

SLC SERIES

GENERAL PURPOSE BATTERIES

DATASHEET

SLC 60-12

12V 60AH



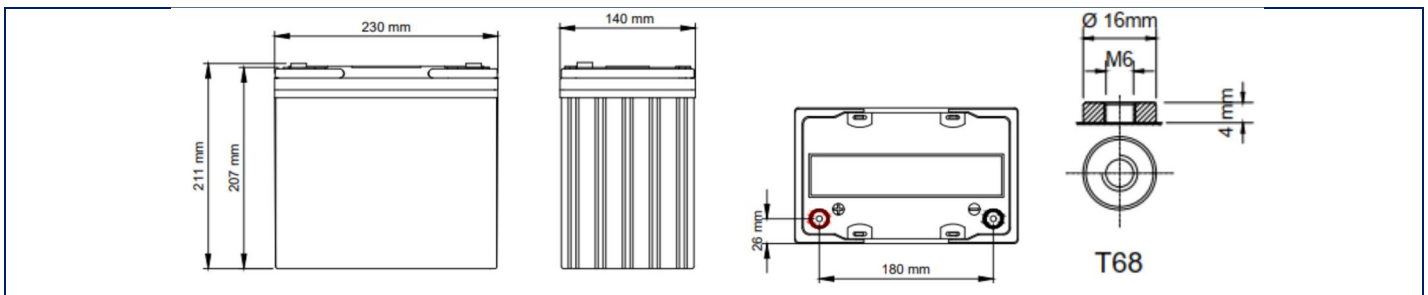
AGM SEALED VRLA BATTERY

EUROBAT 2022 CLASSIFICATION: 10-12 Years – Long Life

Designed in accordance with IEC 60896-21/22

SPECIFICATIONS

| Nominal Voltage | Nominal Capacity | Dimension ±3mm | | | | Weight ±2% | Max Discharge Current (5s) | Internal Resistance | Standard Terminal | Container Material |
|-----------------|------------------|-------------------|-------|-------|-------|---------------|-------------------------------|---------------------|-------------------|--------------------|
| | | L | W | H | TH | | | | | |
| 12V | 60AH | 230mm | 140mm | 207mm | 211mm | 16,1kg | 660A | ≈6.9 mΩ | M6 | ABS |



CONSTANT-VOLTAGE CHARGE

| Rated Capacity | |
|----------------------------------|--------|
| 20 hour rate (2.86A) | 60.0AH |
| 10 hour rate (5.5A) | 55.6AH |
| 5 hour rate (9.35A) | 47.2AH |
| 3 hour rate (13.75A) | 41.7AH |
| 1 hour rate (33.0A) | 35.0AH |
| Capacity affected by temperature | |
| 40°C (104°F) | 103% |
| 25°C (77°C) | 100% |
| 0°C (32°F) | 86% |

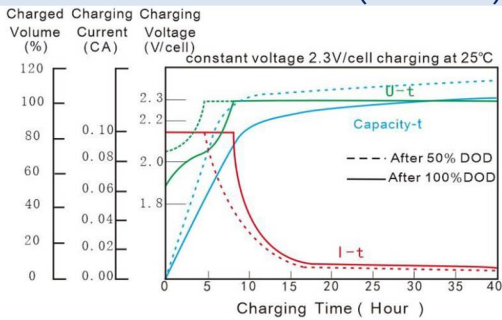
| Cycle Application |
|---|
| 1. Limit initial current less than 13.75A. |
| 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F). |
| 3. Hold at 14.1V to 14.4V until current drop to under 0.33A for at least 3 hours. |
| 4. Temperature compensation coefficient of charging voltage is -30mV/°C. |
| Standby Service |
| 1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 13.75A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status. |
| 2. Temperature compensation coefficient of charging voltage is -18mV/°C. |

| Nominal Operating Temp. Range |
|-------------------------------|
| 25±3°C (77±5°F) |

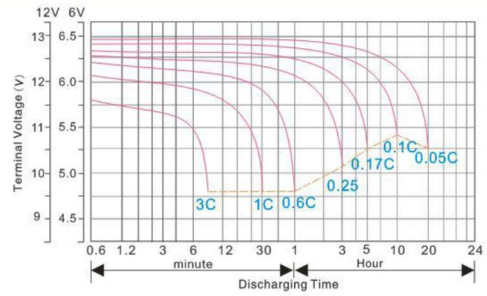
| Operating Temperature | | |
|-----------------------|----------------|-------------------|
| Discharge: -15÷50°C | Charge: 0÷40°C | Storage: -15÷40°C |

NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

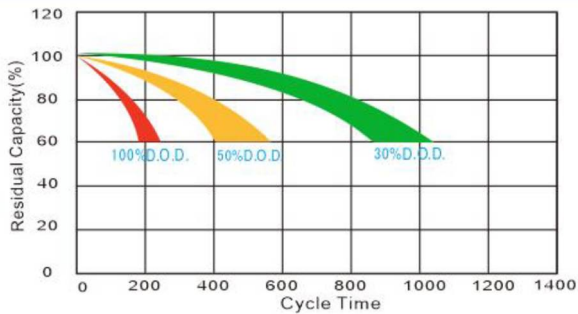
CHARGE CHARACTERISTICS (25°C/77°F)



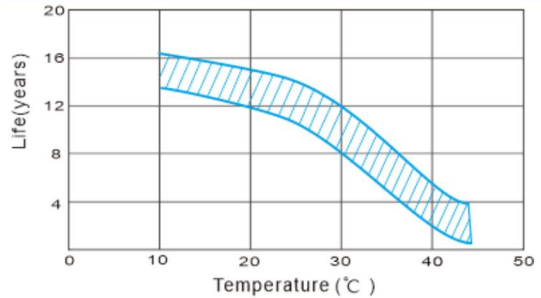
DISCHARGE CHARACTERISTIC (25°C/77°F)



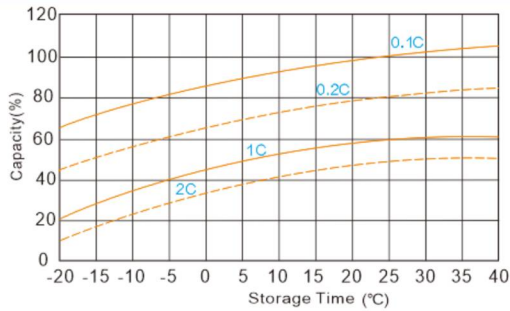
CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE



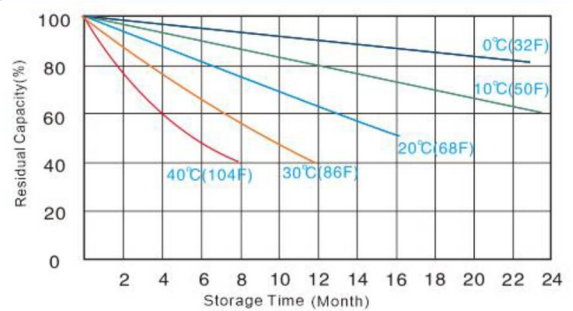
TEMPERATURE VS FLOAT LIFE



CAPACITY CURVE AT DIFFERENT TEMPERATURE



SELF DISCHARGE CHARACTERISTICS



Constant Current Discharge (Amperes) at 25°C (77°F)

| End Voltage (V) | 10 min | 15 min | 30 min | 45 min | 1 h | 1,5 h | 2 h | 3 h | 5 h | 8 h | 10 h | 20 h |
|-----------------|--------|--------|--------|--------|------|-------|------|------|-------|------|------|------|
| 9.6V | 135 | 107 | 60 | 51.5 | 35.0 | 27.8 | 23.5 | 14.4 | 10.06 | 6.89 | 5.79 | 3.01 |
| 9.9V | 129 | 102 | 58 | 50.5 | 34.4 | 27.3 | 22.9 | 14.2 | 9.84 | 6.78 | 5.73 | 2.98 |
| 10.2V | 123 | 97 | 55 | 48.5 | 33.3 | 26.7 | 22.3 | 13.9 | 9.62 | 6.67 | 5.67 | 2.95 |
| 10.5V | 117 | 92 | 52 | 46.5 | 32.8 | 26.2 | 21.8 | 13.6 | 9.44 | 6.50 | 5.62 | 2.92 |
| 10.8V | 111 | 88 | 49 | 45.5 | 32.2 | 25.6 | 21.3 | 13.3 | 9.17 | 6.39 | 5.56 | 2.89 |

Constant Power Discharge (Watts) at 25°C (77°F)

| End Voltage (V) | 10 min | 15 min | 30 min | 45 min | 1 h | 1,5 h | 2 h | 3 h | 5 h | 8 h | 10 h | 20 h |
|-----------------|--------|--------|--------|--------|-----|-------|-----|-----|-----|-----|------|------|
| 9.6V | 1508 | 1249 | 774 | 541 | 450 | 329 | 246 | 184 | 118 | 90 | 69.4 | 37.3 |
| 9.9V | 1436 | 1190 | 736 | 523 | 440 | 320 | 240 | 179 | 115 | 88 | 68.7 | 37.0 |
| 10.2V | 1368 | 1133 | 701 | 506 | 429 | 313 | 234 | 175 | 113 | 86 | 68.0 | 36.6 |
| 10.5V | 1303 | 1080 | 668 | 489 | 418 | 305 | 228 | 170 | 110 | 85 | 67.4 | 36.2 |
| 10.8V | 1240 | 1028 | 636 | 473 | 408 | 298 | 223 | 166 | 107 | 83 | 66.7 | 35.9 |