

Power requirements have grown. So has Northern Lights.

For years our most popular size generator has been our 8 kW. But power requirements have grown, so now we also offer a 10 kW set. This brawny little three cylinder set has plenty of power to run your home, job site or business.

The Yanmar diesel incorporates advanced clean-burn technology that meets new exhaust emissions standards and increases fuel efficiency. It combines high pressure fuel injection equipment with a high piston ring placement. This prevents unburned fuel from entering the exhaust and the environment.

Clean and quiet too. Low clash gears, stabilized pistons, flywheel housing sound barriers and a unit mounted exhaust muffler make the set remarkably quiet. Your neighbors will appreciate that.

Non-service side has 12 volt battery charging alternator, electric starter and unit mount exhaust muffler with rain cap. All the common maintenance points are grouped on the other side. The set can be installed near a wall without sacrificing access.

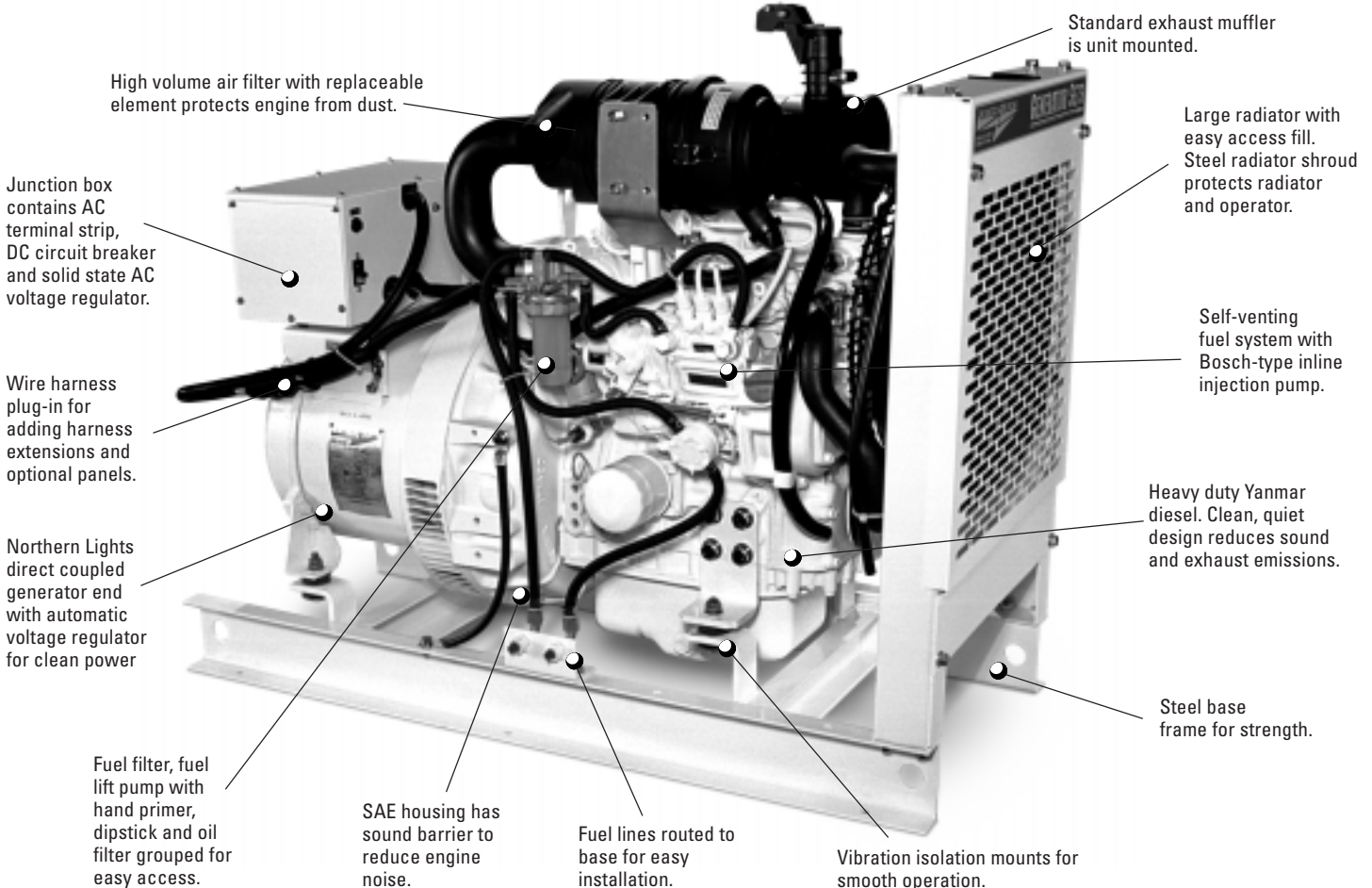
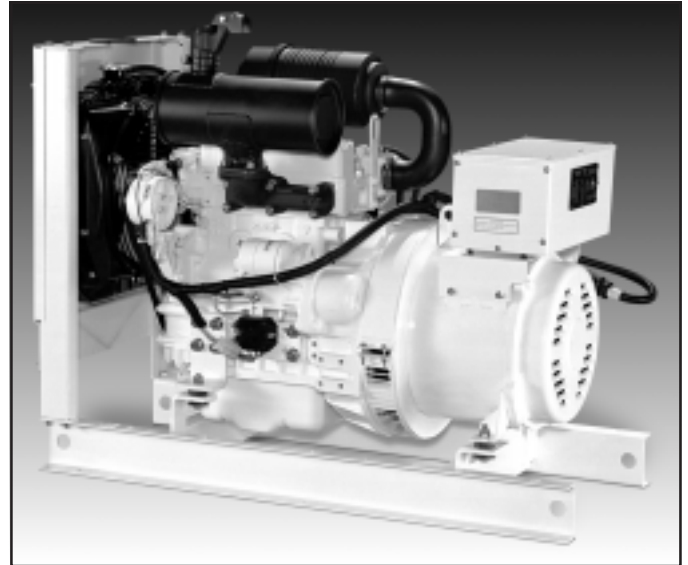
The NL378 is easy to install, operate and maintain. The fuel system is self venting. The standard control panel is unit mounted and optional control panels just plug in. The generator is prewired and has a junction box. Your electrician can connect it to your prepared AC distribution system in just minutes. The only additional equipment you need is a 12 volt battery and a fuel supply. A thorough operator's manual helps you do maintenance yourself.

