



C&D 12-440 DNT

Valve Regulated Lead Acid Battery For UPS Standby Power Applications

12V 440 Watts/Cell @ 15 Min Rate

12V 120 AH @ 20 HR Rate



APPLICATIONS

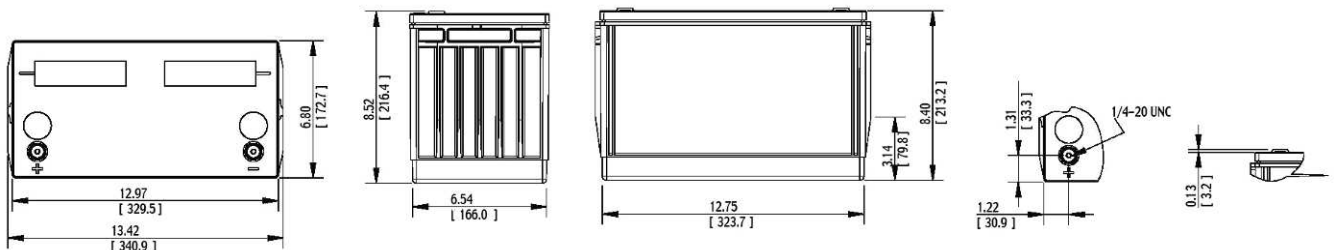
- Data Centers
- Network Operation Centers
- Industrial Process Control Facilities
- Internet Housing Sites
- Semiconductor Manufacturing
- Banks and Financial Markets
- Power Generation Plants
- Hospital and Testing Laboratories
- Emergency Response Center

FEATURES

- Design life:12 year
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Patented Long Life Alloy having the lowest calcium levels in the industry - minimizing grid growth, reducing gassing, and extending battery life
- Patented UL Recognized Flame-arresting vents in each cell for safety and long life.
- Designed with the same recombination, thermal runaway prevention, gassing and flame retardant characteristics of the Bellcore 4228
- Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- Can be operated in any orientation. Upright, side or end mounting recommended.
- Not restricted for air transport -Complies with IATA/ICAO Special Provisions A67.
- Not restricted for surface transport - Classified as non-hazardous material as related to DOT-CFR Title 49 parts171-189
- Not restricted for water transport - Classified as non-hazardous material per IMDG Amendment 27.

SPECIFICATIONS

| Cell Per Unit | Voltage | Weight | Capacity | | 1 Min Current to 1.75VPC | Short Circuit Current | Resistance |
|---------------|---------|--------|--------------------|--------------------|--------------------------|-----------------------|------------|
| 6 | 12.98V | 36 Kg | 110 Ah (C10,1.80V) | 120 Ah (C20,1.75V) | 588 Amps | 3183 Amps | 3.96 (mΩ) |



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

SPECIFICATIONS

| | |
|--|---|
| Operating Temperature Range with temperature compensation | Discharge: -40° F (-40° C) to +160° F (71° C) Charge: -10° F (-23° C) to +140° F (60° C) |
| Nominal Operating Temperature Range | +74° F (23° C) to +80° F (27° C) |
| Recommended Maximum Charging Current Limit | C/5 amperes @ 20hr rate |
| Float Charging Voltage | 13.65 ± 0.15 VDC average per 12V unit. (6.75 to 6.90 per 6V unit) |
| Maximum AC Ripple (Charger) | 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 = C/20 |
| Self Discharge | Battery can be stored up to 6 months at 77° F (25° C) before a freshening charge is required. Batteries stored at temperatures greater than 77° F (25° C) will require recharge sooner than batteries stored at lower temperatures. See C&D brochure 41-7272, Self-Discharge and Inventory Control for details. |
| Equalize charge and cycle service voltage | 14.40 to 14.80 VDC average per 12V unit @ 77° F (25° C) (7.20 to 7.40 VDC per 6V unit.) |
| Terminal: Inserted | Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt |
| Container and Cover Materials | PP (UL-94 V2) |

Constant Power Discharge Table - Watts Per Cell @ 25°C (77°F)

