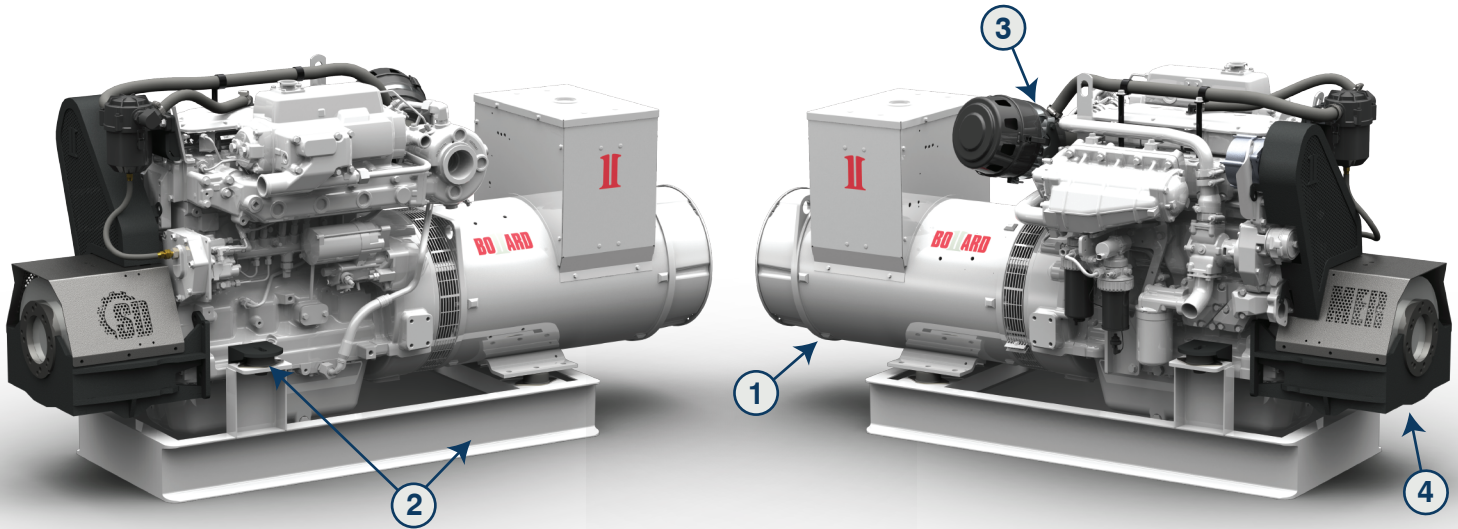


BOLLARD™ MG104 Series

104kW Marine Generator Specifications

104kW



* Drawings or pictures may show non-standard equipment

Features and Benefits

Unsurpassed Quality & Reliability

- BOLLARD™ Generators are designed and built in the USA specifically for the rugged conditions of commercial use. The expected time between overhauls on the BOLLARD™ packaged generator set is 40 to 50 thousand hours.

1: High Efficiency Generators

- Heavy Duty windings engineered for 80°C rise of 40°C ambient yield extended insulation service life, high electrical efficiency for maximum fuel economy, and superior motor starting at all voltages. PMG dedicated excitation is standard, resulting in even higher motor starting together with 300% sustained short circuit capacity along with VFD and paralleling compatibility.

Emissions

- The Bollard MG50 –MG 395 Gen-Sets are EPA certified Tier 3 Marine, CARB, EU, and MOC. They meet the lowest emissions levels available on the market today without exhaust after-treatment resulting in reduced maintenance and operating costs while preserving our clean air and water quality.

Keel Cooling, Heat Exchange, or Radiator Compatibility

Premium Marine Grade Protection

- Bollard generators feature Imron™ 2 part marine epoxy overcoats on the engine, generator, and baseframe. Accessory brackets are typically powder coated, and fasteners are primarily stainless steel to protect your investment from the harsh marine environment.

