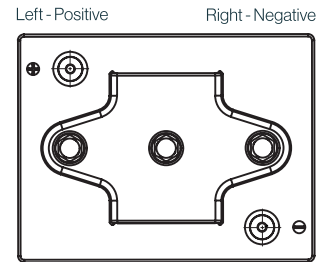
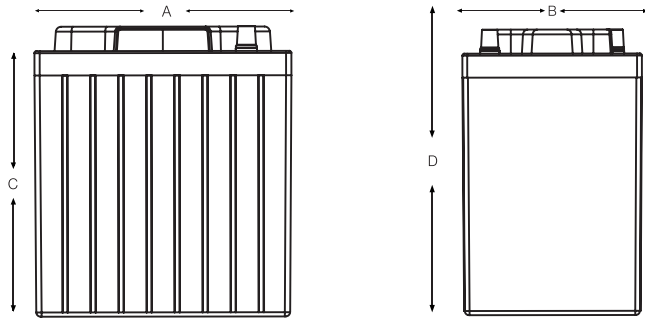


# G06-06-180-3

## Semi-Traction Bloc Battery



### Electrical Specifications

|                                |  |
|--------------------------------|--|
| <b>Voltage</b>                 | 6V                                     |
| <b>80% DOD Voltage Cutoff</b>  | 5.6V                                   |
| <b>Self Discharge</b>          | Less than 3% per month (20°C/68°F)     |
| <b>Charge Temperature</b>      | Min: -10°C (14°F) / Max: 50°C (122°F)  |
| <b>Discharge Temperature**</b> | Min: -40°C (-40°F) / Max: 50°C (122°F) |
| <b>Storage</b>                 | Min: -20°C (-4°F) / Max: 60°C (140°F)  |

| Amp Hours (AH) |       |      |      |      |      |
|----------------|-------|------|------|------|------|
| 20 HR          | 10 HR | 5 HR | 3 HR | 2 HR | 1 HR |
| 220            | 198   | 180  | 166  | 156  | 126  |

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

### Mechanical Specifications

| Industry Reference        | -       |        |
|---------------------------|---------|--------|
| <b>Length (A)</b>         | 9.5 in  | 242 mm |
| <b>Width (B)</b>          | 7.3 in  | 186 mm |
| <b>Height (C)</b>         | 9.9 in  | 251 mm |
| <b>Height (D)*</b>        | 10.8 in | 274 mm |
| <b>Weight</b>             | 71 lb   | 32 kg  |
| <b>Terminal (Opt'l)</b>   | A-POLE  |        |
| <b>Cell(s)</b>            | 3       |        |
| <b>Electrolyte</b>        | Gel     |        |
| <b>Terminal Torque Nm</b> | 8       |        |

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

\*Including A-Terminal

### Features

Maintenance-free bloc batteries in Gel technology (no topping up during lifetime)

Good high current performance for extreme operating conditions

High-class patented safety valve

700 cycles (DIN EN 60254-1) (IEC 254-1)

Valve-regulated lead-acid battery

Recyclable

Long cycle life

Low self discharge rate allows for up to 2 years shelf life

Classified as a non-spillable battery is not restricted for transportation by:

- Air (IATA/ICAO provision 67)
- Ground (STB, DOT-CFR-HMR49)
- Water (IMDG amendment 27)

### Applications

Electric vehicles

Wheelchairs

Cleaning machines

Electric working platforms

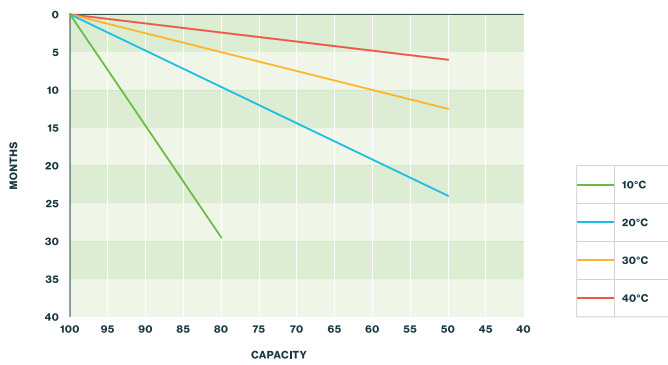
Universal for multiple cyclic applications

## Charging profile

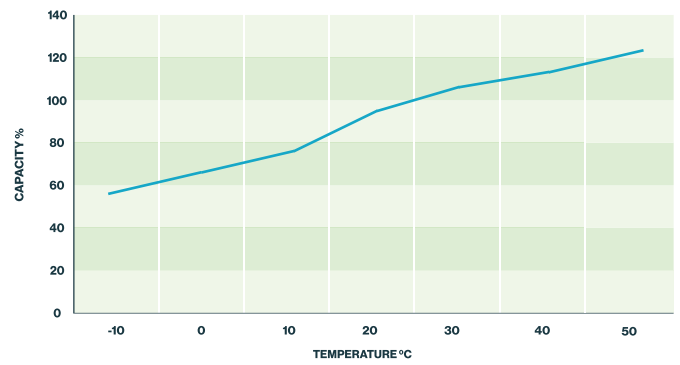
**IU Charging** I = min. 12% C<sub>5</sub> max. 18% C<sub>5</sub>  
U = 2.4 V per cell

**IUI Charging** I<sub>1</sub> = min. 12% C<sub>5</sub> max. 18% C<sub>5</sub>  
U = 2.35 V per cell  
I<sub>2</sub> = 1.5% C<sub>5</sub> for max. 4 hours

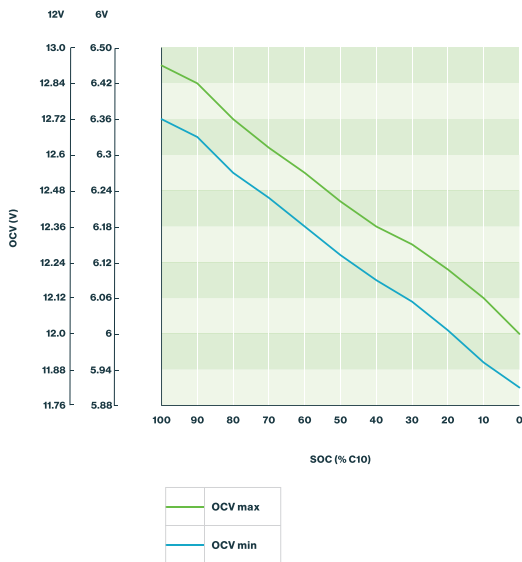
### Self discharge at different temperatures



### Capacity vs. temperature



### Storage: Determine the state of charge



### Relation between charging, voltage and temperature

