

## EDC12-85 (12V 85Ah)

### Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	85Ah	
Dimension	Length	260±1mm( 10.24 inches)
	Width	169±1mm( 6.65 inches)
	Container Height	211±1mm( 8.31 inches)
	Total Height (With terminal)	215±1mm( 8.46 inches)
Approx Weight	Approx. 26.3kgs (57.98 lbs)	
Design life	10 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	85.0Ah/4.25A	(20hr, 1.75V/Cell, 25 °C/77°F)
	77.4Ah/7.74A	(10hr, 1.80V/Cell, 25 °C/77°F)
	67.5Ah/13.5A	(5hr, 1.75V/Cell, 25 °C/77°F)
	47.3Ah/47.3A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	850A(5s)	
Internal Resistance	Appro≤7.0mΩ	
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 19.1 A. 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 at 25 °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 )

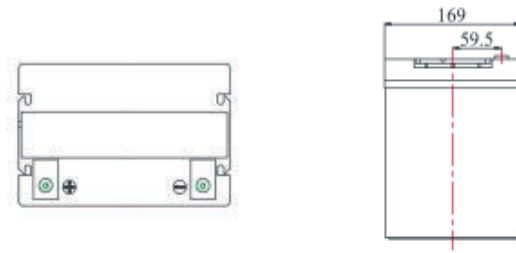
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	109.4	69.9	51.3	47.3	30.0	21.1	14.3	9.4	8.42	4.51	1.02
1.67V	107.4	68.6	50.4	46.3	29.4	20.7	14.0	9.3	8.25	4.42	1.00
1.70V	105.4	67.3	49.5	45.5	28.9	20.3	13.8	9.1	8.08	4.34	0.98
1.75V	103.4	66.0	48.5	44.6	28.3	19.9	13.5	8.9	7.99	4.25	0.96
1.80V	99.5	63.5	46.7	42.9	27.2	19.1	13.0	8.6	7.74	4.21	0.94

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

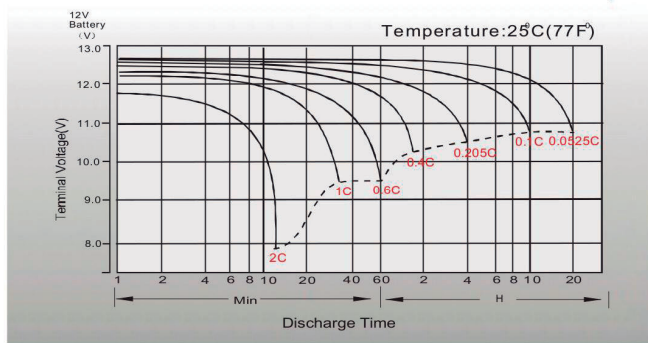
F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h	100h
1.60V	210.5	134.5	98.9	90.7	57.6	40.5	27.5	18.1	16.2	8.8	1.96
1.67V	206.7	132.0	97.0	89.1	56.6	39.8	27.0	17.9	15.9	8.6	1.92
1.70V	202.9	129.5	95.2	87.4	55.6	39.0	26.5	17.5	15.6	8.5	1.89
1.75V	199.1	127.1	93.4	85.8	54.5	38.3	26.0	17.2	15.3	8.4	1.85
1.80V	191.4	122.2	89.8	82.5	52.4	36.8	25.1	16.5	14.7	8.2	1.82

EDC12-85 (12V 85Ah)

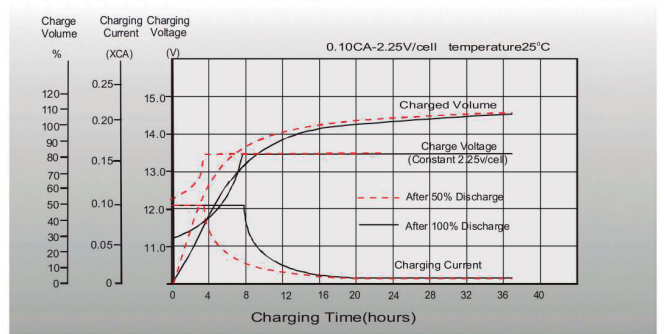
Dimensions



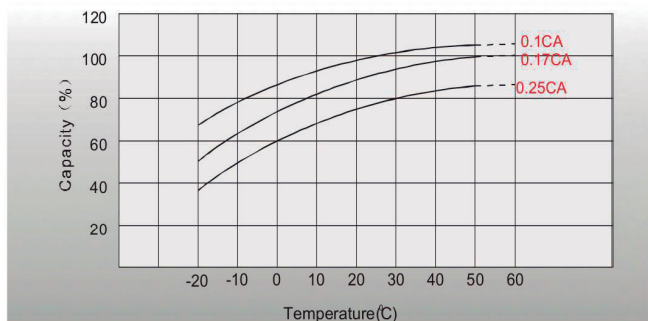
Discharge Characteristics



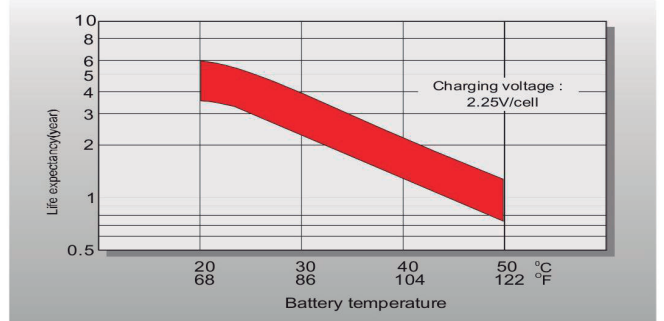
Float Charging Characteristics



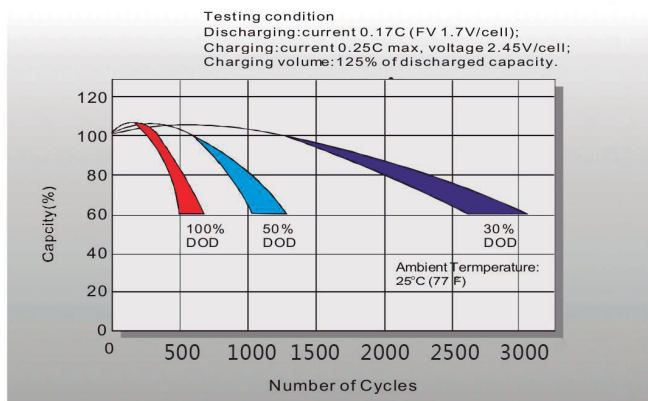
Temperature Effects in Relation to Battery Capacity



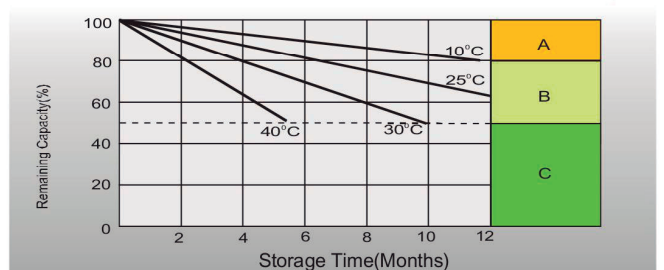
Effect of Temperature on Long Term Float Life



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.