Tb Plus®

AGM BATTERY MANUAL

www.tbplusenergy.com

LEGAL GUARANTEES

In accordance with Law 1480 of 2011 Consumer Statute and Decree 735 of 2013 Legal Guarantee:

- To request a guarantee, the customer is obliged to report the damage to the product, make it available to the company at the guarantee service point at AV CL 80 69-70 Unit 1C, and indicate the invoice number to determine your purchase date.
- The delivery of the repaired product will be delivered to the customer at the warranty service point, unless the customer requests to send it to a different destination, in which case the customer must assume the cost of freight.
- In any case, when a product repair guarantee is denied or approved, the respective written report must be issued supporting the evidence that justifies the decision.
- In no case will Tb Plus Energy proceed with the replacement of the product given under warranty since, if the repair does not proceed, a credit note will be issued which covers the acquisition of another new product or service or the return of the money paid.
- If the failure repeats once the product has been repaired, only the credit note applies which covers the acquisition of another new product or service or the return of the money paid.
- When the customer opts for a refund of the money, it will be for the amount of the sale price. For this purpose, they must send a communication signed by the legal representative, which indicates the bank details to make the return, the which will be effective within fifteen (15) business days after receipt of the return request.
- The repair of the product will be carried out within 30 business days following the claim, which is carried out by filling out the GP-F-018 Warranty Form, which is completed in the PQRF Guarantees tab on the WEB page www. tbplusenergy.com or at the following link:

  https://forms.office.com/Pages/ResponsePage.aspx?id=K987JK0Nuke_1n30RF9URwiKWAfZovhDrWEVYGmhK95UOVZYUFBWMUpaQVZBM0hIS0RKUjdLSkdIWS4u:

- Once the guarantee form has been completed, the client has 15 days to make it available at the guarantee service point.
- The product manuals in which proper use, installation instructions and periods covered by the warranty are reported are found in the PQRF Product Manuals tab on the website www.tbplusenergy.com.

TECHNICAL SPECIFICATIONS

Product description

Device made from absorbent fiberglass, so that when assembled the battery and introduce the liquid electrolyte, it is absorbed by the AGM fiber that operates like a sponge.

They support the charging voltage with which conventional batteries work, without specifying of any modification to the charging system.

Main properties

- Professional alloy formula and advanced manufacturing techniques.
- Completely sealed and maintenance free, low self-discharge.
- Good loading and unloading acceptability.
- Cyclic application: deep cycle charging and discharging for more than 260 times.
- Useful life up to 5 years.
- Floating application: for 3-5 years.
- High energy retention.
- Simple installation.

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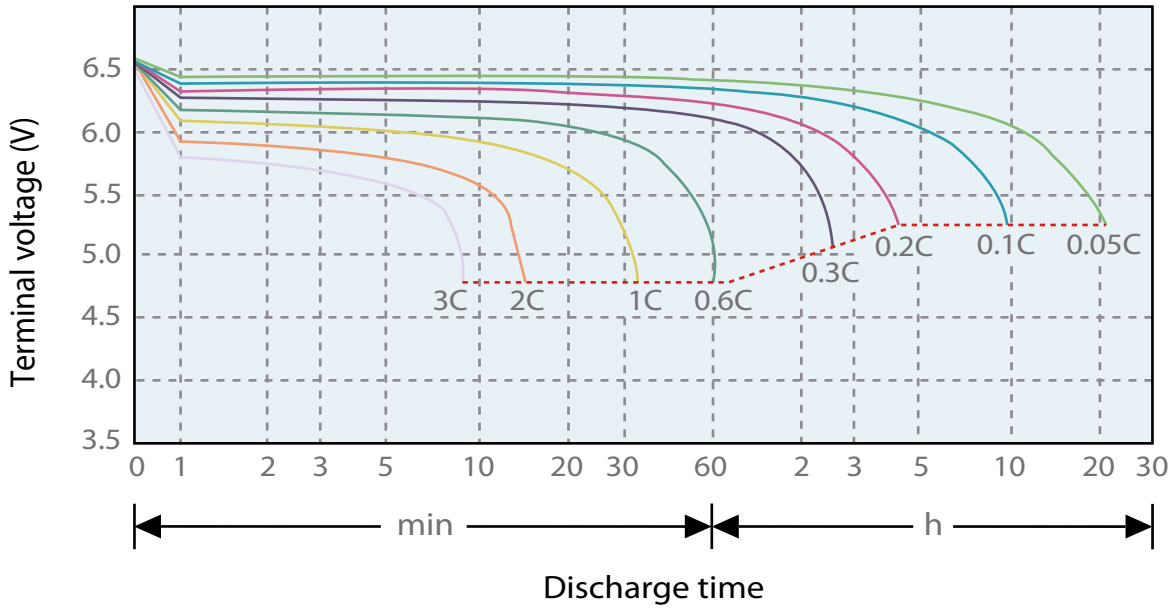
TECHNICAL VARIABLES

Operating temperature		
Charge	0 º C (32 º F) ~ 40 º C (104 º F)	
Discharge	- 20 º C (- 4 º F) ~ 50 º C (122 º F)	
Storage	- 20 º C (- 4 º F) ~ 40 º C (104 º F)	
Specification		
Affected capacity by the temperature	40 º C (104 º F)	103 %
	25 º C (77 º F)	100 %
	0 º C (32 º F)	86 %
	-15 º C (5 º F)	65 %
Auto - discharge in 25º C (77º F) (Before recharging)	Cap. after 3 months	91 %
	Cap. after 6 months	82 %
	Cap. after 12 months	64%

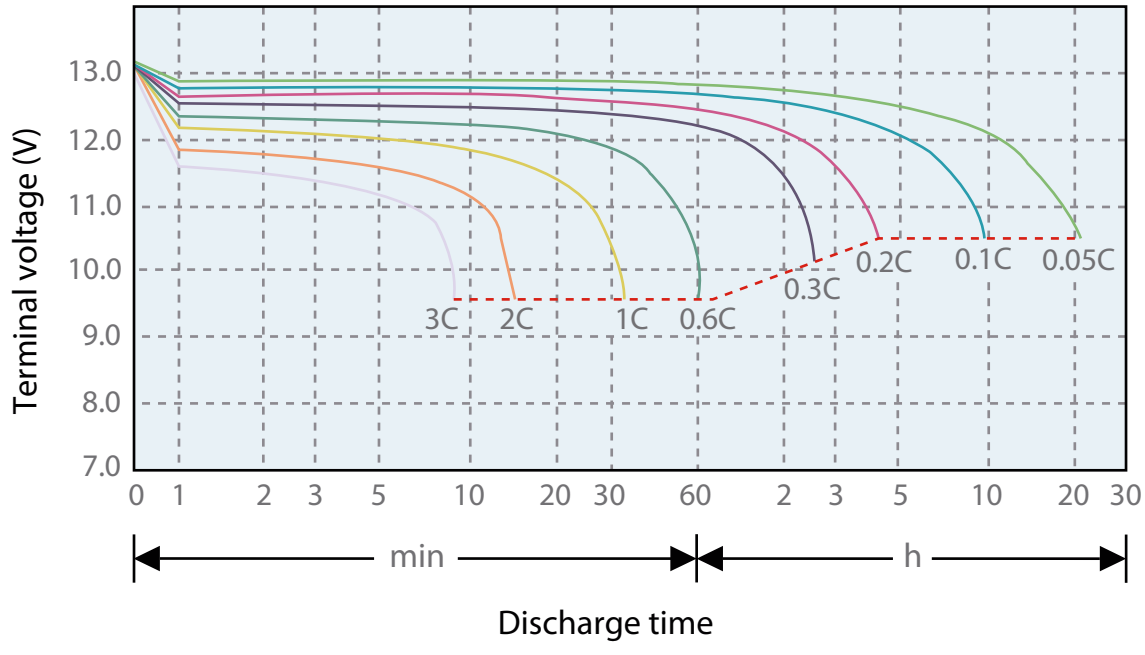
GRAPHICS

Discharge Features

TB 6-1.3 / 4



TB 6-12 / TB 12-1.3 / 3 / 5 / 7 / 9 / 12 / 18 / 26 / 35 / 40



WARRANTY CONDITIONS

Tb Plus Energy warrants that each product is free from defects in materials and workmanship, manufacturing, and offers a guarantee for a period of **18 months** from the acquisition of the product.

RECOMMENDATIONS

- Follow loading and unloading recommendations.
- Store in a safe place. Free of light, water and dust.
- Install under certified professional recommendation.
- Do not expose to nearby heat sources.
- Do not connect equipment with a power greater than that with which the power supply has been sized, battery or system.
- Once a year check the battery charge level.
- Keep the battery free of objects and obstacles.
- Do not manipulate its edges with your hands.
- Do not leave them within the reach of children.

	Voltage and current			Temperature		Ohmic		Undulation
Test	Voltage floatation total measurement on the terminals of the battery	Tension and voltage of the exit from charger	Current float DC (for chain)	Temperature atmosphere	Temperature of the terminal negative of each battery	Values ohmic internal cell/unit	Endurance from cell to cell and detail of connection of terminal	tension or current undulation AC imposed on the battery
Monthly	X	X	X	X				
Quarterly	X	X	X	X	X	X		
Annually	X	X	X	X	X	X	X	X

Inspections recommended by IEEE Standard 1188, "Recommended Practices for Maintenance, Testing, and Replacement of Batteries Valve Regulated Lead Acid (VRLA) for Stationary Applications"

*Other battery capacities can be developed and supplied upon request.

Tb Plus®

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