Printed: 10/24/2022



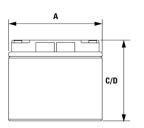
Innovative Battery Solutions

iscover°

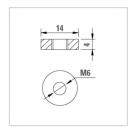


# AGM High Rate Battery

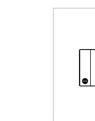
Discover® VRLA AGM High Rate batteries are dependable and delivers consistent power in backup for UPS and critical power applications. The batteries are maintenance-free, no-gassing, nonspillable and ideal for use in sensitive areas.







TERMINAL



LAYOUT

## MECHANICAL SPECIFICATIONS

Length A (in/mm)	7.8 197			
Width B (in/mm)	6.5 165			
Height C (in/mm)	6.7 170			
Total Height D (in/mm)	6.7 170			
Weight (lbs/kgs)	33 15			
Terminal *	F11M6			
Technology	AGM, VRLA			

NOTE 1: Dimensions have a ±2 mm (0.08 in) tolerance. Weights may vary. NOTE 2: Refer to terminal guide on website for torque values

## **ELECTRICAL SPECIFICATIONS**

Voltage (V)	12
Internal Resistance (mΩ)	6
Short Circuit (A) (20°C / 68°F)	2000
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.

### PERFORMANCE SPECIFICATIONS

Amp Hours (AH)								
15 MIN	1 HR	5 HR	10 HR	20 HR				
26	36	42	45	48				

15MIN @1.67 VPC; 1HR @1.60 VPC, 5HR @1.75 VPC; 10 HR@ 1.80 VPC; 20 HR

Discharge Constant Current (Amperes) @ 25°C / 77°F									
VPC/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR
1.60 VPC	_	141.00	111.00	66.10	35.90	14.10	9.10	4.85	2.55
1.65 VPC	_	136.00	106.00	63.30	35.00	13.70	8.85	4.80	2.55
1.70 VPC	_	130.00	101.00	60.30	34.00	13.20	8.60	4.70	2.50
1.75 VPC	_	124.00	76.00	57.20	33.00	12.60	8.35	4.60	2.45
1.80 VPC	_	116.00	90.50	54.00	31.80	12.00	8.10	4.50	2.40

Discharge Constant Power (Watts) @ 25°C / 77°F									
VPC/Time	5 MIN	10 MIN	15 MIN	30 MIN	45 MIN	1 HR	2 HR	3 HR	5 HR
1.60 VPC	_	252.00	194.00	115.00	84.50	67.00	37.30	27.90	18.90
1.65 VPC	_	245.00	188.00	111.00	81.50	65.30	36.00	27.00	18.30
1.70 VPC	_	236.00	181.00	106.00	78.00	63.30	34.70	25.90	17.50
1.75 VPC	_	227.00	174.00	101.00	74.50	61.30	33.40	24.80	16.70

### 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

### CERTIFIED QUALITY

Discover® manufacturing facilities are fully certified to ISO 9001/14001 and OSHA 18001 standards. Designed in accordance with and published in

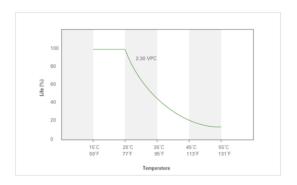
- compliance with applicable standards, including: • IEC 60896-21/22
- BS EN 60254-1:2005
- UL, CE Health Safety Certified

### SHIPPING CLASSIFICATION

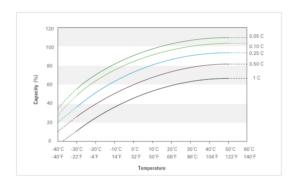
- Classified as a nonspillable battery
- Without restriction for transport by Sea (IMDG amendment 27)
- Without restriction for transport by Air (IATA/ICAO provision 67)
- Without restriction for transport by Ground (STB, DOT-CFR-HMR49)

1.80 VPC — 217.00 168.00 95.50 /0.50 59.00 28.10 23.60 15.80

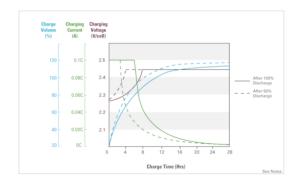
# **Temperature Effects on Float Life**



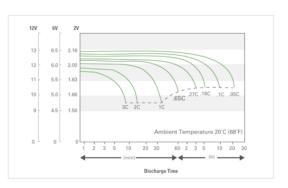
# **Temperature Effects on Capacity**



# **Charge Characteristics**



# **Discharge Characteristics**



# **Self-Discharge Characteristics**



### **NOTES**

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.

2Charge profile recommendations correspond to battery voltages at 25°C (77°F). For temperatures below, adjust +5mVPC/°C (+3mVPC/°F). Temperatures above, adjust -5mVPC/°C (-3mVPC/°F). Temperature compensated charging helps ensure optimum battery runtime and life performance.

3Charge 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 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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