# EV12-7 12V7Ah / 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**

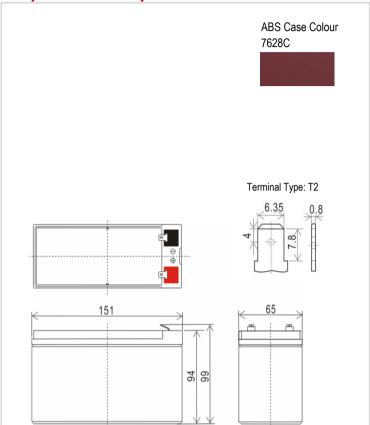
- Extra long cycle life and resistance to mechanical stress and the elements all in one battery.
- Maintenance-free
- Very high purity lead (purity rate 99.994%)
- Traction heavy duty grid design gives consistent active material adhesion and corrosion resistance.
- Fully tank formed plates for evenly formed and capacity matched plates.
- Low impurity electrolyte
- $\bigcirc\,$  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 > Air (IATA/ICAO provision 67)
    - > Surface (DOT-CFR-HMR49)
    - > Water (per IMDG amendment 27)

#### Electrical Specification

Desigr	Life Cycles	s @ 80% D.O.D. (2	5°C)	450 Cycles			
Nomin	al Capacity	@ 25°C /77°F					
100	hour rate	0.084A to 1.75Vpc		8.4 Ah			
10	hour rate	0.7 A to 1.75Vpc .		7 Ah			
5	hour rate	1.26 A to 1.75Vpc		6.3 Ah			
3	hour rate	1.86 A to 1.70Vpc		5.6 Ah			
1	hour rate	4.2 A to 1.60Vpc .		4.2 Ah			
Minute	s of Discha	rge					
25A to	10.5V			10.8			
56A to	10.2V			4.2			
Cranki	ng Amps						
0°C /3	30						
Interna	I Resistanc	e					
(	Fully charge	ed battery @ 25°C	/77°F)	18 mΩ			
Max. Discharge Current @ 25°C /77°F 105 A (5S)							
Charge Methods: Constant voltage charge @ 25°C /77°F							
(	Cycle Use			14.7 ~ 14.9V			
Ν	/lax. Curren	ıt		1.8 A			
S	Standby Use	э		13.6 - 13.8V			
Operat	ting Tempe	rature Range		-20 ~ 60°C			
Notes: battery voltage must be adjusted according to temperature							
Please refer to our recommendation.							
Self-Di	scharge						
	001						

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

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#### **Dimension & Weight**

	Weight			
Length	Width	Height	Total Height	(± 2%)
151 mm	65 mm	94 mm	99 mm	2.7 kg
5.9 inch	2.6 inch	3.7 inch	3.9 inch	6.0 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





12V7Ah / 10hr rate



Cycle Service Life V.S. Depth Of Discharge

900

Number of Cycles (cycles)

1500

1800

1200

100

8(

60

4(

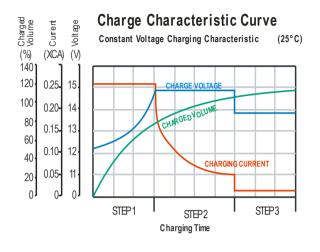
20

0

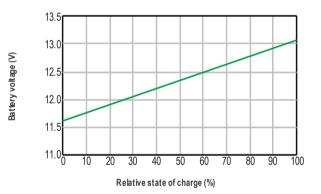
300

Depth of discharge (%)

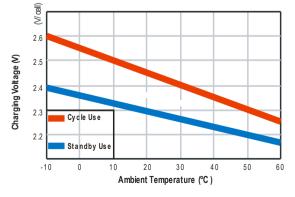
## Graphs



OCV V.S. State of Charge (20°C)

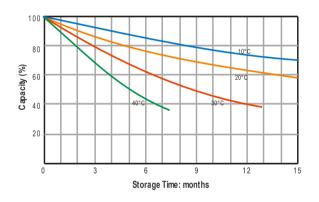


Charging Voltage V.S. Temperature



Self-Discharge Characteristic

600



120 100 0 051 Available Capacity (%) 0 104 80 1 C A 60 2 C A 40 20 0 -20 -10 10 20 30 0 40 Ambient Tempreture ( °C)

**Temperature Effects On Capacity** 

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