

MODEL **SAES 12 205**  
 VOLTAGE **12**  
 CAPACITY **175Ah @ 20Hr**  
 MATERIAL **Polypropylene**  
 BATTERY **VRLA AGM / Non-Spillable / Maintenance-Free**  
 COLOR **Maroon**  
 WATERING **No Watering Required**  
 IEC 61427 **8+ Years Life**



**12 VOLT**

**PHYSICAL SPECIFICATIONS**

| MODEL NAME  | TERMINAL TYPE | DIMENSIONS <sup>B</sup> INCHES (mm) |            |                     | WEIGHT <sup>F</sup> LBS. (kg) | HANDLES      | INSTALLATION ORIENTATION |
|-------------|---------------|-------------------------------------|------------|---------------------|-------------------------------|--------------|--------------------------|
|             |               | LENGTH                              | WIDTH      | HEIGHT <sup>C</sup> |                               |              |                          |
| SAES 12 205 | M8/LT         | 14.97 (380)                         | 6.94 (176) | 14.07 (357)         | 125 (57)                      | Braided Rope | Horizontal and Vertical  |

**ELECTRICAL SPECIFICATIONS**

| VOLTAGE | CAPACITY <sup>A</sup> AMP-HOURS (Ah) |       |       |       |        | ENERGY (kWh) | INTERNAL RESISTANCE (mΩ) | SHORT CIRCUIT CURRENT (amps) |
|---------|--------------------------------------|-------|-------|-------|--------|--------------|--------------------------|------------------------------|
|         | 10-Hr                                | 20-Hr | 48-Hr | 72-Hr | 100-Hr |              |                          |                              |
| 12      | 167                                  | 175   | 210   | 213   | 216    | 2.1          | 4.5                      | 2790                         |

**CHARGING INSTRUCTIONS**

| CHARGER VOLTAGE SETTINGS (AT 77°F/25°C) |                        |       |       |       |
|---|------------------------|-------|-------|-------|
| SYSTEM VOLTAGE                          | 12V                    | 24V   | 36V   | 48V   |
| Maximum Charge Current (A)              | 50% of C <sub>20</sub> |       |       |       |
| Absorption Voltage (2.40 V/cell)        | 14.40                  | 28.80 | 43.20 | 57.60 |
| Float Voltage (2.25 V/cell)             | 13.50                  | 27.00 | 40.50 | 54.00 |

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.

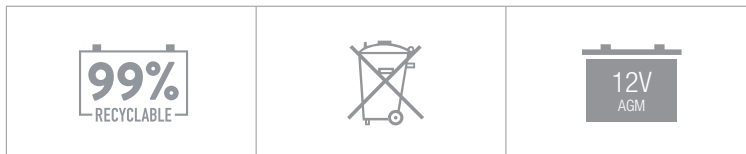
**CHARGING TEMPERATURE COMPENSATION**

| 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  |
|--|---|
| -40°F to 140°F (-40°C to +60°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. |

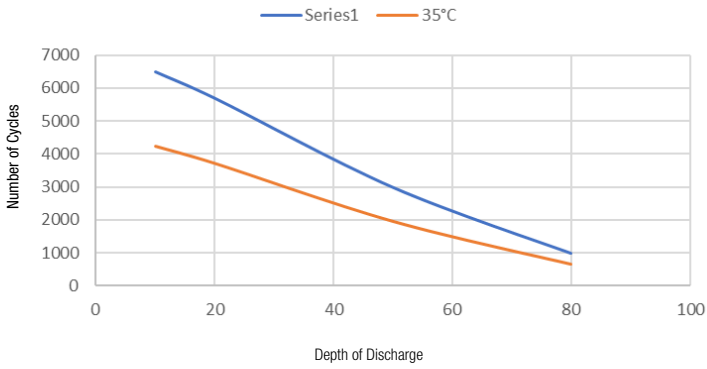
**RECYCLE RESPONSIBLY**



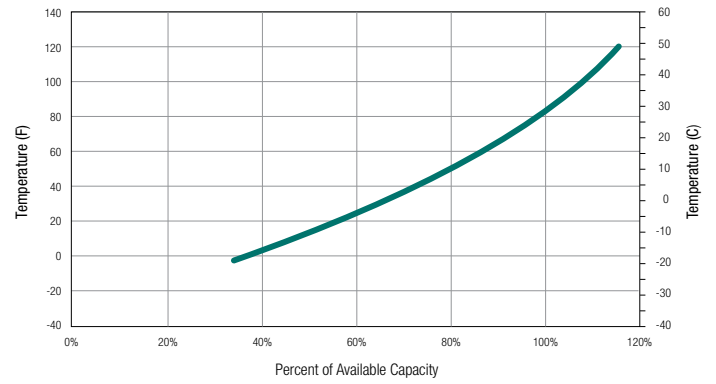
**STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE**

| PERCENTAGE CHARGE | CELL | 12 VOLT |
|-------------------|------|---------|
| 100               | 2.14 | 12.84   |
| 75                | 2.09 | 12.54   |
| 50                | 2.04 | 12.24   |
| 25                | 1.99 | 11.94   |
| 0                 | 1.94 | 11.64   |

