

**Physical Specifications**

Part Number: AGM GBS127CO.RE  
 Length: 151 ± 2 mm (5.94 inches)  
 Width: 65 ± 2 mm (2.55 inches)  
 Height: 99 ± 2 mm (3.89 inches)  
 Weight: ~ 1.9kg (4.19 lbs)

Standard case material is flame retardant to (UL94) HBO.  
 3CORE Batteries range provide an extremely reliable and versatile valve regulated lead acid battery. Their unique construction and sealing techniques ensures that no electrolyte leakage can occur and provides safe and effective operation in any orientation and meets all requirements of the International Air Transport Association Dangerous Goods Regulations to allow transportation by air.



**Specifications**

Terminal Type: Standard F1 (T1) or any suitable terminal (at customer request)

Design Floating Life 20°C (68°F): 5 Years

Maxim Discharge Current: 99A/5sec.

Internal Resistance: Approximative 30mΩ

Cycle Use: Initial Charging Current Less Than 1.20A • Voltage 14.4÷14.8 at 25°C (77°F) • Temperature Coefficient -30mV/°C  
 Standby Use: No Limit on Initial Charging Current Voltage 13.5÷13.8V at 25°C (77°F) • Temperature Coefficient -20mV/°C  
 Capacity Affected by Temperature 40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%

Self Discharge: 3CORE Batteries may be stored for up to 6 months at 25°C (77°F) and than refresh charge is required. For higher temperatures the time interval will be shorter.

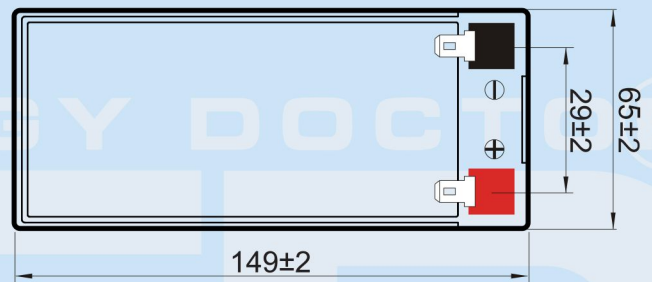
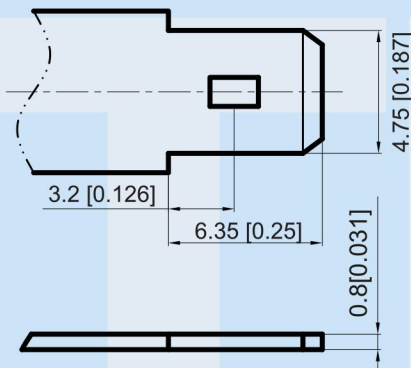
**Rated Capacity**

7.02 Ah/0.34A	20hr	1.80V/cell 25°C/77°F
6.53 Ah/0.63A	10hr	1.80V/cell 25°C/77°F
5.80 Ah/1.16A	5hr	1.75V/cell 25°C/77°F
5.13 Ah/1.71A	3hr	1.75V/cell 25°C/77°F
4.26 Ah/4.26A	1hr	1.60V/cell 25°C/77°F

**Discharge Characteristics**

<b>Operating Temperature Range</b>
Charge: 0°C÷40°C (5°F÷104°F)
Storage: -15°C÷40°C (5°F÷104°F)
Nominal: 25°C±3°C (77°F±5°F)
Discharge: -15°C÷50°C (5°F÷122°F)

F1 (T1) terminal 4.8 mm



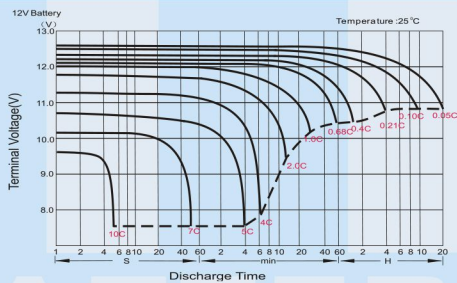
**Constant Current Discharge (Amperes) at 25°C**

