

# HIGH RATE SERIES



## UPS12-140 VALVE REGULATED LEAD ACID BATTERY FOR UPS STANDBY POWER APPLICATIONS

### FEATURES

- Flame-arresting one-way pressure-relief vent for safety and long life.
- Thermally welded case-to-cover bond to eliminate leakage.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Computer-generated grid design optimized for high power density.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Can be mounted in any orientation.
- 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.
- Computer designed lead, low calcium alloy grid for minimal gassing and ease of recycling.
- Case and cover available in both standard and flame retardant polypropylene.
- Flame retardant polypropylene case and cover compliant with UL 1778 (optional).

### 12 Volts – 140 Watts Per Cell For 15 Minutes to 1.67 Volts per Cell

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

| End Point<br>Volts/Cell | Operating Time to End Point Voltage (in minutes) |     |     |     |    |    |    |    |    |    |
|-------------------------|--|-----|-----|-----|----|----|----|----|----|----|
|                         | 5  | 10  | 15  | 20  | 30 | 40 | 45 | 50 | 60 | 90 |
| 1.67                    | 282  | 183 | 140 | 115 | 86 | 69 | 63 | 58 | 50 | 39 |

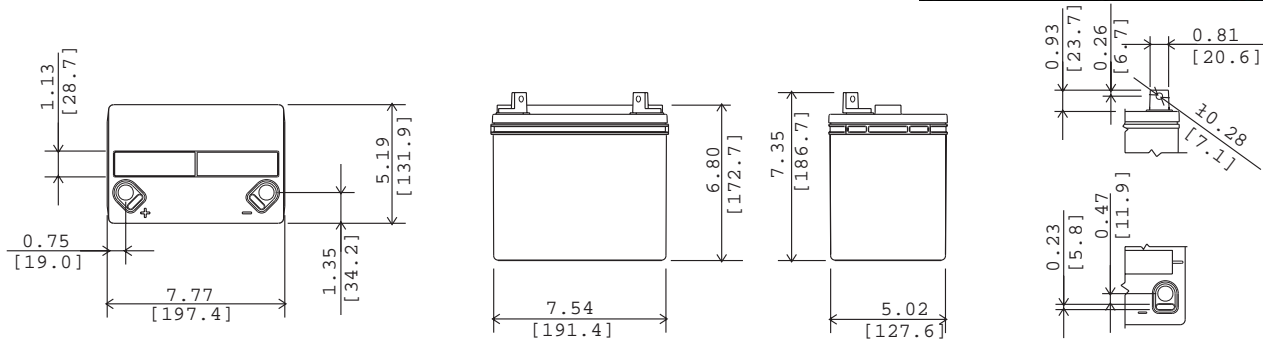
### SPECIALTY BATTERY DIVISION

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Form 41-7106 (Rev. 07/98) Printed in the U.S.A.



# UPS12-140



## UPS12-140 – Specifications

| Cells Per Unit   | Voltage Per Unit | Weight   | Electrolyte   | Maximum Discharge Current | Short Circuit Current   | Ohms Imped. 60 Hz (Ω) |
|--|------------------|--|---|---------------------------|-------------------------|-----------------------|
| 6  | 12.84            | 26.6 lbs.<br>12.0 kg   | Absorbed H <sub>2</sub> SO <sub>4</sub><br>SG = 1.300 | 500 Amps                  | 2500 Amps<br>@ 0.1 sec. | 0.0060 Ohms           |
| <b>Capacity</b>  |                  | 140 watts per cell at the 15 minute rate to 1.67 volts per cell at 77°F (25°C).<br>32 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C)<br>29 Ah @ 10 hr rate to 1.80 volts per cell @ 25°C (68°F) |   |                           |                         |                       |
| <b>Operating Temperature Range</b>                     |                  | <b>Discharge;</b> -40°F (-40°C) to +140°F (60°C), <b>Charge;</b> -4°F (-20°C) to +122°F (50°C)   |   |                           |                         |                       |
| <b>Nominal Operating Temperature Range</b>             |                  | +74°F (23°C) to +80°F (27°C)   |   |                           |                         |                       |
| <b>Float Charging Voltage</b>                          |                  | 13.5 to 13.8 VDC/unit Average at 77°F (25°C).  |   |                           |                         |                       |
| <b>Recommended Maximum Charging Current Limit</b>      |                  | C/5 amperes (6.5 amperes @ 100% depth of discharge)  |   |                           |                         |                       |
| <b>Equalization and Cycle Service Charging Voltage</b> |                  | 14.4 to 14.8 VDC/unit Average at 77°F (25°C).  |   |                           |                         |                       |
| <b>AC Ripple (Charger)</b>                             |                  | 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.<br>Maximum voltage allowed = 4% P-P<br>Maximum current allowed = 1.3 amperes (C/20)   |   |                           |                         |                       |
| <b>Self Discharge</b>                                  |                  | 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.                             |   |                           |                         |                       |
| <b>Accessories</b>                                     |                  | Inter unit connectors, racks and cabinet systems are available.  |   |                           |                         |                       |
| <b>Terminal</b>  |                  | "L" terminal with 0.28" clearance hole to accept 0.25" (6mm) bolt.   |   |                           |                         |                       |
| <b>Terminal Hardware Initial Torque</b>                |                  | 40 in.-lbs. (4.5 n-m).   |   |                           |                         |                       |
| <b>Terminal Hardware Annual Retorque</b>               |                  | 32 in.-lbs. (3.48 n-m).  |   |                           |                         |                       |

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

Run Time to 1.75 Volts per Cell (in minutes)

| End Point Volts/Cell | 5   | 10  | 15  | 20  | 30 | 40 | 45 | 50 | 60 | 90 |
|----------------------|-----|-----|-----|-----|----|----|----|----|----|----|
| 1.75                 | 265 | 177 | 137 | 112 | 84 | 68 | 62 | 57 | 49 | 39 |
| 1.70                 | 277 | 182 | 139 | 114 | 85 | 68 | 62 | 57 | 50 | 39 |
| 1.67                 | 282 | 183 | 140 | 115 | 86 | 69 | 63 | 58 | 50 | 39 |
| 1.65                 | 285 | 184 | 141 | 115 | 86 | 69 | 63 | 58 | 50 | 39 |
| 1.60                 | 289 | 186 | 142 | 116 | 86 | 69 | 63 | 58 | 50 | 39 |

**Note:** Batteries to be mounted with 0.5 in. spacing minimum and free air ventilation.

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

Operating Time to End Point Voltage (in hours)

| End Point Volts/Cell | 1    | 2    | 3    | 5    | 8    | 10   | 12   | 24   |
|----------------------|------|------|------|------|------|------|------|------|
| 1.90                 | 18.1 | 11.0 | 8.03 | 5.20 | 3.39 | 2.73 | 2.32 | 1.19 |
| 1.85                 | 20.5 | 11.8 | 8.40 | 5.40 | 3.50 | 3.16 | 2.83 | 1.24 |
| 1.80                 | 22.3 | 12.4 | 8.80 | 5.50 | 3.65 | 3.30 | 2.95 | 1.29 |
| 1.75                 | 23.6 | 13.0 | 9.10 | 5.70 | 3.75 | 3.39 | 3.03 | 1.33 |

**Note:** Specifications subject to change.