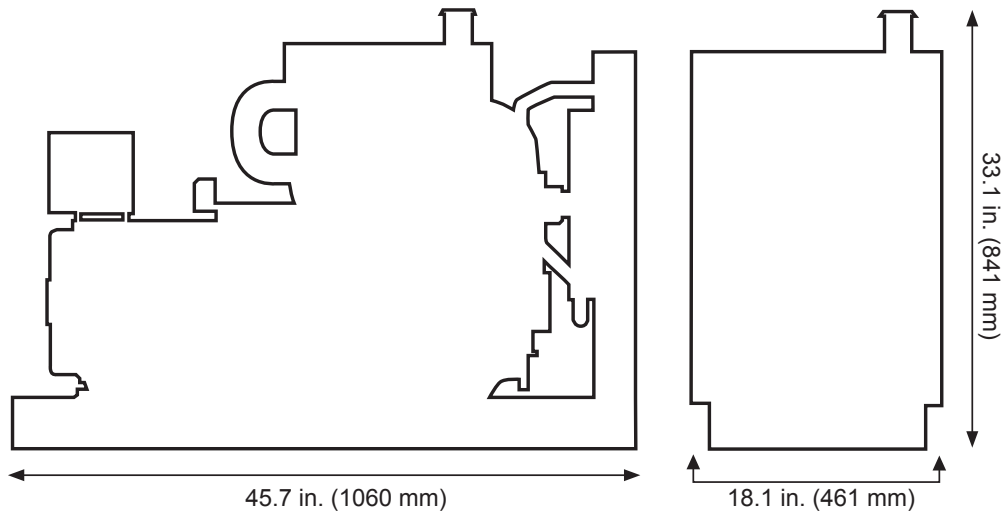


Dimensional Drawing
NL843NW4 - 12 kW

AC Output ¹	
12 kW	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120-240 V/50A, 120 V/100A
Optional	Three Phase with 0.8 PF
Voltage regulation	±1%
Lugger L843 Engine	
Type	Vertical 3 cylinder diesel
Displacement	91 in ³ (1.5 ltr)
Bore/Stroke	3.30/3.5 in (84/90 mm)
HP @ RPM	20.0/1800
Approx. fuel use	
1800 RPM @ full load ²	1.2 gph (4.5 lph)
1800 RPM @ half load ²	0.62 gph (2.3 lph)
Installation Data & Weight	
Exhaust outlet	1.38 inch (35 mm)
Fuel inlet and return	1/4 inch NPT
Approximate dry weight	668 lbs (303 kg)



NL843NW4 Overall Dimensions L x W x H: 45.7 x 18.1 x 33.1 inch (1060 x 461 x 841 mm)
 Dimensions given in inches (mm). Dimensions subject to change without notice.
 Contact dealer or visit www.northern-lights.com for most current installation drawings.

- Based on 1.0 unity power factor. Deratings: 3% per 1000 ft. over 500 feet above sea level. 1.5% for every 10° over 77°F
- Actual fuel consumption will vary depending on operating conditions.

NL843NW4 Features and Benefits
Engine Block

- Four cycle, 3 cylinder, liquid cooled, naturally aspirated, overhead valve, industrial-duty diesel.
- Swirl combustion design improves fuel efficiency, reduces smoke and noise.
- Glow plugs for fast cold weather starting.

Cooling System

- Liquid-cooled with radiator and pusher cooling fan. Steel radiator shroud and fan guard protects the radiator and operator.

Self-Venting Fuel System

- Bosch-type in-line injection pump.
- Stop solenoid controls the fuel rack, not throttle, to eliminate speed variance and linkage problems.
- Engine speed governed to 5% for close AC frequency control.
- Pintle fuel injectors have replaceable tips for lower service costs.
- Mechanical fuel pump with hand primer.
- Large spin-on fuel filter.
- Fuel line manifold and flexible fuel lines for easy fuel tank connection.

Lubrication System.

- Full flow, spin-on oil filter with bypass.
- 5.8qt. (5.5ltr) oil capacity for better lubrication.

Intake and Exhaust

- Large replaceable air filter protects engine in dusty environments.
- Residential muffler built into the exhaust manifold saves installation time and costs.
- Set meets US EPA Tier IV emission requirements for cleaner air.


DC Electrical System

- 12 volt system includes starter motor, battery charging alternator with solid state voltage regulator and DC circuit breaker.
- Standard, unit mount S-1B control panel has engine hour meter, start-stop switch with run light and preheat switch.
- Dual panel relays and quick disconnect harness plug-ins. With optional Y-harness and 10, 20 or 40 foot harness extensions, you can have up to six remote control panels, up to 100 feet from the set.
- Safety shutdown system for low oil pressure and high coolant temperature.

AC Generator

- Northern Lights, direct coupled, brushless AC generator end is maintenance free. 4 lead, 1 phase, 1.0 pf, 50 or 60 Hz output. 12 lead-3 phase output is optional. Conservative heat rise rating: 95°C/50°C ambient for long generator life.
- Automatic Voltage Regulator is powered by dedicated AC winding for true 300% short circuit capability. Quick ±1% RMS no load to full load voltage regulation. AVR has circuit breaker protection.
- Generator features high quality, Class "H" epoxy insulation, accessible diodes, over-sized bearings and junction box for wiring.
- High air flow from integral fan keeps generator running cool.

Special Equipment

- Welded steel skid frame gives rigid support and makes installation easy.
- Enhanced fan guard for improved operator safety.
- Flexible mounts isolate engine vibration for smooth operation.
- Long life, blue enamel paint finish.
- Operator's and parts manuals.
- Rigorous quality control includes a test run with load.
- Shipping crate protects set.

www.northern-lights.com

Dealer

Northern Lights, Inc. • 4420 14th Ave. NW., • Seattle WA 98107
 Tel: 206-789-3880 • 1-800-762-0165 • Fax: 206-782-5455
 Information and dimensions subject to change without notice.
 Northern Lights and Lugger are registered trademarks of Northern Lights, Inc.
 © 2013 All rights reserved. Litho USA. S146 5/13