



DEEP CYCLE/HIGH CYCLIC AGM SERIES

HDC200-12

SPECIFICATION

Nominal Voltage	12V		
Nominal Capacity(10HR)	200.0AH		
Dimensions	Length:	522 ± 3mm (20.55 inches)	
	Width:	240 ± 3mm (9.45 inches)	
	Container Height:	218 ± 3mm (8.58 inches)	
	Total Height:	224 ± 3mm (8.81 inches)	
Approx. Weight	62.2 Kg (137.1lbs) ± 4%		
Terminal	M8 (T11)		
Terminal Material	Copper		
Rated Capacity	214.4 AH/10.7A	(20hr, 1.80V/cell, 25°C/77°F)	
	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C/77°F)	
	175.4 AH/35.1A	(5hr, 1.75V/cell, 25°C/77°F)	
Max. Discharge Current	2000A (5s)		
Internal Resistance	Approx 2.7mΩ		
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)		
Cycle Use	Initial Charging Current less than 60.0A.Voltage		
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C		
Standby Use	No limit on Initial Charging Current Voltage		
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C		
Capacity Affected by Temperature	40°C (104° F) - 103%		0°C (32° F) - 86%
Self-Discharge	SECUK HDC series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.		

APPLICATION

- + Electric tools
- + Vehicle in place of walking
- + Lawn mowers
- + Golf trolleys and golf cart
- + Portable apparatus, lights and instruments;
- + Electric toys
- + Illumination light
- + Fire alarms
- + Portable power
- + Wheelchairs
- + Medical equipments.

FEATURES

- + Lead calcium grids for extended life
- + Absorbent glass mat technology
- + Recognized by UL & CE
- + ABS container

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.8	246.4	215.3	154.9	123.0	99.9	62.0	48.4	39.2	31.8	27.8	22.7	18.9	10.6
1.80V/cell	374.2	297.7	254.5	182.8	143.1	111.9	67.7	52.0	41.8	34.2	29.8	24.0	20.0	10.7
1.75V/cell	411.1	325.2	273.8	189.8	148.5	117.0	70.2	53.0	42.8	35.1	30.6	24.5	20.2	10.8
1.70V/cell	448.1	347.2	287.7	197.5	154.4	120.7	73.0	54.5	43.9	36.0	31.2	24.8	20.4	11.0
1.65V/cell	483.6	369.2	305.7	208.4	158.3	124.8	75.0	56.8	45.4	37.0	31.9	25.2	20.8	11.2
1.60V/cell	\	394.8	325.6	220.0	165.0	129.2	77.6	58.5	46.8	38.2	32.6	25.4	21.0	11.2

Constant Power Discharge Characteristics (Watt/Cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.3	464.5	410.3	297.7	238.1	193.8	120.9	94.5	76.7	62.5	54.9	44.8	37.4	21.3
1.80V/cell	688.8	552.9	477.6	347.1	274.6	215.8	131.1	101.2	81.5	66.9	58.6	47.5	39.6	21.4
1.75V/cell	747.5	598.1	509.6	358.5	283.6	224.9	135.6	102.8	83.2	68.6	60.1	48.3	40.0	21.6
1.70V/cell	803.4	633.9	532.5	371.7	294.1	231.5	140.7	105.4	85.2	70.1	61.3	48.9	40.3	22.0
1.65V/cell	860.8	669.7	563.0	390.3	300.3	238.5	144.2	109.6	87.9	72.0	62.6	49.6	41.1	22.2
1.60V/cell	\	707.6	593.6	408.1	310.2	244.9	148.1	112.4	90.3	74.0	63.8	50.0	41.5	22.3

The above characteristics data can be obtained within three charge/discharge cycles.



