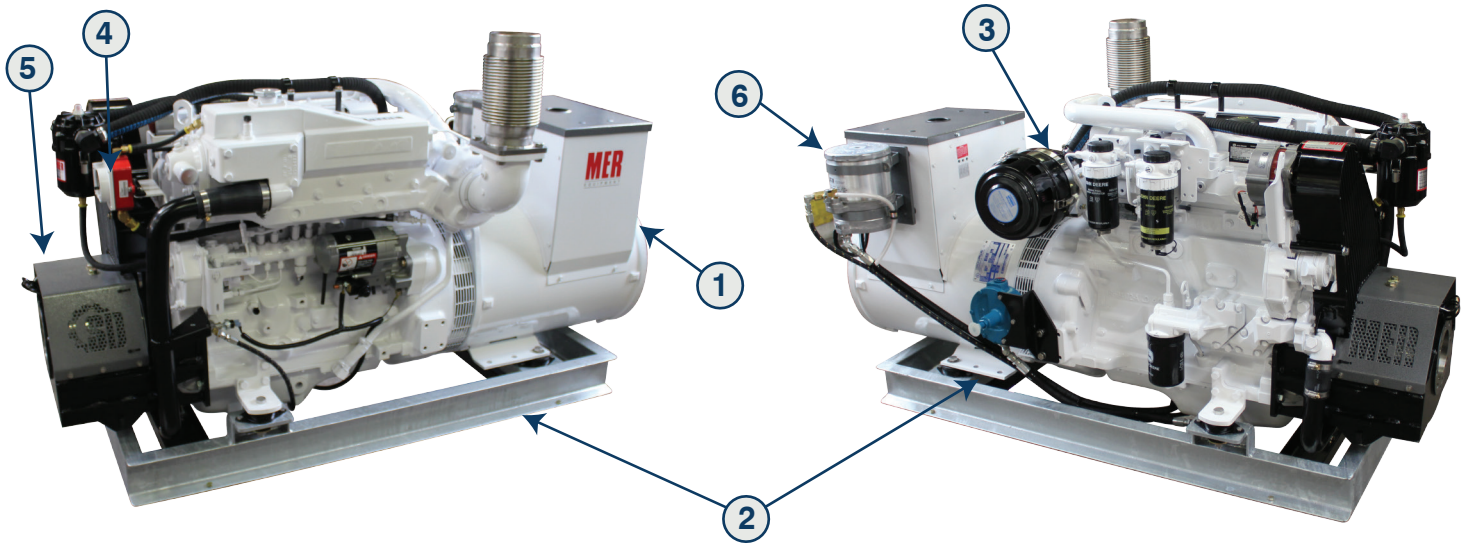
BOLLARD™ MG50 Series

50kW Marine Generator Specifications

50kW



*** 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 Motor Starting
- Heavy Duty windings engineered for 80 deg. C rise of 40 deg. 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

4: 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

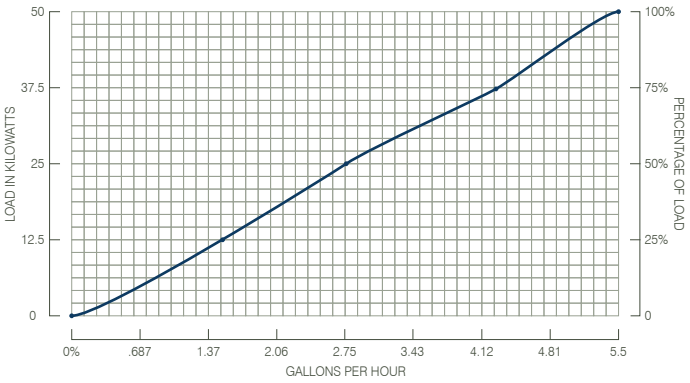
5: Optional SEADRIVE™ Front Power Take Off System
- Compact heavy duty housing, pre aligned, easy to install, service friendly, integrated torsional coupling, and available with or without a clutch.

