

## EDC12-270 (12V 270Ah)

### Specifications

Nominal Voltage	12V	
Nominal Capacity(20 Hr)	270Ah	
Dimension	Length	520±1mm( 20.47 inches)
	Width	268±1mm( 10.55 inches)
	Containeriner Height	220±1mm( 8.66 inches)
	Total Height (With terminal)	224±1mm( 8.82 inches)
Approx Weight	Approx 77.0kgs( 169.75 lbs)	
Design life	12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	270.00Ah/13.50A	(20hr, 1.75V/Cell, 25 °C/77°F)
	245.80Ah/24.58A	(10hr, 1.80V/Cell, 25 °C/77°F)
	214.65Ah/42.93A	(5hr, 1.75V/Cell, 25 °C/77°F)
	150.12Ah/150.12A	(1hr, 1.60V/Cell, 25 °C/77°F)
Max. Discharge Current	2700A(5s)	
Internal Resistance	Appro≤2.8mΩ	
Operating Temp. Range	Discharge: -20 °C~50 °C	
	Charge: -20 °C~50 °C	
	Storage: -20 °C~50 °C	
Nominal Operating Temp. Range	25±3 °C(77±5°F)	
Cycle Use	Initial Charging Current Less than 43.2A. Voltage 14.4V-15.0V at 25 °C(77°F) Temp. Coefficient-20mV/C	
	Standby Use	
Capacity affected by Temperature	40 °C( 104°F)	102%
	25 °C( 77°F)	100%
	0 °C( 32°F)	85%
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 security system
- ◆ Electronic apparatus & equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto controlsystem

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

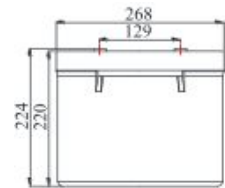
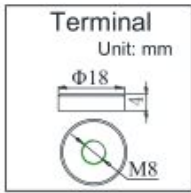
F.V/Time	15 min	30 min	45 min	1h	2h	3h	5h	8h	10h	20h	100h
<b>1.60V</b>	347.49	221.94	163.08	150.12	95.31	66.96	45.36	29.97	26.73	14.31	3.24
<b>1.67V</b>	341.28	217.89	160.11	147.15	93.42	65.61	44.55	29.43	26.19	14.04	3.19
<b>1.70V</b>	334.80	213.84	157.14	144.45	91.80	64.53	43.74	28.89	25.65	13.77	3.11
<b>1.75V</b>	328.59	209.79	154.17	141.75	89.91	63.18	42.93	28.35	25.38	13.50	3.05
<b>1.80V</b>	316.02	201.77	148.29	136.40	86.43	60.77	41.33	27.28	24.58	13.37	3.00

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

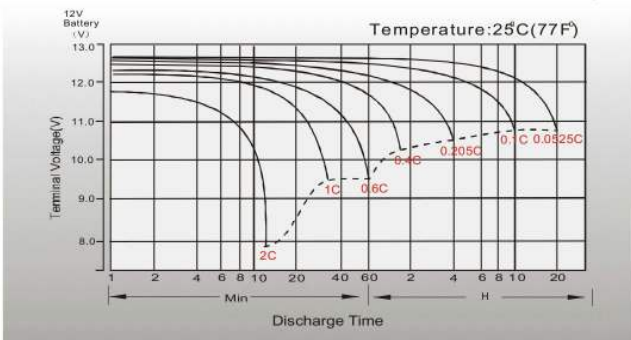
F.V/Time	15 min	30 min	45 min	1h	2h	3h	5h	8h	10h	20h	100h
<b>1.60V</b>	668.79	427.14	314.01	288.09	183.06	128.52	87.48	57.51	51.57	27.81	6.24
<b>1.67V</b>	656.64	419.31	308.07	282.96	179.82	126.36	85.86	56.70	50.49	27.27	6.10
<b>1.70V</b>	644.49	411.48	302.40	277.56	176.58	123.93	84.24	55.62	49.68	27.27	5.99
<b>1.75V</b>	632.34	403.65	296.73	272.43	173.07	121.50	82.62	54.54	48.60	26.73	5.89
<b>1.80V</b>	608.27	388.41	285.50	262.00	166.65	116.95	79.68	52.40	46.73	25.93	5.78

