

PRODUCT LINE SHEET



BATTERY: VRLA GEL
DIMENSIONS: inches (mm)
COLOR: Maroon (case) Grey (cover)
MATERIAL: Polypropylene

Trojan’s deep-cycle gel batteries are sealed, maintenance-free batteries that deliver superior power in demanding renewable energy applications. Engineered for rugged durability, outstanding performance and long battery life, Trojan’s deep-cycle gel batteries feature a number of important design characteristics that provide significant advantages over competing gel products. The gelled electrolyte is a proprietary formulation that delivers consistent performance and dramatically extends the battery’s cycle life. Lead alloy grids provide longer shelf life and superior corrosion resistance as well as deliver more concentrated energy to the terminals. Its premium grade, double-insulated separators allow maximum charge flow between the plates for optimum performance.

PRODUCT SPECIFICATION

BCI GROUP SIZE	TYPE	CAPACITY ^A Amp-Hours (AH)								ENERGY (kWh)	VOLTAGE	TERMINAL Type [*]	DIMENSIONS ^B Inches (mm)			WEIGHT lbs. (kg)
		2-Hr Rate	5-Hr Rate	10-Hr Rate	20-Hr Rate	48-Hr Rate	72-Hr Rate	100-Hr Rate	100-Hr Rate				Length	Width	Height ^C	
DEEP-CYCLE GEL BATTERIES																
24	24-GEL	52	66	72	77	82	84	85	1.02	12 VOLT	7	10-7/8 (276)	6-3/4 (171)	9-5/16 (236)	52 (24)	
27	27-GEL	60	76	84	91	97	99	100	1.20	12 VOLT	7	12-3/4 (324)	6-3/4 (171)	9-1/4 (234)	63 (29)	
31	31-GEL	66	85	94	102	105	107	108	1.30	12 VOLT	7	12-15/16 (329)	6-3/4 (171)	9-5/8 (245)	70 (32)	
DIN	55HP-GEL	81	110	115	125	133	136	137	1.64	12 VOLT	5	13-9/16 (345)	6-3/4 (171)	11-1/8 (283)	85 (39)	
GC2	6V-GEL	123	154	167	189	192	196	198	1.19	6 VOLT	7	10-1/4 (260)	7-1/8 (181)	10-7/8 (276)	68 (31)	
DIN	TE35-GEL	137	180	192	210	216	218	220	1.32	6 VOLT	5	9-5/8 (244)	7-1/2 (190)	10-7/8 (276)	69 (31)	
8D	8D-GEL	146	188	207	225	240	255	265	3.18	12 VOLT	5	21-1/16 (534)	11 (279)	10-13/16 (233)	157 (71)	

A. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 77°F (25°C) and maintain a voltage above 1.75 V/cell. Capacities are based on nominal performance.
 B. Dimensions are based on nominal size. Dimensions may vary depending on type of handle or terminal.
 C. Dimensions taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.
 * Additional terminals available
 Trojan’s battery testing procedures adhere to both BCI and IEC test standards.

CHARGING INSTRUCTIONS

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)				
System Voltage	12V	24V	36V	48V
Absorption	14.1 – 14.4	28.2 – 28.8	42.3 – 43.2	56.4 – 57.6
Float	13.5	27	40.5	54

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.

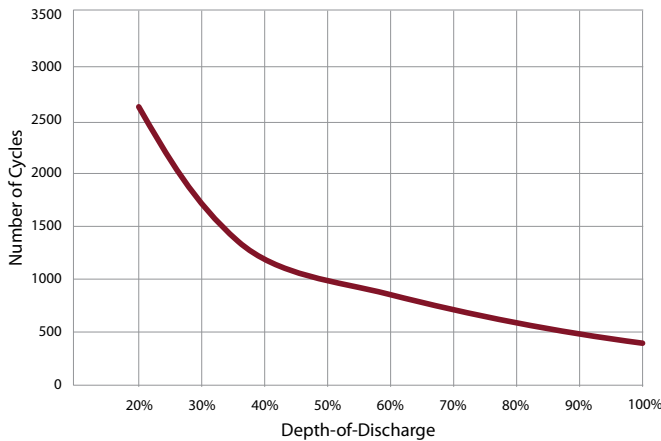
CHARGING TEMPERATURE COMPENSATION

.028 VPC for every 10°F (5.55°C) above or below 77°F (25°C) (add .028 VPC for every 10°F (5.55°C) below 77°F and subtract .028 VPC for every 10°C above 77°F).

EXPECTED LIFE VS. TEMPERATURE

Chemical reactions internal to the battery are driven by voltage and temperature. The higher the battery temperature, the faster chemical reactions will occur. While higher temperatures can provide improved discharge performance the increased rate of chemical reactions will result in a corresponding loss of battery life. As a rule of thumb, for every 10°C increase in temperature the reaction rate doubles. Thus, a month of operation at 35°C is equivalent in battery life to two months at 25°C. Heat is an enemy of all lead acid batteries, FLA, AGM and gel alike and even small increases in temperature will have a major influence on battery life.

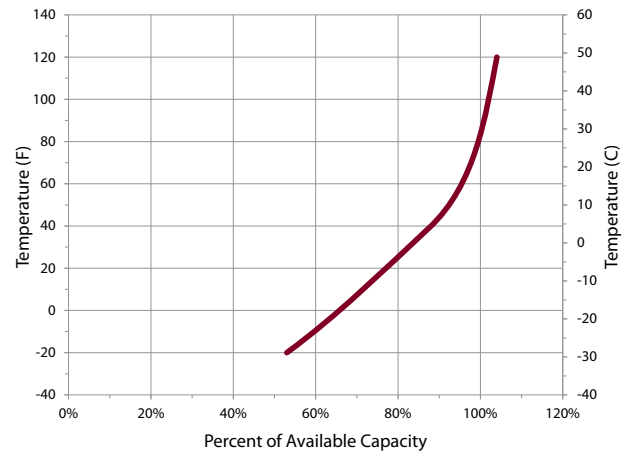
TYPICAL CYCLE LIFE IN A STATIONARY APPLICATION





OPERATIONAL DATA

OPERATING TEMPERATURE	SELF DISCHARGE
-4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	Less than 3% per month depending on storage temperature conditions.

CAPACITY VS. TEMPERATURE



TERMINAL CONFIGURATIONS

5 LT L-Terminal	7 UT Universal Terminal
 <p>Terminal Height Inches (mm) 1-3/4 (43) Torque Values in-lb (Nm) 100 – 120 (11 – 14) Through-hole Diameter (mm) 3/8 (10)</p>	 <p>Terminal Height Inches (mm) 1-1/8 (28) Torque Values in-lb (Nm) 95 – 105 (11 – 12) Through-hole Diameter (mm) 5/8 (9.5)</p>



Trojan batteries are available worldwide.

We offer outstanding technical support, provided by full-time application engineers.

call 800.423.6569 or + 1.562.236.3000 or visit www.trojanbatteryRE.com

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