

Datasheet

Sealed Lead-Acid Battery

General Purpose Specification

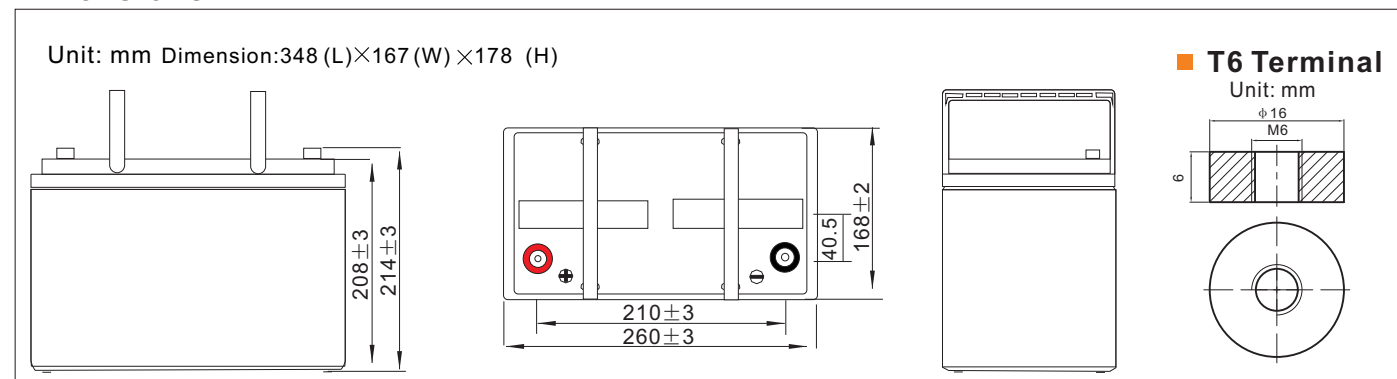
174-8861(12V75Ah)

Cells Per Unit	6
Voltage Per Unit	12
Capacity	75.0 Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx 22.3 kg
Max. Discharge Current	900 A (5 sec)
Internal Resistance	Approx 6.6 mΩ
Operating Temp. Range	Discharge : -15~50°C (5~122°F) Charge : 0~40°C (32~104°F) Storage : -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Float charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	22.5 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	T6
Container Material	A.B.S. (UL94-HB)

Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system

Dimensions



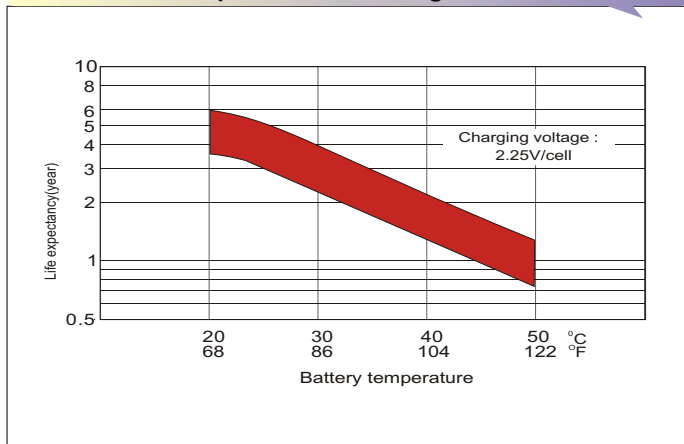
Constant Current Discharge Characteristics : A (25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	128.4	100.9	85.8	71.8	57.1	43.2	35.4	22.5	17.8	14.5	11.7	10.2	8.29	7.08	3.86
1.80V/cell	172.3	128.9	103.7	84.9	67.3	50.2	39.6	24.6	19.2	15.5	12.6	10.9	8.79	7.50	3.90
1.75V/cell	194.3	141.7	113.3	91.3	69.9	52.1	41.4	25.5	19.5	15.9	12.9	11.2	8.94	7.58	3.94
1.70V/cell	213.9	154.4	120.9	95.9	72.7	54.2	42.7	26.5	20.1	16.3	13.2	11.5	9.07	7.65	4.01
1.65V/cell	235.9	166.7	128.6	101.9	76.7	55.6	44.2	27.2	20.9	16.8	13.6	11.7	9.21	7.81	4.07
1.60V/cell	260.2	180.9	137.5	108.6	81.0	57.9	45.8	28.2	21.6	17.4	14.1	12.0	9.30	7.89	4.09

