

Image shown may not be actual engine

Features

Clean Emissions

Building off the Yanmar reputation for clean, quiet, fuel efficient and reliable compact diesel engines MINIMAX has achieved compliance with 2008 EPA Tier 4 and EU stage III A exhaust emissions regulations.

Reliable, Durable, and Quiet

MINIMAX offers enhanced noise and vibration characteristics due to its Ladder Frame block design, a stiffer crank and pistons and finer tolerance in the journal. Gear noise reduction is achieved through an improved gear tooth profile resulting in less mechanical noise.

Fuel Delivery and Economy

A newly designed, in-line MC type rotary fuel injector pump is utilized to assure more precise fuel delivery, and control. The result is reduced emissions, improved performance over a wide range of applications and good fuel economy which assures that Yanmar's reputation for superior starting characteristics continues.

Ultra-Compact and High Performance

MINIMAX offers best-in-class power density as measured by the ratio of the engine's output relative to the engine's overall external dimensions

Easy Installation

With 176 mm wide base, MINIMAX engines is an easy replacement for most major applications in this displacement category.

Additional Information

Yanmar America Corp
951 Corporate Grove Drive
Buffalo Grove, IL 60089
Website www.yanmar.com

Distributed By:

3TNM68-AMW General Specification 18.9 HP (14.1 kW) @ 3600 rpm*

Type • • • 3 Cylinder, 4-Cycle, Liquid Cooled Diesel Engine
Bore • • • • • 68 mm
Stroke • • • • • 72 mm
Displacement • • • • • .784 L
Aspiration • • • • • Naturally Aspirated
Combustion System • • • • • Indirect Injection
Rotation (from flywheel end) • • • • • Counterclockwise
Dry Weight • • • • • 160 lbs.

Standard Engine Equipment

General

Intake manifold & exhaust manifold
Exhaust manifold gasket (shipped loose)

Lubrication System

1.2 L Capacity Shallow Oil Pan
Trochoid Oil Pump
Paper Element Oil Filter
Oil Pressure Switch
Crankcase Breather, Closed Type

Electrical System

12V, 20 Amp Alternator
12V Starter Motor
12V Super Quick Glow Plugs
Preheat Relay (shipped loose)
Preheat Timer, 15 second (shipped loose)
Stop Solenoid Timer, 1 second (shipped loose)

Fuel System

In-line MC Fuel Injection Pump
12V Electric Fuel Pump (shipped loose)
Paper Element Fuel Filter
Water Separator (shipped loose)
Stop Solenoid, Integral to Fuel Injection Pump

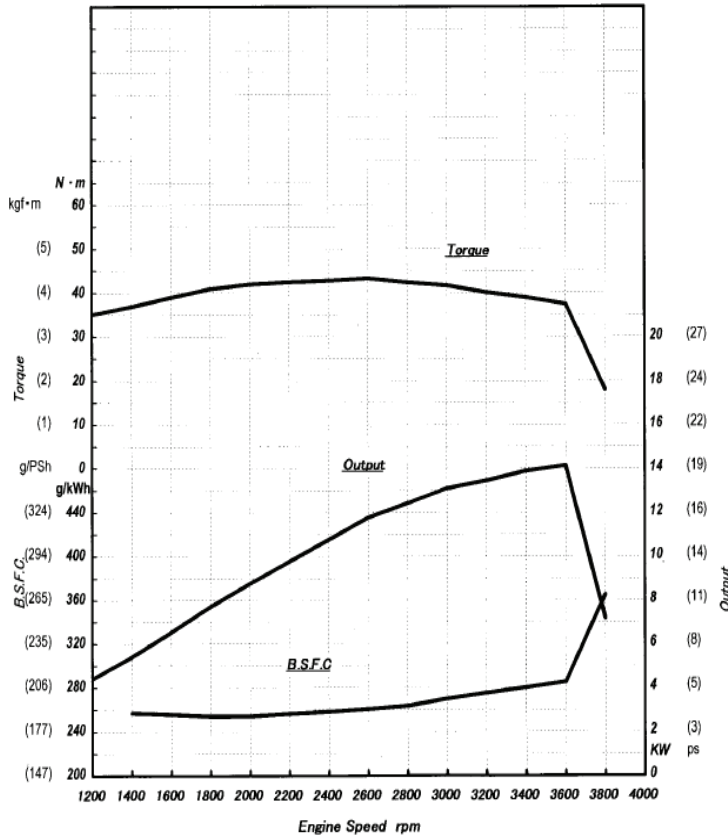
Cooling System

Water Pump, Belt Driven
5-Blade, 290mm Cooling Fan—Puller Type
70 degree Thermostat
Temperature Switch
Fan Belt

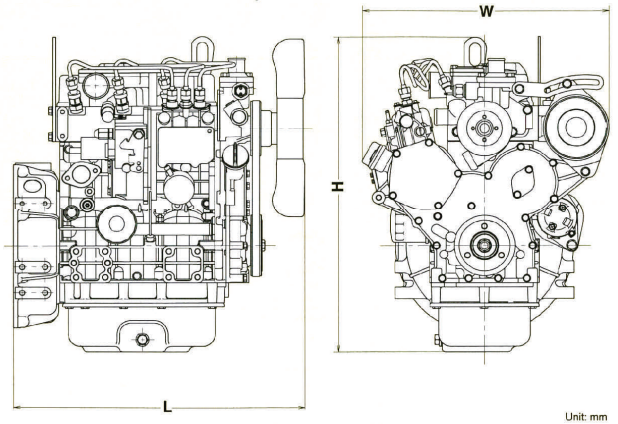
Power Take Off

Flywheel, SAE 7 1/2"
Backplate

Performance Data



Dimensions



Length	16.9 in (431 mm)
Width	15.7 in (400 mm)
Height	19.6 in (500 mm)

Note: Dimensions depend on final specifications.

kW to Hp conversion used is expressed as: $HP = (kW \text{ value}) \times 1.34$

Rated Speed (rpm)	Net rated kW	Net rated HP	Max. Torque (ft-lb)
3600	14.1	18.9	33.1 @ 2400 rpm

Ratings Definitions and Conditions

*Rated power listed is NET engine output. The engine operating environment and driven machine conditions must be studied carefully when selecting an engine in order to ensure correct engine selection, maximize engine performance, extend engine service life and improve machine capacity.

Consult the TNV Application Manual for additional engine ratings and engine application information.

Application standards for Yanmar industrial engines: Inlet air standard conditions with a total barometric pressure of 100kPa (29.5 in. Hg), with a vapor pressure of 1 kPa (.295 in. Hg), and 25°C (77°F).

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