

120 - 185 kW, 60 Hz @ 1800 RPM 99 - 155 kW, 50 Hz @ 1500 RPM

Aftercooled For High Power Density

Northern Lights pioneered the marinization of this engine, and still leads the way in Engineering quality. Case in point: the exclusive M1066 aftercooler. Because cooler air is more oxygenated than warm, it makes for better combustion. This aftercooler, along with electronically controlled fuel injection, give you more kW output.

Electronic System Profiler

"ESP" is a window to your set's real time operating condition. The ECU that controls the electronic fuel injection produces a SAE J1939 data stream of engine information that can be shown on an optional CAN Bus monitor panel.

Component Specific Features

Engine Block

- Six cylinder, four cycle, in-line, liquid cooled, overhead valve, marine diesels based on heavy-duty industrial engine blocks.
- •Balanced, forged crankshaft with induction hardened journals and rolled fillets for long life.
- Replaceable, wet cylinder liners for long life and low rebuild costs.
- ·Bimetallic valves with chrome stems and rotators.
- Replaceable valve seats and guides.
- Three ring aluminum alloy pistons with Ni-Resist insert for the top ring. Keystone piston ring reduces carbon buildup under light loads.
- Torsional crankshaft dampers help ensure smooth operation.
- A single poly-vee drive belt powers the alternator and jacket-water pump.

Fuel System

- High pressure common rail fuel injection for smooth, clean delivery.
- Direct fuel injection systems
- •Ring clamp fuel filters with air bleed and drain.
- Electric fuel pump integrated into primary fuel filter. Computer controlled priming for ease of operation.

Lubrication System

- Positive displacement gear-type oil pump.
- Full flow, spin-on oil filter.
- Jacket-water, plate-type, full flow oil cooler reduces heat and prevents lube oil breakdown.
- · Large capacity oil pan.
- A closed loop crankcase vent traps oil vapor to keep the engine room clean.

Air Guetem

- Dry air filter silences intake noise.
- Turbocharger with jacket water cooled turbine housings for safety.
- Seawater aftercooler provides optimized combustion and output.

Cooling System

- Heat exchanger cooling system.
- Gear driven, belt-less sea water pump with flexible impeller.
- · Cast iron expansion tank with brass filler neck.
- Two thermostats for quick warm-ups and safety.
- Cast-iron exhaust manifold for reliable temperature control.

M1066 US EPA Tier III Features and Specifications

Superior PMG Generator Ends

Northern Lights generator ends achieve ±0.5% voltage regulation. All have low temperature rise ratings that meet or exceed classification society requirements including ABS and Lloyds. All M1066 generator sets have Permanent Magnet Generators for 300% short circuit capability required for classed vessels.

Committed to Providing Complete Solutions

Northern Lights products are thoroughly factory tested and go through a complete quality control program to ensure your total satisfaction Our design philosophy allows us to provide comprehensive solutions to your power production needs. Because engine room space is always at a premium, Northern Lights offers Low-Profile generator sets that save valuable inches where you need it most. Our line of options and accessories are designed to integrate into a total power system specifically built for your vessel. PTO's, sound enclosures and custom panels are among the options that make your power system as unique as your boat.

ESP and DC Electrical System

- Negative ground, 12 volt DC system has circuit breaker, starter motor and alternator with regulator.
- Low oil pressure and high coolant temperature safety shutdown system.
- Optional control panels help you specify the amount and type of information required. Comprehensive list of optional alarms and safety shutdowns.
- Optional DC logic system for simplified maintenance.
- Optional pre-wired engine, panel with terminal strips.

AC Generator

- Direct coupled, single bearing, 12 lead, reconnectable AC generator. Maintenance free brushless design.
- All NL generators meet or exceed class society standards with Class "H" insulation, accessible diodes, oversized ball bearings, marine grade shafts and conservative 90°/50° heat rise ratings.
- Engines and generators are torsionally matched for long life.
- Automatic voltage regulator; ±0.5% regulation over the entire range from no load to full load.
- Configured for isochronous frequency control with integral electronic governor control supplied by ECU.

Special Equipment

- US EPA Tier III Marine certified.
- Meets or exceeds the standards of most classification societies
- Welded steel base pan
- Belt guard
- Center bonded vibration isolation mounts
- Tough white Imron paint
- Operator's and parts manuals

Classification Standards

 ABS Type and Lloyd's Register approval Lloyd's Register states that Northern Lights marine generator sets have been successfully tested in accordance with relevant requirements of Lloyd's Register for Marine Generator applications.





M1066 Series

General Specifications and Dimensions

S0 Hz, 1500 RPM kW	Voltage regulation Both Mod Frequency droop control Both Mod Phase and power factor Both Mod Phase and power factor Both Mod Phase and power factor Both Mod Unity Both Mod Unity Both Mod Unity Both Mod Unity Both Mod Displacement - cid (liter) Both Mod Bore/stroke - inches (mm) Both Mod Fruel injection pump type and control Both Mod Engine Gooling System Approximate cooling capacity - gal (ltr) Both Mod Freshwater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (Seawater pump capacity - 60/50Hz/gpm(lpm) 42 / 35 (Heat rejection to jacket water -1800/1500 rpm BTU min 5977 / 52 DC Electrical (12V standard, 24V ontional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 928 Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm 1,110 / 9 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 86 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - 60/50Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - 60/50Hz - F° (C°) 977° / 93 Max. exhaust back pressure - inch H²O (mm H²O) Both mod Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight'	155 kW els:+/- 0.5% els: Isochronous 0% els: Three phase 0.8 power factor std. gle phase 1.0 power factor els: 95°C temperature rise at 50°C ambient els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
South Models: +/- 0.5%	Voltage regulation Frequency droop control Both Mod Frequency droop control Both Mod Phase and power factor Both Mod Opt.: Sin Generator full load temperature rise Both Mod Lugger Diesel Engine Data Inline cylinders/aspiration/operating cycle Displacement - cid (liter) Both Mod Bore/stroke - inches (mm) Fuel injection pump type and control Engine Cooling System Approximate cooling capacity - gal (ltr) Freshwater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 ('Seawater pump capacity - 60/50Hz/gpm(lpm) 42 / 35 ('Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Sexhaust gas volume - 60/50Hz - fm (m³/m) Both mod Exhaust gas volume - 60/50Hz - refn (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Mod fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ Piolinensions and Weight'	els: +/- 0.5% els: Isochronous 0% els: Three phase 0.8 power factor std. gle phase 1.0 power factor els: 95°C temperature rise at 50°C ambient els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Prequency droop control Both Models: Isochronous 0%	Frequency droop control Phase and power factor Both Mod Opt.: Sin Generator full load temperature rise Both Mod Lugger Diesel Engine Data Inline cylinders/aspiration/operating cycle Displacement - cid (liter) Bore/stroke - inches (mm) Both Mod Fuel injection pump type and control Engine Cooling System Approximate cooling capacity - gal (ltr) Beawater pump capacity - 60/50Hz/gpm (lpm) Approximate cooling capacity - 60/50Hz/gpm (lpm) Desawater pump capacity - 60/50Hz/gpm(lpm) Approximate cooling capacity - 60/50Hz/gpm (lpm) Both Mod Seawater pump capacity - 60/50Hz/gpm (lpm) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Both mod Exhaust gas volume - 60/50Hz - cfm (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ Po / 7.1 Dimensions and Weight*	els: Isochronous 0% els: Three phase 0.8 power factor std. gle phase 1.0 power factor els: 95°C temperature rise at 50°C ambient els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Phase and power factor	Phase and power factor Generator full load temperature rise Both Mod Lugger Diesel Engine Data Inline cylinders/aspiration/operating cycle Both Mod Bore/stroke - inches (mm) Fuel injection pump type and control Engine Cooling System Approximate cooling capacity - gal (ltr) Both Mod Freshwater pump capacity - 60/50Hz/gpm (lpm) Both Mod Freshwater pump capacity - 60/50Hz/gpm(lpm) Both Mod Freshwater pump capacity - 60/50Hz/gpm(lpm) Both Mod Freshwater pump capacity - 60/50Hz/gpm(lpm) Both Mod Both Mod Seawater pump capacity - 60/50Hz/gpm(lpm) Both Mod Both Mod Both Mod Air Consumption - 60/50 Hz - gm (ng/m) Both Mod Air Consumption - 60/50 Hz - cfm (mg/m) Air consumption - 60/50 Hz - cfm (mg/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (mg/m) Both Mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight'	els: Three phase 0.8 power factor std. gle phase 1.0 power factor els: 95°C temperature rise at 50°C ambient els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Opt.: Single phase 1.0 power factor	Generator full load temperature rise Both Mod Lugger Diesel Engine Data Inline cylinders/aspiration/operating cycle Both Mod Bore/stroke - inches (mm) Both Mod Fuel injection pump type and control Both Mod Engine Cooling System Approximate cooling capacity - gal (ltr) Both Mod Freshwater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (** Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (** Heat rejection to jacket water -1800/1500 rpm BTU min DC starting voltage - standard (optional) DC starting voltage - standard (optional) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - cfm (m³/m) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	