



Lead crystal battery

## ECLC6-450 (6V 450Ah)

### Specifications

Nominal Voltage	6V	
Nominal Capacity(20 Hr)	450Ah	
Dimension	Length	295±1mm( 11.62 inches)
	Width	178±1mm( 7.01 inches)
	Containeriner Height	404±1mm( 15.91inches)
	Total Height (With terminal)	424±1mm( 16.69 inches)
	Approx Weight	Approx 57kgs( 125.66 lbs)
Design life	18 years (in standby applications)	
Terminal	T5/DT	
Container Material	ABS	
Rated Capacity	450.0Ah/22.50A	(20hr, 1.80V/Cell, 25 °C/77°F)
	409.3Ah/40.93A	(10hr, 1.80V/Cell, 25 °C/77°F)
	345.0Ah/69.00A	(5hr, 1.75V/Cell, 25 °C/77°F)
	249.1Ah/249.1A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	2000A(5s)	
Internal Resistance	Appro≤2.2mΩ	
Operating Temp. Range	Discharge: -30 °C~60 °C	
	Charge: -30 °C~60 °C	
	Storage: -30 °C~60 °C	
Nominal Operating Temp. Range	25±3 °C(77±5°F )	
Cycle Use	Initial Charging Current Less than 75.6 A. Voltage 7.2V-7.45V at 25°C (77°F). Temp. coefficient -20mV/C	
	Standby Use No limit on Intital Charging Current Voltage 6.8V-6.9V at 25°C (77°F) Temp. Coefficient -20mV/C	
Capacity affected by Temperature	40 °C( 104°F )	103%
	25 °C( 77°F )	100%
	0 °C( 32°F )	86%
Self Discharge	ECLC series batteries may be stored for up to 12 months at25 °C(77°F ) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Application

- ◆ Railway and marine systems
- ◆ Electric tools
- ◆ Vehicle in place of walking
- ◆ Lawn mowers
- ◆ Golf trolleys and golf cart
- ◆ Electric toys
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments
- ◆ Solar / wind power system



ISO9001 ISO14001

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

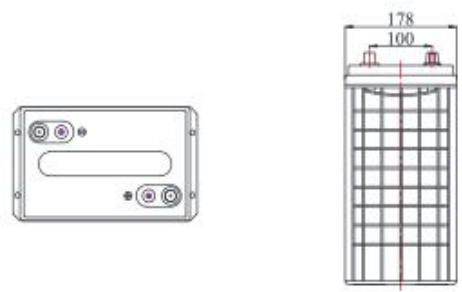
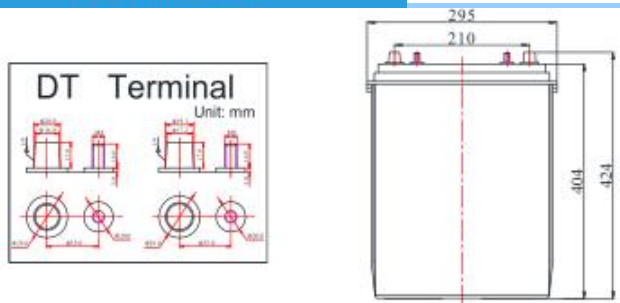
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	540.5	345.2	253.7	233.5	148.3	104.2	70.6	46.6	41.58	22.26	5.04
1.67V	530.9	338.9	249.1	228.9	145.3	102.1	69.3	45.8	40.74	21.84	4.96
1.70V	520.8	332.6	244.4	224.7	142.8	100.4	68.0	44.9	39.90	21.42	4.83
1.75V	511.1	326.3	239.8	220.5	139.9	98.3	66.8	44.1	39.48	21.00	4.75
1.80V	491.4	313.7	230.6	212.1	134.4	94.5	64.3	42.4	38.22	20.79	4.66

