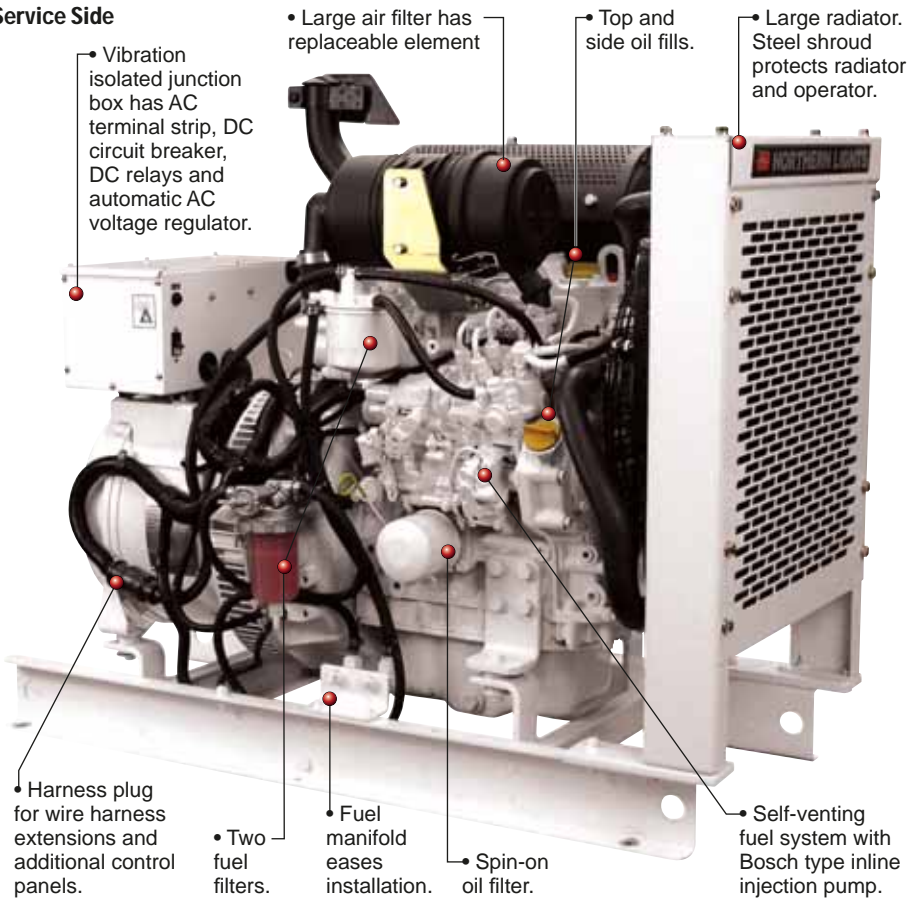


Service Side



• Vibration isolated junction box has AC terminal strip, DC circuit breaker, DC relays and automatic AC voltage regulator.

• Large air filter has replaceable element

• Top and side oil fills.

• Large radiator. Steel shroud protects radiator and operator.

• Harness plug for wire harness extensions and additional control panels.

