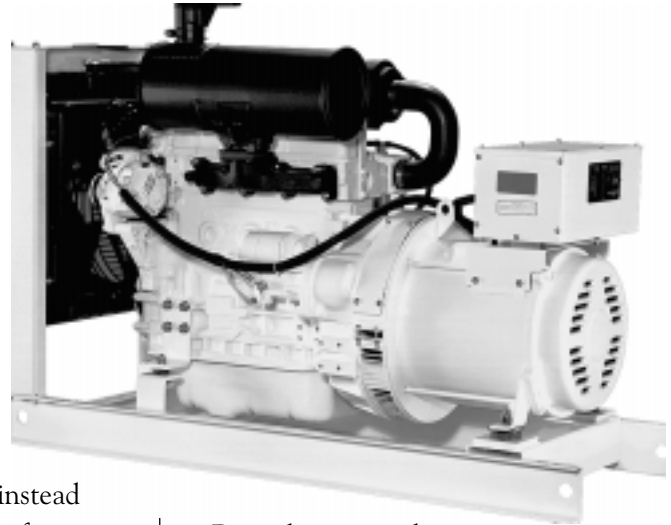


NORTHERN LIGHTS

The right size engine makes this the right set.

NL484K, 16 kW Prime Power Generator Set

The NL484K is powered by a 4 cylinder naturally aspirated diesel. No complex turbocharger on this exhaust manifold, just a unit mounted exhaust muffler.



Generator sets in the 16 kW range have to be tough. They are asked to power remote resorts, farms, mines and logging camps. The trouble is, most have light duty diesels that can't stand up to this type of prime power.

The NL484K is the exception. Instead of a turbocharged three cylinder working at its maximum output, this Northern Lights has a four cylinder, naturally aspirated diesel sized for the job at hand.

The right size and it has the features you want. Its "clean burn" combustion design plus direct injection combine to both meet current emissions standards and lower internal engine noise as well. Your 484 is powered by an engine

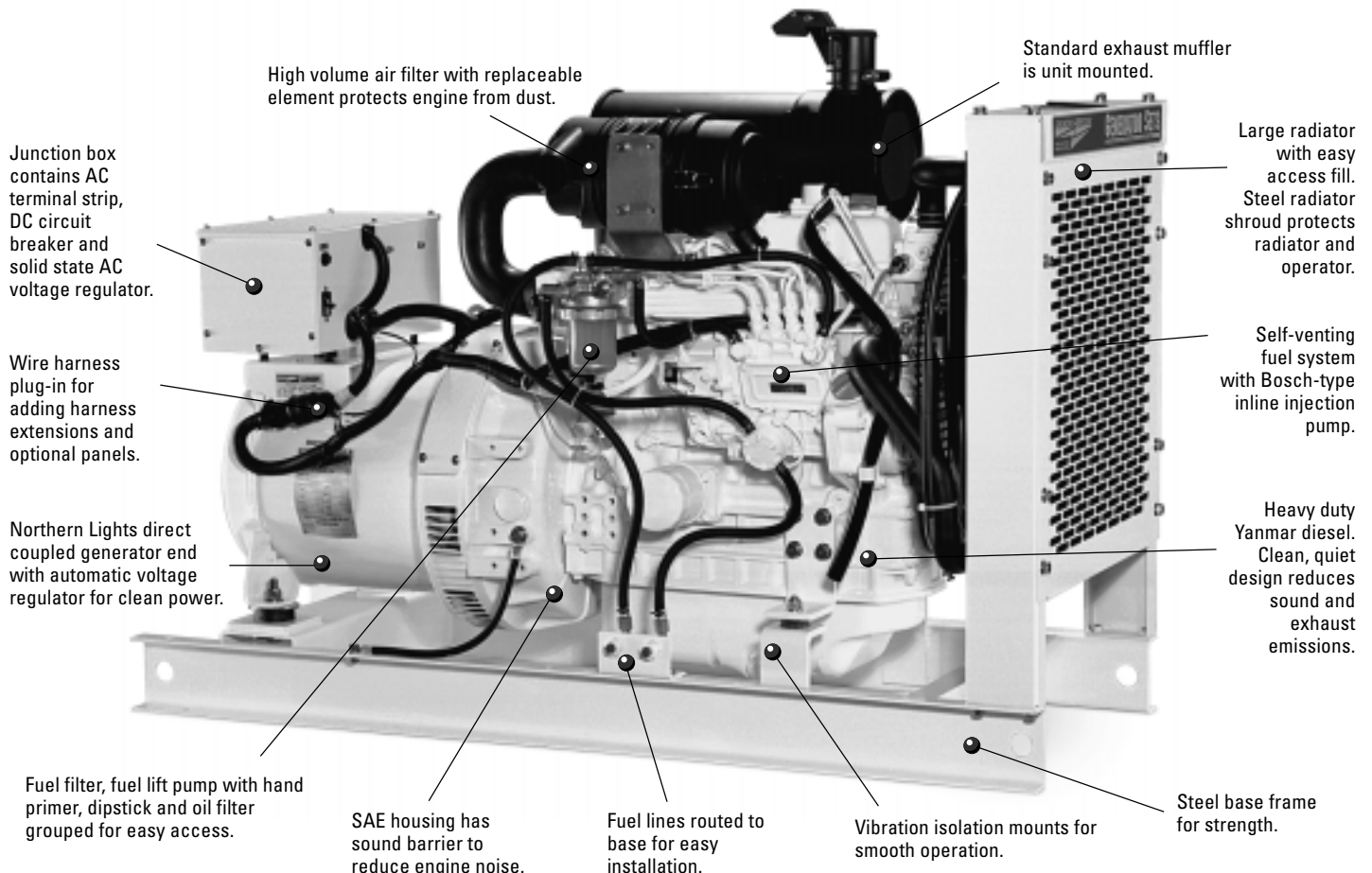
dubbed "Clean and Silent".

Even better is the set's fuel economy. At full load it burns less than 1.4 gallons per hour. That is a remarkable one tenth of a gallon per kilowatt hour. And since it is diesel instead of gasoline, it is inherently safer to handle and store.

On the other end of the set is a prime power grade generator end. It features class H winding insulation and a low 105° C temperature rise rating. Compare it to sets with class F and 125° C ratings. It's not hard to guess which set will hold up under tough, prime power use.

Does that mean the 484 is too well built for stand-by applications? We don't think so. It seems only prudent to put a set built to prime power standards into areas where critical emergency power will be needed.

The NL484K. When there is no other power source to turn to, it's comforting to know you have the right size set for the job.



NL484K SPECIFICATIONS

AC Output¹

16kW..... 60 Hz, 1800 RPM, 1 Ph, 1.0 PF
120-240 Volt 132/66 Amps
120 Volt 132 Amps

12 kW..... 50 Hz, 1500 RPM, 1 Ph, 1.0 PF
110-220 Volt 109/54.5 Amps
240 Volt 50 Amps
110 Volt 109 Amps

Phase..... 1 standard (3 phase optional)

Voltage regulation..... ±1%

Engine

Yanmar diesel..... 4TNE84

Type..... inline 4 cyl., naturally aspirated

Displacement..... 121.74 cid (1.995 ltr)

Bore/Stroke..... 3.31/3.54 in (84/90 mm)

HP @ 1800 RPM..... 26.5

HP @ 1500 RPM..... 22.3

Approx. fuel use rate at 1800 RPM²

full load..... 1.39 gph..... 1.15 Imp gph..... 5.3 lph

3/4 load..... 1.0 gph..... 0.83 Imp gph..... 3.8 lph

1/2 load..... 0.69 gph..... 0.57 Imp gph..... 2.6 lph

Installation Data

Intake air flow/1800..... 63 cfm (0.029ps)

Exhaust outlet O.D. 2.125 in (54 mm)

Max exhaust temp..... 1022°F (550°C)

Max back pressure..... 48 in H₂O (1200mm)

Heat rejection..... 1125 btu/min

Coolant capacity w/radiator..... 6 qts (5.7 l)

Engine lube oil capacity..... 8.35 qts (7.9 l)

Fuel inlet and return outlet..... 1/4 inch NPT

Weight

Approx. dry weight..... 810 lbs (368 kg)

Notes

1. 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.

2. Actual fuel consumption will vary higher or lower depending on operating conditions.

FEATURES & BENEFITS

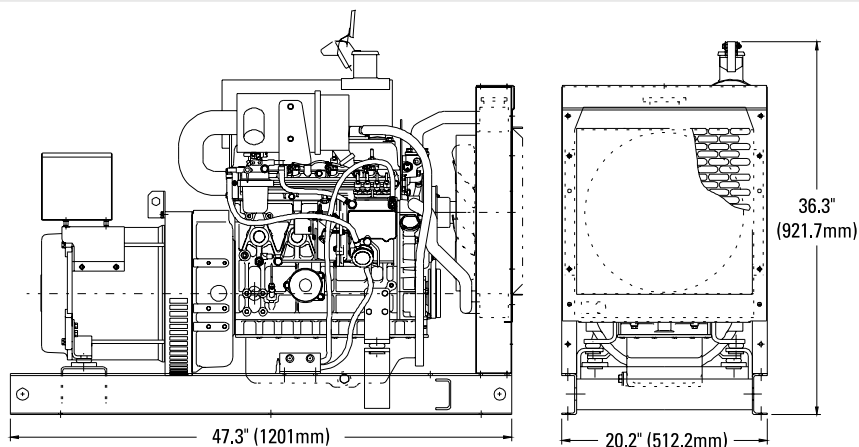
Engine Block

- Yanmar four cycle, 4 cylinder, liquid-cooled, naturally aspirated, overhead valve, industrial duty diesel engine.
- New combustion design improves fuel efficiency, reduces smoke and noise.
- Air intake heater for fast cold weather 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 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.
- Direct, high pressure injection system design for superior fuel atomization, economy and reduced exhaust emissions.
- Engine speed governed to 5% for 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 40 amp battery charging alternator with integral, solid state voltage regulator.
- 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 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 low 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 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. Part of our rigorous quality control program.
 - Shipping box standard.

DEALER: