# EV12-35

12V35Ah / 10hr rate



#### Introduction

## **Battery Picture & Terminal Layout**

Genergy EV AGM Series is designed for tough applications and repeated deep discharging. It is superior with the long cycle life, large current discharge capability, high reliability and safety. The range is the definitive choice for golf cart, electric medical equipment, automated guided vehicles (AGV), aerial lifts, floor cleaning equipment, robotics applications.

#### **Battery Features**

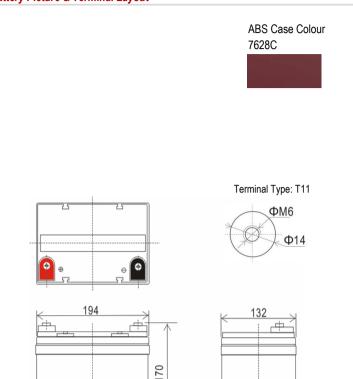
- Extra long cycle life and resistance to mechanical stress and the elements all in one battery.
- Maintenance-free
- Very high purity lead (purity rate 99.994%)
- Traction heavy duty grid design gives consistent active material adhesion and corrosion resistance.
- Fully tank formed plates for evenly formed and capacity matched plates.
- Low impurity electrolyte
- Recognized gas recombination efficiency greater than 99.9%
- Flame arresting pressure regulated safety sealing valves for safety.
- Low self-discharge
- $\bigcirc\,$  Classified as non-spillable and not restricted for
  - transportation by  $\rightarrow$  Air (IATA/ICAO provision 67)
    - > Surface (DOT-CFR-HMR49)
    - > Water (per IMDG amendment 27)

## **Electrical Specification**

Desigr	n Life Cycle	s @ 80% D.O.D. (2	25°C)	450 Cycles			
Nomin	al Capacity	@ 25°C /77°F					
100	hour rate	0.408A to 1.75Vp	c	40.8 Ah			
10	hour rate	3.4 A to 1.75Vpc		34 Ah			
5	hour rate	6.12 A to 1.75Vpc		30.6 Ah			
3	hour rate	9.0 A to 1.70Vpc		27.2 Ah			
1	hour rate	20.4 A to 1.60Vpc		20.4 Ah			
Minute	s of Discha	rge					
25A to	10.5V	60	56A to 10.2V	23			
75A to	10.2V	. 16	85A to 10.2V	13			
100A t	o 10.2V	. 10					
Cranki	ng Amps						
0°C /3	2°F	. 180	-18°C /0°F	150			
Interna	al Resistanc	e					
(Fully charged battery @ 25°C /77°F ) 9.5 mΩ							
Max. Discharge Current @ 25°C /77°F 300 A (5S)							
Charge	e Methods:	Constant voltage of	harge @ 25°C	/77°F			
C	Cycle Use .			14.7 ~ 14.9V			
Ν	Max. Currer	ıt		8.5 A			
5	Standby Us	э		13.6 - 13.8V			
Operat	-20 ~ 60°C						
Notes:	battery vol	tage must be adjus	ted according t	o temperature.			
Please	e refer to ou	r recommendation.					
Self-Di	ischarge						

3% of capacity declined per month @ 25°C (77°F).

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#### **Dimension & Weight**

	Weight			
Length	Width	Height	Total Height	(± 2%)
194 mm	132 mm	170 mm	170 mm	11.8 kg
7.6 inch	5.2 inch	6.7 inch	6.7 inch	23.1 lbs

### **Typical Applications**

- $\bigcirc$  Golf Cart
- Tour Bus
- O Electric Medical Equipments
- Aerial and Fork Lifts
- $\bigcirc$  Golf Trolley
- Sweeper
- Floor Cleaning Machines
- O Marine and RV

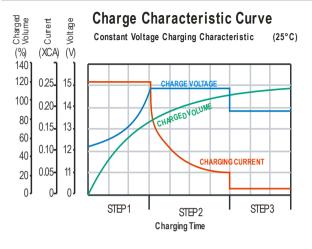




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# Graphs



100 Depth of discharge (%) 80 60

900

Number of Cycles (cycles)

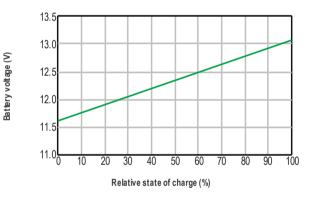
1200

1500

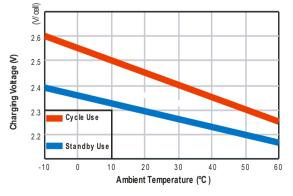
1800

Cycle Service Life V.S. Depth Of Discharge

OCV V.S. State of Charge (20°C)



Charging Voltage V.S. Temperature



Self-Discharge Characteristic

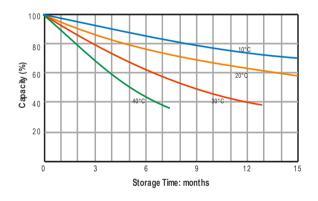
600

40

20

0

300



120 100 0.50 Available Capacity (%) 0.1CA 80 1CA 60 2 C A 40 20 0 -10 20 30 40 -20 0 10 Ambient Tempreture (°C)

**Temperature Effects On Capacity** 

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