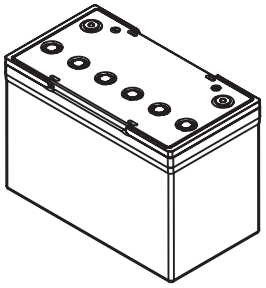
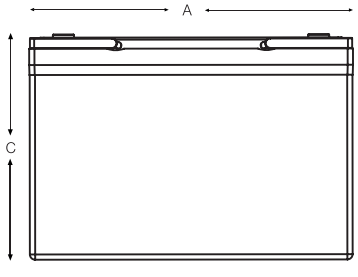
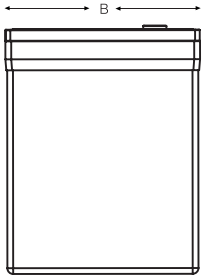
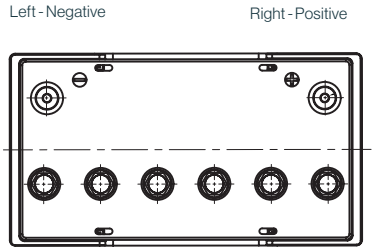
G06-12-078 (BCI27)

Semi-Traction Bloc Battery









Electrical Specifications

C5 Capacity	78Ah
Voltage	12V
80% DOD Voltage Cutoff	11.2V
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	**C100 1.80 25°C**	**C20 1.75 25°C**	**C10 1.75 25°C**	**C5 1.70 25°C**
G06 12 078 (BCI27)	92	87	81	78

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

Mechanical Specifications

Industry Reference	BCI 27	
Length (A)	12.1 in	307 mm
Width (B)	6.6 in	168 mm
Height (C)	8.3 in	211 mm
Weight	65 lbs	29.5 kgs
Terminal (Opt'l)	M8	
Cell(s)	3	
Electrolyte	Gel	
Terminal Torque Nm	8	

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

Terminal Options Available:

M8
A-Pole
Dual
Stud

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

- Power Pallet Jacks
- Electric Vehicles
- Cleaning machines
- Electric working platforms
- Universal for multiple cyclic applications

Compliant with EN60254-1&2 & IEC254-1/2, ISO 7176-25 & SAE J 1495

Charging profile

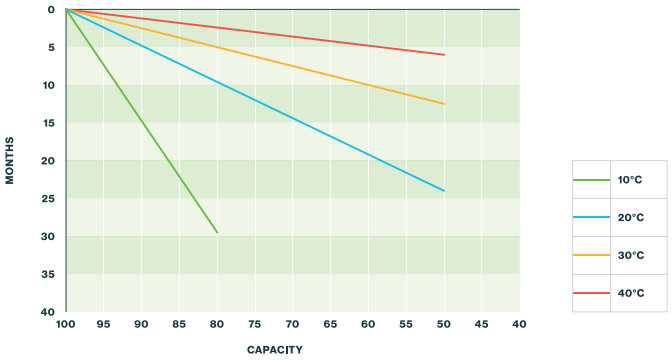
IU Charging

I = min. 12% C_5 max. 18% C_5
U = 2.4 V per cell

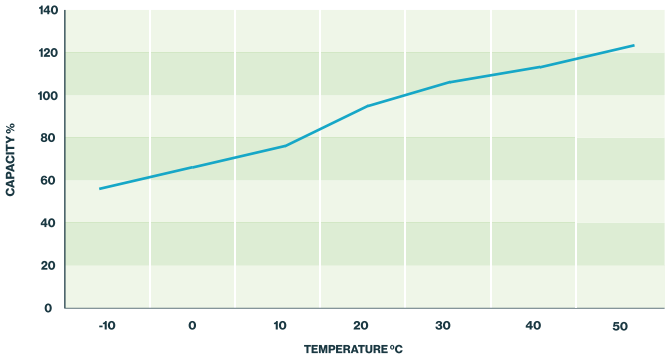
IUI Charging

I_1 = min. 12% C_5 max. 18% C_5
U = 2.35 V per cell
I_2 = 1.5 % C_5 for max. 4 hours

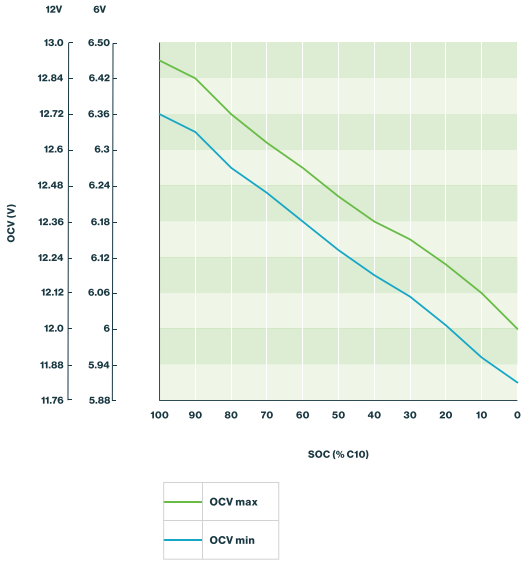
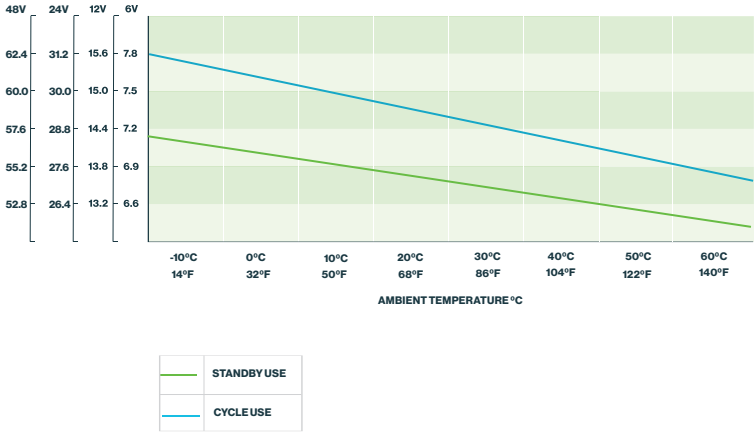
Self discharge at different temperatures



Capacity vs. temperature



Storage: Determine the state of charge



Relation between charging, voltage and temperature