

ENERGY POWER

EV SERIES
VALVE REGULATED LEAD ACID BATTERY

EP-EV8D-240A-AM

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.

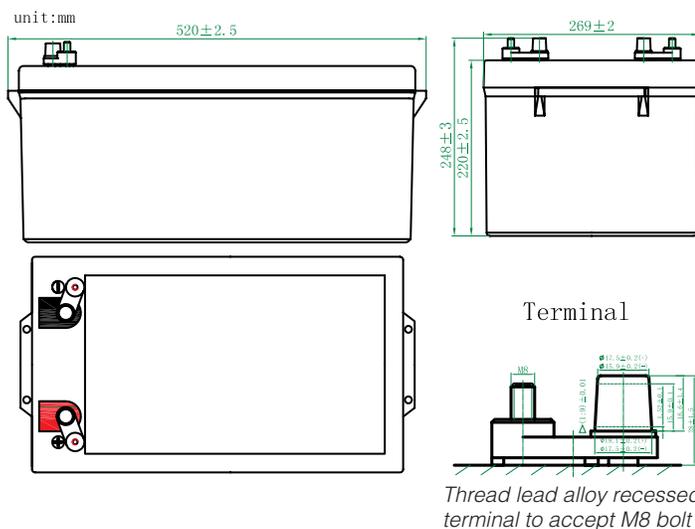
The maintenance free (VRLA) construction and advanced design features makes the EV Series the definitive choice for a wide variety of markets; solar and renewable energy storage; electric vehicle and golf cart; industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and 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.



Deep Cycle
AGM Battery



MECHANICAL CHARACTERISTICS

Cells Per Unit	6
Length (mm/inch)	520±2.5
Width (mm/inch)	269±2
Height (mm/inch)	220±2.5
Total Height (mm/inch)	248±3
Approx. Weight (kg/lbs)	70.0 /154
Terminal	AM
Volts	12
Material	ABS (UL 94-HB)

ELECTRICAL CHARACTERISTICS

Internal Resistance	Approx. 2.7mΩ		
Self Discharge	Can be stored for more than 6 months at 25°C (77°F).		
Operating Temperature Range	Discharge	Charge	Storage
	-15°C~50°C (5°F~122°F)	-15°C~40°C (5°F~104°F)	-15°C~40°C (5°F~104°F)
Maximum Discharge Current	2400A (5sec)		

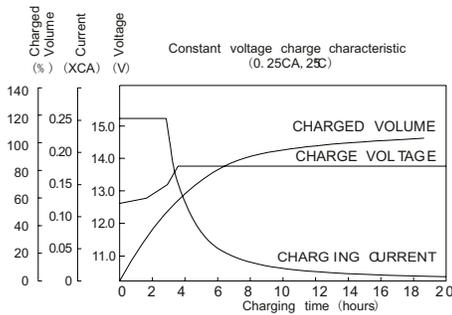
Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.3C
Standby	25°C (77°F)	2.275	2.25~2.30	

DISCHARGE CURRENT VS. DISCHARGE VOLTAGE

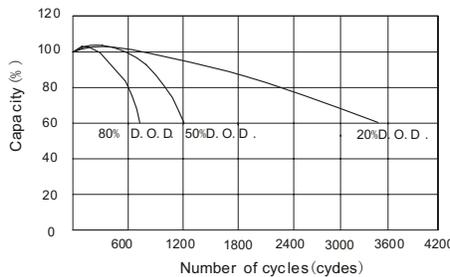
Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

CHARGE / DISCHARGE TABLES & GRAPHS

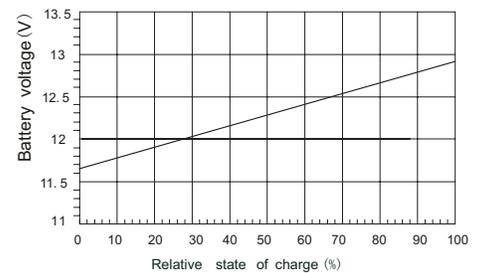
CHARGE CHARACTERISTIC CURVE



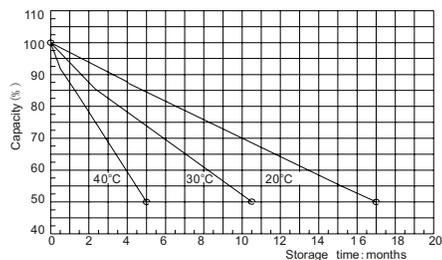
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



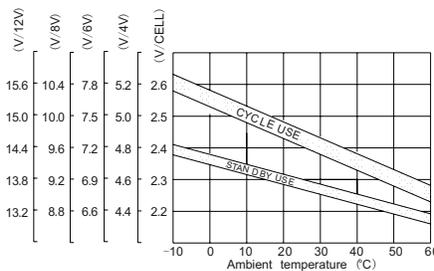
RELATIONSHIP OF OCV AND STATE OF CHARGE (20°)



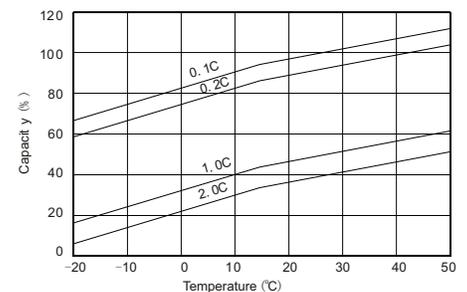
SELF-DISCHARGE CHARACTERISTIC



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.