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

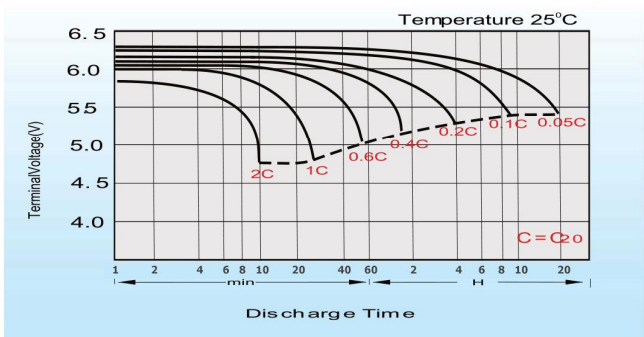
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	1040.3	664.4	488.5	448.1	284.8	199.9	136.1	89.5	80.2	43.4	9.70
1.67V	1021.4	652.3	479.2	440.2	279.7	196.6	133.6	88.2	78.5	42.5	9.49
1.70V	1002.5	640.1	470.4	431.8	274.7	192.8	131.0	86.5	77.3	42.2	9.32
1.75V	983.6	627.9	461.6	423.8	269.2	189.0	128.5	84.8	75.6	41.6	9.16
1.80V	945.8	604.0	443.9	407.4	259.1	181.9	123.9	81.5	72.7	40.3	8.99

# ECLC6-450 (6V 450Ah)

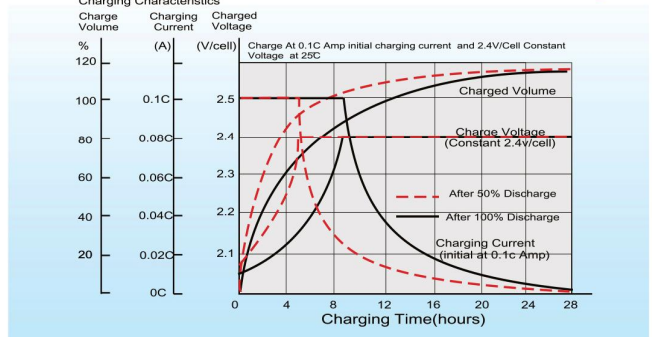
## Dimensions



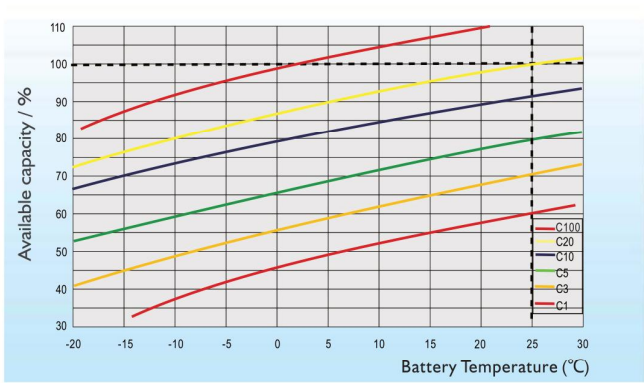
## Discharge Characteristics



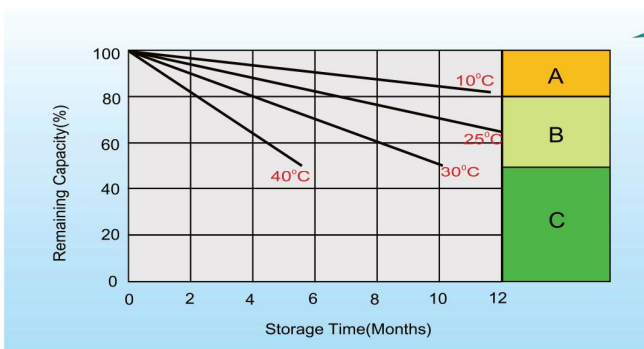
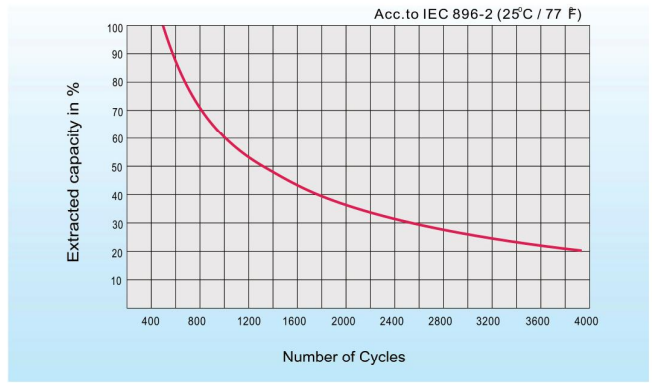
## Charging Characteristics



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

Specifications subject to change without prior notice.