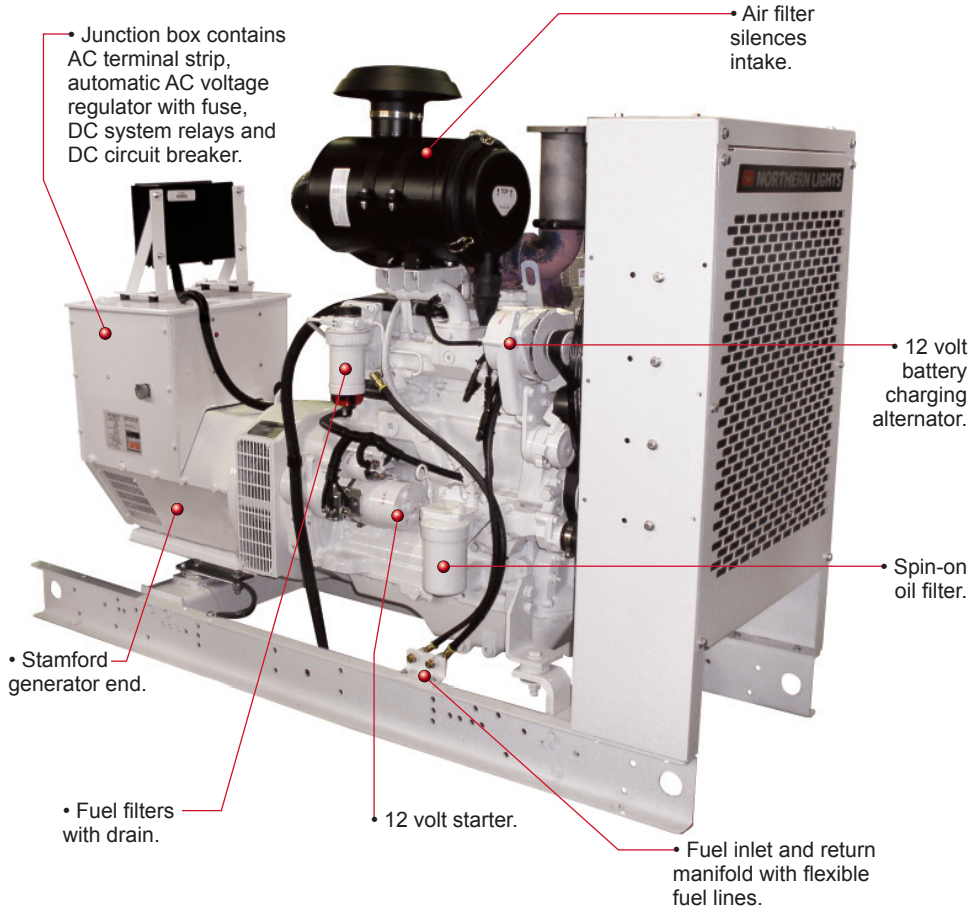
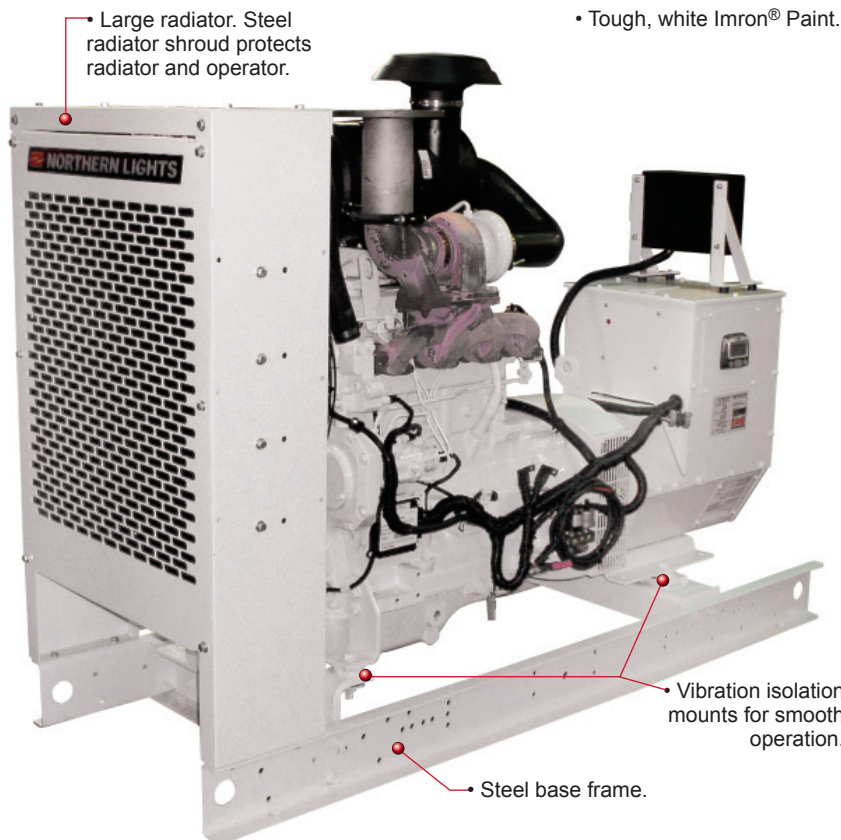


