

# **SOLAR SAES 06 220**

MODEL SAES 06 220

VOLTAGE 6

CAPACITY 212Ah @ 20Hr MATERIAL Polypropylene

BATTERY VRLA AGM / Non-Spillable / Maintenance-Free

COLOR Maroon

WATERING No Watering Required

IEC 61427 **8+ Years Life** 





# **6 VOLT**

#### **PHYSICAL SPECIFICATIONS**

| MODEL NAME  | TERMINAL TYPE | DIMENSIONS <sup>B</sup> INCHES (mm) |            |                     | WEIGHT F LBS. (kg) | HANDLES  | INSTALLATION ORIENTATION |
|-------------|---------------|-------------------------------------|------------|---------------------|--------------------|----------|--------------------------|
|             |               | LENGTH                              | WIDTH      | HEIGHT <sup>c</sup> | ()                 |          | Horizontal               |
| SAES 06 220 | M8/LT         | 10.30 (262)                         | 7.06 (179) | 10.73 (273)         | 70 (32)            | Embedded | and Vertical             |

#### **ELECTRICAL SPECIFICATIONS**

| VOLTAGE | CAPACITY A AMP-HOURS (Ah) |       |       |       | ENERGY (kWh) | INTERNAL RESISTANCE (mΩ) | SHORT CIRCUIT CURRENT (amps) |      |
|---------|---------------------------|-------|-------|-------|--------------|--------------------------|------------------------------|------|
| G       | 10-Hr                     | 20-Hr | 48-Hr | 72-Hr | 100-Hr       | 100-Hr                   | 1.0                          | 3250 |
| О       | 190                       | 212   | 222   | 2271  | 231          | 1.27                     | 1.9                          |      |

#### **CHARGING INSTRUCTIONS**

| CHARGER VOLTAGE SETTINGS (AT 77°F/25°C) |                        |       |       |       |       |
|---|------------------------|-------|-------|-------|-------|
| SYSTEM VOLTAGE                          | 6V 12V 24V             |       | 24V   | 36V   | 48V   |
| Maximum Charge Current (A)              | 20% of C <sub>20</sub> |       |       |       |       |
| Absorption Voltage (2.40 V/cell)        | 7.20                   | 14.40 | 28.80 | 43.20 | 57.60 |
| Float Voltage (2.25 V/cell)             | 6.75                   | 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 0.0028 volt per cell for every 1°F below 77°F | 0.005 volt per cell for every 1°C above 25°C 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). At<br>temperatures below 32°F (0°C) maintain a<br>state of charge greater than 60%. | Less than 3% per month depending on storage temperature conditions. |

#### **RECYCLE RESPONSIBLY**



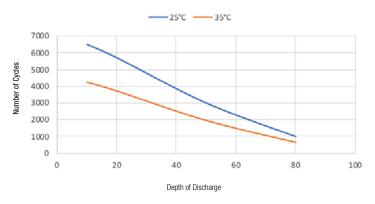




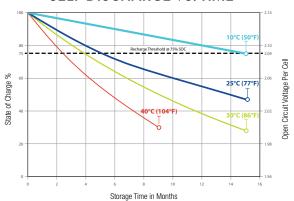
#### STATE OF CHARGE MEASURE OF OPEN-CIRCUIT VOLTAGE

| PERCENTAGE CHARGE | CELL | 6 VOLT |
|-------------------|------|--------|
| 100               | 2.14 | 6.42   |
| 75                | 2.09 | 6.27   |
| 50                | 2.04 | 6.12   |
| 25                | 1.99 | 5.97   |
| 0                 | 1.94 | 5.82   |

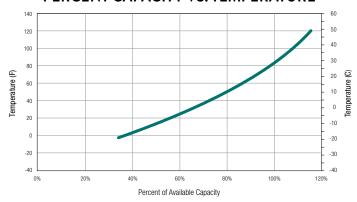
#### SOLAR CYCLE VS DEPTH OF DISCHARGE



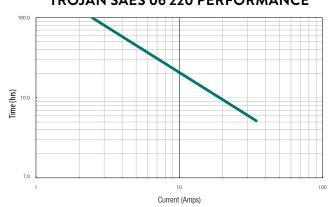
#### SELF DISCHARGE VS. TIME



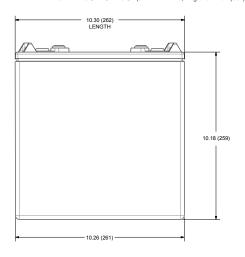
#### PERCENT CAPACITY VS. TEMPERATURE

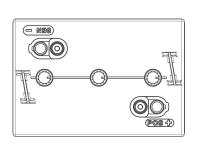


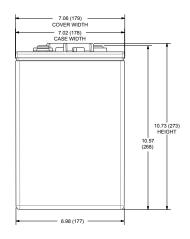
## **TROJAN SAES 06 220 PERFORMANCE**



#### BATTERY DIMENSIONS (shown with M8, height is 12.07 (307) with LT)



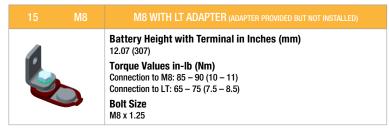




#### TERMINAL TYPED

| 15 | M8 | M8  |
|----|----|---|
|    |    | Battery Height with Terminal in Inches (mm)<br>10.57 (268)<br>Torque Values in-Ib (Nm)<br>Bolt: 85 – 90 (10 – 11) |

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



- Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal. Terminal images are representative only.

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









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

