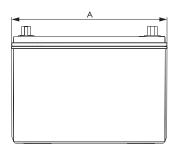


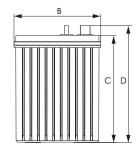


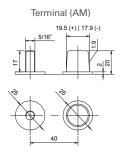
# Marine/RV Dry Cell Battery Block

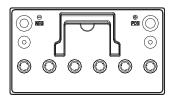
Discover® Marine/RV Series provide superior high integrity and reliability for marine and leisure applications. The maintenance-free, thick plate construction, designed for tough applications and repeated deep discharging makes this series the definitive choice.

#### **MECHANICAL DRAWINGS**









#### **MECHANICAL SPECIFICATIONS**

Industry Reference	27		
Length (A)	12.1 in 308 mm		
Width (B)	6.8 in	172 mm	
Height (C)	8.3 in	212 mm	
Total Height (D)	9.1 in	232 mm	
Weight	66 lbs	30 kgs	
Terminal (Opt'I)*	AM		
Cell(s)	6		
Electrolyte	1.2875 S.G.	AGM	

#### **ELECTRICAL SPECIFICATIONS**

Amp Hours (AH)	Minutes of Discharge		
20 HR	@25A	@75A	
105	200	46	

#### **ELECTRICAL SPECIFICATIONS**

Voltage	12 V			
80% DOD Voltage Cutoff	11.4 V			
Internal Resistance	3.80 mΩ			
Short Circuit (20°C   68°F)	2930A			
Self Discharge	Less than 3% per month (20°C 68°F)			
Cranking Amps**	950 @ 27°C (80°F)			
	850 @ 0°C (32°F)			
	550 @ -18°C (0°F)			
Charge Temperature	Min: -10°C ( 14°F)   Max: 50°C (122°F)			
Discharge Temperature***	Min: -40°C (-40°F)   Max: 50°C (122°F)			
Storage	Min: -20°C (-4°F)   Max: 60°C (140°F)			

NOTE: There is a tolerance of +/-2%.

- \*TERMINAL TORQUE: Please refer to our document, located in the Resources webpage (www.discoverbattery.com/resources).
- \*\*CRANKING AMPS: Cranking Amps data is provided as a reference only. Specific application sizing and life factors must be considered when using deep cycle product in a starting application.
- \*\*\*CAUTION: Extra considerations must be given to depths of discharge, operating voltages and currents when designing systems for use at maximum temperatures

Maximum Current	Peak (5 seconds)	Peak (10 seconds)	Continuous	Recommended Continuous
Charge	1C10Hr	0.75C10Hr	0.5C10Hr	0.3C10Hr
Discharge	2C10Hr	1.5C10Hr	1C10Hr	0.5C10Hr

#### **BENEFITS & FEATURES**

Advanced battery designs that exceed Original Equipment Manufacturer requirements.

Enhanced alloy Traction heavy duty grids gives consistent active material adhesion and corrosion resistance for longer runtime and extended service life.

Higher density active material paste to deliver longer runtimes at high discharge currents.

Lower specific gravity for reduced heat and cycle life performances.

High impact reinforced copolymer and polypropylene cases with flat top

Sealed Non-Spillable Maintenance-free technology.

99.9% gas recombination reduces off gassing and water loss

Multiple battery terminal options and carrying handles available.

Excellent for use in environmentally sensitive areas.

UL94 recognized flame arresting low pressure safety vents (UL94 V0 rating

Classified as a non-spillable battery and is not restricted for transportation by:

- Air (IATA/ICAO provision 67)
- Ground (STB, DOT-CFR-HMR49)
- Water (IMDG amendment 27)

# **CERTIFIED QUALITY**

Discover® and its facilities and products are tested and certified to multiple standards:

- ISO, UL, CE, and QS standards
- ETTS Germany
- · Euro Bat classification for Environmental Stewardship Standards

Designed in accordance with and published in compliance with applicable BCI, IEC and BS EN standards, including:

- IEC60896-21/22
- BS FN 60254-1:2005
- AS/NZS 4029.2.2000













# NOTE:

IUI with Pulse Termination algorithm uses a pulse termination criterion. As a safety precaution during the Finish phase, if the average cell voltage, or volts per cell (vpc), exceeds U2 and the charger output has been on for more than 30 seconds, the output is shut off until the vpc falls to U3. The finish phase then resumes and this "pulsing" continues until the target overcharge (108% - 112%) is reached.

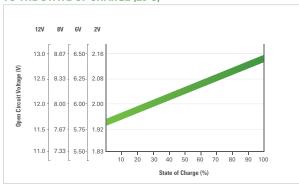
#### NOTE 2:

NUTE 2:
Please note the voltage settings
displayed in the IUI with Pulse
Termination Charge Profile
graph, corresponds to the set
points at 25°C (77°F). For
temperatures below 25°C, adjust
+0.005VPC/°C (or 0.003VPC per
'F). For temperatures above
25°C, adjust -0.005VPC/°C (or
0.003VPC per 'F).

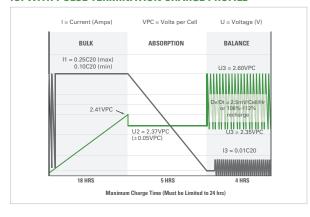
#### **TEMPERATURE EFFECTS ON CAPACITY**



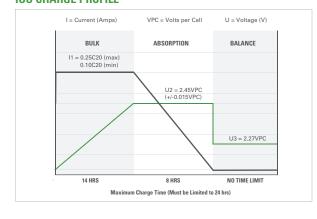
## **OPEN CIRCUIT VOLTAGE IN RELATION** TO THE STATE OF CHARGE (20°C)



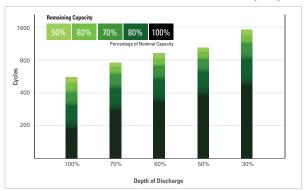
#### **IUI WITH PULSE TERMINATION CHARGE PROFILE**



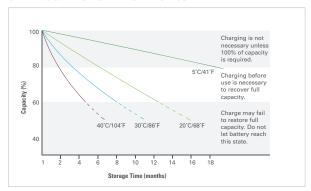
# **IUU CHARGE PROFILE**



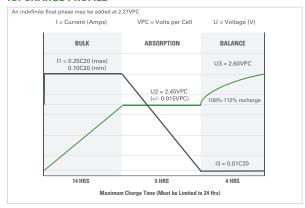
#### CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE (25°C)



### **SELF-DISCHARGE CHARACTERISTICS**



#### **IUI CHARGE PROFILE**



### **RELATION BETWEEN CHARGING, VOLTAGE AND TEMPERATURE**

