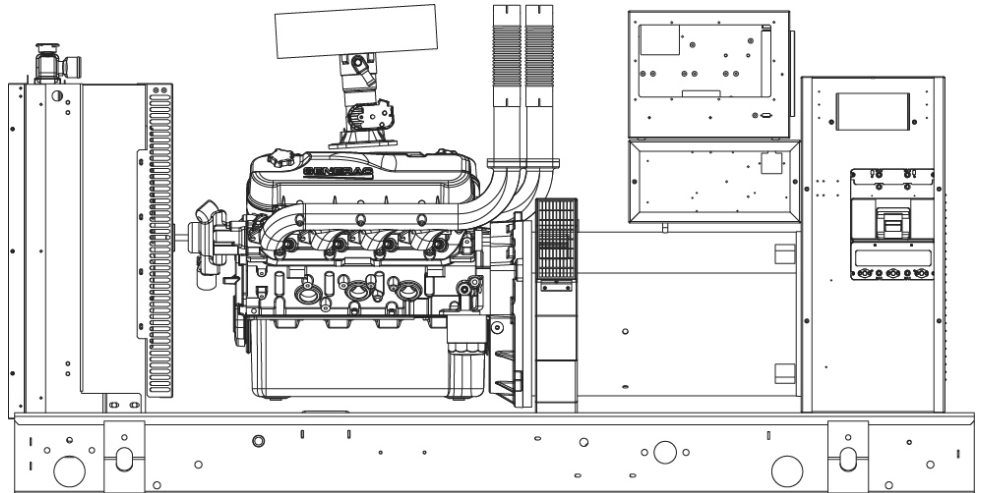


Image used for illustration purposes only

## Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.



UL2200, UL508, UL489



CSA C22.2



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001

## 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 #	8
Type	V
Displacement - Cu In (L)	543 (8.9)
Bore - in (mm)	4.49 (114.3)
Stroke - in (mm)	4.25 (107.95)
Compression Ratio	9.9:1
Intake Air Method	Naturally Aspirated
Number of Main Bearings	5
Connecting Rods	Forged Steel
Cylinder Head	Cast Iron
Cylinder Liners	No
Ignition	High Energy
Piston Type	Aluminum Alloy
Crankshaft Type	Forged Steel
Lifter Type	Hydraulic Roller
Intake Valve Material	Steel Alloy
Exhaust Valve Material	Stainless Steel
Hardened Valve Seats	Yes
Engine Governing	
Governor	Electronic
Frequency Regulation (Steady State)	± 0.25%
Lubrication System	
Oil Pump Type	Gear
Oil Filter Type	Full-Flow Spin-On Cartridge
Crankcase Capacity - qts (L)	10 (9.5)

Cooling System	
Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed - RPM	2,386
Fan Diameter - in (mm)	22 (558.8)
Fuel System	
Fuel Type	Natural Gas, Propane Vapor
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure - in H <sub>2</sub> O (kPa)	11 - 14 (2.7 - 3.5)
Optional Operating Fuel Pressure - in H <sub>2</sub> O (kPa)	7 - 11 (1.7 - 2.7)
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 Drive
Insulation Class - Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class - Stator	H	Voltage Regulator Type	Full Digital
Total Harmonic Distortion	<5% (3-Phase)	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/Demand Response	
Single-Phase 120/240 VAC @1.0pf	80 kW	Amps: 333
Three-Phase 120/208 VAC @0.8pf	80 kW	Amps: 278
Three-Phase 120/240 VAC @0.8pf	80 kW	Amps: 241
Three-Phase 277/480 VAC @0.8pf	80 kW	Amps: 120
Three-Phase 346/600 VAC @0.8pf	80 kW	Amps: 96

### MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip			
277/480 VAC	30%	208/240 VAC	30%
K0080124Y12	172	K0080124Y12	132
K0100124Y12	227	K0100124Y12	171
K0130124Y12	327	K0130124Y12	327

### FUEL CONSUMPTION RATES\*

Natural Gas – scfh (m³/hr)		Propane Vapor – scfh (m³/hr)		Propane Liquid – gph (Lph)	
Percent Load	Standby/Demand Response	Percent Load	Standby/Demand Response	Percent Load	Standby/Demand Response
25%	415.0 (11.7)	25%	191.0 (5.4)	25%	4.0 (15.1)
50%	720.0 (20.4)	50%	298.0 (8.4)	50%	7.6 (28.8)
75%	989.0 (28.0)	75%	409.0 (11.5)	75%	10.5 (39.7)
100%	1,247.0 (35.3)	100%	519.0 (14.7)	100%	13.6 (51.5)

