**DCS-100L**

**VALVE REGULATED LEAD ACID BATTERY**

**FOR DEEP CYCLE MOBILITY APPLICATIONS**

**12V 81 AH @ 5 HR RATE**

**12V 100 AH @ 20 HR RATE**

**FEATURES**

- Robust plate for extended cycle life.
- Computer-generated grid design optimized for high power density.
- Low calcium grid alloy for reduced gas emissions and ease of recycling.
- Flame-arresting one-way pressure-relief vent for safety and long life.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Case and cover available in standard polypropylene.
- Thermally welded case-to-cover bond to eliminate leakage.
- Removable carrying handles.
- Can be used in any orientation. Upright, side, or end mounting recommended.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Not restricted for air transport – Complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport – classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport – classified as non-hazardous material per IMDG Amendment 27.

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### 12 Volts – 100 Ampere Hour Capacity @ 20 Hour Rate

<table>
<thead>
<tr>
<th>Discharge in Hours</th>
<th>1.00</th>
<th>2.00</th>
<th>3.00</th>
<th>4.00</th>
<th>5.00</th>
<th>6.00</th>
<th>7.00</th>
<th>8.00</th>
<th>10.00</th>
<th>12.00</th>
<th>20.00</th>
<th>24.00</th>
<th>72.00</th>
<th>100.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amp-Hr Capacity</td>
<td>49.2</td>
<td>61.5</td>
<td>70.0</td>
<td>76.0</td>
<td>80.6</td>
<td>84.0</td>
<td>86.8</td>
<td>89.0</td>
<td>92.0</td>
<td>94.2</td>
<td>100.0</td>
<td>101.3</td>
<td>104.0</td>
<td>106.0</td>
</tr>
</tbody>
</table>
DCS-100L

**DCS-100L – Specifications**

<table>
<thead>
<tr>
<th>Cells Per Unit</th>
<th>Voltage Per Unit</th>
<th>Weight</th>
<th>Electrolyte</th>
<th>Maximum Discharge Current</th>
<th>Short Circuit Current</th>
<th>Ohms Imped. 60 Hz (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>12.84</td>
<td>69 lbs. 31 kg</td>
<td>Absorbed H₂SO₄, SG = 1.300</td>
<td>800 Amps</td>
<td>3600 Amps @ 0.1 sec.</td>
<td>0.0035 Ohms</td>
</tr>
</tbody>
</table>

**Capacity**
81.0 Ah @ 5 hr. rate to 1.75 volts per cell @ 77°F (25°C)
100 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C)
84.7 Ah @ 10 hr. rate to 1.80 volts per cell @ 20°C (68°F)

**Operating Temperature Range**
Discharge: -40°F (-40°C) to +160°F (71°C), Charge: -10°F (-23°C) to +140°F (60°C) (with temperature compensation)

**Recommended Operating Temperature Range**
+74°F (23°C) to +80°F (27°C)

**Float Charging Voltage**
13.5 to 13.8 VDC/unit Average at 77°F (25°C).

**Recommended Maximum Charging Current Limit**
C/5 amperes (20.0 amperes @ 100% depth of discharge) @ 20 hour rate

**Equalization and Cycle Service Charging Voltage**
14.4 to 14.8 VDC/unit Average at 77°F (25°C).

**Maximum AC Ripple (Charger)**
0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.
Maximum AC ripple float charge voltage allowed = (4% P-P)
Maximum AC ripple current allowed = 5.0 amperes RMS (C/20)

**Self Discharge**
Dynasty batteries may be stored for up to 6 months at 77°F (25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

**Accessories**
Inter unit connectors, racks and cabinet systems are available.

**Terminal**
"L" terminal with 0.28" clearance hole to accept 0.25" (6mm) bolt.

**Terminal Hardware Initial Torque**
65 in.-lbs. (7.35 N-m).

**Terminal Hardware Annual Retorque**
52 in.-lbs. (5.88 N-m).

**Constant Current Discharge Ratings – Amperes @ 77°F (25°C)**

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>1.00</th>
<th>2.00</th>
<th>3.00</th>
<th>4.00</th>
<th>5.00</th>
<th>6.00</th>
<th>7.00</th>
<th>8.00</th>
<th>10.00</th>
<th>12.00</th>
<th>20.00</th>
<th>24.00</th>
<th>72.00</th>
<th>100.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.90</td>
<td>38.5</td>
<td>23.5</td>
<td>17.7</td>
<td>14.4</td>
<td>12.20</td>
<td>10.60</td>
<td>9.40</td>
<td>8.44</td>
<td>7.05</td>
<td>6.08</td>
<td>4.00</td>
<td>3.40</td>
<td>1.23</td>
<td>0.91</td>
</tr>
<tr>
<td>1.85</td>
<td>42.0</td>
<td>26.5</td>
<td>19.7</td>
<td>16.0</td>
<td>13.60</td>
<td>11.80</td>
<td>10.45</td>
<td>9.38</td>
<td>7.86</td>
<td>6.80</td>
<td>4.48</td>
<td>3.80</td>
<td>1.35</td>
<td>0.99</td>
</tr>
<tr>
<td>1.80</td>
<td>45.4</td>
<td>28.4</td>
<td>21.5</td>
<td>17.5</td>
<td>14.90</td>
<td>13.00</td>
<td>11.50</td>
<td>10.33</td>
<td>8.64</td>
<td>7.44</td>
<td>4.78</td>
<td>4.04</td>
<td>1.42</td>
<td>1.03</td>
</tr>
<tr>
<td>1.75</td>
<td>49.2</td>
<td>30.8</td>
<td>23.3</td>
<td>19.0</td>
<td>16.12</td>
<td>14.00</td>
<td>12.40</td>
<td>11.13</td>
<td>9.20</td>
<td>7.85</td>
<td>5.00</td>
<td>4.22</td>
<td>1.44</td>
<td>1.06</td>
</tr>
</tbody>
</table>

**Note:** Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.

*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact a C&D Representative for complete dimensional information.*