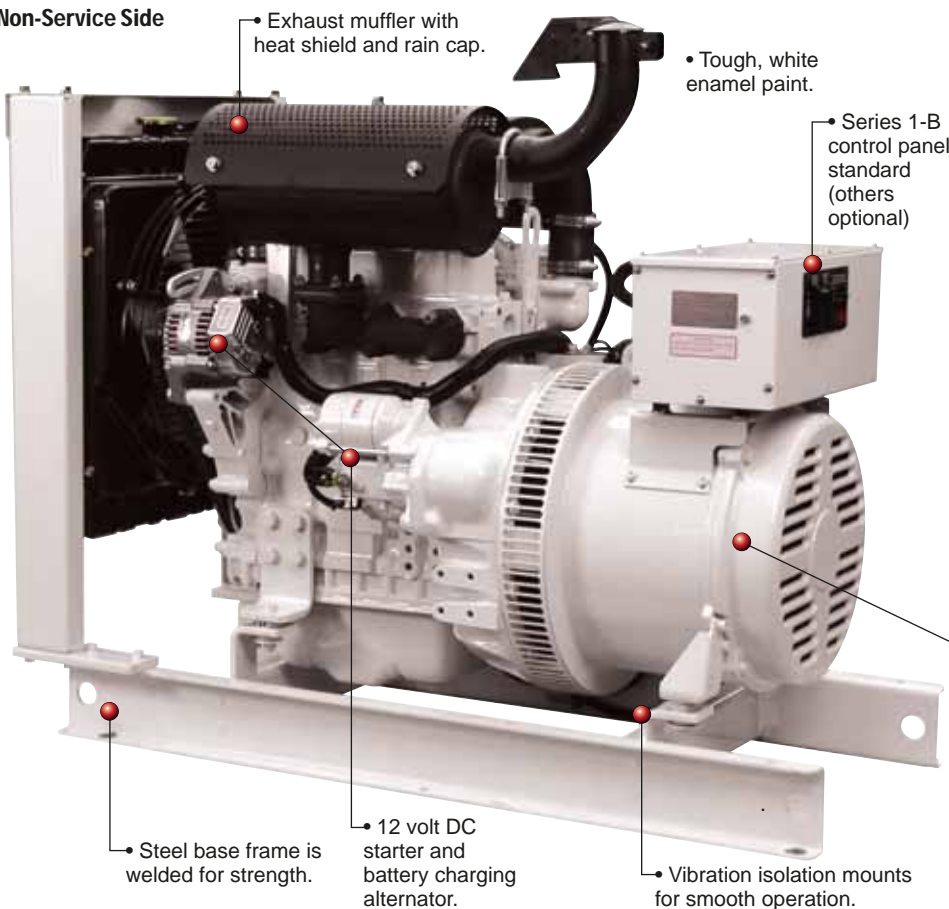
• Two fuel filters.

• Fuel manifold eases installation.

• Spin-on oil filter.

• Self-venting fuel system with Bosch type inline injection pump.

Non-Service Side



• Exhaust muffler with heat shield and rain cap.

• Tough, white enamel paint.

• Series 1-B control panel standard (others optional)

• Steel base frame is welded for strength.

• 12 volt DC starter and battery charging alternator.

• Vibration isolation mounts for smooth operation.

10 kW

60 Hz / 1800 RPM

8 kW

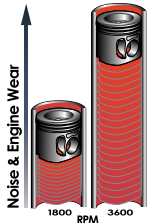
50 Hz / 1500 RPM

Prime power experience.

You'll find Northern Lights generators wherever prime power is needed. We began building Northern Lights sets to power the Alaskan bush country in 1963. Today our sets and dealers are at work worldwide.

Tractor-tough diesels.

Designed for farm tractors, the long stroke engines that power the NL382W have the low end torque needed to start big electric motors. Dependable too; some sets have logged over 25,000 hours with just routine maintenance. All operate at 1800 rpm (1500 rpm for 50 hz). This is half the speed of light duty 3600 rpm sets. Half the wear and tear, too.



Clean, quiet operation.

This set meets US EPA Tier II emission standards. The large muffler reduces exhaust noise so well that an additional muffler is not needed.



Fuel economy.

Economical operation is a necessity in remote areas where fuel is expensive. These sets use less fuel than comparable gasoline sets. Diesel is also much safer to transport and store.

We keep it simple.

Northern Lights are easy to install, operate and maintain. Each has a self-venting fuel system, mounted control panel and is ready for connection to your electrical distribution system. Just add a battery and fuel, and you have power at the touch of a button.

Service is easy, too. All the maintenance points are on one side. Low oil pressure and high coolant temperature shutdowns protect your investment.

Thorough testing.

Every Northern Lights has been fully load tested before shipment. This is part of a quality control program that assures your satisfaction and years of service.

See your Dealer.

Let them show you the set that is right for you. They will also explain the options available to customize the set to meet your special power requirements.