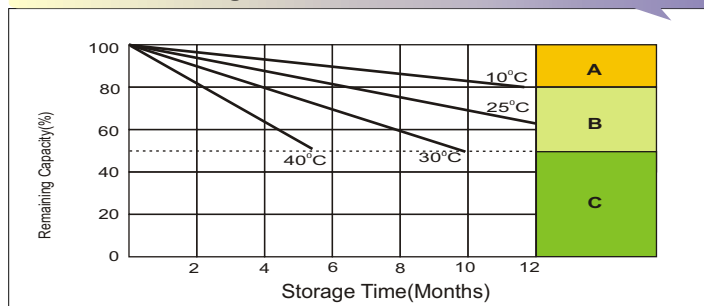
Constant Power Discharge Characteristics : W (25°C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	234.7	186.4	160.1	135.3	108.7	83.0	68.2	43.7	34.7	28.4	23.0	20.1	16.4	14.0	7.65
1.80V/cell	311.7	235.4	190.9	157.6	126.3	95.8	76.0	47.4	37.1	30.2	24.6	21.4	17.3	14.8	7.71
1.75V/cell	343.9	254.5	205.9	167.9	130.1	98.4	79.1	49.0	37.7	30.8	25.1	22.0	17.6	14.9	7.78
1.70V/cell	368.2	271.1	216.8	175.1	134.6	102.0	81.4	50.8	38.7	31.5	25.7	22.4	17.8	15.1	7.92
1.65V/cell	400.3	289.9	228.8	184.7	140.9	103.6	83.5	52.0	40.1	32.5	26.3	22.8	18.0	15.4	8.02
1.60V/cell	431.3	307.6	240.6	194.6	147.7	107.4	86.0	53.4	41.2	33.4	27.1	23.2	18.2	15.5	8.05

Effect of Temperature on Long Term Float Life

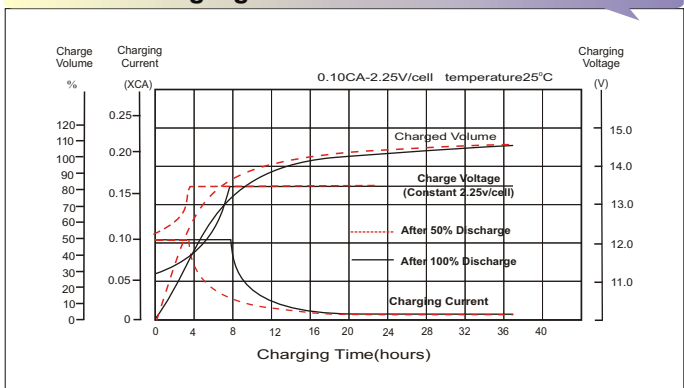


Self Discharge Characteristics

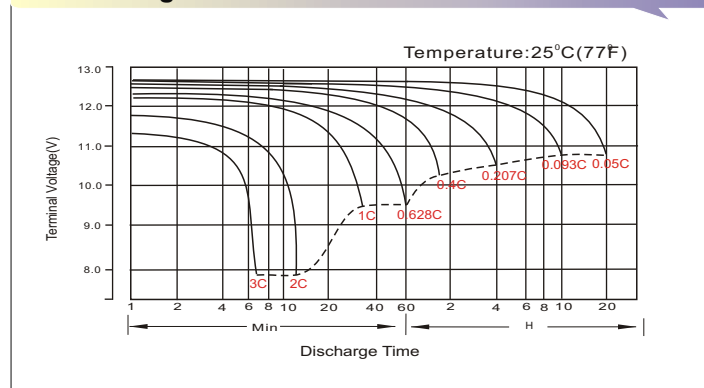


- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Avoid this storage period unless regular Top charge. Supplementary charge may often fail to recover the full capacity

Float Charging Characteristics



Discharge Characteristics



Available Capacity Subject to Temperature

Battery Type	-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
AGM Battery 6V&12V	46%	66%	86%	89%	93%	98%	100%	102%	103%	105%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	0.1C until the voltage reaching 14.4V, then 0.1Cx4h

Maintenance & Cautions

Float Service:
◆ It is recommended to check battery/Float voltage each month.
Equalisation charge:
◆ Equalisation charging is recommended once every 3 to 6 months using.
◆ Discharge 100% rated capacity.
◆ Charge 2.35v/cell constant voltage, maximum 0.3CA 24hrs.