



# C&D 12-320 DNT

## Valve Regulated Lead Acid Battery For UPS Standby Power Applications

**12V 320 Watts/Cell @ 15 Min Rate**

**12V 84 AH @ 20 HR Rate**



### APPLICATIONS

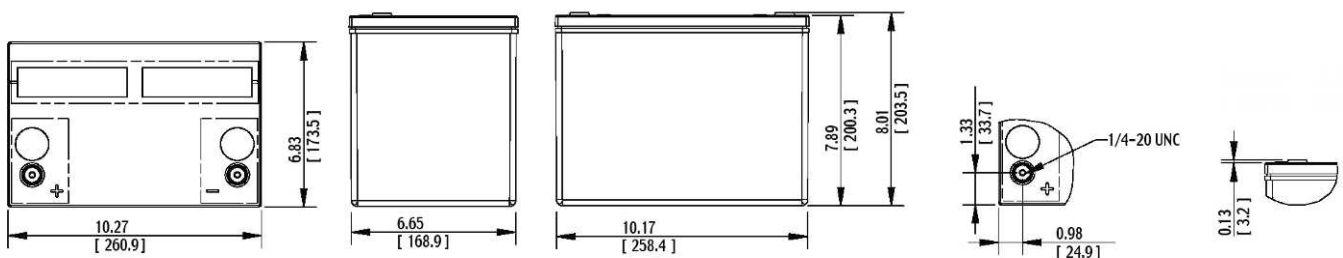
- Data Centers
- Network Operation Centers
- Industrial Process Control Facilities
- Internet Housing Sites
- Semiconductor Manufacturing
- Banks and Financial Markets
- Power Generation Plants
- Hospital and Testing Laboratories
- Emergency Response Center

### 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	27 Kg	79 Ah (C10,1.80V)	84 Ah (C20,1.75V)	500 Amps	2381 Amps	5.29 (mΩ)



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

## SPECIFICATIONS

<b>Operating Temperature Range with temperature compensation</b>	Discharge: -40° F (-40° C) to +160° F (71° C) Charge: -10° F (-23° C) to +140° F (60° C)
<b>Nominal Operating Temperature Range</b>	+74° F (23° C) to +80° F (27° C)
<b>Recommended Maximum Charging Current Limit</b>	C/5 amperes @ 20hr rate
<b>Float Charging Voltage</b>	13.65 ± 0.15 VDC average per 12V unit. (6.75 to 6.90 per 6V unit)
<b>Maximum AC Ripple (Charger)</b>	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
<b>Self Discharge</b>	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.
<b>Equalize charge and cycle service voltage</b>	14.40 to 14.80 VDC average per 12V unit @ 77° F (25° C) (7.20 to 7.40 VDC per 6V unit.)
<b>Terminal: Inserted</b>	Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt
<b>Container and Cover Materials</b>	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	457.7	346.1	277.2	176.3	110.1	63.9	44.2	34.1	27.8	23.6	20.5	18.1	16.3	14.8	12.5	7.8	6.5
1.80	502.0	377.5	303.9	187.9	115.3	66.4	45.9	35.3	28.8	24.4	21.2	18.7	16.8	15.2	12.9	8.0	6.7
1.78	513.3	385.7	307.7	190.7	116.3	66.8	46.2	35.5	29.0	24.5	21.3	18.8	16.9	15.3	12.9	8.0	6.8
1.75	525.6	394.4	313.5	193.3	117.8	67.6	46.7	35.9	29.2	24.7	21.5	19.0	17.0	15.5	13.1	8.1	6.8
1.73	528.6	398.8	317.5	196.2	117.9	67.7	46.8	36.0	29.3	24.8	21.5	19.0	17.1	15.5	13.1	8.1	6.8
1.70	534.7	405.5	320.8	197.9	118.1	68.0	47.0	36.1	29.4	24.9	21.6	19.1	17.1	15.5	13.1	8.1	6.9
1.67	543.6	412.4	325.7	199.7	118.3	68.3	47.1	36.2	29.5	25.0	21.7	19.2	17.2	15.6	13.2	8.2	6.9
1.65	546.8	417.0	328.6	202.1	118.7	68.5	47.3	36.3	29.6	25.0	21.7	19.2	17.2	15.6	13.2	8.2	6.9

### 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	143.8	143.8	116.6	76.6	46.5	26.1	18.4	14.4	11.8	10.1	8.7	7.7	6.9	6.3	5.37	3.37	2.84
1.90	198.2	168.7	133.2	85.3	52.4	29.2	20.5	16.0	13.2	11.3	9.7	8.6	7.7	7.0	5.97	3.73	3.14
1.85	246.3	183.0	148.5	93.9	57.0	31.6	22.2	17.3	14.3	12.2	10.5	9.3	8.3	7.5	6.44	4.01	3.38
1.83	254.0	186.9	153.2	96.2	58.1	32.1	22.5	17.6	14.5	12.4	10.7	9.4	8.5	7.7	6.53	4.06	3.42
1.80	265.8	194.8	160.3	99.8	59.7	32.9	23.1	18.0	14.9	12.7	11.0	9.7	8.6	7.8	6.67	4.14	3.48
1.78	270.8	197.4	163.3	101.2	60.2	33.2	23.2	18.1	15.0	12.7	11.0	9.7	8.7	7.9	6.71	4.16	3.50
1.75	275.5	201.2	166.2	103.4	61.0	33.6	23.5	18.3	15.2	12.9	11.1	9.8	8.8	7.9	6.76	4.20	3.53
1.70	280.8	205.6	169.4	104.9	61.5	33.8	23.6	18.4	15.2	12.9	11.2	9.9	8.8	8.0	6.80	4.22	3.55

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