

**MODEL:** 31-GEL  
**DIMENSIONS:** inches (mm)  
**BATTERY:** VRLA GEL  
**COLOR:** Maroon (case) Grey (cover)  
**MATERIAL:** Polypropylene



## PRODUCT SPECIFICATION

| BCI GROUP SIZE | TYPE   | CAPACITY <sup>A</sup> Minutes  | CAPACITY <sup>B</sup> Amp-Hours (AH) |            |             |             | ENERGY (kWh) | TERMINAL Type  | DIMENSIONS <sup>C</sup> Inches (mm) |                     |         | WEIGHT lbs. (kg) |
|----------------|--------|--------------------------------|--------------------------------------|------------|-------------|-------------|--------------|----------------|-------------------------------------|---------------------|---------|------------------|
|                |        | @25 Amps                       | 5-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                                   | 102        | 108         | 1.30        | 7            | 12-15/16 (329) | 6-3/4 (171)                         | 9-5/8 (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 nominal performance.

B. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 80°F (27°C) for the 20-Hour and 100-Hour rates and 86°F (30°C) for the 5-Hour rate and maintain a voltage above 1.75 V/cell. Capacities are based on nominal 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. 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         |
|----------------|-------------|-------------|-------------|-------------|
| Daily Charge   | 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.

## TERMINAL CONFIGURATIONS

| 7                                                                                     | UT | Universal Terminal |
|---------------------------------------------------------------------------------------|----|--------------------|
|  |    |                    |
| Terminal Height Inches (mm)                                                           |    |                    |
| 1-1/8 (28)                                                                            |    |                    |
| Torque Values in-lb (Nm)                                                              |    |                    |
| 95–105 (11 – 12)                                                                      |    |                    |
| Through-hole Diameter (mm)                                                            |    |                    |
| 5/16–18 (8)                                                                           |    |                    |

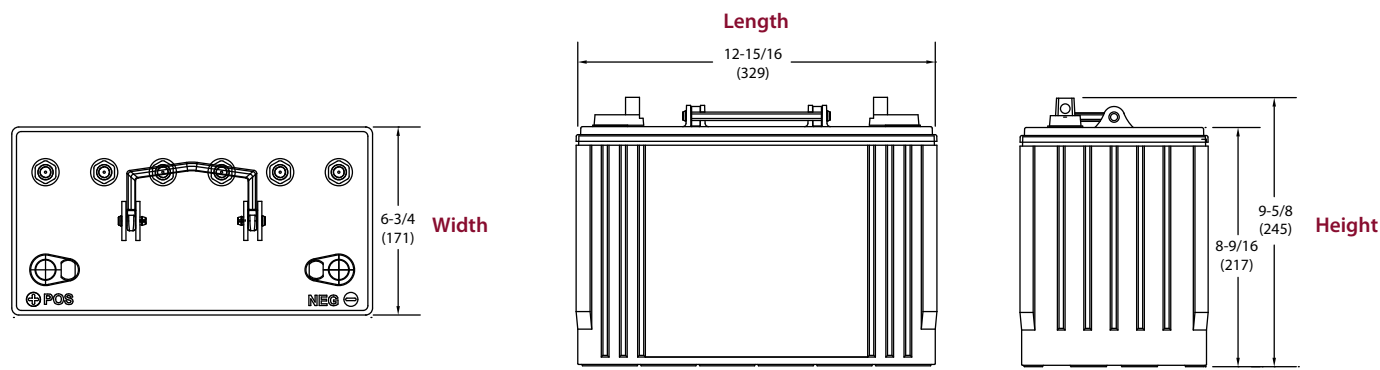
## CHARGING TEMPERATURE COMPENSATION

.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).

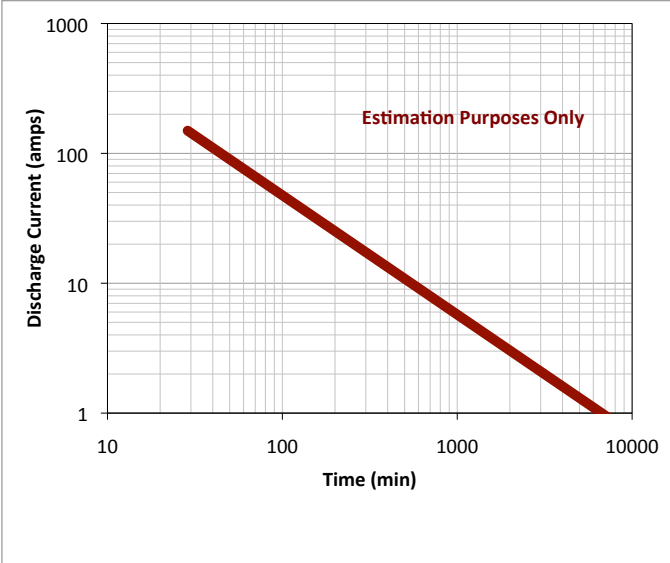
## OPERATIONAL DATA

| 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. |

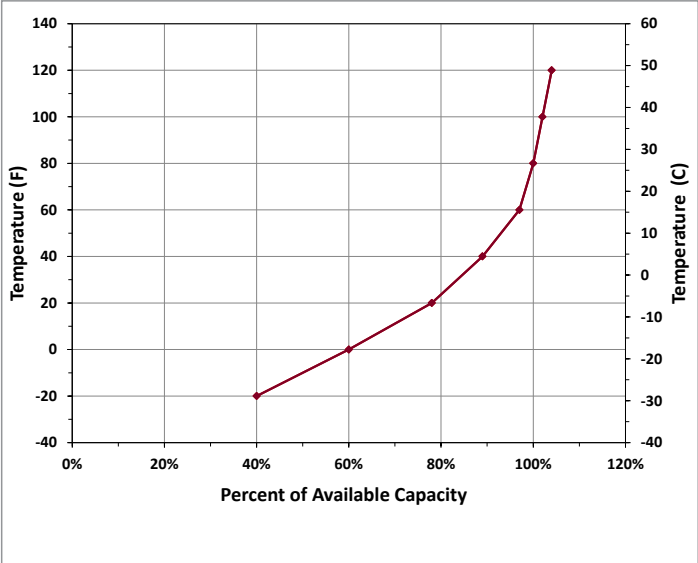
BATTERY DIMENSIONS (shown with UT)



TROJAN 31-GEL PERFORMANCE



PERCENT CAPACITY VS. TEMPERATURE



For product and purchase inquiries contact:

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

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12380 Clark Street, Santa Fe Springs, CA 90670 • USA