2: Heavy Duty Structural Steel Base Frame & Reduced Noise

- For ease of installation, added structural integrity, safety and durability. Superior vibration and noise dampening with a high mass flywheel, polyurethane vibration isolators, mass loaded & stiffened baseframe, and de-noised engine.

3: Heavy Duty Air Intake Filtration & Silencing

- For increased performance, extended engine life, and quiet operation

Controls, Gauges, & Instrumentation

- Standard enclosed prewired J1939 digital control panel with key start/stop and run/idle switch. Safety shutdowns are programmed for high water temp, low oil pressure, and over-speed. Included are LED readout of all J1939 trouble codes and diagnostics. Custom panels offer, auto-start/stop function for inverter or paralleling interface, load sharing, digital generator output LEDs and full function electrical distribution switchboards.

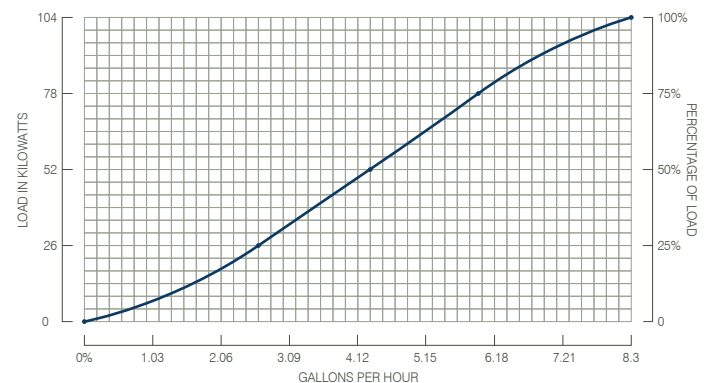
4: Optional SEADRIVE™ Front Power Take Off System

- Compact heavy duty housing, pre aligned, easy to install, service friendly, integrated torsional coupling, and available with or without a clutch.

