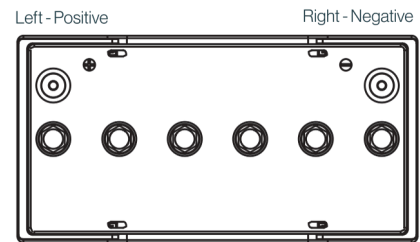
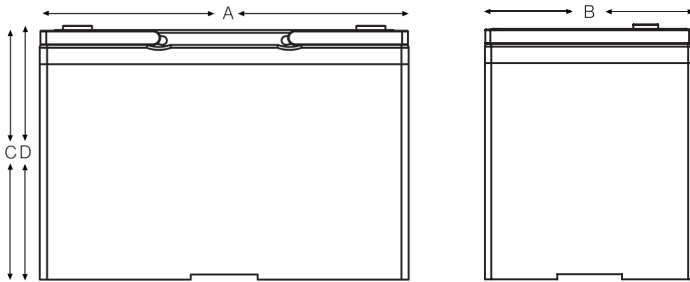


# CNG12123

## CARBON NANO GEL BLOC



### Electrical Specifications

|                         |                                        |
|-------------------------|----------------------------------------|
| Voltage                 | 12V                                    |
| M.R.C. 25 Amps          | 230                                    |
| 80% DOD Voltage Cutoff  | 11.2V                                  |
| Low Voltage Cutoff      | 10.8V                                  |
| Self Discharge          | Less than 3% per month (20°C/68°F)     |
| Charge Temperature      | Min: -10°C (14°F) / Max: 50°C (122°F)  |
| Discharge Temperature** | Min: -40°C (-40°F) / Max: 50°C (122°F) |
| Storage                 | Min: -20°C (-4°F) / Max: 60°C (140°F)  |

| Cell Type Ue (100%) / VPC Ref Temp | C5<br>1.70<br>25°C | C10<br>1.75<br>25°C | C20<br>1.75<br>25°C | C100<br>1.80<br>25°C |
|------------------------------------|--------------------|---------------------|---------------------|----------------------|
| EQ-5SHP                            | 108                | 116                 | 123                 | 130                  |

\*\* CAUTION: Depths of discharge, operating voltages and currents, when designing systems for use at maximum temperatures, will vary.

### Mechanical Specifications

| Industry Reference | BCI 12 / 5SHP |        |
|--------------------|---------------|--------|
| Length (A)         | 13 in         | 329 mm |
| Width (B)          | 6.7 in        | 170 mm |
| Height (C)         | 10.2 in       | 258 mm |
| Weight             | 93 lbs        | 42 kgs |
| Terminal (Opt'l)*  | M8            |        |
| Cell(s)            | 6             |        |
| Electrolyte        | Gel           |        |
| Terminal Torque Nm | 8             |        |

NOTE: There is a tolerance of +/-2%.

### Terminal Options Available:

M8  
A-Pole  
Dual  
Stud

ET/DATAQUASAR GEL EQ 5SHP V2 0822

### Features

- Maintenance free - no topping up required
- Ultra energy efficient due to low resistance
- Reduced operating temperatures for increased cycle life (>1500 cycles) and battery lifetime
- Cost savings due to increased efficiency
- Up to 2 x faster recharge
- Increased design life from 12 to 15 years
- Allows for opportunity charging to give you those extra running times when required
- Suitable for extreme temperature variants

### Applications: all motive, leisure & solar:

- Electric vehicles, including cleaning machines
- Wheelchairs
- Electric Working Platforms
- UPS Systems
- Traffic Systems
- Telecommunications & Emergency Lighting
- Caravans / Motorhomes RV's & Maritime
- Solar & Renewable Energy & Home Invertor

