

EDC12-80 (12V 80Ah)

Specification

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	80Ah	
Dimension	Length	350±1mm(13.78 inches)
	Width	167±1mm(6.57 inches)
	Containeriner Height	178±1mm(7.01 inches)
	Total Height (With terminal)	178±1mm(7.01 inches)
Approx Weight	Approx23.3kgs(51.37 lbs)	
Design life	10 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	80.0Ah/4.0A	(20hr, 1.75V/Cell, 25 °C/77°F)
	75.0Ah/7.5A	(10hr, 1.80V/Cell, 25 °C/77°F)
	72.0Ah/14.4A	(5hr, 1.75V/Cell, 25 °C/77°F)
	51.0Ah/51.0A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	700A(5s)	
Internal Resistance	Appro≤8.3mΩ	
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 15.75 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 at25 °C(77°F) and then a freshening charge is required.	
	For higher temperatures the time interval will be shorter.	



Applications

- ◆ 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 (77 °F)

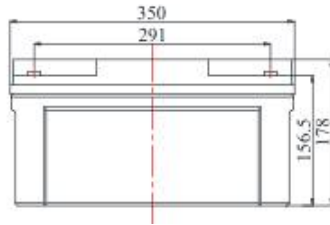
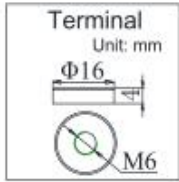
F.V/Time	15min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.60V	144.4	85.0	64.4	51.0	30.0	22.1	14.9	13.0	10.2	8.4	4.44
1.67V	136.4	80.6	61.9	49.5	29.0	21.4	14.6	12.7	10.1	8.2	4.40
1.70V	128.1	78.2	59.7	47.6	28.2	20.8	14.3	12.5	9.9	8.2	4.34
1.75V	120.0	74.8	57.0	45.7	27.5	20.3	14.1	12.2	9.8	8.1	4.28
1.80V	112.6	72.1	55.0	44.1	26.5	19.7	13.8	12.0	9.6	8.0	4.24

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

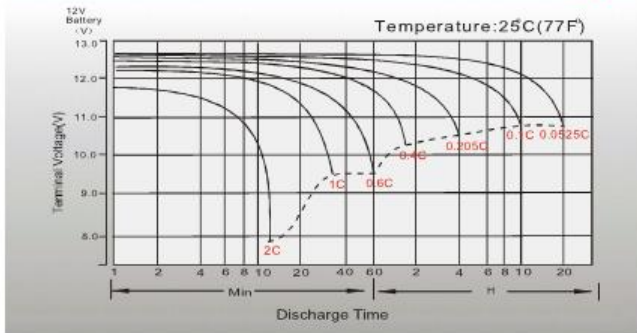
F.V/Time	15min	30min	45min	1h	2h	3h	5h	6h	8h	10h	20h
1.60V	276.1	168.9	122.3	97.9	56.9	42.2	28.7	25.0	19.8	16.4	8.8
1.67V	264.2	158.3	118.2	95.3	55.4	41.0	28.2	24.6	19.7	16.2	8.7
1.70V	246.2	154.9	114.4	92.0	54.1	40.1	27.8	24.3	19.4	16.1	8.6
1.75V	231.0	147.4	109.8	88.6	52.8	39.3	27.4	23.9	19.2	15.9	8.5
1.80V	216.8	141.4	106.2	85.8	51.0	38.2	26.9	23.5	19.0	15.8	8.4

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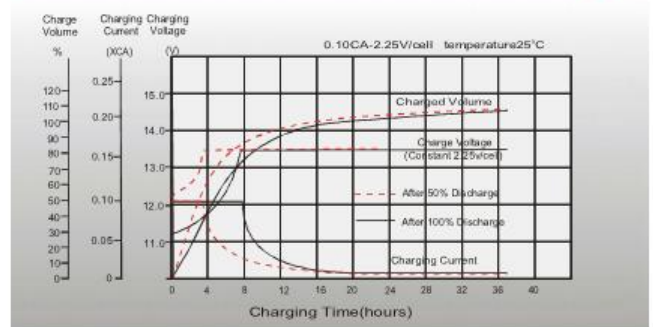
Dimensions



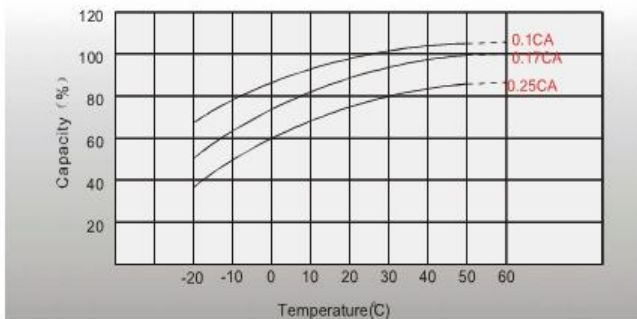
Discharge Characteristics



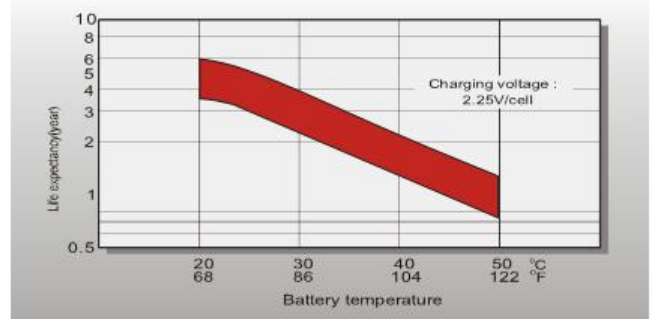
Float Charging Characteristics



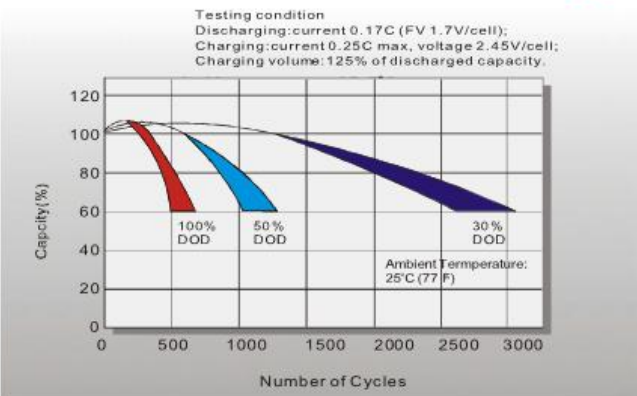
Temperature Effects in Relation to Battery Capacity



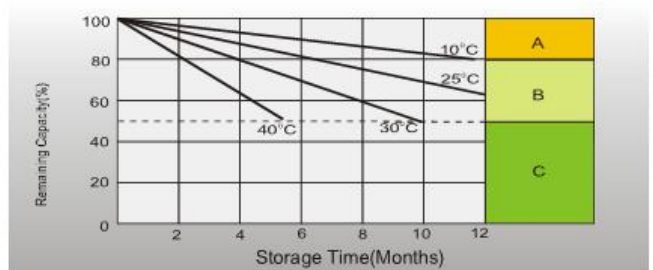
Effect of Temperature on Long Term Float Life



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.