## Service Side



## Non-Service Side



**85 kW**  
60 Hz / 1800 RPM - Prime

**94 kW**  
60 Hz / 1800 RPM - Standby

### Prime power experience

Since 1960, Northern Lights' success has been based on our obsession with innovative, application-specific design, quality control and unit reliability. This has made our Northern Lights land-based generator sets the recognized industry standard of excellence.

### Terrific economy

The NL1064H1 meets this high standard. It combines a high torque, low rpm industrial diesel, conservatively rated generator end and your choice of controls. The resulting power system gives you economical prime power or reliable standby protection. A system designed to pick up 100% of the load with minimal voltage dip and quick recovery.

### Clean, light, quiet

The NL1064H1 features a John Deere based Luger engine designed to meet current EPA, CARB and EEC emissions standards. It is also quieter, lighter and more economical than comparable power producers. The 4 cylinder in-line, two valve per cylinder diesel engine is designed to produce peak torque at low RPM.

### Keeping it Simple

All Northern Lights are designed to be easy to install, operate and maintain. With a self-venting fuel system and mounted control panel, the NL1064H1 is ready to "plug and play" into your electrical system. The DC control panels feature a variety of safety alarms and shut downs to protect your machine. Hoses, gaskets and belts have been minimized to promote long life. Single side service points, 500 hour oil changes, oil drains and owner's manuals available in either printed editions or CD-ROM's help simplify maintenance.

### Industry best warranty

The set's quality allows us to back it with an industry-leading one year, unlimited hour, warranty. This, along with sole-source supply, assures you of quick and total support.

### Complete testing

Every Northern Lights has been fully load tested before shipment to ensure maximum quality.

### Fully customizable

Special needs? Let our engineers use the NL1064H1 as a foundation for a custom set designed for your power requirements.



AC Output <sup>1</sup>	
85 kW - Prime	60 Hz, 1800 RPM
94 kW - Standby	60 Hz, 1800 RPM
Voltage regulation	±5%
Standard phase (optional)	3 (1)
Std. low volt (WYE)	120 (208)
amps - prime @ 0.8 PF	229
amps - prime @ 0.8 PF	243
Std. high volt (WYE)	277 (480)
amps - prime @ 0.8 PF	99
amps - prime @ 0.8 PF	105
Optional voltage (WYE)	127/220 thru 254/440
Optional voltage (Delta)	120/240
Motor starting	
Max. KVA @ 25% dip	205

Lugger L1064H Engine	
Type	Vertical 4 cylinder diesel
Displacement	414 cid (6.8 ltr)
Bore/Stroke	4.19/5.00 in (106/127 mm)
BHP with fan - prime	96.4
BHP with fan - standby	107.4

Installation Data & Weight	
Min. exhaust outlet	4 inch (402 mm)
Fuel inlet and return	1/4 inch NPT
Approximate dry weight	2400 lbs (1090 kg)

NOTES: 1 - Deratings: 3% per 1000 ft over 500 ft above sea level. 5% for every 10° over 77° F. 2 - Three phase rated at 0.8 power factor. Single phase rated at 1.0 PF. 3 - US gallons per hour. Actual fuel consumption will vary depending on operating conditions.

Approximate Fuel Use	
Full load - prime	6.92 gph (36.1 lph)
Full load - standby	Contact Factory
3/4 load - prime	Contact Factory
3/4 load - standby	Contact Factory
1/2 load - prime	3.4 gph (12.8 lph)
1/2 load - standby	Contact Factory
Full Max fuel flow	Contact Factory
Max fuel lift	Contact Factory

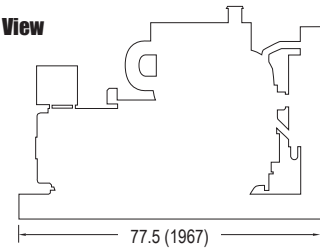
Air	
Combustion air - prime	226 cfm (6.4 m³m)
Combustion air - standby	240 cfm (6.8 m³m)
Generator cooling air	595 cfm (16.8 m³m)
Radiator cooling air	3970 cfm (112 m³m)
Max. Restriction radiator	2 in (50 mm) H <sub>2</sub> O

