



## DEEP CYCLE GEL 24-GEL

### • VRLA GEL

- BCI Group 24, 12V
- Reserve Capacity [Ah@20hr rate]: 77
- Reserve Capacity [Ah@100hr rate]: 85
- Energy [kWh]: 1.02
- Weight: 52 lbs.
- Length: 10.92in (277 mm)
- Width: 6.61 in (168 mm)
- Height: 9.26 in (235 mm)
- DT



### Deep-Cycle Gel

**Trojan Battery – the most trusted name in deep-cycle battery technology – also offers deep-cycle gel batteries.**

- Trojan's deep-cycle gel batteries are completely maintenance-free and require no watering.
- Deep-cycle gel batteries provide customers long lasting runtime and battery life for the most demanding applications.



## DATA SHEET

MODEL **24-GEL**

VOLTAGE **12V**

CAPACITY **77Ah @ 20Hr**

MATERIAL **Polypropylene**

BATTERY TYPE **Deep Cycle VRLA GEL**

**12V**

### PRODUCT + PHYSICAL SPECIFICATIONS

| BCI Group Size | Type          | Voltage   | Cell(s)  | Terminal Type <sup>G</sup> | Dimensions <sup>C</sup> Inches (mm) |            |                     | Weight Lbs. (kg) |
|----------------|---------------|-----------|----------|----------------------------|-------------------------------------|------------|---------------------|------------------|
|                |               |           |          |                            | Length                              | Width      | Height <sup>F</sup> |                  |
| <b>24</b>      | <b>24-GEL</b> | <b>12</b> | <b>6</b> | <b>6</b>                   | 10.92 (277)                         | 6.61 (168) | 9.26 (235)          | 52 (24)          |

### ELECTRICAL SPECIFICATIONS

| Cranking Performance              |                                | Capacity <sup>A</sup> Minutes |           | Capacity <sup>B</sup> Amp-Hours (AH) |       |       |        | Energy (kWh) | Internal Resistance (mΩ) | Short Circuit Current (amps) |
|-----------------------------------|--------------------------------|-------------------------------|-----------|--------------------------------------|-------|-------|--------|--------------|--------------------------|------------------------------|
| C.C.A. <sup>D</sup> @ 0°F (-18°C) | C.A. <sup>E</sup> @ 32°F (0°C) | @ 25 Amps                     | @ 75 Amps | 5-Hr                                 | 10-Hr | 20-Hr | 100-Hr | 100-Hr       | —                        | —                            |
| —                                 | —                              | 147                           |           | 66                                   | 72    | 77    | 85     | 1.02         |                          |                              |

### 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          |

### CHARGING TEMPERATURE COMPENSATION

| Add                                                                                           | Subtract                                                                                      |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 0.005 volt per cell for every 1°C below 25°C<br>0.0028 volt per cell for every 1°F below 77°F | 0.005 volt per cell for every 1°C above 25°C<br>0.0028 volt per cell for every 1°F above 77°F |

### OPERATIONAL DATA

| Operating Temperature                                                                                            | Self Discharge                                                        |
|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| -4°F to 122°F (-20°C to 50°C)<br>At temperatures below 32°F (0°C)<br>maintain a state of charge greater than 60% | Less than 3% per month depending on<br>storage temperature conditions |

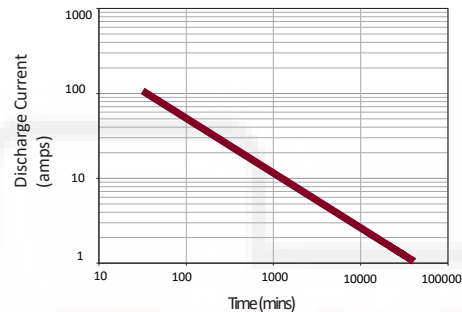


Designed in compliance with applicable BCI, DIN, BS and IEC standards. Tested in compliance to BCI and IEC standards.

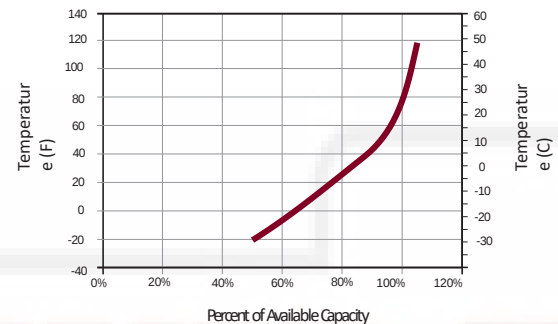


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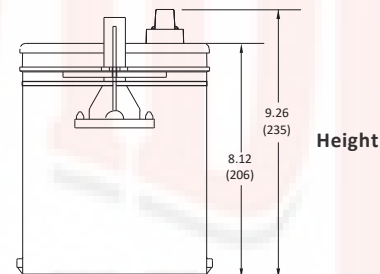
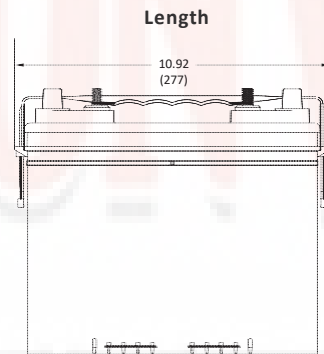
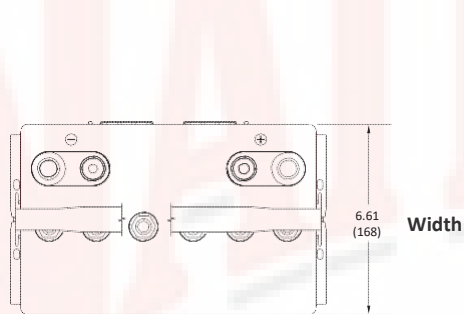
## TROJAN 24-GEL PERFORMANCE



## PERCENT CAPACITY VS. TEMPERATURE



## BATTERY DIMENSIONS



## TERMINAL CONFIGURATIONS

| 6                                                                                                             | DT | Automotive Post & Stud Terminal |
|---------------------------------------------------------------------------------------------------------------|----|---------------------------------|
|                            |    |                                 |
| <b>Terminal Height Inches (mm)</b><br>.79 (20)                                                                |    |                                 |
| <b>Torque Values in-lb (Nm)</b><br>Stud: 95 – 105 (11 – 12)<br>AP: 50 – 70 (6 – 8)<br>ST: 120 – 180 (14 – 20) |    |                                 |
| <b>Bolt Size</b><br>5/16"                                                                                     |    |                                 |

A. The amount of amp-hours (Ah) a battery can deliver when discharged at a constant rate at 86°F (30°C) for all rates and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.  
 B. Dimensions may vary depending on type of handle or terminal. Batteries should be mounted with 0.5 inches (12.7 mm) spacing minimum.

C. Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.  
 D. Terminal images are representative only.  
 E. A boost charge should be performed every 6 months when batteries are in storage.  
 F. Weight may vary.