

# ENERGY POWER

## EV SERIES

VALVE REGULATED LEAD ACID BATTERY

## EP-EV12-155A-AM



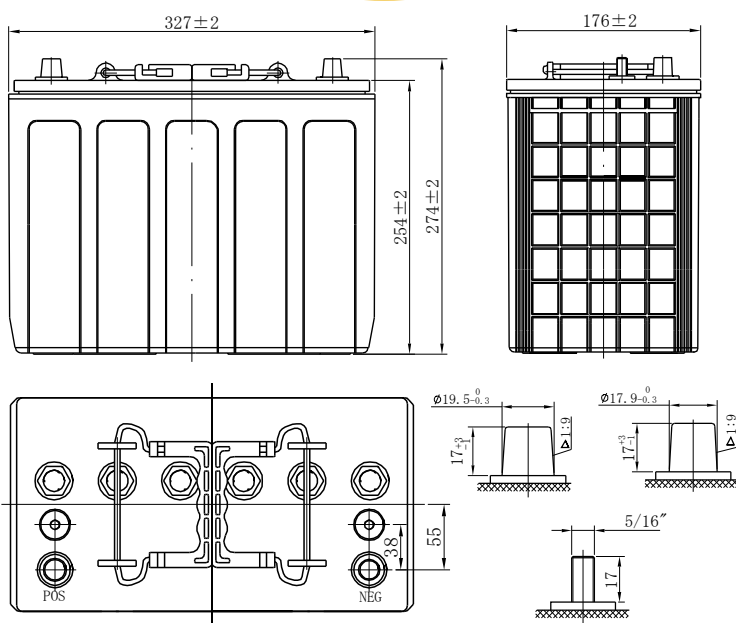
Deep Cycle  
AGM Battery

Energy Power EV Series Batteries provide superior performance, capacities and reliability. Using state of art dry cell technology the EV series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial, industrial, residential, and private applications.

The maintenance free (VRLA) construction and advanced design features makes the EV Series the definitive choice for a wide variety of markets; solar and renewable energy storage; electric vehicle and golf cart; industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solutions; mobility and medical equipment; telecom, broadband and cable TV; UPS systems.

### FEATURES AND BENEFITS

- The Energy Power, EV Battery Series along with our factories are certified to multiple standards:
- ISO, OHSAS18001, UL, CE
- QC/T 742-2006, GB/T18332.1-2009
- High density lead paste and specialized paste formula for deep cycle application.
- High strength ABS or PP case & cover and valve-regulated construction.
- Maintenance-free. High capacities.
- Environmentally friendly, classified as "Non-Spillable Battery" for transportation. Complies with DOT CFR 49.173.
- High tin alloy grids offer: Less gassing, High corrosion-resistant, Low self discharge, Alloy sheeting material for deep cycle applications.
- Exceptional adaptability to operate at high and low temperature environments.
- Durable copper and stainless steel terminals for high electric conductivity.
- Excellent cycle life: 80% DOD 800 cycles.
- Exclusive electrolyte formula and separator, for protecting the electrolyte density from stratification.
- Superior design allows for fast charge acceptance and resistance to over-discharge.



## MECHANICAL CHARACTERISTICS

|                         |           |
|-------------------------|-----------|
| Industry Type No.       | 12        |
| Length (mm/inch)        | 327/12.9  |
| Width (mm/inch)         | 176/6.9   |
| Height (mm/inch)        | 254/10    |
| Total Height (mm/inch)  | 274/10.8  |
| Approx. Weight (kg/lbs) | 40.6/89.5 |
| Terminal                | AM        |
| Volts                   | 12        |

## ELECTRICAL CHARACTERISTICS

|                             |                                   |          |          |
|-----------------------------|-----------------------------------|----------|----------|
| Internal resistance         | Fully charged at 20°C: 3.2 mOhms  |          |          |
| Self discharge              | <3% of capacity per month at 20°C |          |          |
| Operating temperature range | Discharge                         | Charge   | Storage  |
|                             | -20~60°C                          | -10~50°C | -20~60°C |
| Short circuit current (20 ) | 3800A                             |          |          |