Operating Time to End Point Voltage

| End Voltage Per Cell | Min | | | | | Hour | | | | | | | | | | | |
|-------------------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|-----|
| | 5 | 10 | 15 | 30 | 60 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 | 24 |
| 1.85 | 570.2 | 437.1 | 345.3 | 229.5 | 149.3 | 86.9 | 61.1 | 47.5 | 39.1 | 33.4 | 29.3 | 26.1 | 23.4 | 21.2 | 17.8 | 11.0 | 9.2 |
| 1.80 | 634.9 | 484.5 | 384.5 | 245.8 | 156.5 | 89.9 | 63.3 | 49.3 | 40.5 | 34.6 | 30.2 | 26.8 | 24.0 | 21.8 | 18.4 | 11.4 | 9.6 |
| 1.78 | 652.5 | 500.8 | 395.2 | 250.1 | 158.0 | 90.1 | 63.6 | 49.4 | 40.8 | 34.9 | 30.6 | 27.0 | 24.2 | 21.9 | 18.5 | 11.4 | 9.6 |
| 1.75 | 679.7 | 520.6 | 411.7 | 256.9 | 159.5 | 90.2 | 63.8 | 49.9 | 41.2 | 35.2 | 30.9 | 27.3 | 24.4 | 22.1 | 18.7 | 11.5 | 9.7 |
| 1.73 | 689.2 | 529.6 | 417.4 | 259.0 | 161.0 | 90.5 | 64.0 | 50.0 | 41.3 | 35.3 | 31.0 | 27.3 | 24.5 | 22.2 | 18.7 | 11.5 | 9.7 |
| 1.70 | 703.7 | 537.7 | 426.2 | 262.4 | 162.5 | 90.9 | 64.2 | 50.2 | 41.4 | 35.4 | 31.1 | 27.4 | 24.6 | 22.3 | 18.8 | 11.6 | 9.7 |
| 1.67 | 718.6 | 551.7 | 435.2 | 265.7 | 164.0 | 91.3 | 64.5 | 50.4 | 41.6 | 35.5 | 31.2 | 27.5 | 24.7 | 22.3 | 18.8 | 11.6 | 9.8 |
| 1.65 | 728.7 | 561.2 | 441.3 | 268.0 | 165.3 | 91.6 | 64.7 | 50.5 | 41.7 | 35.6 | 31.2 | 27.6 | 24.7 | 22.4 | 18.9 | 11.6 | 9.8 |

Constant Current Discharge Table - Amps @ 25°C (77°F)

Operating Time to End Point Voltage

| End Voltage Per Cell | Min | | | | | Hour | | | | | | | | | | | |
|-------------------------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 5 | 10 | 15 | 30 | 60 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 | 24 |
| 1.94 | 147.3 | 147.3 | 134.4 | 95.0 | 58.5 | 32.2 | 22.6 | 17.5 | 14.4 | 12.3 | 10.8 | 9.6 | 8.6 | 7.9 | 6.77 | 4.34 | 3.69 |
| 1.90 | 212.4 | 199.5 | 160.3 | 107.9 | 67.2 | 36.7 | 25.6 | 19.8 | 16.2 | 13.9 | 12.1 | 10.7 | 9.7 | 8.8 | 7.56 | 4.82 | 4.09 |
| 1.85 | 293.7 | 234.8 | 187.0 | 120.2 | 73.8 | 40.2 | 28.0 | 21.6 | 17.7 | 15.1 | 13.2 | 11.7 | 10.5 | 9.6 | 8.20 | 5.21 | 4.42 |
| 1.83 | 316.7 | 244.4 | 195.1 | 123.6 | 75.4 | 41.0 | 28.5 | 22.0 | 18.0 | 15.4 | 13.4 | 11.9 | 10.7 | 9.7 | 8.32 | 5.28 | 4.48 |
| 1.80 | 344.5 | 260.6 | 208.0 | 129.0 | 77.7 | 42.1 | 29.2 | 22.5 | 18.4 | 15.7 | 13.7 | 12.1 | 10.9 | 9.9 | 8.50 | 5.39 | 4.56 |
| 1.78 | 354.2 | 268.5 | 213.9 | 131.1 | 78.5 | 42.5 | 29.5 | 22.7 | 18.6 | 15.8 | 13.8 | 12.2 | 11.0 | 10.0 | 8.55 | 5.42 | 4.59 |
| 1.75 | 361.0 | 275.5 | 218.0 | 132.8 | 78.7 | 42.7 | 29.6 | 23.0 | 18.8 | 16.0 | 13.9 | 12.4 | 11.1 | 10.1 | 8.64 | 5.46 | 4.63 |
| 1.70 | 374.2 | 284.9 | 226.0 | 137.0 | 78.9 | 42.9 | 29.8 | 23.0 | 18.9 | 16.1 | 14.0 | 12.4 | 11.2 | 10.2 | 8.74 | 5.56 | 4.72 |

* All data shall be changed without prior notice, C&D reserves the right to explain and update the information contained hereinto.