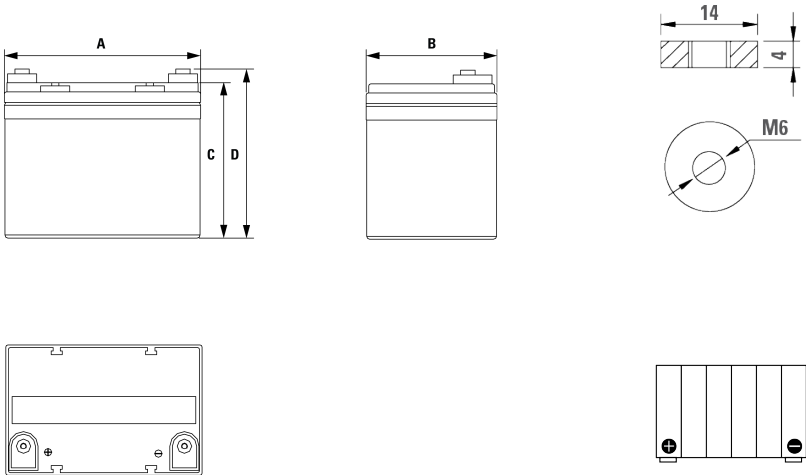


AGM High Rate Battery

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.



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)
- Without restriction for transport by Air (IATA/ICAO provision 67)
- Without restriction for transport by Ground (STB, DOT-CFR-HMR49)

MECHANICAL SPECIFICATIONS

Industry Reference		
Length A (in/mm)	7.7	195
Width B (in/mm)	5.1	130
Height C (in/mm)	6.1	155
Total Height D (in/mm)	6.6	168
Weight (lbs/kgs)	23	11
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 (m?)	8
Short Circuit (A) (20°C / 68°F)	1500
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
19	26	30	32	34

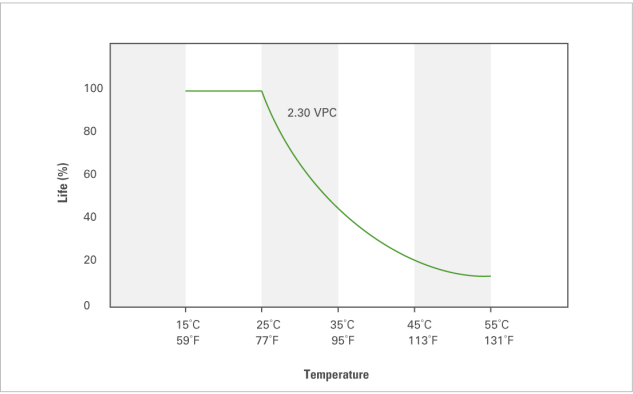
15MIN @1.67 VPC; 1HR @1.60VPC; 5HR @1.75VPC; 10 HR@ 1.80VPC; 20 HR @1.80VPC. All at 30°C/86°F

PERFORMANCE SPECIFICATIONS

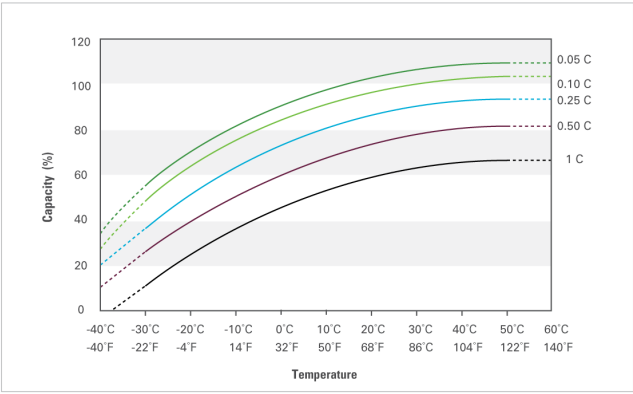
Discharge Constant Current (Amperes) @ 25°C / 77°F										Discharge Constant Power (Watts) @ 25°C / 77°F									
VPC/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR	VPC/Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR
1.60 VPC		107.00	79.50	50.50	25.80	10.70	6.65	3.50	1.90	1.60 VPC		179.00	160.00	95.50	54.00	20.60	13.40		
1.65 VPC		104.00	76.50	48.30	25.10	10.50	6.45	3.50	1.85	1.65 VPC		171.00	153.00	92.70	53.00	20.20	13.10		
1.70 VPC		100.00	75.00	46.00	24.30	10.30	6.20	3.40	1.80	1.70 VPC		163.00	146.00	89.70	51.80	19.70	12.80		
1.75 VPC		96.00	73.00	43.70	23.50	10.10	5.95	3.30	1.75	1.75 VPC		157.00	139.00	86.70	50.60	19.20	12.50		
1.80 VPC		93.00	69.50	41.40	22.50	9.90	5.70	3.20	1.70	1.80 VPC		151.00	131.00	83.50	49.30	18.60	12.20		

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

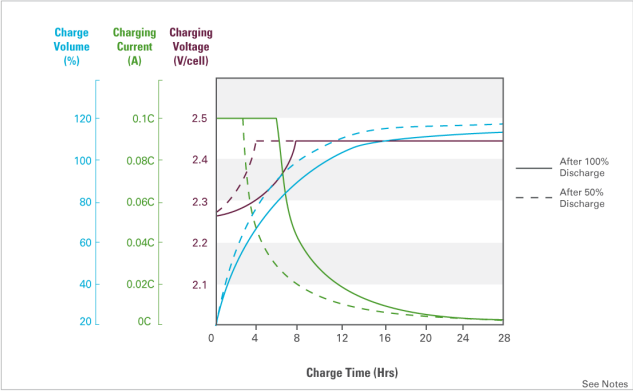
Temperature Effects on Float Life



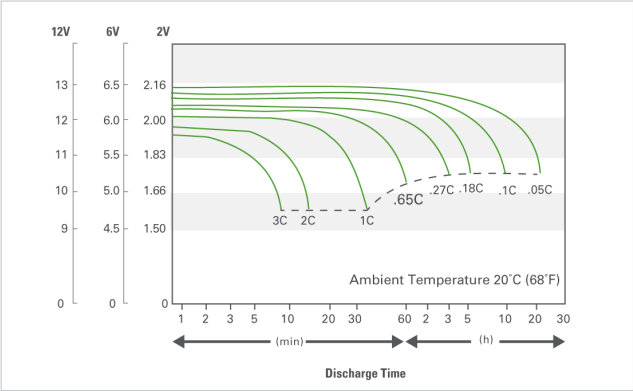
Temperature Effects on Capacity



Charge Characteristics (Cyclic)



Discharge Characteristics



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.
2. 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 (-3mVPC/°F). Temperature compensated charging helps ensure optimum battery runtime and life performance.
3. 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 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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