# TECHNICAL DATA SHEET

# **8VGC**

# **Applications**







CYCLIC

SOLAR

## **AVAILABLE TERMINAL STYLES:**













### PHYSICAL SPECIFICATIONS

BCI Group	Model Description	Nominal Voltage	Length		Width		Container Height		Terminal Height		Weight		Cover & Container Material	Case to Cover Seal Method
Size			in	mm	in	mm	in	mm	in	mm	lbs	kgs	Container material	Seal method
GC8	8VGC	8	10.31	262	7.06	179	9.72	247	10.82	275	64	29.0	Polypropylene Plastic	Heat Seal

### **ELECTRICAL SPECIFICATIONS**

Ampere Hour Capacity (Ah)								Discharg	e Capacity	Minutes	KWH (kWh)	Internal Resistance	
100 Hr	72 Hr	48 Hr	20 Hr	10 Hr	5 Hr	2 Hr	100A	75A	50A	25A	10A	100 Hr	80°F/27°C
199	194	180	165	140	140	108	57	82	117	304	900	1.592	6.6mΩ

## **CHARGING INSTRUCTIONS**

We specifie the following standard battery charge profile for the 8VGC deep cycle battery when used in an electric vehicle service: Phase 1: Constant Current (I1) | 1 = highest amperage available < 30 amps

Phase 1: Constant Current (I1)I1 = minimum amperage available > 12 amps

Normal transition to Phase 2 at 2.37 Volts Per Cell. Safety transition to END OF CHARGE of dV/dt < 0V/1 hr, dt = 1 hr. (NEGATIVE SLOPE).

Timeout for Phase 1 = 10 hours.

Phase 2: Constant Voltage (U2)U2 = 2.37 VPC

Normal Transition to Phase 3 at I2 = 4.5 amps or approximate. Safety transition to END OF CHARGE of I dI/dt I < 0.4 amp / 1 hr, dt = 1 hr.

Phase 3: Constant Current (I3) I3 = 4.5 amps or approximate. Normal transition to END OF CHARGE at 115 - 118% of AH returned.

Timeout for charging phases 1 - 3 at 16 hours. Temperature compensation coefficient = +/- 3 mV / °C. Recommended Equalization Charge: Every seven (7) days. 4 additional hours at normal finish rate of 4.5 amps for 4 hours. Safety transition to END OF CHARGE at maximum voltage of 2.7