Well regulated power protects your

electronic equipment and makes motors last longer.

The NL378's brushless generator end has an automatic voltage regulator to give you clean AC power and better motor starting capabilities.

The 10 kW, NL378. Made for today's bigger loads, by a company that's been building sets since 1963.



NL378 SPECIFICATIONS

AC Output¹

| | |
|--------------------------|---|
| 10 kW | 60 Hz, 1800 RPM, 1 Ph, 1.0 PF 120-240 Volt 83/41.6 Amps 120 Volt 83 Amps |
| 8 kW | 50 Hz, 1500 RPM, 1 Ph, 1.0 PF 110-220 Volt 72.7/36.4 Amps 220 Volt 36.3 Amps 110 Volt 72.7Amps |
| Phase | 1 standard (3 phase optional, contact factory for information) |
| Voltage regulation | ±1% |

Engine

| | |
|--|---|
| Yanmar diesel | 3TNE78A |
| Cylinders | Vertical inline 3 |
| Displacement | 73.48 cid (1.204 ltr) |
| Bore/Stroke | 3.07/3.31 in (78/84 mm) |
| HP @ 1800 RPM | 16.2 |
| HP @ 1500 RPM | 13.5 |
| Approx. fuel use rate at 1800 RPM ² | |
| full load ... | 0.85 gph 0.70 Imp gph 3.2 lph |
| 3/4 load ... | 0.64 gph 0.53 Imp gph 2.4 lph |
| 1/2 load ... | 0.42 gph 0.35 Imp gph 1.6 lph |

Installation Data

| | |
|------------------------------------|---------------------------------|
| Intake air flow/1800 | 38 cfm (0.018ps) |
| Exhaust outlet O.D. | 1.69 in (43mm) |
| Max. exhaust temp. | 1022°F (550°C) |
| Max. back pressure | 48 in (1200mm) H ₂ O |
| Heat rejection | 687 btu/min |
| Coolant capacity w/radiator | 2.5 qts (2.4 l) |
| Engine lube oil capacity | 5.28 qts (5.0 l) |
| Fuel inlet and return outlet | 1/4 inch NPT |

