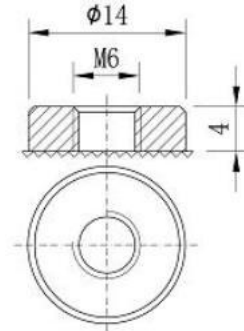


AGM Deep Cycle Battery



Model: BT-12M33AC(12V 33AH)



Application

- ☆ UPS power supply
- ☆ Telecom Equipment
- ☆ Power station
- ☆ Solar/wind energy storage system

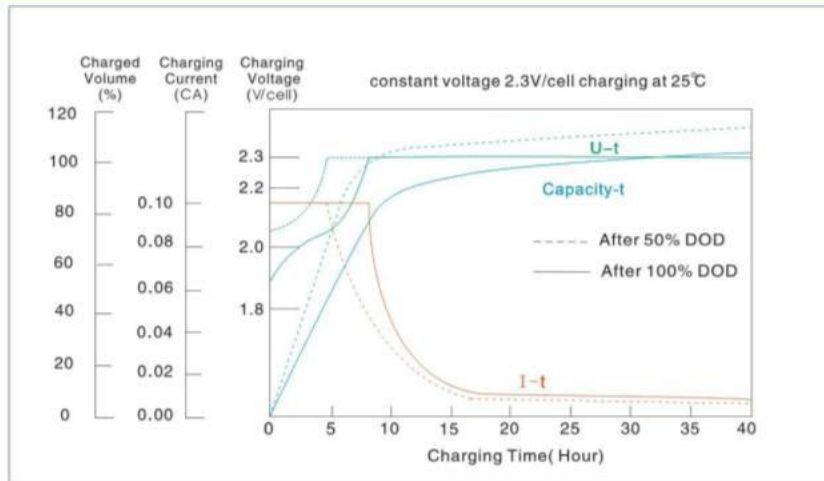
General Features

- ☆ Thick plates and high-density active material
- ☆ High power density
- ☆ Longer life in deep cycle applications
- ☆ Excellent recovery from deep discharge
- ☆ Wide operating temperature range from -10°C-40°C

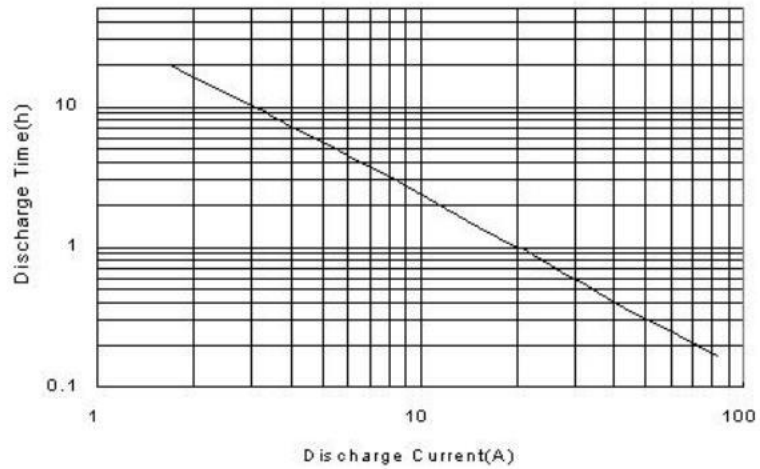
PHYSICAL SPECIFICATIONS		
Nominal Voltage	12V	
Nominal Capacity (20HR)	33AH	
Dimensions	Length	194±2mm
	Width	129±2mm
	Container height	156±2mm
	Total Height (with terminal)	179±2mm
Weight±3%	Approx 9.80Kg(21.60lbs)	
Internal Resistance (In full charge status)	≈7.6mΩ	
Standard Terminals	T20(standard)	

Constant – Voltage Charge	
Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 8.25A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77F) . 3. Hold at 14.1V to 14.4V until current drop to under 0.198A for at least 3 hours. 4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby service	<ol style="list-style-type: none"> 1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit 8.25A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status. 2. Temperature compensation coefficient of charging voltage is -18mV/°C
NOTE : The battery should be charged within 6 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation	

