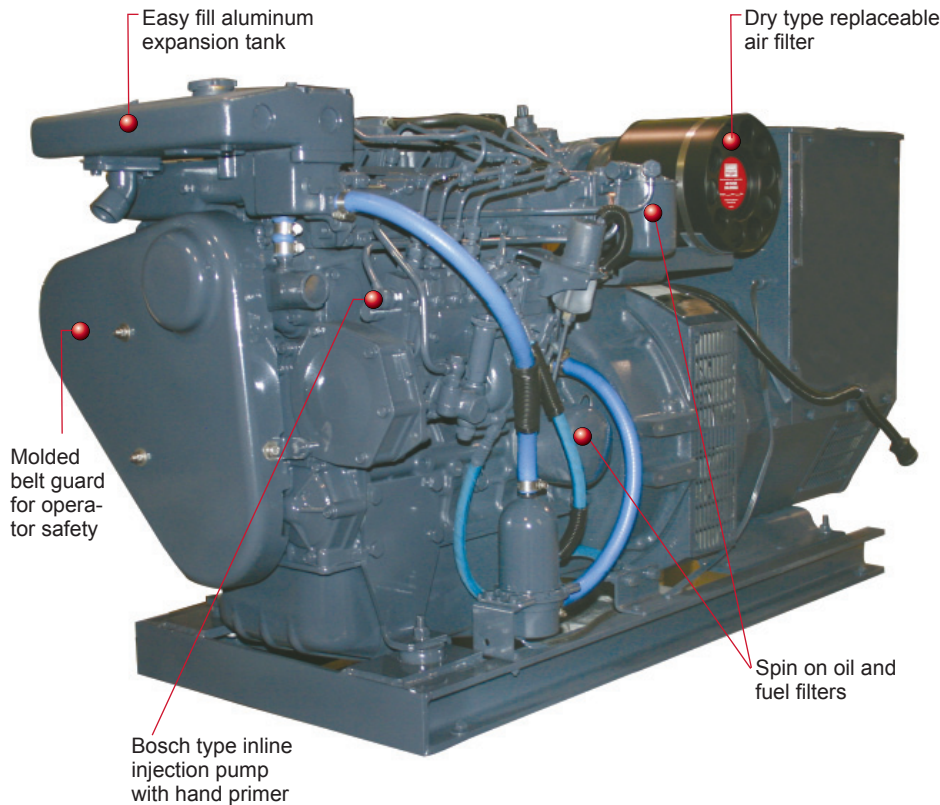
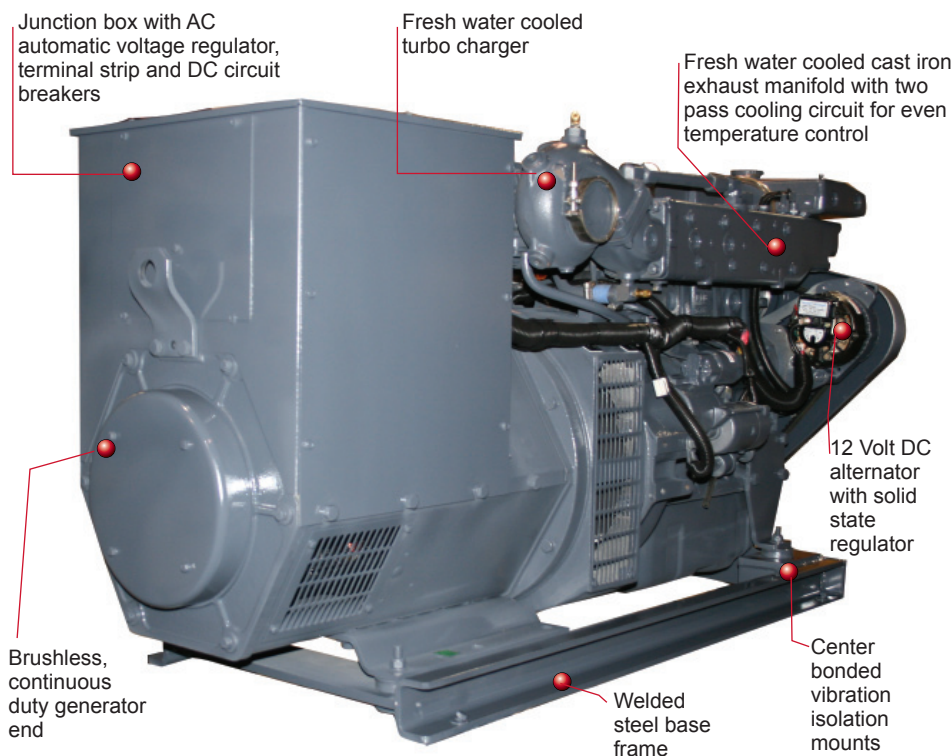


Service Side



Non-Service Side

*Shown with optional equipment



Commercial Series

38 kW

60 Hz / 1800 RPM

Don't trust your livelihood to anything less than the best marine power products on the market.

In commercial applications, heavy duty fuel-efficient continuous duty generator sets are a must. Poorly designed, budget conscious gensets that are ill equipped to run full load day-in, day-out can literally endanger livelihoods. Answering the call of the commercial operator is the new Northern Lights M38CR2.

A turbo-charged generator set to meet the demands of the commercial marine operator, the M38CR2 is custom marinated for 38kW of continuous on-board power. The M38CR2 achieves full power at 1800 RPM and is reconnectable for either three or single phase operation.

Based on a heavy-duty tractor engine, the M38CR2 is built for long-life at full load. The cast iron, two-pass exhaust manifold provides durability and even temperature control. The exhaust fresh manifold and turbo charger are fresh water cooled. Welded steel base frame and center bonded vibration mounts provide stability and reduce the wear and tear associated with vibration.

