# EV12-45

12V45Ah / 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)

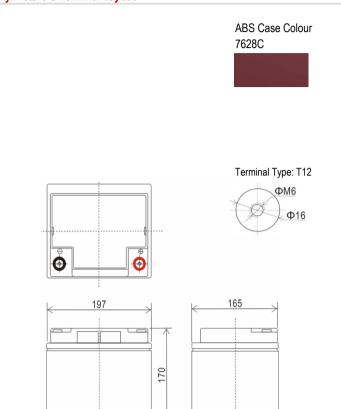
## **Electrical Specification**

Design	Life Cycle	s @ 80% D.O.D.	(25°C)	450 Cycles
Nomin	al Capacity	@ 25°C /77°F		
100	hour rate	0.54 to 1.75Vpc		54 Ah
10	hour rate	4.5 A to 1.75Vpc		45 Ah
5	hour rate	8.1 A to 1.75Vpc		40.5 Ah
3	hour rate	12 A to 1.70Vpc		36 Ah
1	hour rate	27 A to 1.60Vpc		27 Ah
Minute	s of Discha	rge		
25A to	10.5V	80	56A to 10.2V	30
75A to	10.2V	. 20	85A to 10.2V	17
100A t	o 10.2V	. 13		
Cranki	ng Amps			
0°C /3	2°F	. 235	-18°C /0°F	195
Interna	I Resistanc	e		
(	Fully charge	ed battery @ 25°	C /77°F )	9.5 mΩ
Max. D	ischarge C	urrent @ 25°C /7	7°F	400 A (5S)
Charge	e Methods:	Constant voltage	charge @ 25°C	/77°F
C	Cycle Use			14.7 ~ 14.9V
Ν	/lax. Currer	ıt		11.0A
S	Standby Use	э		13.6 - 13.8V
Operat	ing Tempe	rature Range		-20 ~ 60°C
Notes:	battery vol	tage must be adju	isted according t	o temperature
Please	refer to ou	r recommendatio	n.	

Self-Discharge

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

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Web: www.genergybattery.com | Email: sales@genergybattery.com



#### **Dimension & Weight**

	Weight			
Length	Width	Height	Total Height	(± 2%)
197 mm	165 mm	170 mm	170 mm	17.6 kg
7.8 inch	6.5 inch	6.7 inch	6.7 inch	38.8 lbs

### **Typical Applications**

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

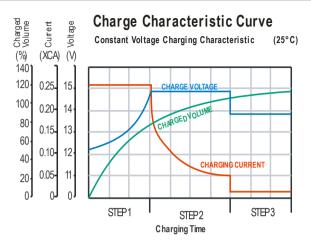




12V45Ah / 10hr rate

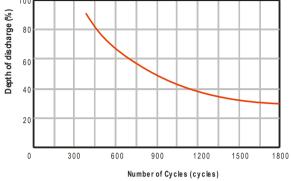


Graphs

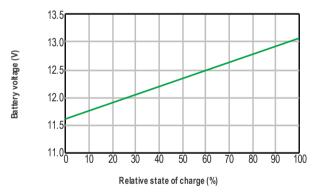


100 80

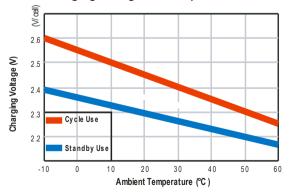
Cycle Service Life V.S. Depth Of Discharge



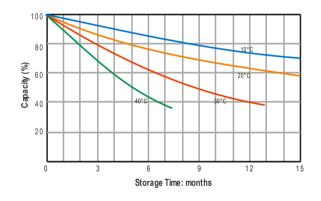
OCV V.S. State of Charge (20°C)



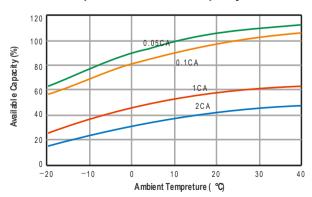
Charging Voltage V.S. Temperature



Self-Discharge Characteristic



**Temperature Effects On Capacity** 



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