MODEL: 31-AGM
VOLTAGE: 12
DIMENSIONS: Inches (mm)
BATTERY: VRLA AGM
COLOR: Maroon (case/cover)
MATERIAL: Polypropylene
WATERING SYSTEM: N/A
DESIGN LIFE: 10 Years

PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>BCI GROUP SIZE</th>
<th>TYPE</th>
<th>CAPACITY a Minutes</th>
<th>CRANKING Performance</th>
<th>CAPACITY b Amp-Hours (AH)</th>
<th>ENERGY (kWh)</th>
<th>TERMINAL Type c</th>
<th>DIMENSIONS d Inches (mm)</th>
<th>WEIGHT lbs. (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>31-AGM</td>
<td>177</td>
<td>609</td>
<td>720</td>
<td>82</td>
<td>92</td>
<td>100</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C.A. b @0°F</td>
<td>C.A. b @12°F</td>
<td>5-Hr Rate</td>
<td>10-Hr Rate</td>
<td>20-Hr Rate</td>
<td>100-Hr Rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

A. The number of minutes a battery can deliver when discharged at a constant rate at 80°F (27°C) and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.
B. The amount of amp-hours (Ah) a battery can deliver when discharged at a constant rate at 80°F (27°C) for the 20-Hour rate and 86°F (30°C) for the 5-Hour rate and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.
C. Dimensions are based on nominal size. Dimensions may vary depending on type of handle or terminal. Batteries to be mounted with .5 inches (12.7 mm) spacing minimum.
D. C.C.A. (Cold Cranking Amps) - the discharge load in amperes which a new, fully charged battery can maintain for 30 seconds at 0°F at a voltage above 1.2 V/cell.
E. C.A. (Cranking Amps) - the discharge load in amperes which a new, fully charged battery can maintain for 30 seconds at 32°F at a voltage above 1.2 V/cell. This is sometimes referred to as marine cranking amps @ 32°F or M.C.A. @ 32°F.
F. Dimensions taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.
G. Terminal images are representative only.
Trojan’s battery testing procedures adhere to both BCI and IEC test standards.

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)

<table>
<thead>
<tr>
<th>System Voltage</th>
<th>12V</th>
<th>24V</th>
<th>36V</th>
<th>48V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Charge</td>
<td>14.1 – 14.7</td>
<td>28.2 – 29.4</td>
<td>42.3 – 44.1</td>
<td>56.4 – 58.8</td>
</tr>
<tr>
<td>Float</td>
<td>13.5</td>
<td>27</td>
<td>40.5</td>
<td>54</td>
</tr>
</tbody>
</table>

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.

CHARGING TEMPERATURE COMPENSATION

<table>
<thead>
<tr>
<th>ADD</th>
<th>SUBTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.005 volt per cell for every 1°C below 25°C</td>
<td>0.005 volt per cell for every 1°C above 25°C</td>
</tr>
<tr>
<td>0.0028 volt per cell for every 1°F below 77°F</td>
<td>0.0028 volt per cell for every 1°F above 77°F</td>
</tr>
</tbody>
</table>

OPERATIONAL DATA

OPERATING TEMPERATURE

-4°F to 131°F (-20°C to +55°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.

SELF DISCHARGE

Less than 3% per month depending on storage temperature conditions.
BATTERY DIMENSIONS (shown with DT)

31-AGM PERFORMANCE

PERCENT CAPACITY VS. TEMPERATURE

Trojan batteries are available worldwide through Trojan's Master Distributor Network. We offer outstanding technical support, provided by full-time application engineers.

For a Trojan Master Distributor near you, test call 800.423.6569 or + 1.562.236.3000 or visit www.trojanbattery.com

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