Despite being technologically advanced, the M38CR2 is remarkably simple to operate with a mechanical fuel system, easily accessible junction box and single-side service points. Systems are designed to save you time and money in upkeep. Troublesome belts and hoses have been engineered away.

Excellent fuel economy and unrivaled reliability make the M38CR2 an outstanding investment for the commercial operator.

Don't trust your livelihood to anything less than the state of the art in marine power generation. Exceptional commercial vessels deserve exceptional on board power.



AC Output

38 kW 60 Hz @ 1800 RPM, 1 Ph. 1.0 PF,
120-240V / 158A, 120V / 316A

Engine Type Vertical inline 4 cylinder diesel

Displacement CID (ltr) 203 (3.33)

Aspiration Turbocharged

Bore - in (mm) 3.70 (94)

Stroke - in (mm) 4.72 (120)

Fuel System Bosch type inline injection pump

HP @ RPM 50/1800

Approximate Fuel Usage

1800 RPM @ full load gph (lph) 2.8 (9.8)

1800 RPM @ half load gph (lph) 1.5 (5.3)

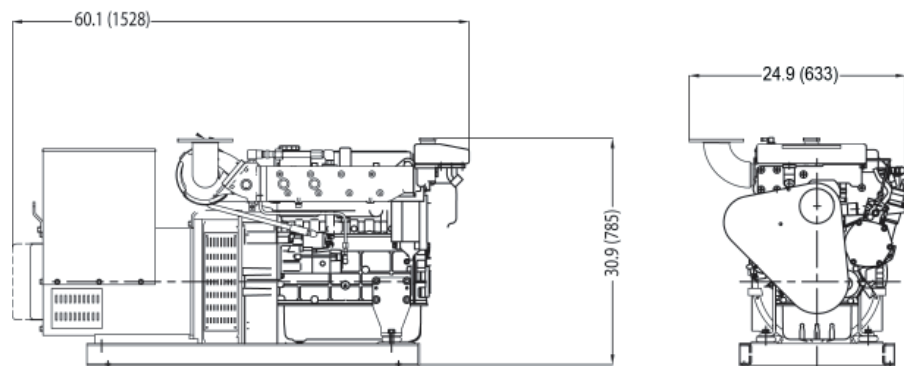
Dimensions

Length - in (mm) 60.1 (1528)

Width - in (mm) 24.9 (633)

Height - in (mm) 30.9 (785)

M38CR2 Dimensional Drawing



M38CR2 Overall Dimensions L x W x H: 60.1 x 24.9 x 30.9 inch (1528 x 633 x 785 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.

M38C2 Features and Benefits

Engine Block

- Lugged, four cycle, 4 cylinder, liquid cooled, turbocharged, overhead valve marine diesel based on a heavy-duty engine block.
- Helical cut and ground, carbon steel timing gears reduce noise.
- Cross flow head for efficient breathing.
- Integral oil cooler

Cooling System

- Large, easy fill expansion tank.
- Cast iron exhaust manifold is freshwater cooled for safety. Two pass cooling circuit for even temperature control.

Fuel System

- Direct injection with glow plugs.
- Bosch-type in-line injection pump with 5% mechanical governor.
- Pintle type injectors.
- Mechanical fuel lift pump with hand primer.
- Large spin-on fuel filter.
- Stop solenoid controls fuel rack, not throttle, for fast engine shutdowns.



Lubrication System

- Full flow, spin-on oil filter with bypass.
- 10.5 qt (10 ltr) center well oil pan.
- Closed Crankcase vent system keeps oil vapor inside engine for clean engine room.

Intake and Exhaust

- Fully compliant with all current US EPA marine emission requirements.
- Disposable dry air cleaner

DC Electrical System

- DC system uses reliable relays instead of unrepairable printed circuit boards.
- 12 volt starter and battery charging alternator with regulator.
- Standard panel: Remote mount S-3C has hour meter, oil pressure gauge, coolant temperature gauge, DC voltmeter, stop-start switch and preheat switch.
- 20 ft (6 m) plug-in panel harness lets you monitor your set from the bridge.
- Expandable to six panels, 110 ft from set.
- Low oil pressure, and high coolant temperature shutdowns are standard.



AC Generator

- Northern Lights, direct coupled, brushless AC generator is maintenance free.
- 12 lead design is reconnectable for 1 or 3 phase, 60 Hz output. Conservative heat rise rating: 95°C/50°C ambient.
- Generator features: high quality, Class "H" epoxy insulation, accessible diodes, oversized bearing and junction box for AC wiring.

- Automatic Voltage Regulator (AVR) gives quick +/-1% RMS no load to full load voltage regulation. AVR has circuit breaker protection.

Special Equipment

- Rigid, welded steel base frame.
- Four centerbonded mounts.
- Belt guard protects operator.
- Tough grey enamel paint for long life finish.
- Parts and operator's manual.

Accessories and Optional Equipment

- Front power take off with 12 or 24V electric clutch and SAE B spline. At the touch of a button you can take up to 48 HP for your vessel's hydraulic system.
- Control panels with DC and AC gauges.
- 24 volt standard ground DC system
- Wire harness extensions and "Y" harness.
- Heat exchanger cooling with 3 inch wet exhaust.
- Dry exhaust: elbow, mufflers, 18" SS flex.
- Alarms and shutdowns for low oil level, low coolant level, raw water flow and overspeed.
- On board parts kits.
- Fuel filter-water separators.
- Permanent magnetic generator (PMG).



Dealer

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.

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www.northern-lights.com