

**MODEL:** 31-GEL  
**VOLTAGE:** 12  
**DIMENSIONS:** Inches (mm)  
**BATTERY:** VRLA GEL  
**COLOR:** Maroon (case) Grey (cover)  
**MATERIAL:** Polypropylene  
**WATERING SYSTEM:** N/A



## PRODUCT SPECIFICATIONS

BCI GROUP SIZE	TYPE	CAPACITY <sup>A</sup> Minutes	CAPACITY <sup>B</sup> Amp-Hours (AH)				ENERGY (kWh)	TERMINAL Type <sup>E</sup>	DIMENSIONS <sup>C</sup> Inches (mm)			WEIGHT lbs. (kg)
		@25 Amps	5-Hr Rate	10-Hr Rate	20-Hr Rate	100-Hr Rate	100-Hr Rate		Length	Width	Height <sup>D</sup>	
12 VOLT DEEP CYCLE GEL BATTERY												
31	31-GEL	200	85	94	102	108	1.30	7	12.94 (329)	6.82 (173)	9.64 (245)	70 (32)

- A. The number of minutes a battery can deliver when discharged at a constant rate at 80°F (27°C) and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.  
 B. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 77°F (25°C) for Gel Lines and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.  
 C. Dimensions are based on nominal size. Dimensions may vary depending on type of handle or terminal.  
 D. Dimensions taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.  
 E. Terminal images are representative only.  
 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 Charge	14.1 – 14.4	28.2 – 28.8	42.3 – 43.2	56.4 – 57.6
Float Charge	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).

## OPERATIONAL DATA

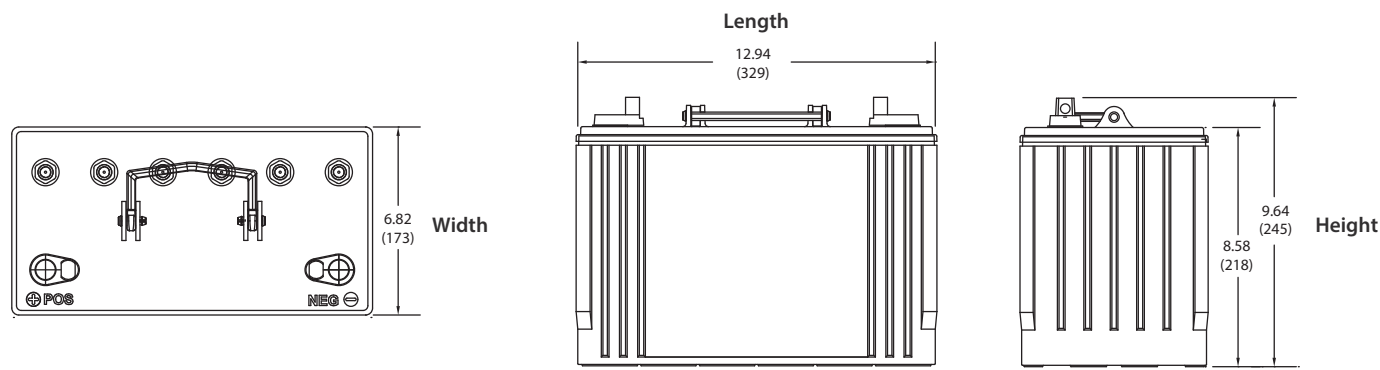
Operating Temperature	Self Discharge
-4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	Less than 3% per month depending on storage temperature conditions.

Batteries may be utilized at higher temperatures with the understanding that battery life will be reduced by 50% for every 10° C (18° F) increase in operating temperatures over 68° F (20° C).

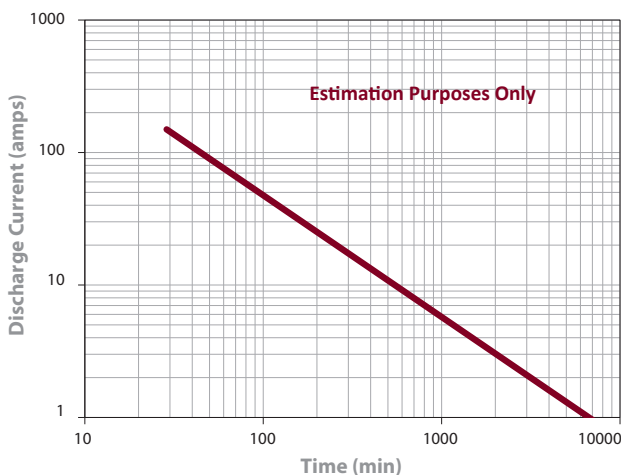
## TERMINAL CONFIGURATIONS

7	UT	Universal Terminal
		Terminal Height Inches (mm)
		1.10 (28)
		Torque Values in-lb (Nm)
		95–105 (11 – 12)
		Bolt
		5/16"

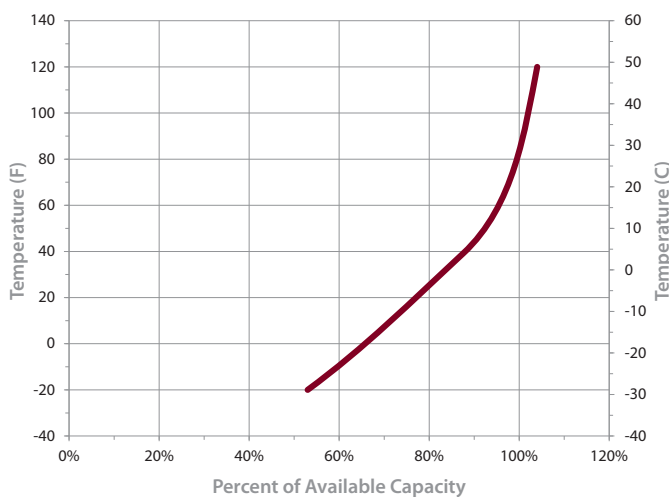
BATTERY DIMENSIONS (shown with UT)



TROJAN 31-GEL PERFORMANCE



PERCENT CAPACITY VS. TEMPERATURE



TROJAN BATTERY  
COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV  
= ISO 9001:2008 =



Trojan batteries are available worldwide through Trojan's Master Distributor Network. We offer outstanding technical support, provided by full-time application engineers.