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

### COOLING

	Standby/Demand Response	
Air Flow (Fan Air Flow Across Radiator)	scfm (m³/min)	6,107 (173)
Coolant System Capacity	gal (L)	5.5 (20.8)
Coolant Flow	gal/min (L/min)	27.5 (104.1)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0199270SSD	
Maximum Radiator Backpressure	in H <sub>2</sub> O (kPa)	0.5 (0.12)

### COMBUSTION AIR REQUIREMENTS

	Standby/Demand Response
Flow at Rated Power scfm (m³/min)	185.0 (5.2)

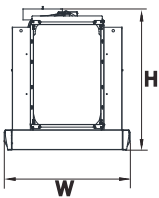
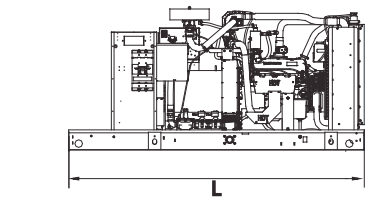
### ENGINE

		Standby/Demand Response
Rated Engine Speed	RPM	1,500
Horsepower at Rated kW**	hp	122
Piston Speed	ft/min (m/min)	1,275 (389)
BMEP	psi (kPa)	99.9 (689)

### EXHAUST

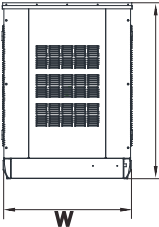
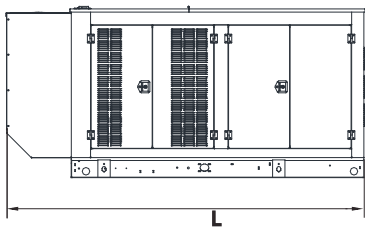
		Standby/Demand Response
Exhaust Flow (Rated Output)	scfm (m³/min)	599 (16.9)
Maximum Exhaust Backpressure	inHg (kPa)	0.75 (2.54)
Exhaust Temp (Rated Output - Post Catalyst)	°F (°C)	1,288 (698)

DIMENSIONS AND WEIGHTS\*



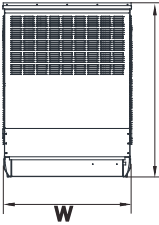
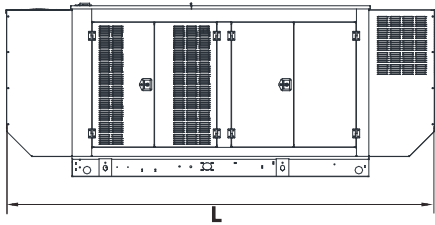
OPEN SET (Includes Exhaust Flex)

L x W x H - in (mm)	94.2 (2,394) x 40.0 (1,016) x 47.6 (1,208)
Weight - lbs (kg)	2,543 (1,153)



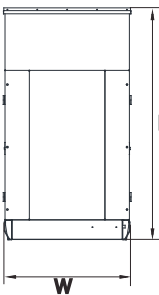
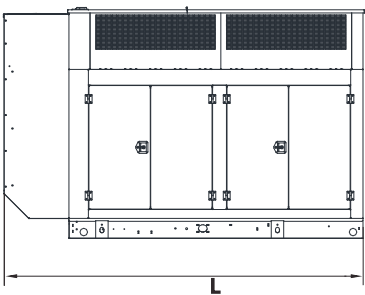
WEATHER PROTECTED ENCLOSURE

L x W x H - in (mm)	111.8 (2,840) x 40.5 (1,028) x 56.2 (1,427)
Weight - lbs (kg)	Steel: 3,075 (1,393) Aluminum: 2,802 (1,271)



LEVEL 1 ACOUSTIC ENCLOSURE

L x W x H - in (mm)	129.4 (3,287) x 40.5 (1,028) x 56.2 (1,427)
Weight - lbs (kg)	Steel: 3,233 (1,466) Aluminum: 2,873 (1,303)



LEVEL 2 ACOUSTIC ENCLOSURE

L x W x H - in (mm)	111.8 (2,840) x 40.5 (1,028) x 68.6 (1,743)
Weight - lbs (kg)	Steel: 3,360 (1,524) Aluminum: 2,928 (1,328)

\* All measurements are approximate and for estimation purposes only.

Specification characteristics may change without notice. Please consult [www.honny.com](http://www.honny.com) for detailed installation drawings.