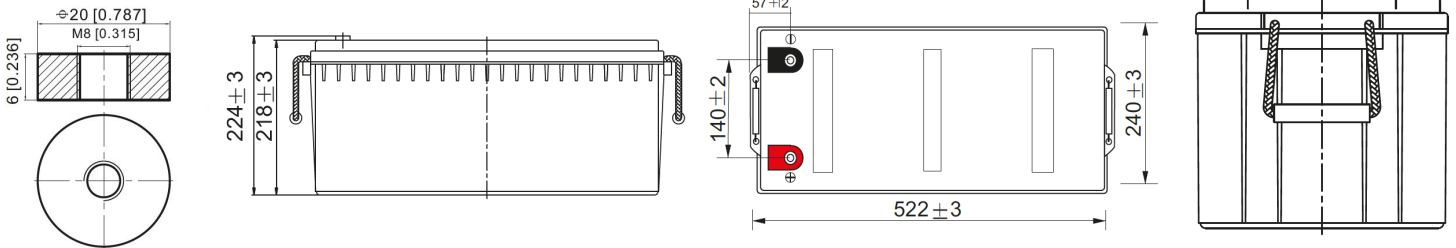
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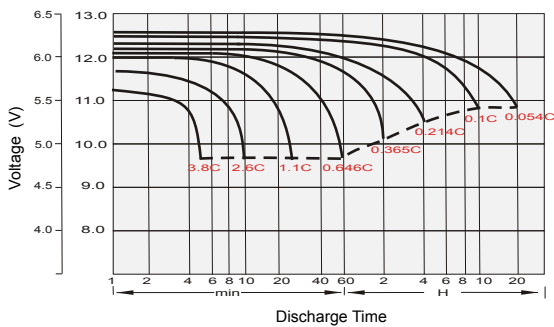
Dimensions

T11 Terminal

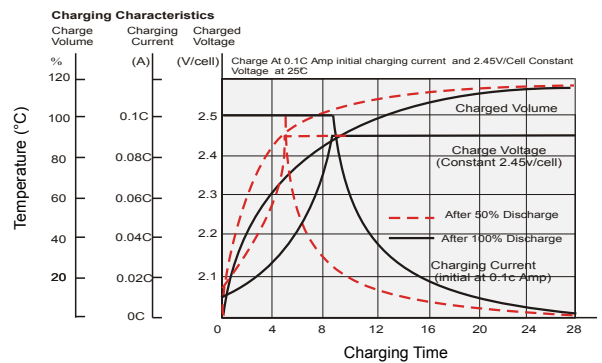
Unit: mm [inches]



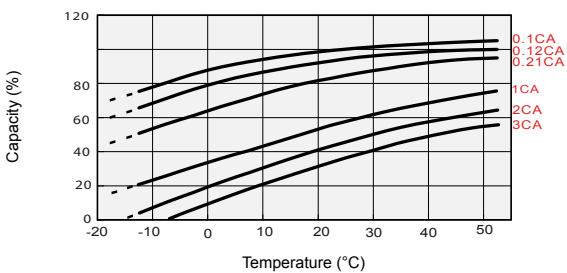
Discharge Characteristics



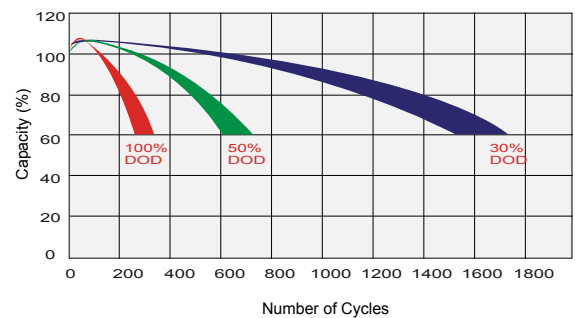
Charging Characteristics (cycle use)



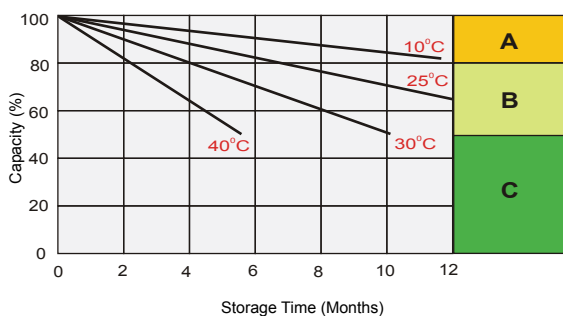
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



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 20hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.