

# **24TMX DATA SHEET** for Renewable Energy / Hybrid Systems / Backup Power Applications

## SIGNATURE LINE

MODEL:	24TMX with POD vent
DIMENSIONS:	inches (mm)
BATTERY:	Flooded/wet lead-acid battery
COLOR:	Maroon (case/cover)
MATERIAL:	Polypropylene



## **PRODUCT SPECIFICATIONS**

BCI GROUP	ТҮРЕ			CAPACIT	ГҮ <sup>A</sup> Amp-Ho	ours (AH)			ENERGY (kWh)	VOLTAGE	SE TERMINAL Type <sup>D**</sup>	DIMENSIONS <sup>B</sup> Inches (mm)			WEIGHT lbs.
SIZE	ITFE	2-Hr Rate	5-Hr Rate	10-Hr Rate	20-Hr Rate	48-Hr Rate	72-Hr Rate	100-Hr Rate	100-Hr Rate	VULIAGE		Length	Width	Height <sup>C</sup>	(kg)
SIGNATURE LINE - DEEP-CYCLE FLOODED BATTERIES															
24	24TMX	55	70	78	85	91	93	94	1.13	12 VOLT	5	10.92 (277)	6.62 (168)	9.25 (235)	47 (21)

#### **CHARGING INSTRUCTIONS**

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)					
	Voltage per cell				
Absorption charge	2.35-2.45				
Float charge	2.20				
Equalize charge	2.58				

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.

# **OPERATIONAL DATA**

Operating Temperature	Specific Gravity
-4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	The specific gravity at 100% state-of-charge is 1.280

#### **CHARGING TEMPERATURE COMPENSATION**

To the Voltage Reading -- Subtract 0.005 volt per cell (VPC) for every 1°C above 25°C or add 0.005 volt per cell for every 1°C below 25°C.

#### **EXPECTED LIFE VS. TEMPERATURE**

Chemical reactions internal to the battery are driven by voltage and temperature. The higher the battery temperature, the faster chemical reactions will occur. While higher temperatures can provide improved discharge performance the increased rate of chemical reactions will result in a corresponding loss of battery life. As a rule of thumb, for every 10°C increase in temperature the reaction rate doubles. Thus, a month of operation at 35°C is equivalent in battery life to two months at 25°C. Heat is an enemy of all lead acid batteries, FLA, AGM and gel alike and even small increases in temperature will have a major influence on battery life.

A. The amount of amp-hours (AH) a battery can deliver when discharged at a constant rate at 77°F (25°C) and maintain a voltage above 1.75 V/cell. Capacities are based on peak performance.

- B. Dimensions are based on nominal size. Dimensions may vary depending on type of handle or terminal.
- C. Dimensions taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal. D. Terminal images are representative only.
- Trojan's battery testing procedures adhere to both BCI and IEC test standards. Additional Terminals Available

## **TERMINAL CONFIGURATIONS**

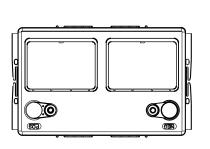
5	LT	L-Terminal						
	0	Terminal Height Decimals (mm) 1.70 (43) Torque Values in-Ib (Nm) 100 –120 (11 – 14) Bolt 3/8"						
7	UT	Universal Terminal						
	9	Terminal Height Decimals (mm) 1.10 (28) Torque Values in-Ib (Nm) 95–105 (10.7 - 11.9) Bolt 5/16"						
8	AP	Automotive Post Terminal						
		Terminal Height Decimals (mm) .83 (21) Torque Values In-Ib (Nm) 50 –70 (6 – 8)						
9	WNT	Wingnut Terminal						
		Terminal Height Decimals (mm) .95 (24) Torque Values in-lb (Nm) 95–105 (11 – 12) Bolt Size 5/16 – 18						

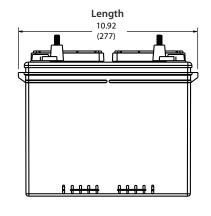
# **24TMX DATA SHEET**

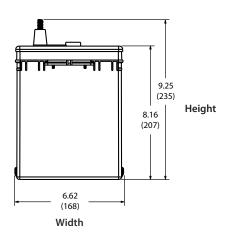
for Renewable Energy / Hybrid Systems / Backup Power Applications

SIGNATURE LINE

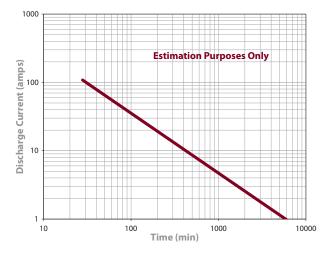
## BATTERY DIMENSIONS (shown with WNT)



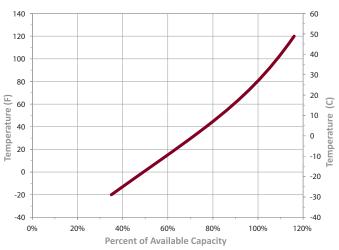




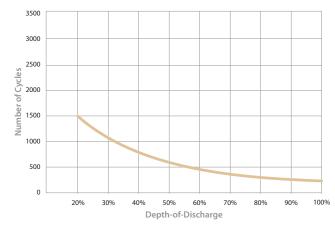
**TROJAN 24TMX PERFORMANCE** 



#### PERCENT CAPACITY VS. TEMPERATURE



#### **TYPICAL CYCLE LIFE IN A STATIONARY APPLICATION**





Trojan batteries are available worldwide. We offer outstanding technical support, provided by full-time application engineers.

call 800.423.6569 or + 1.562.236.3000 or visit www.trojanbatteryRE.com

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