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	11.5	8.03	6.62	5.74	4.61	3.54	2.90	1.77	1.35	1.11	0.941	0.815	0.648	0.539	0.287
1.80V/cell	14.2	9.58	7.68	6.50	5.10	3.86	3.12	1.88	1.42	1.17	0.982	0.851	0.672	0.551	0.290
1.75V/cell	16.8	10.8	8.47	7.07	5.45	4.10	3.28	1.96	1.47	1.20	1.01	0.872	0.690	0.569	0.293
1.70V/cell	19.0	12.0	9.17	7.60	5.72	4.26	3.42	2.04	1.52	1.23	1.03	0.893	0.701	0.578	0.298
1.67V/cell	21.0	12.9	9.70	7.97	5.96	4.43	3.56	2.10	1.55	1.26	1.06	0.910	0.712	0.586	0.303
1.60V/cell	22.0	13.4	10.1	8.23	6.13	4.53	3.64	2.17	1.59	1.29	1.08	0.928	0.727	0.596	0.304

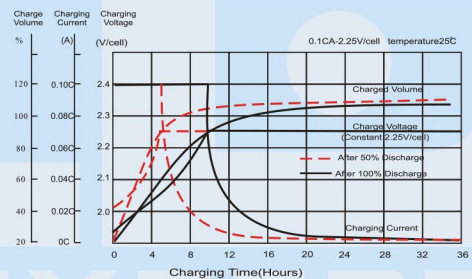
**Constant Power Discharge (Watts) at 25°C**

F.V/Time	5 min	10 min	15 min	20 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	21.7	15.3	12.7	11.1	8.99	6.95	5.71	3.50	2.68	2.21	1.88	1.63	1.30	1.09	0.580
1.80V/cell	26.4	18.1	14.6	12.5	9.88	7.53	6.11	3.70	2.80	2.31	1.95	1.70	1.34	1.12	0.583
1.75V/cell	30.9	20.2	16.0	13.5	10.5	7.95	6.40	3.84	2.88	2.37	1.99	1.73	1.37	1.13	0.585
1.70V/cell	34.7	22.1	17.2	14.4	10.9	8.21	6.63	3.98	2.96	2.41	2.03	1.76	1.38	1.14	0.592
1.67V/cell	37.7	23.4	17.9	14.9	11.3	8.48	6.86	4.07	3.02	2.45	2.07	1.78	1.40	1.15	0.597
1.60V/cell	39.0	24.1	18.5	15.2	11.5	8.58	6.96	4.17	3.07	2.50	2.09	1.81	1.42	1.17	0.597

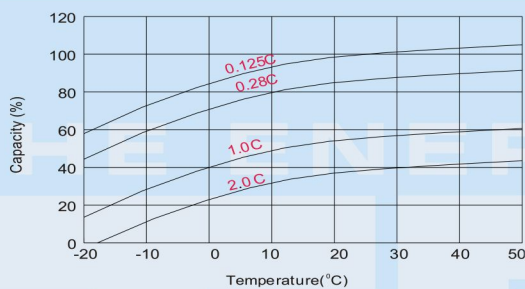
**Discharge Characteristics**



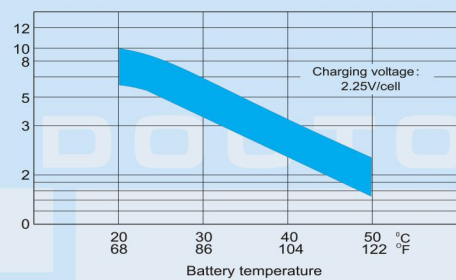
**Float Charging Characteristics**



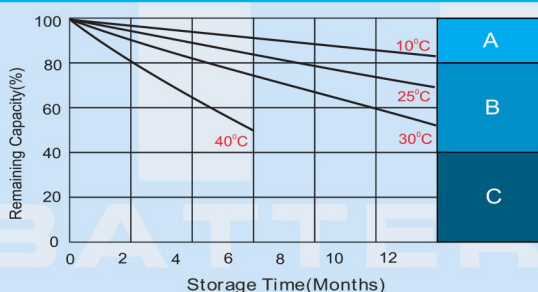
**Temperature Effects in Relation to Battery Capacity**



**Effect of Temperature on Long Term Float Life**



**Self Discharge Characteristics**



**A**

No supplementary required  
(Carryout supplementary charge before use if 100% capacity is required.)

**B**

Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

**C**

Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.