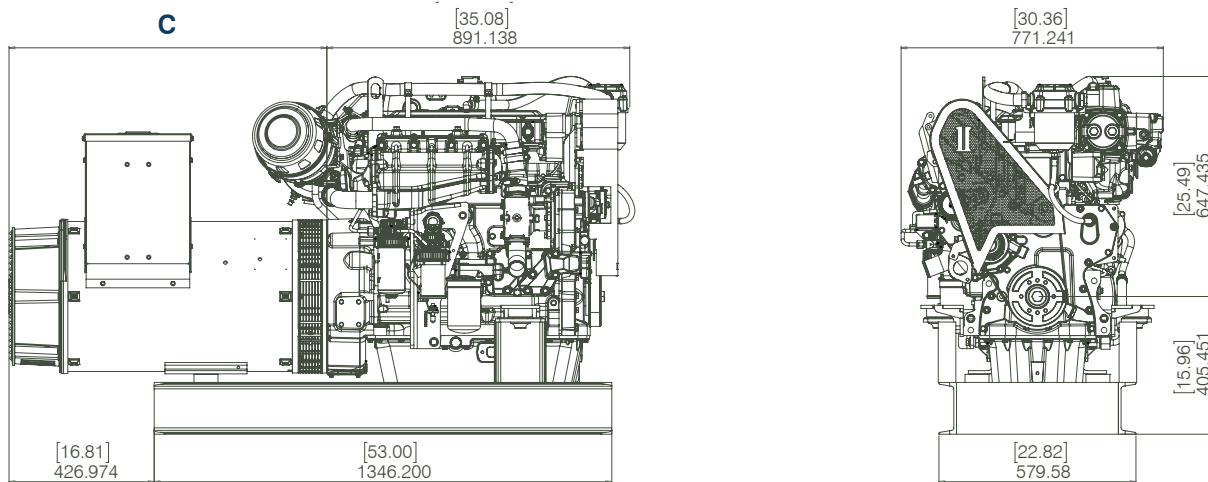
General Specifications

Engine Model	4045AFM85
Engine Type	In-Line 4 Cylinder Diesel
Displacement - L (cu.in)	4.5 (274.607)
Bore x Stroke - mm (in)	107 (4.21) x 127 (5.00)
Aspiration	Turbocharged Air-To-Coolant Aftercooled
Oil Sump Capacity - qts (L)	19.02 (18)
Emission Regulation	EPA Commercial Marine Tier 3
Prime - 60hz, 1800RPM (HP)	104 kW (139.6)
Standby - 60Hz, 1800RPM (HP)	114kW (153.3)
Motor Starting Range - HP	39.75 - 54.1
Voltage Regulation	+/- .25%
Starter	12v 4.5 kW
Alternator	12v 75 Amp
Operating Angle	20° (Constant) 30° (Intermittent)
Dry Weight - lbs (approx.)	2456 (engine, 363 gen, skid)
Length x Width x Height - inches	(see back for details)

Fuel Performance



Dimensions



Alternate Dimensions

C - Length - In

Weight

363-1607	31.72" (36.32" w/ PMG)	943
UCI274E	35.98" (38.48" w/ PMG)	1084

* Drawings or pictures may show non-standard equipment

* Dimensions are subject to change without notice and or with the use of alternate generators and cooling systems.

* Please confirm exact configuration if dimensions are critical.

Load Performance

25%

50%

75%

100%

Load in kW	26.0	52.0	78.0	104.0
Pounds Per Hour	16.27	29.15	40.00	56.28
Gallons Per Hour	2.4	4.3	5.9	8.3
kW Per Gallons Per Hour	10.83	12.09	13.22	12.53
Pounds Per Gallon	7.1	7.1	7.1	7.1
Continuous kW Output	104	104	104	104
Horsepower At Load	36.98	73.97	110.95	147.4
Horsepower Continuous	147.4	147.4	147.4	147.4
Pounds Per Horsepower Hour	.440	.3942	.3606	.3804

Customizable Options and Accessories

Engine	Controls & Instrumentation	DC Electrical System	Exhaust	Additional Options
Single Circuit Keel Cooling Package	Control Panel	Battery: 12v 24v	SS Wet Exhaust Mixing Elbow	Sea Trial Start Up
Single Circuit Heat Exchange Package	Custom Harness Length	Battery Rack & Cables	Dry Exhaust Matching Flange	MER Site Start-Up w/ Load Bank
Single Circuit Marine Radiator Package	Auxiliary Start Panel	Battery Isolation Switch	SUPERFLEX™ Exhaust Bellows	Custom Frame / Skid
	Auto Start/Stop		Cowl & EM Exhaust Silencers	Crank Vent Filtration Kit
Motor Starting Upgrade Options	Pre-Alarm Senders	Fuel-Lube Oil System	Heat Recovery Silencer	Dual Vibration Isolation Mounts
(Code G Motor @ 208VAC)	AC Meter Panel	SCOR™ Oil Regeneration System		Custom Sound Enclosure
Up to 1:1 HP per kW	Low Coolant Level Shutdown	Oil Drain Extension W/ Valve	Power Take Off	Galvanized or Powder Coated
	High Water Temp. Shutdown	Oil Drain Pump To Engine	SEADRIVE™ Clutched Front PTO	Skids & Accessories
Air Intake & Filtration	Low Oil Pressure Shutdown	Move Dipstick To Opposite Side	Clutch: Air Oil Electric	Racor Fuel Water Separator
K&N Air Filters	Low Oil Level Gauge/Shutdown	High/Low Oil Level Shut Down	SEADRIVE™ Direct Drive Front PTO	
Donaldson Air Silencer	Overspeed Shutdown	Custom Oil Drain Hose Length	Aux. A/B 2 Sheave Universal Pulley	
Closed Crank Case Vent Loop	Paralleling & Load Share	Single Side Service	Aux. A/B 4 Sheave Universal Pulley	
	Over-Voltage Alarm	Lube Oil Drip Pan	Additional Belts	
	Over-Current Alarm			
	Under-Current Alarm			