

## EDC12-55 (12V 55Ah)

### Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	55Ah	
Dimension	Length	229±1mm( 9.02 inches)
	Width	138±1mm( 5.44 inches)
	Container Height	208±1mm( 8.19 inches)
	Total Height (With terminal)	212±1mm( 8.35 inches)
Approx Weight	Approx 17.3 kgs (38.14 lbs)	
Design life	12 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	55.0Ah/2.75A	(20hr, 1.75V/Cell, 25 °C/77°F)
	51.7Ah/5.17A	(10hr, 1.80V/Cell, 25 °C/77°F)
	47.0Ah/9.40A	(5hr, 1.75V/Cell, 25 °C/77°F)
	30.6Ah/30.6A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	550A(5s)	
Internal Resistance	Appro≤9.6mΩ	
Operating Temp. Range	Discharge:	-20 °C~50 °C
	Charge:	0 °C~40 °C
	Storage:	-20 °C~50 °C
Nominal Operating Temp. Range	25±3 °C(77±5°F )	
Cycle Use	Initial Charging Current Less than 12.4A. Voltage 14.4V-15.0V at 25 °C(77°F ) Temp. Coefficient-20mV/C	
Standby Use	No limit on Intital 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%
	25 °C( 77°F )	100%
	0 °C( 32°F )	86%
Self Discharge	EDC series batteries may be stored for up to 6 months at25 °C(77°F ) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Application

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

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

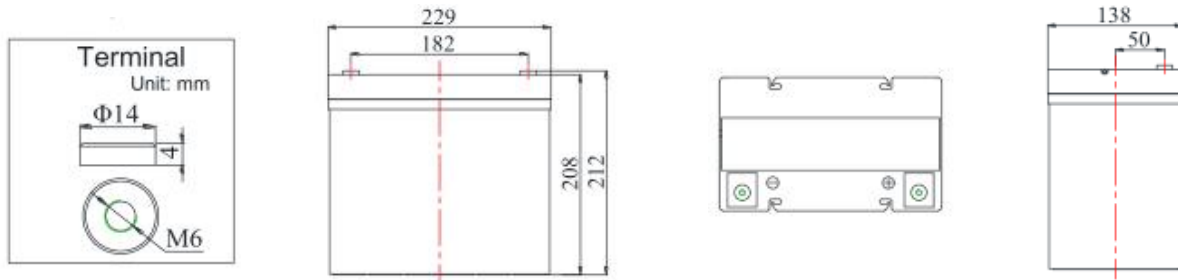
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	70.8	45.2	33.2	30.6	19.4	13.6	9.2	6.1	5.45	2.92	0.66
1.67V	69.5	44.4	32.6	30.0	19.0	13.4	9.1	6.0	5.34	2.86	0.65
1.70V	68.2	43.6	32.0	29.4	18.7	13.1	8.9	5.9	5.23	2.81	0.63
1.75V	66.9	42.7	31.4	28.9	18.3	12.9	8.7	5.8	5.17	2.75	0.62
1.80V	64.4	41.1	30.2	27.8	17.6	12.4	8.4	5.6	5.01	2.72	0.61

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

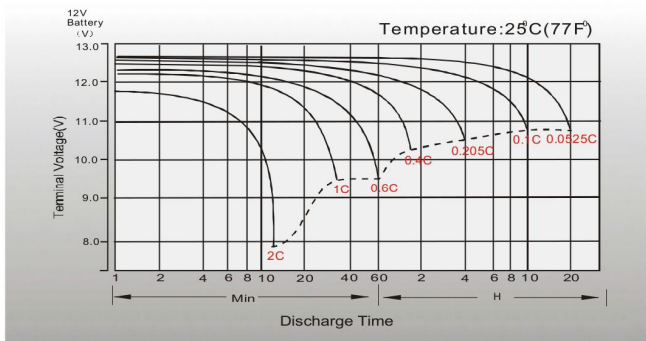
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	136.2	87.0	64.0	58.7	37.3	26.2	17.8	11.7	10.5	5.7	1.27
1.67V	133.8	85.4	62.8	57.6	36.6	25.7	17.5	11.6	10.3	5.6	1.24
1.70V	131.3	83.8	61.6	56.5	36.0	25.2	17.2	11.3	10.1	5.5	1.22
1.75V	128.8	82.2	60.4	55.5	35.3	24.8	16.8	11.1	9.9	5.4	1.20
1.80V	123.9	79.1	58.1	53.4	33.9	23.8	16.2	10.7	9.5	5.3	1.18

**EDC12-55 (12V 55Ah)**

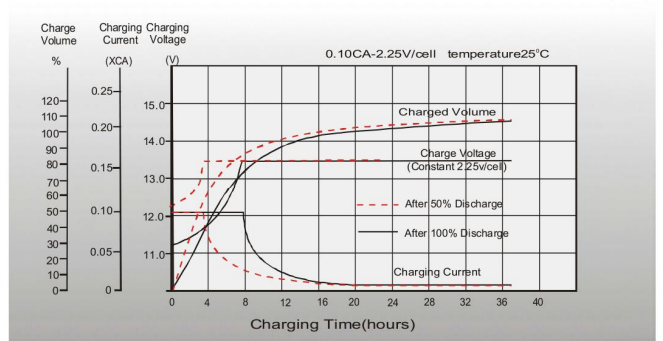
**Dimensions**



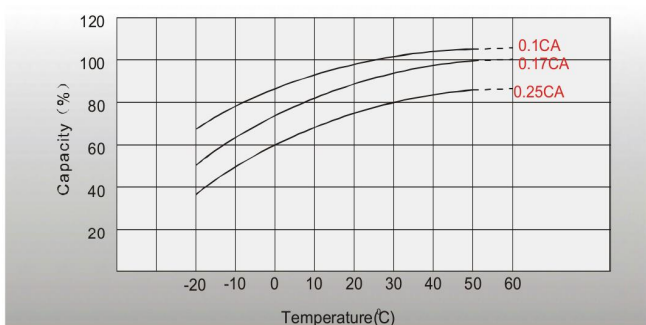
**Discharge Characteristics**



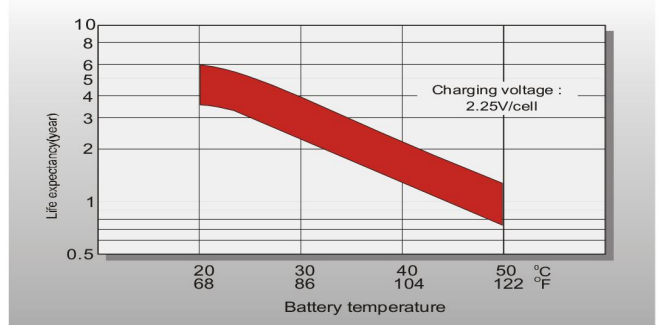
**Float Charging Characteristics**



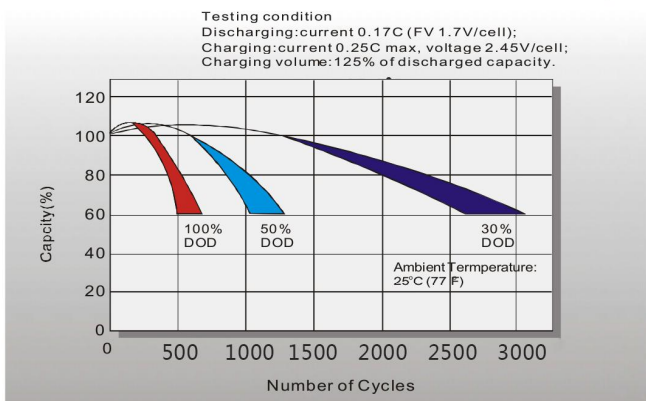
**Temperature Effects in Relation to Battery Capacity**



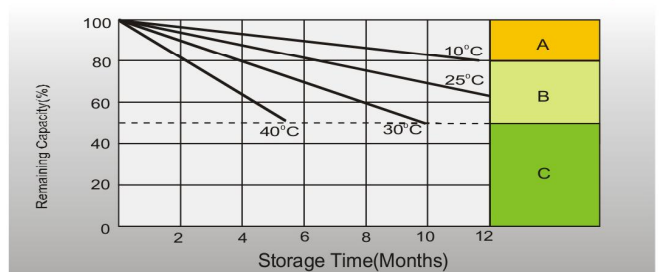
**Effect of Temperature on Long Term Float Life**



**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.