gle phase 1.0 power factor els: 95°C temperature rise at 50°C ambient els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Both Models: 95°C temperature rise at 50°C ambient	Generator full load temperature rise Lugger Diesel Engine Data Inline cylinders/aspiration/operating cycle Both Mod Displacement - cid (liter) Both Mod Bore/stroke - inches (mm) Fuel injection pump type and control Both Mod Engine Cooling System Approximate cooling capacity - gal (ltr) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (1) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (1) Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - cfm (m³/m) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: 95°C temperature rise at 50°C ambient els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Infine cylinders/aspiration/operating cycle Displacement - cid (liter) Bort Models: 4.19 / 5 (106 / 127) Bore/stroke - inches (mm) Both Models: 4.19 / 5 (106 / 127) Fuel injection pump type and control Bore/stroke - inches (mm) Both Models: Electronic (HPCR) ### Approximate cooling capacity - gal (ltr) Bore Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (160 / 180) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (160 / 180) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (159 / 133) Heat rejection to jacket water -1800/1500 rpm BTU min 5977 / 5247 Consult factory #### DC Starting vortage - standard (optional) DC starting vortage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) #### Starter volling amps @ 0°C - 12VDC (24VDC) Both Models: 000 #### Starter volling air flow 18.3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) #### Say 4/27 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - cfm (m³/m) ### Starter say volume - 60/50Hz - cfm (m³/m) ### Starte	Inline cylinders/aspiration/operating cycle Both Mod Displacement - cid (liter) Both Mod Bore/stroke - inches (mm) Fuel injection pump type and control Both Mod Engine Gooling System Approximate cooling capacity - gal (ltr) Freshwater pump capacity - 60/50Hz/gpm (lpm) Seawater pump capacity - 60/50Hz/gpm(lpm) Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Air consumption - 60/50 Hz - cfm (m³/m) Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas volume - 60/50Hz - cfm (m³/m) Both mod Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: I-6 / Turbo & Aftercooled / 4 els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Inline cylinders/aspiration/operating cycle Displacement - cid (liter) Both Models: 414 (6.8) Bore/stroke - inches (mm) Both Models: 419 / 5 (106 / 127) Fuel injection pump type and control Both Models: 419 / 5 (106 / 127) Fuel injection pump type and control Both Models: 5.5 (24.7) Freshwater pump capacity - 9al (ltr) Both Models: 6.5 (24.7) Freshwater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (160 / 180) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (160 / 180) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (159 / 133) 42 / 35 (159 / 133) Heat rejection to jacket water -1800/1500 rpm BTU min 5977 / 5247 Consult factory IDF IECUTICAL ITAL Standard, 241 optional DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) 225 / 800 (570) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 200 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 000 Air Generator cooling air flow 18:30 - 60/50 Hz - cfm 1,110 / 915 1,100 / 915 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - ETU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m²/m) 974 / 854 (27.6 / 24.2) 1317 / 1111 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - cfm (m²/m) 977 / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Firel Min suction and return line - in (mm) Both models: 38 (9.5) Max fuel flow to transfer pump at 60/50Hz - gph 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Immensions and Weight - Length - inches (mm) Both models: 42 (1.067) Height - inches (mm) Both models: 41.5 (1.054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Inline cylinders/aspiration/operating cycle Displacement - cid (liter) Both Mod Bore/stroke - inches (mm) Fuel injection pump type and control Both Mod Fuel injection pump type and control Both Mod Fuel injection pump type and control Both Mod Freshwater cooling capacity - gal (ltr) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (1) Seawater pump capacity - 60/50Hz/gpm (lpm) Heat rejection to jacket water -1800/1500 rpm BTU min DC Starting voltage - standard (optional) DC starting voltage - standard (optional) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 183Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas volume - 60/50Hz - cfm (m³/m) Both mod Fuel Min suction and return line - in (mm) Max exhaust back pressure - inch H²O (mm H²O) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Displacement - cid (liter) Both Models: 414 (6.8)	Displacement - cid (liter) Bort More Bore/stroke - inches (mm) Fuel injection pump type and control Both More Bot	els: 414 (6.8) els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Bore/stroke - inches (mm) Both Models: 4.19 / 5 (106 / 127)	Bore/stroke - inches (mm) Fuel injection pump type and control Roth Mod Rugine Cooling System Approximate cooling capacity - gal (ltr) Freshwater pump capacity - 60/50Hz/gpm (lpm) Seawater pump capacity - 60/50Hz/gpm (lpm) Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Para diated to air - 60/50 Hz - BTU/min Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr O.354 / O Approx. fuel rate³ 60/50Hz - gph (lph)³ Pinel Dimensions and Weight*	els: 4.19 / 5 (106 / 127) els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Fuel injection pump type and control Ingline Broiling System Approximate cooling capacity - gal (ltr) Freshwater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (160 / 180) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (159 / 133) 42 / 35 (159 / 133) Heat rejection to jacket water -1800/1500 rpm BTU min 5977 / 5247 Consult factory Ingli Electrical (12/1 standard, 24/1 optional) DC starting voltage - standard (optional) Both Models: 12 (24) Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) 225 / 800 (570) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 900 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 000 Ingli Center of the control of the contr	Fuel injection pump type and control Engine Gooling System Approximate cooling capacity - gal (ltr) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 ('Seawater pump capacity - 60/50Hz/gpm(lpm) 42 / 35 ('Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Both Moole Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Moole Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - cfm (m³/m) Para / 854 Exhaust gas temp - 60/50Hz - for (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both moole Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: Electronic (HPCR) els: 6.5 (24.7) 60 / 180)
Approximate cooling capacity - gal (ltr) Approximate cooling capacity - 60/50Hz/gpm (lpm) Az / 48 (160 / 180) Seawater pump capacity - 60/50Hz/gpm (lpm) Az / 48 (160 / 180) Az / 48 (160	Engine Cooling System Approximate cooling capacity - gal (ltr) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (1) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (1) Heat rejection to jacket water -1800/1500 rpm BTU min 5977 / 52 DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas volume - 60/50Hz - cfm (m³/m) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: 6.5 (24.7) 60 / 180)
Approximate cooling capacity - gal (ltr) Freshwater pump capacity - 60/50Hz/gpm (lpm) 42 / 48 (160 / 180) 60 / 50 (227 / 189) Seawater pump capacity - 60/50Hz/gpm (lpm) 42 / 35 (159 / 133) 42 / 35 (159 / 133) Heat rejection to jacket water - 1800/1500 rpm BTU min 5977 / 5247 Consult factory In Electrical (172 standard, 247 optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) 225 / 800 (570) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 000 II Cenerator cooling air flow 18.3Ø - 60/50 Hz - cfm 1,110 / 915 1,100 / 915 Air consumption - 60/50 Hz - cfm (m²/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1660 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m²/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - Cfm (m²/m) Both models: 30 (762) Itel Max. exhaust back pressure - inch H²O (mm H²O) Both models: 38 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 10 mensions and Weight* Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 42 (1,067) Height - inches (mm) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Approximate cooling capacity - gal (ltr) Freshwater pump capacity - 60/50Hz/gpm (lpm) Seawater pump capacity - 60/50Hz/gpm(lpm) Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Modalir Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both modalir Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both modaling Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr O.354 / O Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Freshwater pump capacity - 60/50Hz/gpm (lpm)	Freshwater pump capacity - 60/50Hz/gpm (lpm) Seawater pump capacity - 60/50Hz/gpm(lpm) Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Modalir Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both modalir Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both modaling max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	60 / 180) 60 / 50 (227 / 189) 59 / 133) 42 / 35 (159 /133)
Seawater pump capacity - 60/50Hz/gpm(lpm)	Seawater pump capacity - 60/50Hz/gpm(lpm) Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Both Mod Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	59 / 133) 42 / 35 (159 /133)
Heat rejection to jacket water -1800/1500 rpm BTU min 5977 / 5247 Consult factory **DG Heatring Voltage - standard (optional)** **DC starting voltage - standard (optional)** **DC starting voltage - standard (optional)** **Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) 225 / 800 (570)** **Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600)** **Post of the start of the s	Heat rejection to jacket water -1800/1500 rpm BTU min DC Electrical (12V standard, 24V optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	· · · · · · · · · · · · · · · · · · ·
