

# D28000D

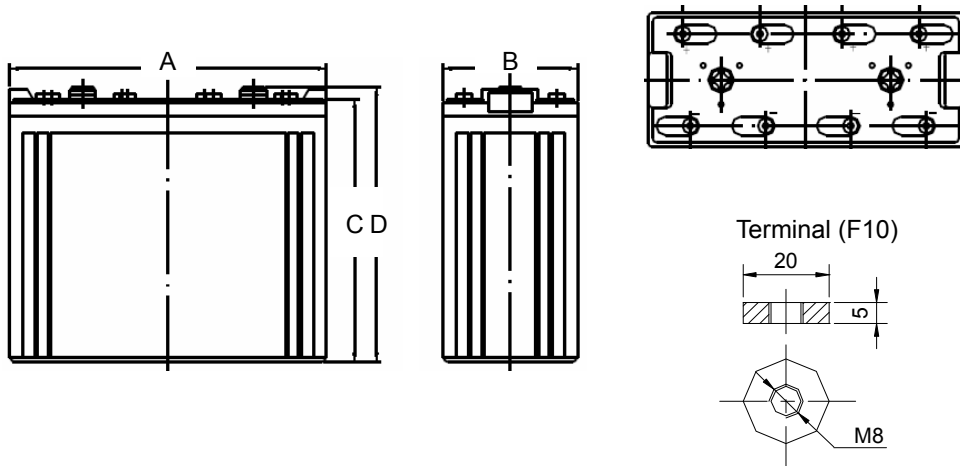
DATA SHEET



## Cyclic AGM Battery Block

Discover® AGM Series VRLA Industrial Batteries provide superior high integrity and reliability for commercial, industrial, and private applications. The maintenance-free Valve Regulated Lead Acid (VRLA) construction make Discover® Standard AGM Series Batteries the definitive choice for mobility and Home Medical Equipment (HME), solar and renewable energy, electronics and security, marine and RV, and utility applications.

### Mechanical Drawings



### Benefits and Features

- Tank formed lead-tin-calcium plates deliver consistent dependable performance and promote long life
- Maintenance-free technology
- 99% gas recombination for extended life in float applications
- Multiple terminal, configuration options and carrying handles available with most models
- Classified as a non-spillable battery and is not restricted for transportation by:
  - Air (IATA/ICAO provision 67)
  - Surface (DOT-CFR-HMR49)
  - Water (per IMDG amendment 27)
- Flame retardant ABS case and cover with UL94 V0 rating available
- UL924 recognized flame arresting low pressure safety vents
- 98% recyclable

### Mechanical Specifications

Length (A)	16.14 in	410 mm
Width (B)	6.89 in	175 mm
Height (C)	13.0 in	330 mm
Total Height (D)	14.4 in	367 mm
Weight	114.4 lbs	52.0 kgs
Terminal (Opt'l)	F10	
Cells	1	
Electrolyte	AGM	

**TERMINAL TORQUE:** Please refer to our document, located in the Resources webpage ([www.discover-energy.com/resources/](http://www.discover-energy.com/resources/)).

**CAUTION:** Extra considerations must be given to depths of discharge, operating voltages and currents when designing systems for use at maximum temperatures.

### Electrical Specifications

Voltage	2 V
Internal Resistance	0.6 mΩ
Short Circuit 20°C (68°F)	-
20 HR	860 Ah
10 HR	800 Ah
5 HR	710 Ah
1 HR	495 Ah
15 MIN	-
Charge Temperature	-10°C (14°F) to 50°C (122°F)
Discharge Temperature	-20°C (-4°F) to 50°C (122°F)
Maximum Discharge*	-40°C (-40°F) to 60°C (140°F)

### Certifications and Standards

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

- IEC60896-21/22
- BS EN 60254-1:2005
- AS/NZS 4029.2:2000 BS EN 60254-1:2005 (MOD)

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

- ISO, UL, QS, and TUV standards
- EITS Germany
- Euro Bat classification for Environmental Stewardship Standards



### Discharge Constant Current (Amperes at 25°C/77°F)

End Point V/C	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	3 HR	5 HR	10 HR	20 HR
1.60V	-	1570	1280	828	495	220	154	85.5	-
1.65V	-	1489	1218	791	476	213	150	84.1	-
1.70V	-	1404	1154	752	456	205	146	82.8	-
1.75V	-	1317	1087	714	436	199	142	81.5	-
1.80V	-	1228	1022	673	415	193	137	80.0	-

### Discharge Constant Power (Watts at 25°C/ 77°F)

End Point V/C	5 MIN	10 MIN	15 MIN	30 MIN	45 MIN	1 HR	2 HR	3 HR	5 HR
1.60V	-	2394	1995	1497	1133	936	632	451	303
1.65V	-	2255	1887	1422	1081	896	613	432	298
1.70V	-	2115	1777	1346	1027	855	594	413	292
1.75V	-	1975	1667	1267	971	812	575	394	286
1.80V	-	1837	1557	1187	915	769	556	375	271