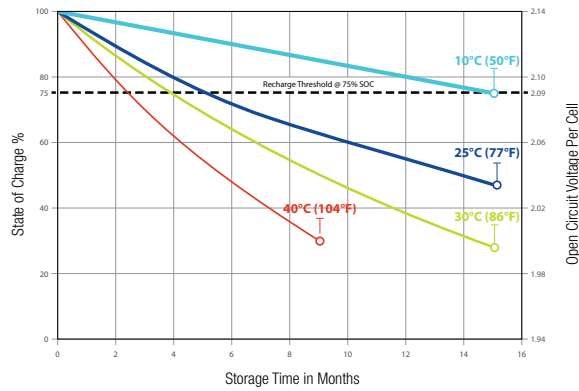
## SOLAR CYCLE VS DEPTH OF DISCHARGE



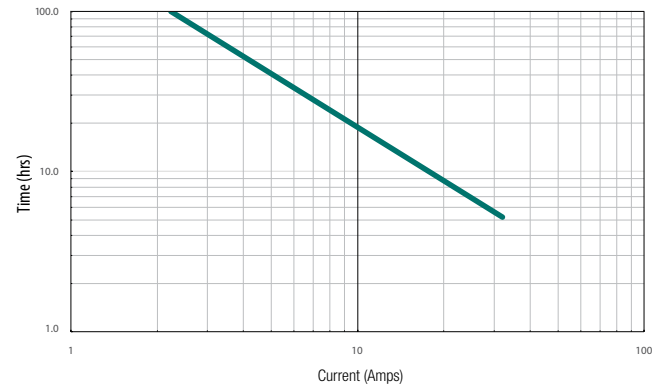
## PERCENT CAPACITY VS. TEMPERATURE



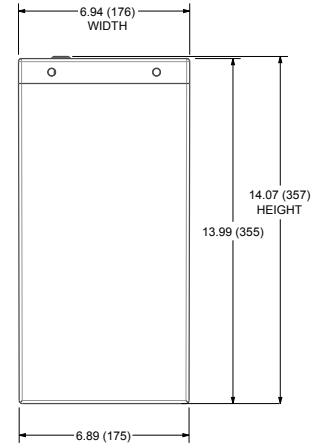
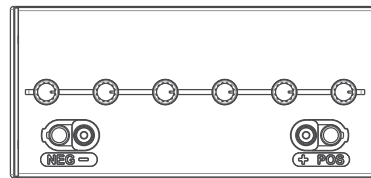
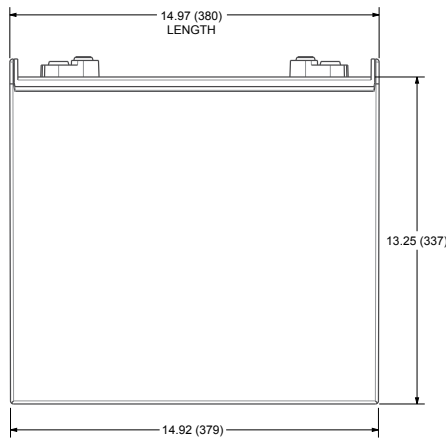
## SELF DISCHARGE VS. TIME<sup>E</sup>



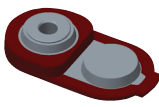
## TROJAN SAES 12 205 PERFORMANCE




## BATTERY DIMENSIONS (shown with M8, height is 15.57 (395) with LT)



## TERMINAL TYPE<sup>D</sup>

| 15   | M8   | M8 |
|--|--|----|
|  | <p><b>Battery Height with Terminal in Inches (mm)</b><br/>14.07 (357)</p> <p><b>Torque Values in-lb (Nm)</b><br/>Bolt: 85 – 90 (10 – 11)</p> |    |

| 15  | M8   | M8 WITH LT ADAPTER (ADAPTER PROVIDED BUT NOT INSTALLED) |
|---|--|---|
|  | <p><b>Battery Height with Terminal in Inches (mm)</b><br/>15.57 (395)</p> <p><b>Torque Values in-lb (Nm)</b><br/>Connection to M8: 85 – 90 (10 – 11)<br/>Connection to LT: 65 – 75 (7.5 – 8.5)</p> <p><b>Bolt Size</b><br/>M8 x 1.25</p> |   |

- 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. Batteries in storage should be charged when they decline to 75% State of Charge (SOC).
- F. Weight may vary.



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