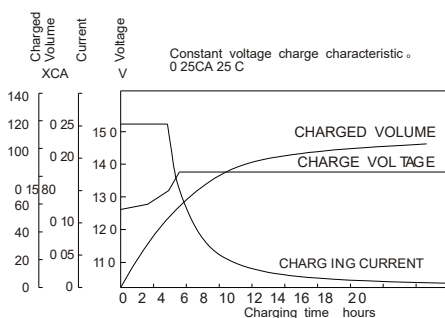
| CHARGE METHODS: Constant voltage charging at 20°C (68°F) |                      |                |                          |
|----------------------------------------------------------|----------------------|----------------|--------------------------|
|                                                          | Max. Charge current  | Charge voltage | Temperature compensation |
| Standby use                                              | 0.3C <sub>10</sub> A | 13.6--13.8V    | -20mV/°C                 |
| Cyclic use                                               | 0.3C <sub>10</sub> A | 14.4--14.7V    | -30mV/°C                 |

## ELECTRICAL CHARACTERISTICS

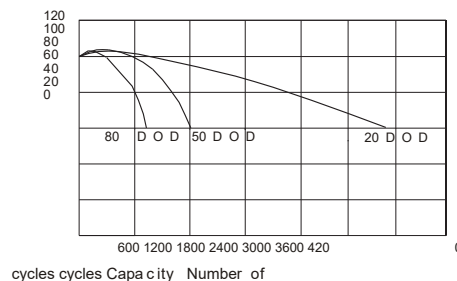
| Ampere Hour Capacity                     |      |     | Minutes of Discharge |      | R/C  | Cranking Amps |            |
|------------------------------------------|------|-----|----------------------|------|------|---------------|------------|
| 100HR                                    | 10HR | 5HR | @25A                 | @75A | @25A | 32°F/ 0°C     | 0°F/ -18°C |
| * - Performance averages after 15 cycles |      |     |                      |      |      |               |            |
| 128                                      | 110  | 98  | 230                  | 55   | 310  | 750           | 600        |

## CHARGE / DISCHARGE TABLES & GRAPHS

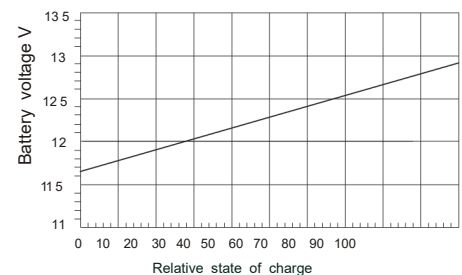
CHARGE CHARACTERISTIC CURVE



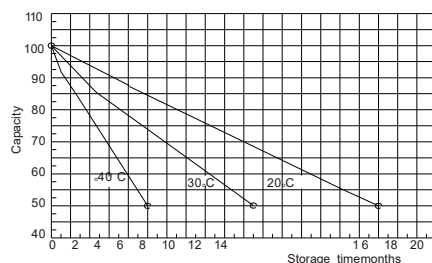
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



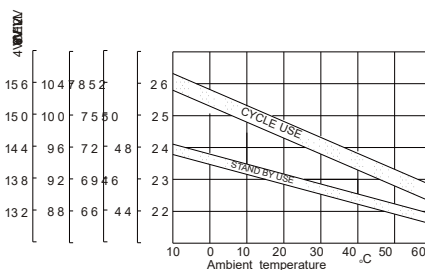
RELATIONSHIP OF OCV AND STATE OF CHARGE (20°)



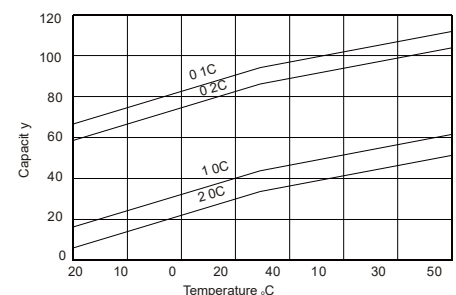
SELF-DISCHARGE CHARACTERISTIC



RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



TEMPERATURE EFFECTS ON CAPACITY



To ensure safe and efficient operations always refer to the latest edition of our Technical Manual, as published on our Web site. All specifications subject to change without notice.