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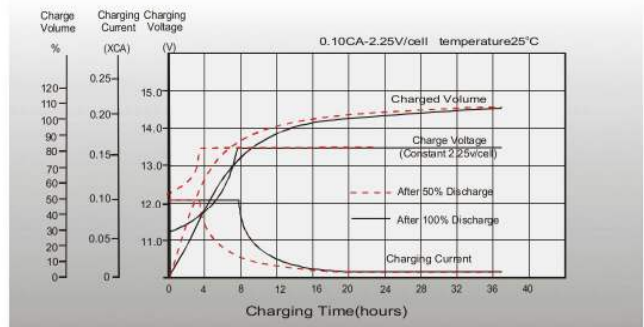
## Dimensions



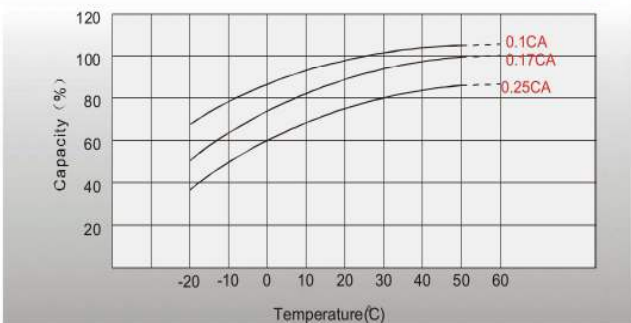
## Discharge Characteristics



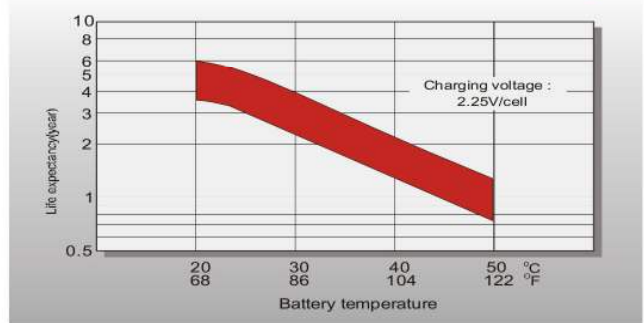
## Float Charging Characteristics



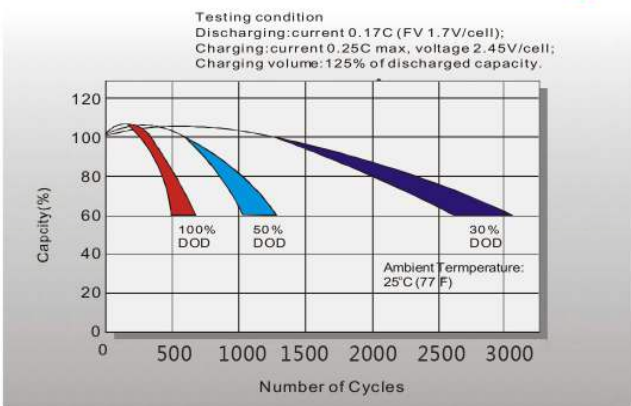
## Temperature Effects in Relation to Battery Capacity



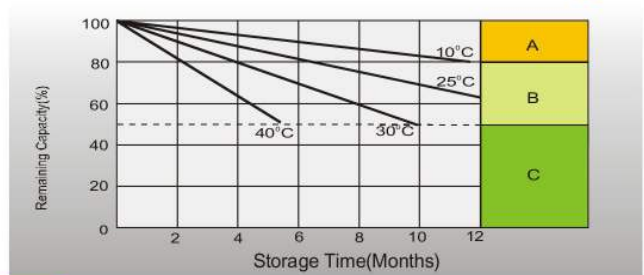
## Effect of Temperature on Long Term Float Life



## 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.