Featuring new W-Series generator

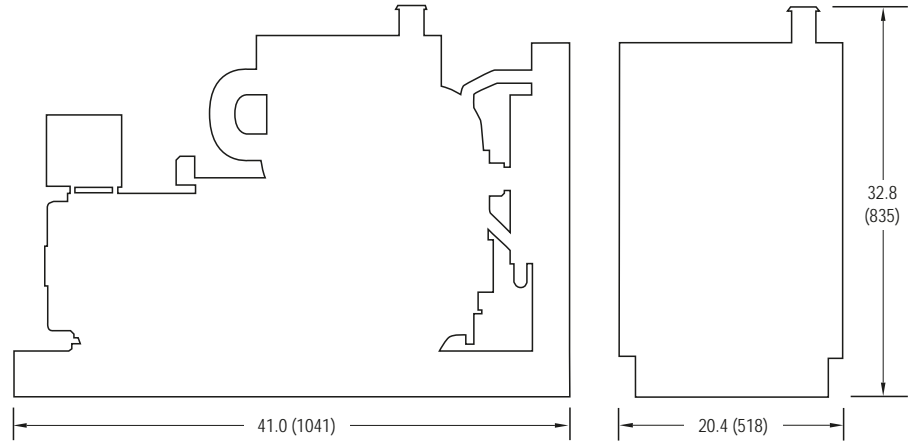
The new W-Series brushless generator features an auxiliary stator winding that supplies separate and stable power to the Automatic Voltage Regulator. The result:

- Real 300% short circuit capability.
- Improved AC breaker performance.
- 1% no load to full load voltage regulation.
- Low 95°C/50°C temperature rise rating.

See your dealer for more information.

AC Output ¹	
10 kW	60 Hz, 1800 RPM, 1 Ph, 1.0 PF, 120-240 V/41.6A, 120 V/83.3A
8 kW	50 Hz, 1500 RPM, 1 Ph, 1.0 PF, 220 V/36.3A
Optional	Three Phase with 0.8 PF
Voltage regulation	±1%
Lugger L382 Engine	
Type	Vertical 3 cylinder diesel
Displacement	81.1 in ³ (1.33 ltr)
Bore/Stroke	3.22/3.3 in (82/84 mm)
HP @ RPM	16.5/1800 13.2/1500
Approx. fuel use	
1800 RPM @ full load ²	0.91 gph (3.4 lph)
1800 RPM @ half load ²	0.46 gph (1.7 lph)
1500 RPM @ full load ²	0.72 gph (2.7 lph)
1500 RPM @ half load ²	0.37 gph (1.4 lph)
Installation Data & Weight	
Exhaust outlet	2.0 inch (51 mm)
Fuel inlet and return	1/4 inch NPT
Approximate dry weight	683 lbs (310 kg)

NL382W Dimensional Drawing



NL382W Overall Dimensions L x W x H: 41 x 20.4 x 32.8 inch (1041 x 518 x 835 mm)

Base Length: 41.25 in (1048mm) **Base Width:** 18.62 in (473 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.

Features and Benefits

Engine Block

- Four cycle, 3 cylinder, liquid cooled, naturally aspirated, overhead valve, industrial-duty diesel.
- Direct Injected with manifold air heater 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

- Yanmar distributor 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.
- Electric fuel pump 12 VDC.
- Large spin-on fuel filter.
- Fuel line manifold and flexible fuel lines for easy fuel tank connection.

Lubrication System

- Pressure lubricated. Trochoid oil pump.
- Full flow, spin-on oil filter with bypass.
- 4 qt. (3.6 ltr) oil capacity for better lubrication.

Intake and Exhaust

- Set meets US EPA Tier II emission requirements for cleaner air.
- Large replaceable air filter protects engine in dusty environments.
- Unit mounted residential muffler with rain cap.



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. Compare to 130°C heat rise on some light duty sets.
- 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.
- Flexible mounts isolate engine vibration for smooth operation.
- Long life, white enamel paint finish.
- Operator's and parts manuals.
- Rigorous quality control includes a test run with load.
- Shipping crate protects set.

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:

- Unit enclosures and mobile units
- AC and DC control panels
- Exhaust system components
- Fuel filter-water separators
- Wire harness extensions
- Alarms and safety shutdown systems
- Heaters
- Air ducts
- Dry sump units
- Batteries... and much more.

Dealer

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