

# ENERGY POWER

MARKETED BY  
 **ENERGY**  
 BATTERY GROUP INC.

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 Atlanta, GA 30328-6216  
 888-823-0954

## EV SERIES VALVE REGULATED LEAD ACID BATTERY

## EP-EV24-85A-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.

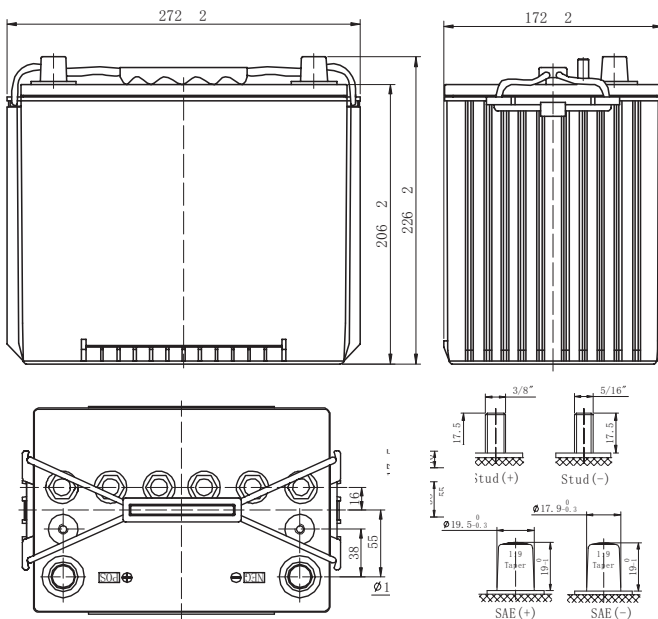
The maintenance free (VRLA) construction and advanced design features makes the EV Series the definitive choice for a wide variety of markets; solar and renewable energy storage; electric vehicle and golf cart; industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and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

Industry Type No.	24
Length(mm/inch)	272/10.7
Width (mm/inch)	172/6.8
Height(mm/inch)	206/8.1
Total Height(mm/inch)	226/8.9
Approx. Weight (kg/lbs)	35.1/55.3
Terminal	AM
Container material	PP
Cells	6 cell
Nominal Voltage	12 V

# ELECTRICAL CHARACTERISTICS

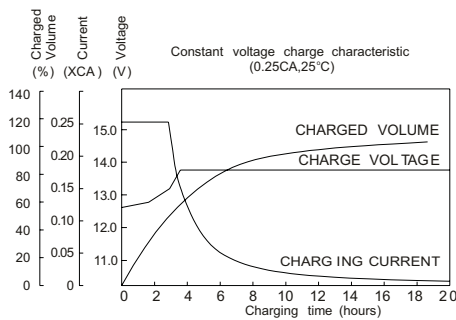
Nominal Capacity	85Ah@20 hour rate F. V. (1.75V/Cell)	
Internal Resistance (Approx. )	≤ Fully Charged battery (25°C) : 3.5mOhms	
Self Discharge	3% of capacity per month@68°F/20°C	
Cranking Amps	545A@32°F/0°C	423A@0°F/-18°C
Max. Discharge	680A(5s)	
Reserve Capacity (80°F/27°C)	@25A F.V.(1.75V/Cell)	165Min
	@75A F.V.(1.75V/Cell)	41Min
Charging(25°C) (Constant Voltage)	Cycle use	Initial Charging Current: 25.5A, 2.40-2.45VPC
	Float use	2.20-2.30VPC

# ELECTRICAL CHARACTERISTICS

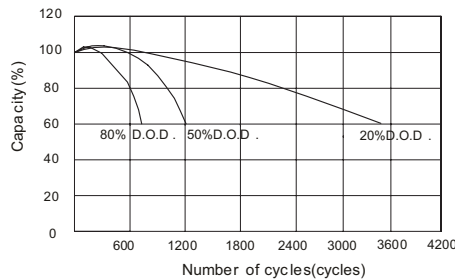
Final voltage 1.75V/Cell	Amp Hours(AH)@77°F(25°C)						Minutes of Discharge@80°F(27°C)	
	20HR	10HR	5HR	3HR	2HR	1HR	@25A	@75A
	85	80	72	68	60	50	165	41

# CHARGE / DISCHARGE TABLES & GRAPHS

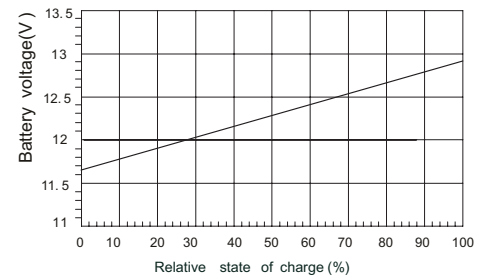
**CHARGE CHARACTERISTIC CURVE**



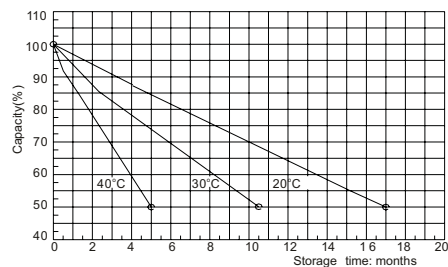
**CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE**



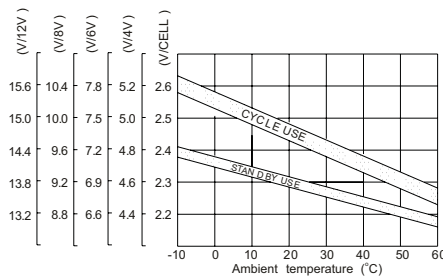
**RELATIONSHIP OF OCV AND STATE OF CHARGE (25°C)**



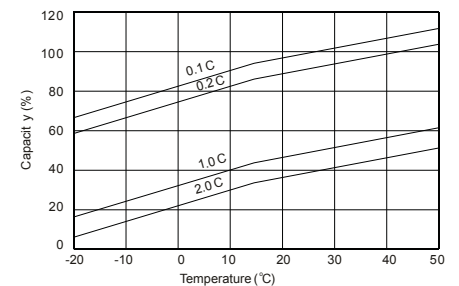
**SELF-DISCHARGE CHARACTERISTIC**



**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.

