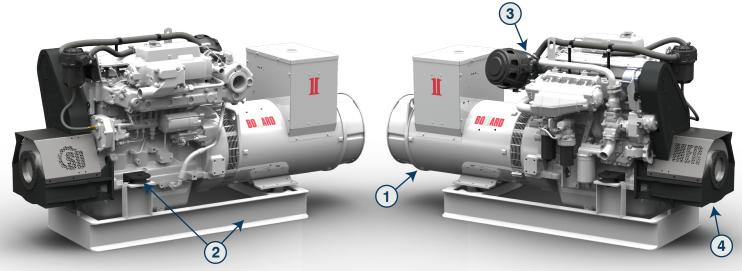
# **BOLLARD™ MG99 Series**

99kW Marine Generator Specifications





\* 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.

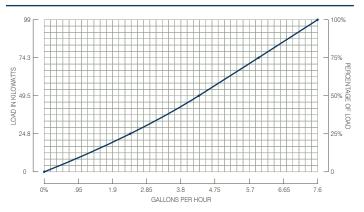
# 4: Optional SEADRIVE™ Front Power Take Off System

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

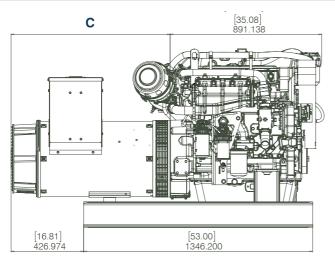
# **General Specifications**

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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)	99 kW (132.76)		
Standby - 60Hz, 1800RPM (HP)	109 kW (146.03)		
Motor Starting Range - HP	39.75 - 99 (Code G Motor @ 208VAC)		
Voltage Regulation	+/25%		
Starter	12v   4.5 kW		
Alternator	12v   75 Amp		
Operating Angle	20° (Constant)   30° (Intermittent)		
Dry Weight - Ibs	2456 (engine, 363 gen, skid)		
Length x Width x Height - inches	(see back for details)		

#### **Fuel Performance**







[30.36] 771.241	1
0	[25.49] 647.435
	[15.96] 405.451
[22.82] 579.58	

- Alternate Dimensions C Length In Weight
- 363-1607 31.72" (36.32" w/ PMG) 943 UCl274E 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.

<b>Load Performance</b>	25%	50%	75%	100%	
Load in kW	24.8	49.5	74.3	99	
Pounds Per Hour	17.04	30.53	41.89	53.96	
Gallons Per Hour	2.4	4.3	5.9	7.6	
kW Per Gallons Per Hour	10.31	11.51	12.58	13.03	
Pounds Per Gallon	7.1	7.1	7.1	7.1	
Continuous kW Output	99	99	99	99	
Horsepower At Load	33.16	66.33	99.49	132.66	
Horsepower Continuous	132.66	132.66	132.66	132.66	
Pounds Per Horsepower Hour	.406	.406	.406	.406	

# **Customizable Options and Accessories**

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Single Circuit Keel Cooling Package Single Circuit Heat Exchange Package Single Circuit Marine Radiator Package

# Motor Starting Upgrade Options (Code G Motor @ 208VAC)

Up to 1:1 HP per kW

## Air Intake & Filtration

K&N Air Filters

Donaldson Air Silencer
Closed Crank Case Vent Loop

# Controls & Instrumentation

Control Panel

Custom Harness Length
Auxiliary Start Panel
Auto Start/Stop
Pre-Alarm Senders
AC Meter Panel
Low Coolant Level Shutdown
High Water Temp. Shutdown
Low Oil Pressure Shutdown
Low Oil Level Gauge/Shutdown
Overspeed Shutdown
Paralleling & Load Share
Over-Voltage Alarm

# DC Electrical System

Battery: 12v | 24v Battery Rack & Cables Battery Isolation Switch

## Fuel-Lube Oil System

SCOR™ Oil Regeneration System
Oil Drain Extension W/ Valve
Oil Drain Pump To Engine
Move Dipstick To Opposite Side
High/Low Oil Level Shut Down
Custom Oil Drain Hose Length
Single Side Service
Lube Oil Drip Pan

# Exhaust

SS Wet Exhaust Mixing Elbow
Dry Exhaust Matching Flange
SUPERFLEX™ Exhaust Bellows
Cowl & EM Exhaust Silencers
Heat Recovery Silencer

#### **Power Take Off**

SEADRIVE™ Clutched Front PTO
Clutch: Air | Oil | Electric
SEADRIVE™ Direct Drive Front PTO
Aux. A/B 2 Sheave Universal Pulley
Aux. A/B 4 Sheave Universal Pulley
Additional Belts

# Additional Options

Sea Trial Start Up
MER Site Start-Up w/ Load Bank
Custom Frame / Skid
Crank Vent Filtration Kit
Dual Vibration Isolation Mounts
Custom Sound Enclosure
Galvanized or Powder Coated
Skids & Accessories
Racor Fuel Water Separator

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Over-Current Alarm
Under-Current Alarm

