

## DATASHEET

## DCC 320-6

6V 320AH



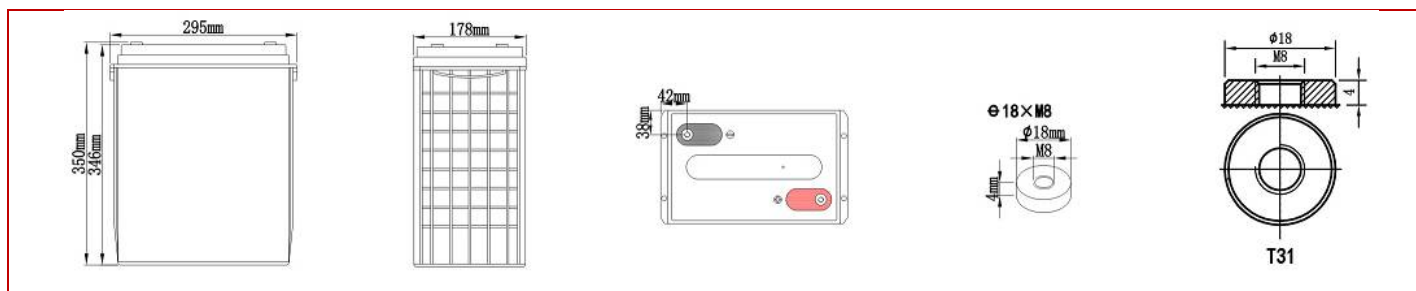
### LEAD CARBON BATTERY

EUROBAT 2022 CLASSIFICATION: 15 Years – Very Long Life

Designed in accordance with IEC 60896-21/22

## SPECIFICATIONS

| Nominal Voltage | Nominal Capacity | Dimension<br>± 3mm |       |       |       | Weight | Short-Circuit Current | Internal Resistance | Standard Terminal | Container Material |
|-----------------|------------------|--------------------|-------|-------|-------|--------|-----------------------|---------------------|-------------------|--------------------|
|                 |                  | L                  | W     | H     | TH    |        |                       |                     |                   |                    |
| 6V              | 320AH            | 295mm              | 178mm | 346mm | 350mm | 46.5kg | -                     | ≈1.49 mΩ            | M8                | ABS<br>UL94-V0     |



## CONSTANT-VOLTAGE CHARGE

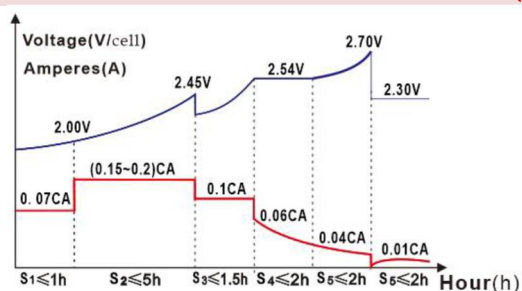
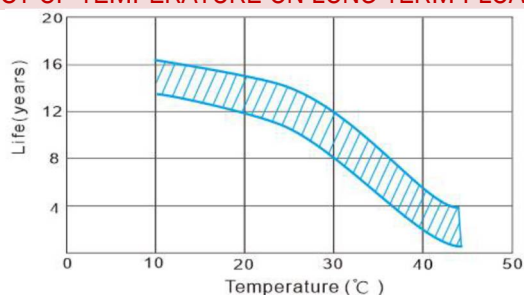
| Rated Capacity                   |         |
|----------------------------------|---------|
| 20 hour rate (15.0A)             | 320.0AH |
| 10 hour rate (30.0A)             | 300.0AH |
| 5 hour rate (51.0A)              | 255.0AH |
| 3 hour rate (75.0A)              | 225.0AH |
| 1 hour rate (165.0A)             | 169.0AH |
| Capacity affected by temperature |         |
| 40°C (104°F)                     | 103%    |
| 25°C (77°F)                      | 100%    |
| 0°C (32°F)                       | 86%     |