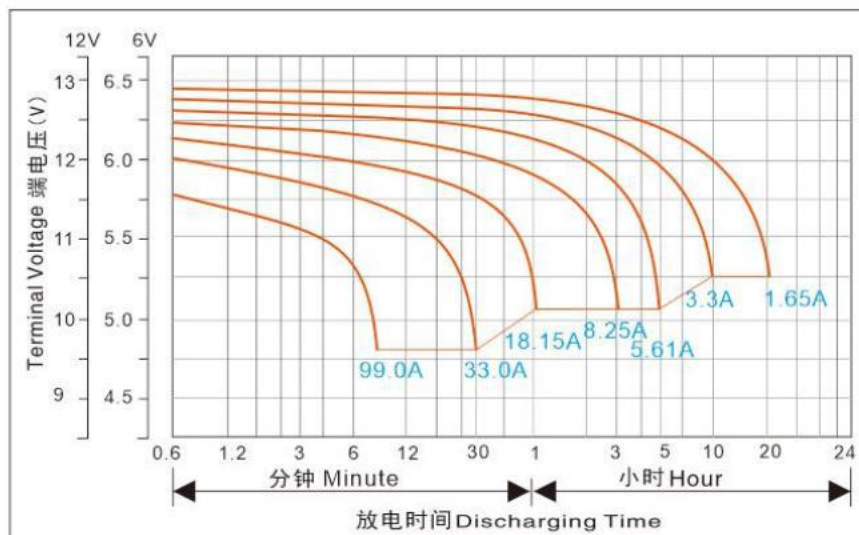
Charge Characteristics



Discharge Current & Discharge Duration Time (25°C/77°F)



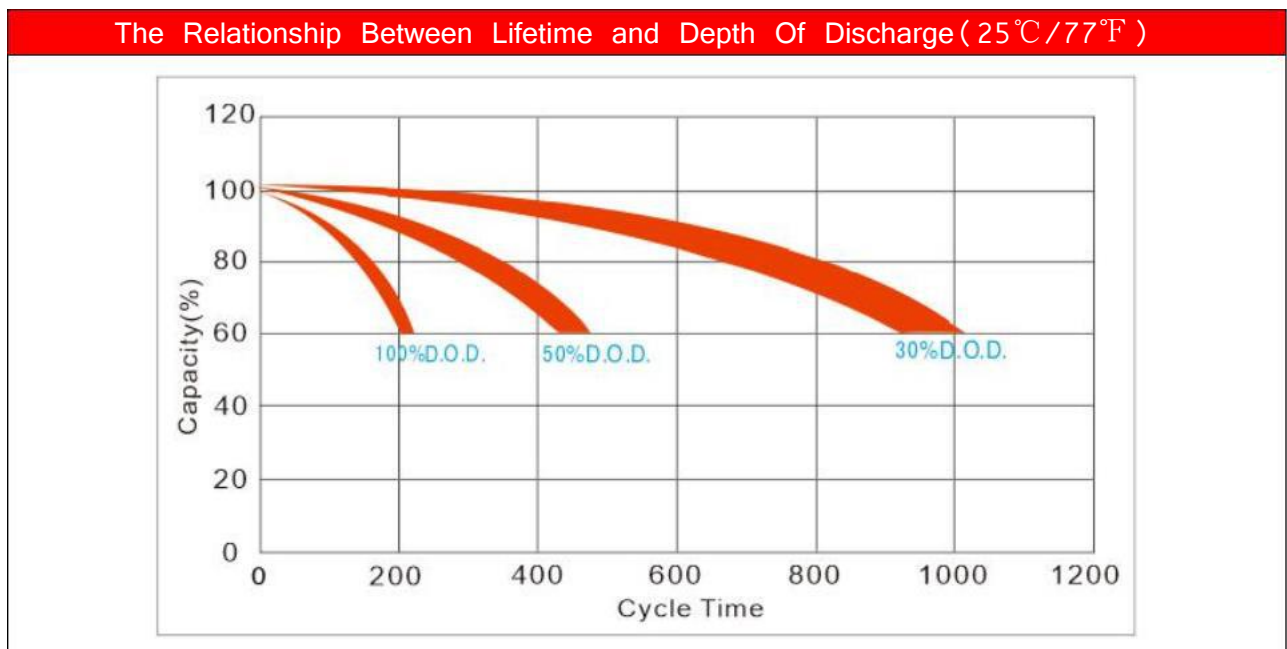
Discharge Characteristic (25°C/77°F)



