C&D Technologies’ addition to the High Rate Max front access line provides a 12V 4D battery that meets the needs of today’s higher power UPS systems as an ideal fit for new system installs and 4D battery retrofits.

APPLICATIONS

• Data Centers
• Network Operations Centers
• Industrial Process Control Facilities
• Internet Hosting Sites
• Semiconductor Manufacturing
• Banks & Financial Institutions
• Power Generation Plants
• Hospitals & Testing Laboratories
• Emergency 911 Response Centers

FEATURES & BENEFITS

• Ten Year Design Life in Float Service
• UL-recognized component
• Absorbent Glass Mat (AGM) technology for efficient gas recombination over 99%
• Multicell design for ease of installation and maintenance
• Operates at low internal pressure
• Thermally welded case-to-cover bond to ensure a leak-proof seal
• Flame-retardant polypropylene case and cover compliant with UL94-V2
• Shock absorbent thick wall construction
• Measured high vacuum acid fill reduces electrical variability between cells
• Oversized through-the-partition inter-cell welds for minimal power loss
• Advanced lead-tin calcium alloy reduces grid corrosion and promotes long battery life
• Cold forged, nonporous terminal bushings eliminate post leakage
• Flame arresting, low pressure safety release venting system for individual cells, recognized per UL924
• 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 MDG Amendment 27
• 3 Year Full Warranty (refer to Dynasty warranty card, 41-9027)
• Cabinets and racks available. See brochure 12-1100.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Voltage Per Unit</th>
<th>8 Hour Rate @ 77°F (25°C) to 1.75</th>
<th>Operating Time (in minutes) to 1.67 volts per cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS12-745MRF</td>
<td>12 Ah</td>
<td>170 Ah</td>
<td>1306 951 734 601 487 261 188</td>
</tr>
</tbody>
</table>

Valve Regulated Lead Acid (VRLA) Battery Series
Designed for UPS Standby Power Applications
SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Cells Per Unit</th>
<th>Battery Weight</th>
<th>Maximum Terminal Discharge Current (Amps)</th>
<th>Impedance at 60 Hz (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS12-745MRF</td>
<td>6</td>
<td>160.3 lbs</td>
<td>1086</td>
<td>0.00173</td>
</tr>
</tbody>
</table>

DIMENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPS12-745MRF</td>
<td>19.68</td>
<td>499.87</td>
<td>20.74</td>
<td>526.80</td>
<td>20.99</td>
<td>533.2</td>
<td>19.47</td>
<td>494.40</td>
</tr>
</tbody>
</table>

* All dimensions are for reference only. Contact a C&D Representative for complete dimensional information.

Operating Temperature Range with temperature compensated charging

Discharge -40°F (-40°C) to +140°F (60°C)
Charge -40°F (-40°C) to +122°F (50°C)

Nominal Operating Temperature Range

+68°F (20°C) to +77°F (25°C)

Recommended Maximum Charging Current Limit

C₆/5 (34.1) amperes

Recommended Float Voltage

13.56 to 13.80 volts per cell

Maximum AC Ripple (Charger) voltage or current

0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = C₆/5

Self Discharge/ Storage time from a fully charged condition

6 months at 77°F (25°C). For each 15°F (9°C) rise, reduce the storage time by half. See C&D brochure 41-7272, Self Discharge and Inventory Control for details.

Terminal Post

Threaded copper insert to accept 5/16" bolt

Terminal Hardware Torque

160 in-lbs (18 N-m)

UPS 12-745MRF

Constant Power Discharge Ratings, Watts per cell @ 77°F (25°C)

<table>
<thead>
<tr>
<th>Minutes</th>
<th>Final VPC</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60</td>
<td>1385</td>
<td>989</td>
<td>749</td>
<td>609</td>
<td>450</td>
<td>263</td>
<td>185</td>
<td></td>
</tr>
<tr>
<td>1.67</td>
<td>1305</td>
<td>951</td>
<td>734</td>
<td>601</td>
<td>447</td>
<td>261</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>1.70</td>
<td>1259</td>
<td>923</td>
<td>719</td>
<td>592</td>
<td>443</td>
<td>260</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td>1.75</td>
<td>1180</td>
<td>878</td>
<td>695</td>
<td>578</td>
<td>437</td>
<td>258</td>
<td>184</td>
<td></td>
</tr>
</tbody>
</table>

Constant Current Discharge Ratings - Amperes

<table>
<thead>
<tr>
<th>Hours</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75</td>
<td>131.6</td>
<td>68.1</td>
<td>48.8</td>
<td>38.4</td>
<td>31.8</td>
<td>27.2</td>
<td>21.3</td>
<td>17.4</td>
<td>14.8</td>
<td>7.6</td>
</tr>
<tr>
<td>1.80</td>
<td>128.5</td>
<td>67.0</td>
<td>47.9</td>
<td>37.3</td>
<td>30.8</td>
<td>26.3</td>
<td>20.5</td>
<td>16.7</td>
<td>14.2</td>
<td>7.5</td>
</tr>
<tr>
<td>1.85</td>
<td>109.6</td>
<td>64.0</td>
<td>45.7</td>
<td>35.8</td>
<td>29.6</td>
<td>25.4</td>
<td>19.7</td>
<td>16.1</td>
<td>13.7</td>
<td>7.3</td>
</tr>
<tr>
<td>1.90</td>
<td>98.2</td>
<td>58.3</td>
<td>41.7</td>
<td>32.8</td>
<td>27.2</td>
<td>23.2</td>
<td>18.1</td>
<td>14.9</td>
<td>12.6</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Note: Specifications subject to change without notification. Above ratings do not include interunit connector voltage drops.