6: Optional SCOR™ Sea Change Oil Regeneration System
- 1μ bypass oil filter. Safely extends oil drain intervals and engine life.

General Specifications

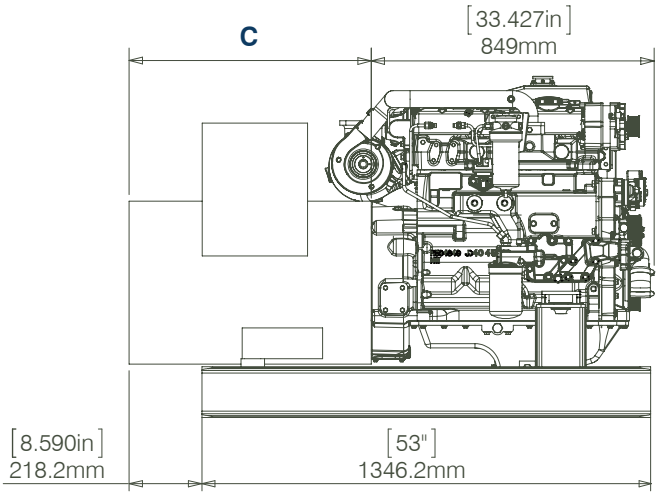
Engine Model	4045TFM
Engine Type	In-Line | 4 Cycle | 4 Cylinder | Diesel
Displacement - L (cu.in)	4.5 (275)
Bore x Stroke - mm (in)	106 (4.17) x 127 (5.00)
Aspiration	Turbocharged
Oil Sump Capacity - qts (L)	19 (18)
Emission Regulation	EPA Commercial Marine Tier 3
Prime - 60hz, 1800RPM (HP)	50 kW (68.5)
Standby - 60Hz, 1800RPM (HP)	55 kW (73.7)
Motor Starting Range - HP	23.5 - 39.75 (Code G Motor @ 208VAC)
Voltage Regulation	+/-1%
Starter	12v | 4.5 kW
Alternator	12v | 75 Amp
Operating Angle	20° (Constant) | 30° (Intermittent)
Dry Weight - lbs	1992 (engine, 287 gen, skid)
Length x Width x Height - inches	(See details on back)

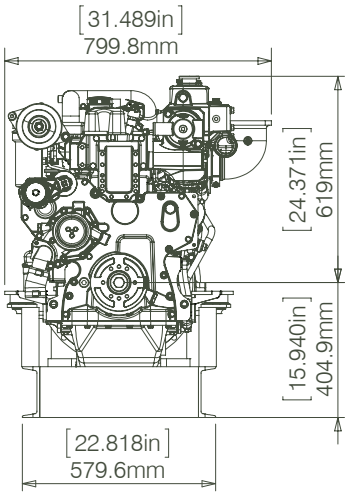
Fuel Performance



BOLLARD
ENGINES & GENERATORS

Dimensions





Alternate Dimensions	C - Length - In	Weight
287-1702	28.99" (33.59" w/ PMG)	670
361-1602	24.96 (29.56" w/ PMG)	518
UCI224	31.49 (33.99" w/PMG)	743

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*** 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	12.523	25.046	37.569	50.92
Pounds Per Hour	9.285	15.838	23.485	30.038
Gallons Per Hour	1.7	2.9	4.3	5.5
kW Per Gallons Per Hour	7.367	8.637	8.737	9.108
Pounds Per Gallon	7.1	7.1	7.1	7.1
Continuous kW Output	50.92	50.92	50.92	50.92
Horsepower At Load	19.038	38.077	57.115	76.154
Horsepower Continuous	99	99	99	99

Customizable Options and Accessories

Engine
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
Over-Current Alarm
Under-Current 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

Air Intake & Filtration
K&N Air Filters
Donaldson Air Silencer
Closed Crank Case Vent Loop
Walker AirSep

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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