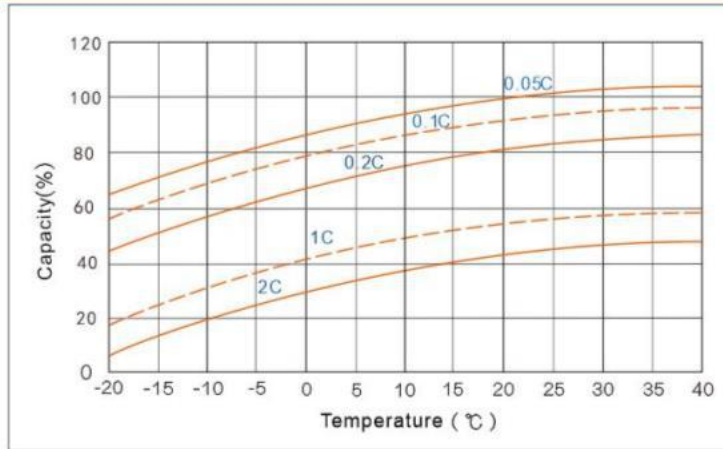
ELECTRICAL SPECIFICATIONS		
Rated Capacity	20 hour rate(1.65A)	33.03AH
	10 hour rate(3.3A)	32.50AH
	5 hour rate(5.61A)	27.80AH
	27minute rate(33A)	16.00AH
	7 minute rate (99A)	11.60AH
Capacity affected by Temperature (20Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

Constant Current Discharge Data Sheet (Amperes at 25°C)													
End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
10.20	122.5	80.0	62.7	32.0	23.2	19.9	15.75	11.60	8.81	5.69	3.81	3.35	1.740
10.50	121.5	79.2	62.0	31.7	23.1	19.8	15.50	11.20	8.54	5.58	3.77	3.32	1.720
10.80	120.4	78.3	61.4	31.5	23.0	19.7	15.25	10.80	8.26	5.47	3.73	3.29	1.690

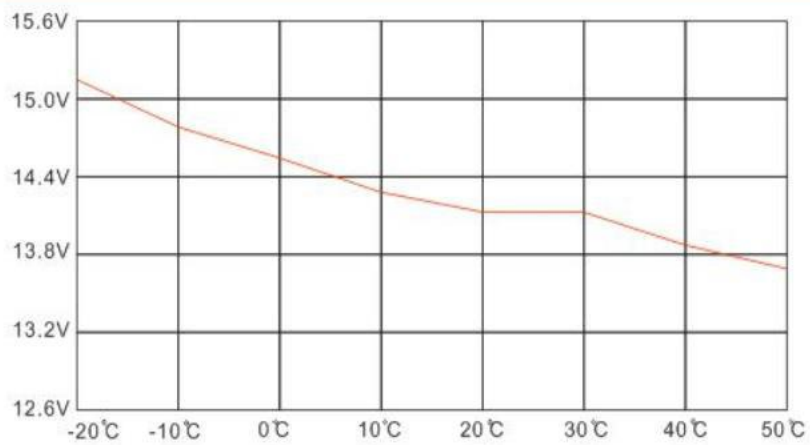
Constant Power Discharge Data Sheet (Watt at 25°C)													
End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
10.20	1325	955	773	437	318	242	185.7	139.7	99.71	65.72	46.29	37.46	20.17
10.50	1269	923	750	428	311	238	183.0	137.7	97.45	64.97	45.91	36.90	19.88
10.80	1203	889	726	415	303	234	180.3	135.8	95.76	64.22	45.44	36.28	19.60



Capacity Curve at Different Temperature



Charge Voltage VS Ambient Temperature Curve



Storage Characteristics