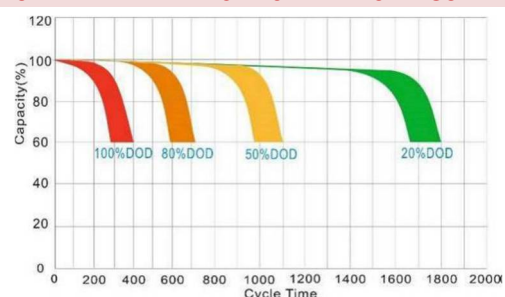
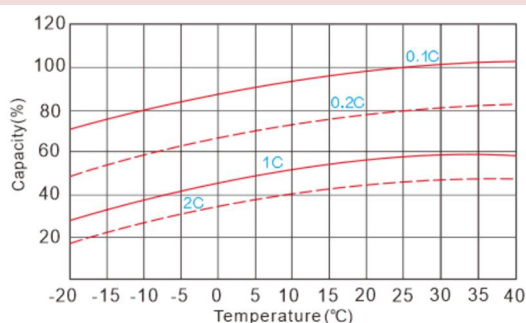
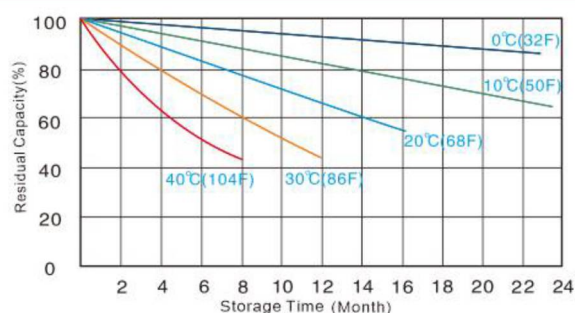
| Cycle Application                                                                                                                                                                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. Limit initial current less than 60A.                                                                                                                                                                                         |  |
| 2. Charge until battery voltage (under charge) reaches 7.30V to 7.40V at 25°C(77°F).                                                                                                                                            |  |
| 3. Hold at 14.6V to 14.8V until current drop to under 1.8A for at least 3 hours.                                                                                                                                                |  |
| 4. Temperature compensation coefficient of charging voltage is -15mV/°C.                                                                                                                                                        |  |
| Standby Service                                                                                                                                                                                                                 |  |
| 1. Hold battery across constant voltage source of 6.80 to 6.90 volts with current limit 60A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status. |  |
| 2. Temperature compensation coefficient of charging voltage is -9mV/°C.                                                                                                                                                         |  |

## Wide Operating Temp. Range

-20°C ~ 50°C

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation.

**CHARGE CHARACTERISTIC CURVE FOR CYCLE USE(IIUU)**

**EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE**

**DISCHARGE CHARACTERISTIC (25°C/77°F)**

**CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE**

**CAPACITY CURVE AT DIFFERENT TEMPERATURE**

**SELF DISCHARGE CHARACTERISTICS**


| End Voltage (V) | Minute (M) |    |    |    | Hour (H) |     |   |   |   |   |    |    |
|-----------------|------------|----|----|----|----------|-----|---|---|---|---|----|----|
|                 | 10         | 15 | 30 | 45 | 1        | 1.5 | 2 | 3 | 5 | 8 | 10 | 20 |

**Constant Current Discharge Data Sheet (@25°C) Unit: A**

|       |     |     |     |     |     |     |     |    |    |      |      |      |
|-------|-----|-----|-----|-----|-----|-----|-----|----|----|------|------|------|
| 4.80V | 621 | 504 | 283 | 219 | 169 | 135 | 114 | 77 | 54 | 36.2 | 30.8 | 15.7 |
| 4.95V | 598 | 486 | 272 | 210 | 167 | 131 | 111 | 76 | 53 | 35.6 | 30.6 | 15.6 |
| 5.10V | 572 | 465 | 259 | 201 | 164 | 128 | 109 | 75 | 52 | 35.1 | 30.4 | 15.5 |
| 5.25V | 538 | 437 | 246 | 191 | 159 | 124 | 105 | 71 | 51 | 34.3 | 30.2 | 15.4 |
| 5.40V | 508 | 413 | 231 | 178 | 154 | 120 | 101 | 69 | 49 | 33.6 | 30.0 | 15.3 |

**Constant Power Discharge Data Sheet (@25°C) Unit: W**

|       |      |      |      |      |     |     |     |     |     |     |     |    |
|-------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|----|
| 4.80V | 3332 | 2709 | 1635 | 1213 | 936 | 765 | 596 | 418 | 306 | 218 | 176 | 95 |
| 4.95V | 3203 | 2604 | 1575 | 1164 | 904 | 752 | 587 | 414 | 302 | 214 | 174 | 93 |
| 5.10V | 3111 | 2529 | 1515 | 1116 | 896 | 733 | 578 | 407 | 294 | 210 | 173 | 91 |
| 5.25V | 2940 | 2391 | 1431 | 1058 | 879 | 714 | 561 | 398 | 291 | 206 | 171 | 89 |
| 5.40V | 2775 | 2256 | 1356 | 1001 | 855 | 699 | 555 | 390 | 279 | 203 | 169 | 87 |