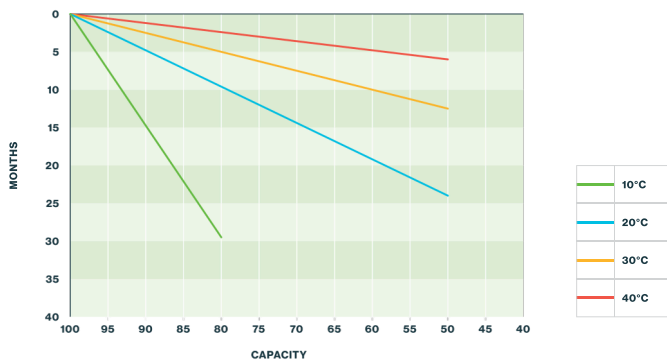
Compliant with EN60254-1&2 and IEC254-1/2

## Charging profile

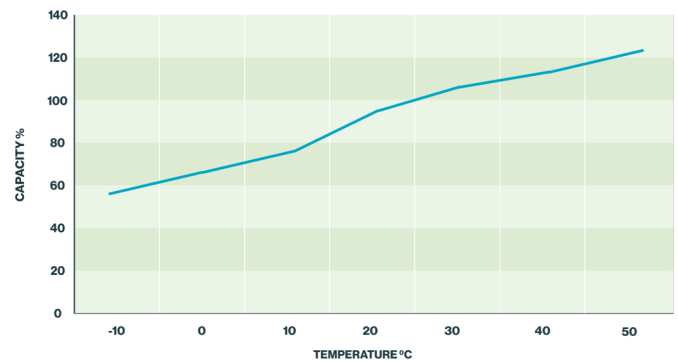
**IU Charging** I = min. 12% C<sub>5</sub> max. 30% C<sub>5</sub>  
U = 2.4 V per cell

**IUI Charging** I1 = min. 12% C<sub>5</sub> max. 40% C<sub>5</sub>  
U = 2.35 V per cell  
I2 = 1.5 % C<sub>5</sub> for max. 4 hours

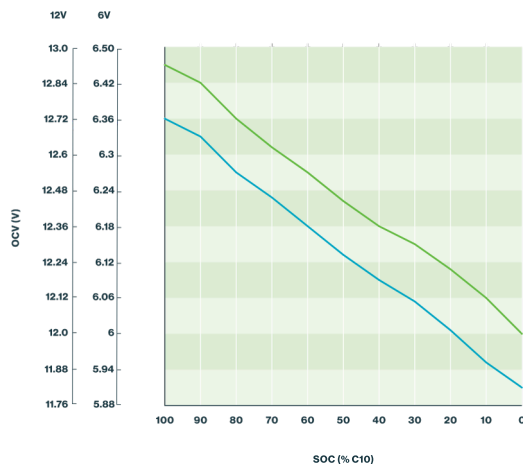
### Self discharge at different temperatures



### Capacity vs. temperature

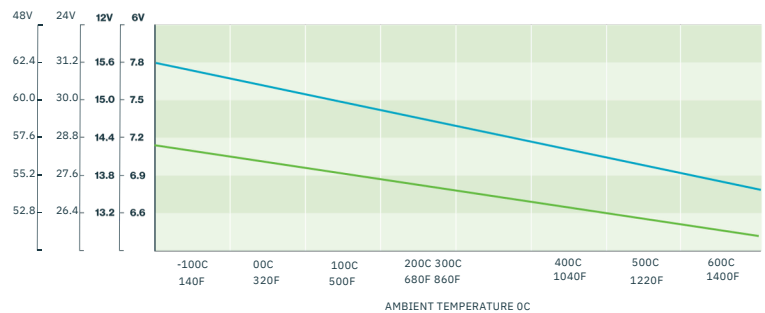


### Storage: Determine the state of charge



|   |         |
|---|---------|
| — | OCV max |
| — | OCV min |

### Relation between charging, voltage and temperature



|   |             |
|---|-------------|
| — | STANDBY USE |
| — | CYCLE USE   |