Weight

Approx. dry weight

Notes

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

FEATURES & BENEFITS

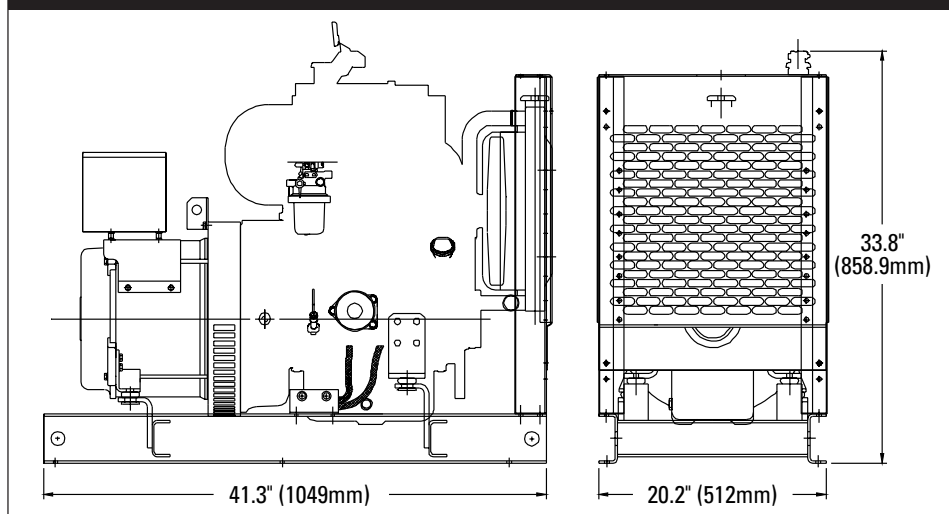
Engine Block

- Yanmar four cycle, 3 cylinder, liquid-cooled, naturally aspirated, overhead valve, industrial duty diesel engine.
- New combustion design improves fuel efficiency, reduces smoke and noise.
- Intake air heater for fast cold starting.
- High top piston ring placement and stabilized piston design for improved combustion and efficiency.
- Noise barrier cast into the flywheel housing for quiet operation.

Cooling System

- Liquid-cooled with radiator and pusher cooling fan. Radiator shroud and fan hand guard.

DIMENSIONAL DATA



Contact dealer for complete installation drawings

Self-Venting Fuel System

- Bosch-type in-line injection pump with control solenoid of fuel rack, not throttle. Eliminates speed variance.
- High pressure injection system design for superior fuel atomization, economy and reduced exhaust emissions.
- Engine speed governed from 5% for close frequency control.
- Rebuildable fuel injectors.
- Fuel lift pump with hand primer.
- Fuel filter with replaceable element.
- Fuel line manifold on base for easy connection to your fuel tank.

Intake and Exhaust

- Large air cleaner with replaceable filter element.
- Unit mount exhaust muffler. Saves you installation time and money.

Lubrication System

- Pressure lubricated by trochoid pump.
- Full flow, spin-on oil filter with bypass.

DC Electrical System

- 12 volt system includes starter motor and battery charging alternator with solid state voltage regulator.
- Standard unit mount control panel has engine hour meter, preheat switch, start-stop switch and DC system circuit breaker.
- Panel harness plug-in for no-tool installation of optional control panels.
- Optional Y-harness and 10, 20 or 40 foot panel harness extensions allow you to mount an additional control panel(s) in a convenient location.



- Safety shutdown system protects engine in event of oil pressure loss or high water temperature. Additional safety shutdown equipment optional.
- DC system circuit breaker standard.

AC Generator

- Northern Lights direct coupled, 4 pole, revolving field generator with Class H insulation and pre-lubricated, double sealed bearing. Brushless design is maintenance free.
- Generator has a 105° C temperature rise rating instead of 125° C. This conservative temperature rise is better for tropical applications and continuous operation.
- Generator is externally regulated with an automatic voltage regulator. This provides "clean power" (±1% RMS no load to full load) to protect sensitive electronics and help motors last longer. All have excellent motor starting capability.
- High air flow from cast aluminum fan keeps the generator running cool.
- Terminal strip in generator junction box for easy connection to AC distribution system and voltage changes.

Special Equipment

- Steel base frame gives rigid support and makes installation easy.
- Vibration mounts isolate engine vibration for smooth, quiet operation.
- Long life, white enamel finish for excellent service visibility.
- Operator's and parts manuals.
- Each set is test run with a load, one step of our rigorous quality control program.
- Shipping box standard.

DEALER: