STANDBY GENERATORS

8 kW - 10 kW - 14 kW

Air-Cooled Gas Engine Generator Sets

Includes:

• Two Line LCD Digital Controller (10 & 14 kW)
• Automatic Transfer Switch with Built-In Priority Load Center
• Electronic Governor (10 & 14 kW)
• Pre-wired External Connection Box
• External Main Circuit Breaker & System Status LED (10 & 14 kW)
• Flexible Fuel Line Connector
• Composite Mounting Pad
• Pre-wired conduits
• Natural Gas or LP Gas Operation
• UL 2200 Listed

Features

- Innovative Design & Prototype Testing are key components of Carrier®'s success in “Improving Power by Design.” But it doesn’t stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose Carrier® with the confidence that these systems will provide superior performance.

- Improved Electrical Technology: Superior harmonics and sine wave form produce less than 5% Total Harmonic Distortion for utility quality power. This allows confident operation of sensitive electronic equipment and micro-chip based appliances, such as variable speed HVAC.

- Test Criteria: Yes Prototype Tested Yes System Torsional Tested Yes NEMA MG1-22 Evaluation Yes Motor Starting Ability

- Solid-State, Frequency Compensated Voltage Regulation: This state-of-the-art power maximizing regulation system is standard on all Carrier® models. It provides optimized FAST RESPONSE to changing load conditions and maximum motor starting capability by electronically torque-matching the surge loads to the engine.

- Single Source Service Response from Carrier®’s dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.

- Carrier® Transfer Switches: Long life and reliability are synonymous with Carrier®. One reason for this confidence is that the Carrier® product line includes its own transfer systems and controls for total system compatibility.
### FEATURES

#### ENGINE
- **Generac (OHVI) Design**
  - Maximizes engine “breathing” for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings help engine run cooler, reducing oil consumption. Because heat is the primary cause of engine wear, the OHVI has a significantly longer life than competitive engines.
- **“Spiny-lok” cast iron cylinder walls**
  - Rigid construction and added durability provide long engine life.
- **Electronic ignition/spark advance**
  - These features combine to assure smooth, quick starting every time.
- **Full pressure lubrication system**
  - Superior lubrication to all vital bearings means better performance, less maintenance and significantly longer engine life. Now featuring a 2 year/200 hour oil change interval.
- **Low oil pressure shutdown system**
  - Superior shutdown protection prevents catastrophic engine damage due to low oil.
- **High temperature shutdown**
  - Prevents damage due to overheating.

#### GENERATOR
- **Revolving field**
  - Allows for smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
- **Skewed rotor (8 & 10 kW)**
  - Skewed stator (14 kW)
  - Produces a smooth output waveform for compatibility with electronic equipment.
- **Displaced phase excitation**
  - Maximizes motor starting capability.
- **Automatic voltage regulation**
  - Regulates the output voltage to ±2% prevents damaging voltage spikes.
- **UL 2200 Listed**
  - For your safety

#### TRANSFER SWITCH
- **Fully Automatic**
  - Transfers your vital electrical loads to the energized source of power.
- **Remote Mounting**
  - Mounts near your existing distribution panel for simple, low cost installation.
- **UL Listed**
  - For your safety

#### CONTROLS
- **Manual/Auto/Off switch**
  - Selects the operating mode.
- **Utility voltage sensing**
  - Constantly monitors utility voltage, setpoints 65% dropout, 75% pick-up, of standard voltage.
- **Utility interrupt delay**
  - Prevents nuisance start-ups of the engine, setpoint approximately 10 seconds.
- **Engine warm-up**
  - Ensures engine is ready to assume the load, setpoint approximately 10 seconds.
- **Engine cool-down**
  - Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
- **Seven day exerciser**
  - Operates engine to prevent oil seal drying and damage between power outages.
- **Timed Trickle Battery charger**
  - Maintains battery charge level to insure starting.
- **Main Line Circuit Breaker**
  - Protects generator from overload.
- **Electronic governor (10 & 14 kW)**
  - Maintains constant 60 Hz frequency.
- **Weather protective enclosure**
  - Ensures protection against mother nature. Hinged key locking roof panel for security. Lift-out front for easy access to all routine maintenance items. Electrostatically applied textured epoxy paint for added durability.
- **Enclosed critical grade muffler**
  - Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
- **Small, compact, attractive**
  - Makes for an easy, eye appealing installation.

#### UNIT
- **Pre-wired External Connection Box**
  - Easy Installation - Virtually all hardware included, plus step-by-step photographed Installation Guide.
- **1” Flexible Fuel Line Connector**
- **Composite Mounting Pad**
- **Pre-wired conduits**
- **UL Listed wire nuts**

#### INSTALLATION SYSTEM
- **Pre-wired External Connection Box**
  - Easy Installation - Virtually all hardware included, plus step-by-step photographed Installation Guide.
**SPECIFICATIONS**

### GENERATOR

<table>
<thead>
<tr>
<th>Model ASPDS1XXA008 (8 kW)</th>
<th>Model ASPDS1XXA010 (10 kW)</th>
<th>Model ASPDS1XXA014 (14 kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rated Maximum Continuous Power Capacity (LP)</strong></td>
<td>8,000 Watts*</td>
<td>10,000 Watts*</td>
</tr>
<tr>
<td><strong>Rated Maximum Continuous Power Capacity (NG)</strong></td>
<td>7,000 Watts*</td>
<td>9,000 Watts*</td>
</tr>
<tr>
<td><strong>Rated Voltage</strong></td>
<td>120/240</td>
<td>120/240</td>
</tr>
<tr>
<td><strong>Rated Maximum Continuous Load Current</strong></td>
<td>33.3 LP/29.2 NG</td>
<td>41.6 LP/37.5 NG</td>
</tr>
<tr>
<td><strong>Total Harmonic Distortion</strong></td>
<td>Less than 5%</td>
<td>Less than 5%</td>
</tr>
<tr>
<td><strong>Main Line Circuit Breaker</strong></td>
<td>35 Amp</td>
<td>45 Amp</td>
</tr>
<tr>
<td><strong>Phase</strong></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Number of Rotor Poles</strong></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Rated AC Frequency</strong></td>
<td>60Hz</td>
<td>60Hz</td>
</tr>
<tr>
<td><strong>Battery Requirement (not included)</strong></td>
<td>Group 26R</td>
<td>Group 26R</td>
</tr>
<tr>
<td><strong>Unit Weight</strong></td>
<td>340 Pounds</td>
<td>387 Pounds</td>
</tr>
<tr>
<td><strong>Dimensions (L’ x W’ x H’)</strong></td>
<td>48 x 25 x 29</td>
<td>48 x 25 x 29</td>
</tr>
</tbody>
</table>

### ENGINE

<table>
<thead>
<tr>
<th>Model ASPDS1XXA008 (8 kW)</th>
<th>Model ASPDS1XXA010 (10 kW)</th>
<th>Model ASPDS1XXA014 (14 kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Engine</strong></td>
<td>GENERAC OHVI</td>
<td>GENERAC OHVI V-TWIN</td>
</tr>
<tr>
<td><strong>Number of Cylinders</strong></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Rated Horsepower</strong></td>
<td>14.8 @ 3,600 rpm</td>
<td>18 @ 3,600 rpm</td>
</tr>
<tr>
<td><strong>Displacement</strong></td>
<td>410cc</td>
<td>530cc</td>
</tr>
<tr>
<td><strong>Cylinder Block</strong></td>
<td>Aluminum w/Cast Iron Sleeve</td>
<td>Aluminum w/Cast Iron Sleeve</td>
</tr>
<tr>
<td><strong>Valve Arrangement</strong></td>
<td>Overhead Valve</td>
<td>Overhead Valve</td>
</tr>
<tr>
<td><strong>Governor System</strong></td>
<td>Solid-state w/Magneto</td>
<td>Solid-state w/Magneto</td>
</tr>
<tr>
<td><strong>Compression Ratio</strong></td>
<td>8.6:1</td>
<td>9.5:1</td>
</tr>
<tr>
<td><strong>Rated RPM</strong></td>
<td>3,600</td>
<td>3,600</td>
</tr>
</tbody>
</table>

### CONTROLS

- **2-Line Plain Text LCD Display (10 & 14 kW)**
  - Simple user interface for ease of operation
- **Mode Switch**
  - **Auto**: Automatic Start on Utility failure. 7 day exerciser
  - **Off**: Stops unit. Power is removed. Control and charger still operate.
  - **Manual/Test (start)**: Start with starter control, unit stays on. If utility fails, transfer to load takes place.
- **Engine Start Sequence**
  - **Cyclic cranking**: 16 sec. on, 7 rest (90 sec. maximum duration)
- **Engine Cool-Down**
  - 10 seconds
- **Starter Lock-out**
  - Starter cannot re-engage until 5 sec. after engine has stopped.
- **2.5 Amp Timed Trickle Battery Charger**
  - Standard
- **Automatic Voltage Regulator w/Overvoltage Protection**
  - Standard
- **Automatic Low Oil Pressure Shutdown**
  - Standard
- **Overspeed Shutdown**
  - Standard, 72Hz
- **High Temperature Shutdown**
  - Standard
- **Overcrank Protection**
  - Standard
- **Safety Fuse**
  - Standard

Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO046 and DIN6271). * Maximum wattage and current are subject to and limited by such factors as fuel Btu content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet above sea level, and also will decrease about 1 percent for each 12° C (10° F) above 15.5° C (60°F).
### Transfer Switch Features

- Electrically operated, mechanically-held contacts for fast, positive connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2 pole, 250 VAC contactors.
- 160 millisecond transfer time.
- Dual coil design.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA 1 (indoor rated) enclosure is standard on the 100 amp switch.

### Mechanical Dimensions (in inches)

<table>
<thead>
<tr>
<th>Current Rating</th>
<th>No. of Poles</th>
<th>Height H1</th>
<th>Height H2</th>
<th>Width W1</th>
<th>Width W2</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 UL Listed</td>
<td>2</td>
<td>26.5</td>
<td>29.25</td>
<td>8.14</td>
<td>12.5</td>
<td>7</td>
</tr>
</tbody>
</table>

### Terminal Wire Ranges

<table>
<thead>
<tr>
<th>ATS Rated Amps</th>
<th>Switch Terminal</th>
<th>Neutral Lug/Stud</th>
<th>Ground Lug</th>
</tr>
</thead>
<tbody>
<tr>
<td>100A 2-Pole UL</td>
<td>1 x 1/0-12</td>
<td>1 x 3/8-16 Stud</td>
<td>1 x 2/0-14</td>
</tr>
</tbody>
</table>

Design and specifications subject to change without notice. Dimensions shown are approximate. Contact your Carrier dealer for certified drawings. DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.