

# MECHANICAL SPECIFICATIONS

Industry Reference			
Length A (in/mm)	9	229	
Width B (in/mm)	5.4	138	
Height C (in/mm)	8.2	208	
Total Height D (in/mm)	8.3	212	
Weight (lbs/kgs)	40	18	
Terminal *	F11M6		
Technology	AGM, VRLA		

NOTE 1: Dimensions have a  $\pm 2 \text{ mm}$  (0.08 in) tolerance. Weights may vary. NOTE 2: Refer to terminal guide on website for torque values.

### PERFORMANCE SPECIFICATIONS

Amp Hours (AH)								
15 MIN	1 HR	5 HR	10 HR	20 HR				
34	48	53	55	57				

15MIN @1.67 VPC; 1HR @1.60 VPC, 5HR @1.75 VPC; 10 HR@ 1.80 VPC; 20 HR @1.80 VPC. All at 30°C/86°F

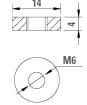
## PERFORMANCE SPECIFICATIONS

Discharge Constant Current (Amperes) @ 25°C / 77°F								Discharge Constant Power (Watts) @ 25°C / 77°F											
VPC/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR	VPC/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR
1.60 VPC	246.00	176.00	145.00	78.00	48.20	18.50	11.50	5.80	3.05	1.60 VPC	444.00	313.00	260.00	146.00	86.00	35.20	23.50		
1.65 VPC	225.00	168.00	140.00	76.00	46.90	18.10	11.30	5.80	3.00	1.65 VPC	425.00	301.00	253.00	142.00	835.00	34.40	23.00		
1.70 VPC	218.00	160.00	134.00	74.00	45.50	17.60	11.00	5.70	2.95	1.70 VPC	410.00	290.00	242.00	138.00	81.00	33.50	22.50		
1.75 VPC	200.00	152.00	128.00	72.00	44.10	17.10	10.70	5.60	2.90	1.75 VPC	385.00	278.00	233.00	134.00	78.50	32.60	22.00		
1.80 VPC	185.00	143.00	121.00	69.80	42.50	16.50	10.30	5.50	2.85	1.80 VPC	353.00	265.00	223.00	130.00	75.50	31.70	21.40		

15MIN @1.67 VPC; 1HR @1.60VPC, 5HR @1.75VPC; 10 HR@ 1.80VPC; 20 HR @1.80VPC. All at 30°C/86°F

#### AGM High Rate Battery

Discover® VRLA AGM High Rate batteries are dependable and delivers consistent power in backup for UPS and critical power applications. The batteries are maintenance-free, no-gassing, nonspillable and ideal for use in sensitive areas.





**ELECTRICAL SPECIFICATIONS** 

## BENEFITS

#### ENHANCED RUNTIME

- Consistent amp hour capacity over lifetime
- Superior high-rate discharge performance

# EXTENDED SERVICE LIFE

- Up to 12 year design life
- Low self-discharge rates prolongs shelf life
  99% gas recombination extends life

#### EXTREME TEMPERATURES

- Wide ambient operating temperature
- Low temperature operation superior to FLA / Gel batteries

#### RELIABLE AND SAFE

- Valve Regulated Lead-Acid, AGM
- Maintenance-free, nonspillable, no-gassing
- Flame retardant (UL94:V0) ABS case and cover available

#### CERTIFIED QUALITY

Discover® manufacturing facilities are fully certified to ISO 9001/14001 and OSHA 18001 standards.

Designed in accordance with and published in compliance with applicable standards, including:

- IEC 60896-21/22
- BS EN 60254-1:2005
- UL, CE Health Safety Certified

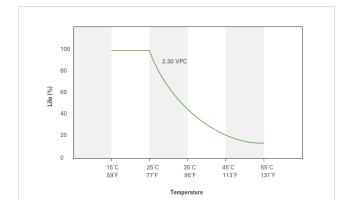
## SHIPPING CLASSIFICATION

- Classified as a nonspillable battery
- Without restriction for transport by Sea (IMDG amendment 27)
  - $\bullet\,$  Without restriction for transport by Air (IATA/ICAO provision 67)
  - Without restriction for transport by Ground (STB, DOT-CFR-HMR49)

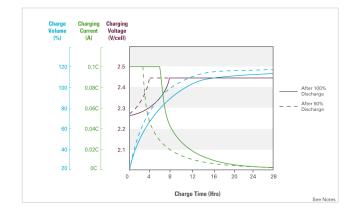
Voltage (V)	12
Internal Resistance (m?)	5.5
Short Circuit (A) (20°C / 68°F)	2100
Self-Discharge (20°C / 68°F)	2-3% per month
Charge Temperature	Min: -10°C (14°F)   Max: 50°C (122°F)
Discharge Temperature	Min: -40°C (-40°F)   Max: 50°C (122°F)
Storage Temperature	-20°C (-4°F) to 60°C (140°F)

NOTE 3: Extra considerations must be given when designing systems for use at maximum temperatures. NOTE 4: Internal Resistance is approximate.

#### **Temperature Effects on Float Life**



### **Charge Characteristics (Cyclic)**



#### Self-Discharge Characteristics



- 1. Due to self-discharge characteristics of lead acid battery technologies, batteries should be charged within 6 months of storage to ensure optimum performance, prevent sulphation and permanent capacity loss.
- Charge profile recommendations correspond to battery voltages at 25°C (77°F). For temperatures below, adjust +5mVPC/°C (+3mVPC/°F). Temperatures above, adjust -5mVPC/°C (-2
- 3mVPC/°F). Temperature compensated charging helps ensure optimum battery runtime and life performance. Charge until battery voltage reaches 2.45VPC and hold until current tapers down to 0.01C20 amps. Battery is fully charged under these conditions and charger should be disconnected or 3. switched to "float" voltage. For standby / float use, a constant charge voltage of 2.25-2.30VPC is also acceptable. Hold until the battery seeks its own current level and maintain itself in a fully charged condition.

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#### **Temperature Effects on Capacity**

