UPS12-530FR VALVE REGULATED LEAD ACID BATTERY

FOR UPS STANDBY POWER APPLICATIONS

12V 145 AH @ 20 HR RATE,
12V 530 WATTS/CELL @ 15 MIN. RATE

FEATURES

• 10 Year design life @ 25°C (77°F)
• Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
• Patented flame-arresting one-way pressure-relief vent providing vacuum and controlled backpressure for long life recombinant operation.
• Designed to comply with ANSI and Eurobat battery standards.
• Specifically designed for optimum performance in UPS applications.
• Proprietary computer modeled radial grid matrix using multiple conductors for providing the lowest internal resistance and highest current carrying efficiency.
• Proprietary Fixed Orifice Pasting technology applying active material on both sides of the grid for consistent cell-to-cell performance, highest paste packing efficiency and uniform grid protection.
• Lowest calcium levels among battery manufactures minimizing grid growth and extended battery life.
• UL-recognized component.
• Thermally welded case-to-cover bond to eliminate leakage.
• Can be mounted in any orientation. Upright, side, or end mounting recommended.
• 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.
• Flame retardant polypropylene case and cover compliant with UL 1778 (optional).

SPECIFICATIONS

12 Volts – 145 AH @ 20 Hour Rate
12 Volts – 530 Watts Per Cell For 15 Minutes to 1.67 Volts per Cell
Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)

<table>
<thead>
<tr>
<th>Operating Time to End Point Voltage (in Minutes)</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.67 Volts/Cell</td>
<td>856.7</td>
<td>645.5</td>
<td>530.0</td>
<td>444.2</td>
<td>339.5</td>
<td>273.4</td>
<td>248.7</td>
<td>227.0</td>
<td>195.4</td>
<td>137.2</td>
</tr>
</tbody>
</table>
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www.cdtechno.com

 Specifying batteries will be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.

**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>100 lbs. 45 Kg</td>
<td>Absorbed H2SO4 (SG = 1.300)</td>
<td>800 Amps</td>
<td>5000 Amps @ 0.1 sec.</td>
<td>0.0023 Ohms</td>
</tr>
</tbody>
</table>

**Capacity**

530 watts per cell at the 15 minute rate to 1.67 volts per cell at 77°F (25°C).

145 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C).

131 Ah @ 10 hr. rate to 1.80 volts per cell @ 68°F (20°C).

**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)

**Nominal 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 (29 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 voltage allowed = 1.4% RMS (4% P-P). Maximum current allowed = 7.25 amperes rms (C/20).

**Self Discharge**

Dynasty UPS 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**

Threaded brass inserts to accept 0.25" (6mm) bolt.

**Terminal Hardware Torque**

110 in.-lbs. (12.4 N·m).

**Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)**

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75</td>
<td>713.6</td>
<td>556.7</td>
<td>465.9</td>
<td>399.8</td>
<td>315.8</td>
<td>257.6</td>
<td>235.9</td>
<td>217.1</td>
<td>187.5</td>
<td>134.2</td>
</tr>
<tr>
<td>1.70</td>
<td>814.3</td>
<td>616.9</td>
<td>505.3</td>
<td>426.4</td>
<td>329.7</td>
<td>266.5</td>
<td>243.8</td>
<td>223.1</td>
<td>190.5</td>
<td>135.7</td>
</tr>
<tr>
<td>1.67</td>
<td>856.7</td>
<td>645.5</td>
<td>530.0</td>
<td>444.2</td>
<td>339.5</td>
<td>273.4</td>
<td>248.7</td>
<td>227.0</td>
<td>195.4</td>
<td>137.2</td>
</tr>
<tr>
<td>1.65</td>
<td>892.2</td>
<td>670.2</td>
<td>546.8</td>
<td>453.1</td>
<td>345.5</td>
<td>278.3</td>
<td>252.7</td>
<td>231.0</td>
<td>197.4</td>
<td>139.2</td>
</tr>
<tr>
<td>1.60</td>
<td>939.7</td>
<td>687.0</td>
<td>556.7</td>
<td>459.0</td>
<td>349.4</td>
<td>280.3</td>
<td>254.6</td>
<td>233.9</td>
<td>199.4</td>
<td>141.1</td>
</tr>
</tbody>
</table>

**Constant Current Discharge Ratings – Amps Per Cell @ 77°F (25°C)**

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>.083</th>
<th>.25</th>
<th>.50</th>
<th>.75</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>20</th>
<th>24</th>
<th>72</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.90</td>
<td>238</td>
<td>166</td>
<td>115</td>
<td>91</td>
<td>74.0</td>
<td>43.4</td>
<td>31.6</td>
<td>21.1</td>
<td>14.2</td>
<td>11.7</td>
<td>10.0</td>
<td>6.27</td>
<td>5.28</td>
<td>1.82</td>
<td>1.34</td>
</tr>
<tr>
<td>1.85</td>
<td>296</td>
<td>189</td>
<td>132</td>
<td>104</td>
<td>83.9</td>
<td>48.9</td>
<td>35.3</td>
<td>23.1</td>
<td>15.5</td>
<td>12.8</td>
<td>10.9</td>
<td>6.85</td>
<td>5.80</td>
<td>1.97</td>
<td>1.44</td>
</tr>
<tr>
<td>1.80</td>
<td>354</td>
<td>213</td>
<td>143</td>
<td>110</td>
<td>88.8</td>
<td>52.3</td>
<td>37.5</td>
<td>24.3</td>
<td>16.2</td>
<td>13.4</td>
<td>11.4</td>
<td>7.11</td>
<td>5.98</td>
<td>2.04</td>
<td>1.49</td>
</tr>
<tr>
<td>1.75</td>
<td>395</td>
<td>229</td>
<td>153</td>
<td>116</td>
<td>93.8</td>
<td>55.3</td>
<td>39.4</td>
<td>25.3</td>
<td>16.7</td>
<td>13.7</td>
<td>11.6</td>
<td>7.25</td>
<td>6.09</td>
<td>2.08</td>
<td>1.52</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.