

# **MOTIVE 31-AGM**

MODEL 31-AGM

VOLTAGE 12

CAPACITY 100Ah @ 20Hr MATERIAL Polypropylene

BATTERY VRLA AGM / Non-Spillable / Maintenance-Free

COLOR Maroon

WATERING No Watering Required









## **12 VOLT**

#### **PHYSICAL SPECIFICATIONS**

BCI	MODEL NAME	TERMINAL TYPE G	DIMENSIONS © INCHES (mm)			WEIGHT LBS. (kg)	HANDLES	INSTALLATION ORIENTATION
04	31-AGM	M8/DT	LENGTH	WIDTH	HEIGHTF	<b></b> (0.0)	Plastic Handle	Horizontal and Vertical
31			12.80 (325)	6.81 (173)	9.37 (238)	67 (30)		

#### **ELECTRICAL SPECIFICATIONS**

VOLTAGE	VOLTAGE Cranking Performance Capacity A Minutes		CAPACITY <sup>B</sup> AMP-HOURS (Ah)			1)	ENERGY (kWh)	INTERNAL RESISTANCE (m $\Omega$ )	SHORT CIRCUIT CURRENT (amps)		
10	C.C.A. <sup>D</sup> @0°F	C.A. <sup>E</sup> @32°F	@ 25 Amps	@ 75 Amps	5-Hr	10-Hr	20-Hr	100-Hr	100-Hr	4.00	2555
12	600	720	177	-	82	92	100	111	1.33	4.80	

#### **CHARGING INSTRUCTIONS**

CHARGER VOLTAGE SETTINGS (AT 77°F/25°C)					
SYSTEM VOLTAGE	12V 24V 36V 48V				
Maximum Charge Current (A)	20% of C <sub>20</sub>				
Absorption Voltage (2.40 V/cell)	14.40	28.80	43.20	57.60	
Float Voltage (2.25 V/cell)	13.50	27.00	40.50	54.00	

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.

#### **CHARGING TEMPERATURE COMPENSATION**

ADD	SUBTRACT
0.005 volt per cell for every 1°C below 25°C 0.0028 volt per cell for every 1°F below 77°F	0.005 volt per cell for every 1°C above 25°C 0.0028 volt per cell for every 1°F above 77°F

### **OPERATIONAL DATA**

OPERATING TEMPERATURE	SELF DISCHARGE		
-4°F to 122°F (-20°C to +50°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%.	Less than 3% per month depending on storage temperature conditions		

#### **RECYCLE RESPONSIBLY**



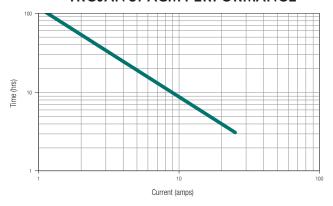




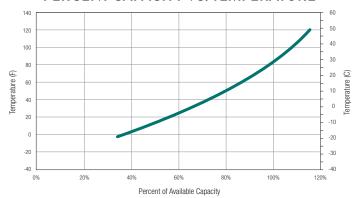
#### **STATE OF CHARGE** MEASURE OF OPEN-CIRCUIT VOLTAGE

PERCENTAGE CHARGE	CELL	12 VOLT
100	2.14	12.84
75	2.09	12.54
50	2.04	12.24
25	1.99	11.94
0	1.94	11.64

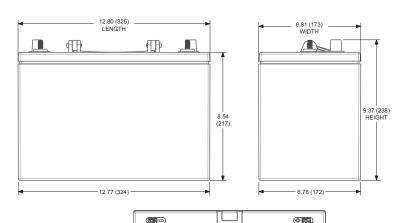
#### **TROJAN 31-AGM PERFORMANCE**



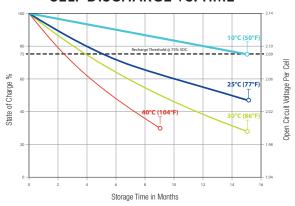
#### PERCENT CAPACITY VS. TEMPERATURE



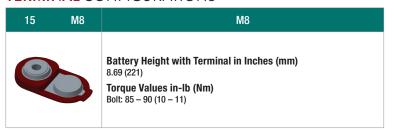
#### **BATTERY DIMENSIONS** (shown with DT)



#### SELF DISCHARGE VS. TIME



#### TERMINAL CONFIGURATIONS<sup>6</sup>



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6	DT	AUTOMOTIVE POST & STUD
		Battery Height with Terminal in Inches (mm) 9.37 (238)
Q		Torque Values in-lb (Nm) Connected to Stud: 95 – 105 (11 – 12) Connected to AP: 50 – 70 (6 – 8)
		<b>Bolt Size</b> 5/16" – 18

- A. The number of minutes a battery can deliver when discharged at a constant rate at 80°F (27°C) and maintain a voltage above 1.75 V/cell. Capacities are
- The anount of aminists a statesty can deliver when discharged at a constant rate at 60° (27°) and maintain a dislage above 1.73 Vicen. Capacities based on peak performance.

  The amount of amp-hours (Ah) a battery can deliver when discharged at a constant rate at 80° (27°C) for the 20-Hour rate and 66°F (30°C) for the 5-Hour rate and maintain a voltage above 1.75 Vicen. Capacities are based on peak performance.

  Dimensions may vary depending on type of handle or terminal. Batteries should be mounted with 0.5 inches (12.7 mm) spacing minimum.
- C.C.A. (Cold Cranking Amps) the discharge load in amperes which a new, fully charged battery can maintain for 30 seconds at 0°F (-18°C) at a voltage above 1.2 V/cell.
- E. C.A. (Cranking Amps) the discharge load in amperes which a new, fully charged battery can maintain for 30 seconds at 32°F (0°C) at a voltage above 1.2 V/Cell. This is sometimes referred to as marine cranking amps @ 32°F or M.C.A. @ 32°F.

  F. Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.

  G. Terminal Images are representative only.

- A boost charge should be performed every 6 months when batteries are in storage.
- Weight may vary.