Cooling and Lubrication	
Heat rejected to coolant -prime	2959 btu/min
Heat rejected to coolant -standby	3300 btu/min
Lube oil capacity	3.25 US gal (12.2 ltr)

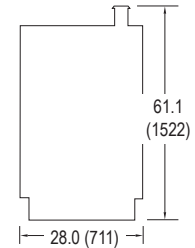
Exhaust	
Exhaust gas flow - prime	618 cfm (17.5 m³m)
Exhaust gas flow - standby	674 cfm (19.1 m³m)
Max. exhaust temp - prime	898° F (481° C)
Max. exhaust temp - standby	946° F (508° C)
Max. back pressure	30 in (762 mm) H <sub>2</sub> O

## NL1064T2 Dimensional Drawing

### Side View



### Front View



**NL1064H1 Overall Dimensions L x W x H:**  
77.5 x 28.0 x 61.1 inch (1967 x 711 x 1552 mm)  
Dimensions given in inches (mm).  
Dimensions subject to change without notice.  
Contact dealer or visit [www.northern-lights.com](http://www.northern-lights.com)  
for most current installation drawings.

## Features and Benefits

### Engine Block

- John Deere-base, 4 cylinder in-line, two valve per cylinder diesel engine designed to produce peak torque at low RPM.
- Turbo charged to increase performance and lower emissions.
- Replaceable, liquid cooled cylinder liners for long life and low rebuild costs.
- Balanced, forged crankshaft with induction hardened fillets.
- Two gear-driven balance shafts rotate at twice engine speed counteracting vertical forces for smooth operation.
- Liquid cooled with radiator. Poly-vee single belt fan drive system. Pusher cooling fan has hand guard to protect operator. Steel radiator shroud standard.
- Electronic controlled rotary fuel injection pump for higher injection pressures, variable timing control and precise fuel metering. Higher power with lower emissions.
- Engine-mounted fuel filter with drain valve on canister. Easy element change without tools.
- Fuel lines routed to fuel manifold on base frame for easy installation.
- Full flow, spin-on oil filter with bypass.
- Jacket water engine oil cooler reduces heat and thermal breakdown of lube oil.
- Oil spray piston cooling.
- High ring pistons with patented combustion bowl maximizes operating efficiencies and low emissions.
- Shipped with lube oil.
- Large, dry element, industrial air filter protects engine in dusty environment.
- 12 volt system with starter motor, battery charging alternator and regulator.



- Low oil pressure and high coolant temperature shutdown systems.
- Every set is load tested with controls installed.
- Control panel with NEMA 1 enclosure, oil pressure and coolant temperature gauges, DC volt and engine hour meters, and engine control switches all standard.

### AC Generator

- Stamford, direct coupled, single bearing, 12 lead, reconnectable generators are torsionally matched with engine.
- Brushless design is maintenance free.
- Generators meet or exceed NEMA and BS standards with class H insulation, accessible diodes, oversized ball bearings and conservative 105° C temperature rise at prime rating (130° C at standby).
- Automatic voltage regulators give quick response, excitation support and stable paralleling. Voltage is regulated to +/-1.5% RMS from no load to full load.

### Special Set Features

- Heavy duty, steel base frames.
- Long life white enamel paint for optimal service visibility.
- Center bonded vibration isolation mounts reduce noise and vibration.
- Parts and operator's manuals standard.

### Accessories and Optional Equipment

- Control panels: AC and DC monitoring panel. PLC controlled auto-start panel. 7 light monitoring module. 12 light monitoring module. Stop-start panels



- Manual transfer switches
- Automatic transfer switches
- Circuit breakers
- Paralleling switchgear
- Alarms and shut down systems: Overspeed shutdown. Low coolant level shutdown. Low lube oil level shutdown
- Exhaust muffler system: Residential, Critical and Compact
- Heaters and tanks: Jacket water heater, lube oil heaters, day tank, fuel tank and dry sump lube oil tank.
- Enclosures: Weather enclosure, arctic environment enclosure, sound attenuation enclosure and trailer mounted enclosure.
- Custom painting
- Export crating
- Heat recovery systems

### Accessories and Optional Equipment



Let your dealer help you custom design a set that matches your special application using the complete line of Northern Lights accessories.

### Dealer

4420 14th Ave. NW., Seattle WA 98107  
Tel: (206) 789-3880 • 1-800-762-0165 • Fax: (206) 782-5455  
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[www.northern-lights.com](http://www.northern-lights.com)