

**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 @25 Amps	CAPACITY <sup>B</sup> Amp-Hours (AH)				ENERGY (kWh) 100-Hr Rate	TERMINAL Type <sup>E</sup>	DIMENSIONS <sup>C</sup> Inches (mm)			WEIGHT lbs. (kg)
			5-Hr Rate	10-Hr Rate	20-Hr Rate	100-Hr Rate			Length	Width	Height <sup>D</sup>	
<b>12 VOLT DEEP CYCLE GEL BATTERY</b>												
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

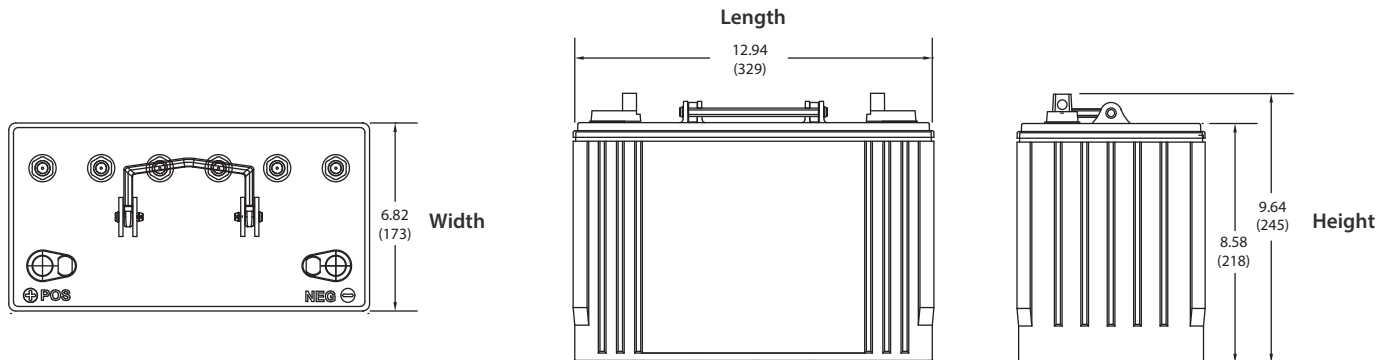
Operating Temperature	Self Discharge
-4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	Less than 3% per month depending on storage temperature conditions.

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).

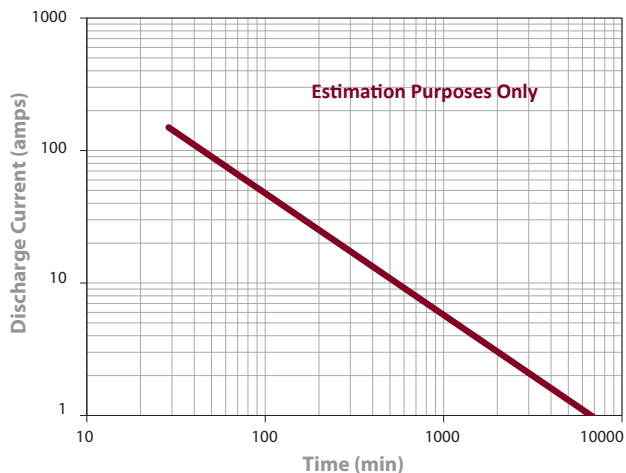
## TERMINAL CONFIGURATIONS

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

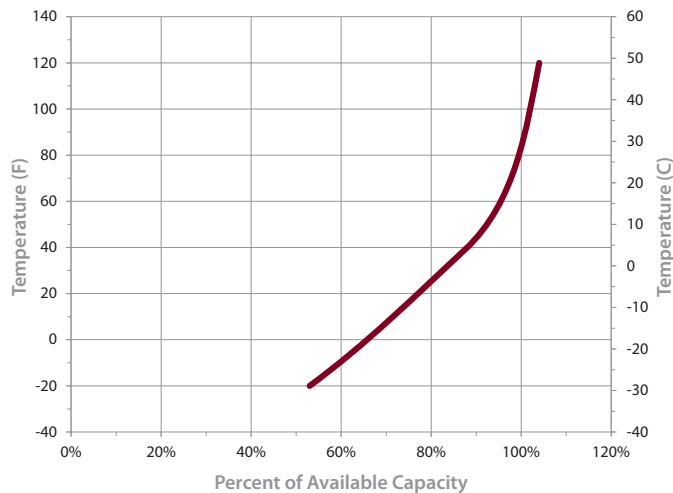
## BATTERY DIMENSIONS (shown with UT)



## 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.

**For a Trojan Master Distributor near you, call 800.423.6569 or + 1.562.236.3000 or visit [www.trojanbattery.com](http://www.trojanbattery.com)**

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