### Contact Us



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### Charge and Discharge

Max Charge / Discharge Currents	Peak (5 seconds)	Peak (10 seconds)	Max Continuous
Charge	1c20	0.75c20	0.25c20
Discharge	15c20	10c20	0.5c20

**Float (Stand-By) Use:** Hold a constant voltage of 2.25vpc to 2.30vpc continuously.

When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

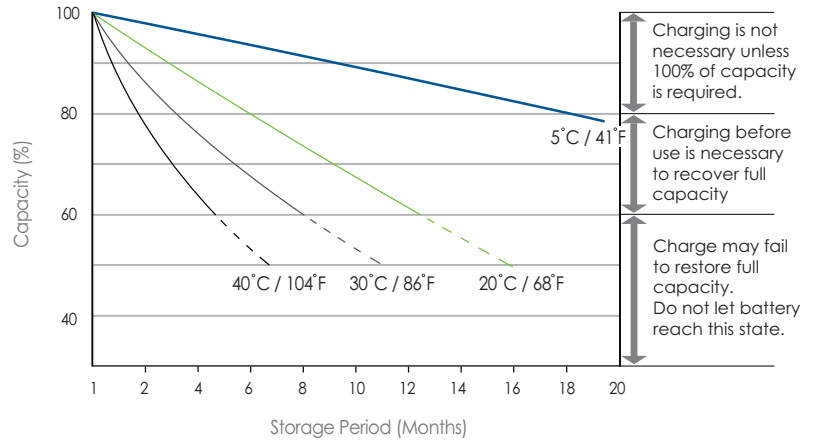
**Cyclic Use:** Limit initial currents to 0.25C20 amps. Charge until battery voltage reaches 2.40 to 2.45vpc. Hold at 2.40 to 2.45vpc until current drops to under 0.01C20 amps. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

**Temperature Coefficient:** Adjust charging voltage to +/- 0.005vpc (C, 0.003vpc/F) from 25°C (77°F).

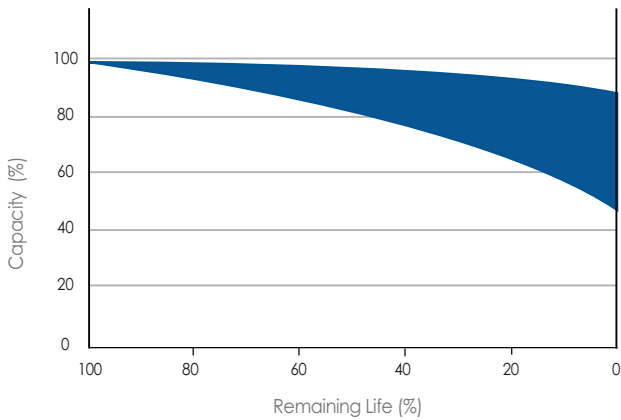
### Discharge Characteristics (20°C/68°F)



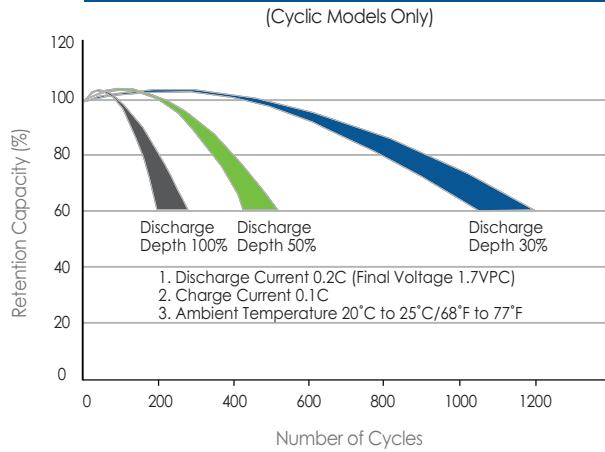
### Self-Discharge Characteristics



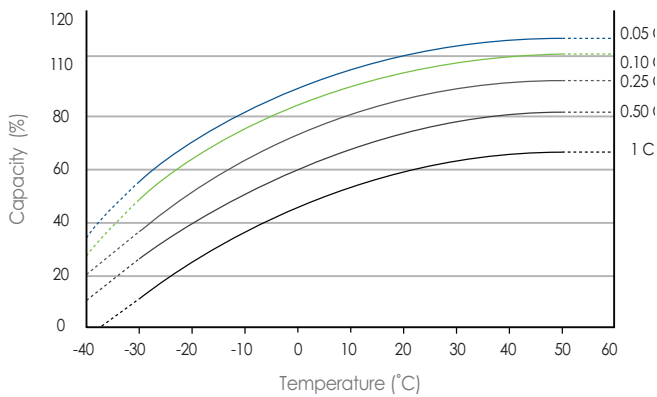
### Life Characteristics in Stand-By Use



### Life Characteristics in Cyclic Use



### Temperature Effects on Capacity



### Temperature Effects on Float Life

