### 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.

#### 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
Emissions 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 base frame. Accessory brackets are typically powder coated, and fasteners are primarily stainless steel to protect your investment from the harsh marine environment.

#### 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 base frame, and de-noised engine.

#### Heavy Duty Air Intake Filtration & Silencing
For increased performance, extended engine life, and quiet operation

#### Controls, Gauges, & Instrumentation
Standard enclosed pre-wired 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.

#### 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)

#### Fuel Performance

- **Prime - 60Hz, 1800RPM (HP)**: 104 kW (139.6)
- **Standby - 60Hz, 1800RPM (HP)**: 114 kW (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)

*Drawings or pictures may show non-standard equipment*
Dimensions

Alternate Dimensions

<table>
<thead>
<tr>
<th>Alternate Dimensions</th>
<th>C - Length - In</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>363-1607</td>
<td>31.72” (36.32” w/ PMG)</td>
<td>943</td>
</tr>
<tr>
<td>UC274E</td>
<td>35.98” (38.48” w/ PMG)</td>
<td>1084</td>
</tr>
</tbody>
</table>

* 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

<table>
<thead>
<tr>
<th>Load in kW</th>
<th>25%</th>
<th>50%</th>
<th>75%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pounds Per Hour</td>
<td>26.0</td>
<td>52.0</td>
<td>78.0</td>
<td>104.0</td>
</tr>
<tr>
<td>Gallons Per Hour</td>
<td>16.27</td>
<td>29.15</td>
<td>40.00</td>
<td>56.28</td>
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<tr>
<td>kW Per Gallons Per Hour</td>
<td>2.4</td>
<td>4.3</td>
<td>5.9</td>
<td>8.3</td>
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<tr>
<td>Pounds Per Gallon</td>
<td>10.83</td>
<td>12.09</td>
<td>13.22</td>
<td>12.53</td>
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<tr>
<td>Continuous kW Output</td>
<td>7.1</td>
<td>7.1</td>
<td>7.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Horsepower At Load</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Horsepower Continuous</td>
<td>36.98</td>
<td>73.97</td>
<td>110.95</td>
<td>147.4</td>
</tr>
<tr>
<td>Pounds Per Horsepower Hour</td>
<td>.440</td>
<td>.3942</td>
<td>.3606</td>
<td>.3804</td>
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</tbody>
</table>

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 Shutdown
- 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