DC Starting voltage - standard (optional) DC starting voltage - standard (optional) Both Models: 12 (24) Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) 225 / 800 (570) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 000 Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm 1,110 / 915 1,100 / 915 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - F° (C°) 977* / 937* (525* / 503*) 927* / 975* (427* / 524*) Exhaust gas temp - 60/50Hz - F° (C°) 977* / 937* (525* / 503*) 927* / 975* (427* / 524*) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Titel Min suction and return line - in (mm) Max fuel flow to transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - gph 0.054 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	DC starting voltage - standard (optional) DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	
DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 900 Introduction of the standard o	DC starting voltage - standard (optional) Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	47 Consult factory
Min battery capacity - amp hr/12V CCA (24V CCA) 255 / 925 (625) 225 / 800 (570) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 000 Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm 1,110 / 915 1,100 / 915 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 (27.6 / 24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fitel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Min battery capacity - amp hr/12V CCA (24V CCA) Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - cfm (m³/m) Both mod Fitel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	
Starter rolling amps @ 0°C - 12VDC (24VDC) Both Models: 920 (600) 12 Volt battery cable size up to 10 ft (3m) Both Models: 000 Air Generator cooling air flow 18.3Ø - 60/50 Hz - cfm 1,110 / 915 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fuel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Starter rolling amps @ 0°C - 12VDC (24VDC) Both Mod 12 Volt battery cable size up to 10 ft (3m) Both Mod Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fitel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: 12 (24)
12 Volt battery cable size up to 10 ft (3m) Both Models: 000 Air	12 Volt battery cable size up to 10 ft (3m) Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	(625) 225 / 800 (570)
Air Generator cooling air flow 18.3Ø - 60/50 Hz - cfm 1,110 / 915 1,100 / 915 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Air Generator cooling air flow 1&3Ø - 60/50 Hz - cfm 1,110 / 9 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 86 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - 60/50Hz - F° (C°) 977° / 93 Max. exhaust back pressure - inch H²O (mm H²O) Both mod Fuel Min suction and return line - in (mm) Both mod Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mod Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1	els: 920 (600)
Generator cooling air flow 1&3Ø - 60/50 Hz - cfm 1,110 / 915 1,100 / 915 Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50 Hz - cfm (m³/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50 Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fuel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel frow to transfer pump at 60/50 Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50 Hz - lgsh.p.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50 Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Full Height - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Generator cooling air flow $1\&3\varnothing - 60/50$ Hz - cfm 1,110 / 9 Air consumption - $60/50$ Hz - cfm (m³/m) 378 / 334 Approx heat radiated to air - $60/50$ Hz - BTU/min 1060 / 86 Exhaust gas volume - $60/50$ Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - $60/50$ Hz - F° (C°) 977° / 93 Max. exhaust back pressure - inch H²O (mm H²O) Both mode of the fuel 100 Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both mode of the fuel 100 Max fuel flow to transfer pump at $60/50$ Hz - gph 100 Max fuel rate³ $60/50$ Hz - gph 100 (kPa) 9.0 / 7.1 Dimensions and Weight	els: 000
Air consumption - 60/50 Hz - cfm (m³/m) 378 / 334 (10.7 / 9.5) 523 / 427 (14.8 / 12/1) Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fitel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Air consumption - 60/50 Hz - cfm (m³/m) Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mode of the first success of the fi	
Approx heat radiated to air - 60/50 Hz - BTU/min 1060 / 861 1458 / 1271 Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fitel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Approx heat radiated to air - 60/50 Hz - BTU/min Exhaust gas volume - 60/50Hz - cfm (m³/m) Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mode of the first success of the fi	5 1,100 / 915
Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 (27.6 /24.2) 1317 / 1112 (37.3 / 31.5) Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fuel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Exhaust gas volume - 60/50Hz - cfm (m³/m) 974 / 854 Exhaust gas temp - 60/50Hz - F° (C°) 977° / 93 Max. exhaust back pressure - inch H²O (mm H²O) Both mode of the succession of the successio	(10.7 / 9.5) 523 / 427 (14.8 / 12/1)
Exhaust gas temp - 60/50Hz - F° (C°) 977° / 937° (525° / 503°) 927° / 975° (427° / 524°) Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fitel Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Exhaust gas temp - 60/50Hz - F° (C°) Max. exhaust back pressure - inch H²O (mm H²O) Both mode of the last section and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	1 1458 / 1271
Max. exhaust back pressure - inch H²O (mm H²O) Both models: 30 (762) Fite! Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Max. exhaust back pressure - inch H²O (mm H²O) Fuel Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	
Fite! Min suction and return line - in (mm) Both models: 3/8 (9.5) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	7° (525° / 503°) 927° / 975° (427° / 524°)
Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 3/8 (9.5) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Min suction and return line - in (mm) Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	els: 30 (762)
Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Both models: 36 (914) Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Max fuel transfer pump suction lift & return line pressure - inch H²O (kPa) Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 Dimensions and Weight*	
Max fuel flow to transfer pump at 60/50Hz - gph 22.4 / 20.8 22.3 / 20.6 Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Max fuel flow to transfer pump at 60/50Hz - gph Specific fuel consumption max load 60/50Hz - lbs.hp.hr Approx. fuel rate ³ 60/50Hz - gph (lph) ³ 9.0 / 7.1 Dimensions and Weight	els: 3/8 (9.5)
Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0.333 0.371 / 0.351 Approx. fuel rate³ 60/50Hz - gph (lph)³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Specific fuel consumption max load 60/50Hz - lbs.hp.hr 0.354 / 0 Approx. fuel rate ³ 60/50Hz - gph (lph) ³ 9.0 / 7.1 Dimensions and Weight	els: 36 (914)
Approx. fuel rate ³ 60/50Hz - gph (lph) ³ 9.0 / 7.1 (34 / 27) 14.9 / 12/4 (56.5 / 47.1) Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Approx. fuel rate ³ 60/50Hz - gph (lph) ³ 9.0 / 7.1 Dimensions and Weight*	· /
Dimensions and Weight* Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Dimensions and Weight*	8 22.3 / 20.6
Length - inches (mm) Both models: 90 (2,286) Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	-	8 22.3 / 20.6 333 0.371 / 0.351
Width - inches (mm) Both models: 42 (1,067) Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	Length - inches (mm) Both mod	8 22.3 / 20.6 333 0.371 / 0.351
Height - inches (mm) Both models: 41.5 (1,054) Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)		8 22.3 / 20.6 333 0.371 / 0.351
Weight - pounds (kilograms) 3,630 (1,646) 3,776 (1,713)	. ,	8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286)
		8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067)
Sound Enclosure . Dimensions and Weight'		8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067) els: 41.5 (1,054)
outina Enotogui o - Enimonotono dina Morgina	Sound Enclosure - Dimensions and Weight'	8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067) els: 41.5 (1,054)
_ · · · · · · · · · · · · · · · · · · ·	•	8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067) els: 41.5 (1,054)
	· ,	8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067) els: 41.5 (1,054) 3,776 (1,713)
		8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067) els: 41.5 (1,054) 646) 3,776 (1,713) els: 90 (2,286) els: 42 (1,067)
Weight - pounds (kilograms) Both models: 436 (198)	Weight - pounds (kilograms) Both mod	8 22.3 / 20.6 333 0.371 / 0.351 34 / 27) 14.9 / 12/4 (56.5 / 47.1) els: 90 (2,286) els: 42 (1,067) els: 41.5 (1,054) 346) 3,776 (1,713) els: 90 (2,286) els: 42 (1,067) els: 42 (1,067)

^{*} Dimensions provided for information only. Do not use for installation. Contact factory for installation drawings and info.

NOTES:
CF = consult factory representative or www.northern-lights.com for current information.

1. Prime kW ratings for 3Ø at 0.8 power factor. Consult factory for deration factors.
2. Lloyd's Register classed M1066H @ 50 Hz = 110°C temperature rise at 45°C ambient

ambient
3. Net flywheel hp rating for fully equipped engine at rated speed under SAE J816b.
4. Based on prime kW rating at 1800 and 1500 RPM. Fuel rate may vary depending on operating conditions.
5. Data for units with hydrolastic mounts, heat exchanger cooling and 3 phase generator ends. Dimensions and weight are affected by optional equipment, AC output, phase, exhaust and cooling configuration.
6. Consult factory for data on enclosures for single phase sets or sets with InSep





Northern Lights, Inc. is ISO 9001 certified through

Lloyds Register Quality Assurance

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. © 2015 All rights reserved. Litho USA. S157 5/15