

Powered by



# EVH 12390 ▶ 12V 39Ah

EVH 12390 is designed specially for electric vehicles, such as electric golf cart, electric wheelchair, mower, dust collector...etc. It has high cycling life, high efficiency and long service life.



CSB-manufactured **VRLA** (Absorbent Glass Mat type) batteries are UL-recognized components under UL1989.

CSB is also certified by ISO 9001 and ISO 14001.

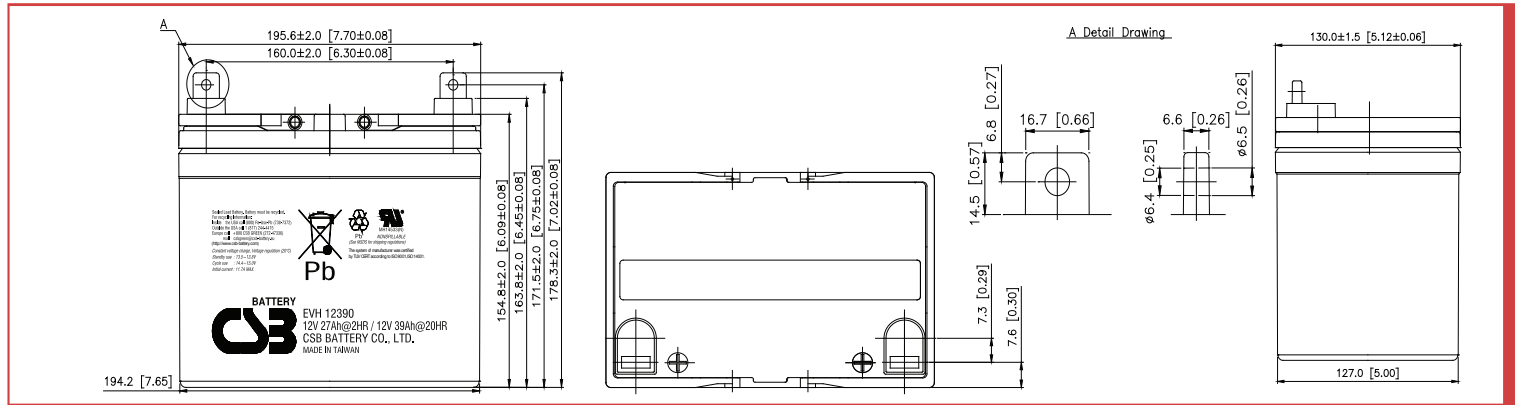
## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	39Ah @ 20hr-rate to 1.75V per cell @25 °C (77°F)
Weight	Approx. 11.5 kg (25.35 lbs)
Maximum Discharge Current	400A(5sec)
Internal Resistance	Approx. 8 mΩ
Operating Temperature Range	Discharge: -15°C~50°C ( 5°F~122°F) Charge: -15°C~40°C ( 5°F~104°F) Storage: -15°C~40°C ( 5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	11.7A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	CSB Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	B5-L terminal to accept M6 nut & bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.

## Dimensions :

Unit: mm (inch)

Overall Height (H)	Container height (h)	Length (L)	Width (W)
178.3±2.0 (7.02±0.08)	154.8±2.0 (6.09±0.08)	195.6±2.0 (7.70±0.08)	130.0±1.5 (5.12±0.06)



## Constant Current Discharge Characteristics Unit:A (25°C ,77°F)

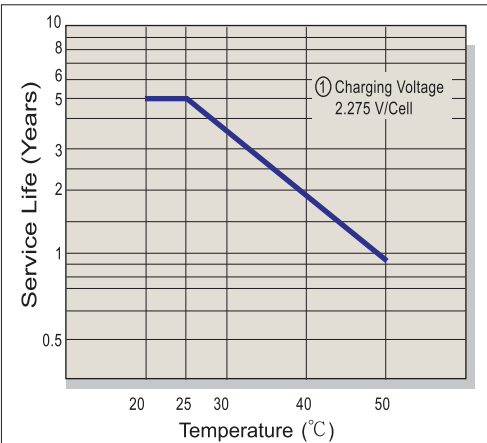
F.V/Time	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	39.6	23.3	17.8	14.4	10.4	8.25	6.93	4.68	3.89	2.13
1.67V	38.5	22.9	17.5	14.2	10.3	8.19	6.87	4.60	3.81	2.06
1.70V	37.4	22.4	17.2	14.0	10.2	8.13	6.79	4.53	3.73	2.01
1.75V	36.4	22.0	16.8	13.7	10.1	8.04	6.71	4.46	3.67	1.96
1.80V	35.4	21.6	16.6	13.5	9.93	7.94	6.62	4.40	3.60	1.91
1.85V	34.3	21.1	16.2	13.3	9.78	7.80	6.52	4.33	3.54	1.87

## Constant Power Discharge Characteristics Unit:W (25°C ,77°F)

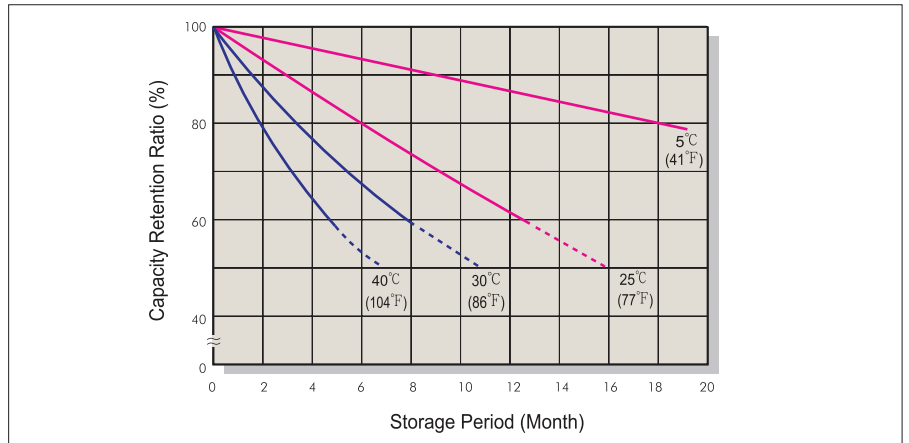
F.V/Time	30MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	475	280	213	172	124	99.0	83.2	56.2	46.6	25.5
1.67V	463	276	210	170	123	98.1	82.4	55.3	45.6	24.8
1.70V	451	271	207	168	122	97.2	81.5	54.4	44.8	24.1
1.75V	438	265	204	166	120	96.2	80.5	53.6	44.0	23.5
1.80V	425	260	201	163	119	95.0	79.4	52.8	43.3	22.9
1.85V	412	253	197	160	117	93.7	78.2	52.0	42.6	22.4

Ratings presented herein are subject to revision without notice. Please refer to [www.csb-battery.com](http://www.csb-battery.com) to confirm the latest version.

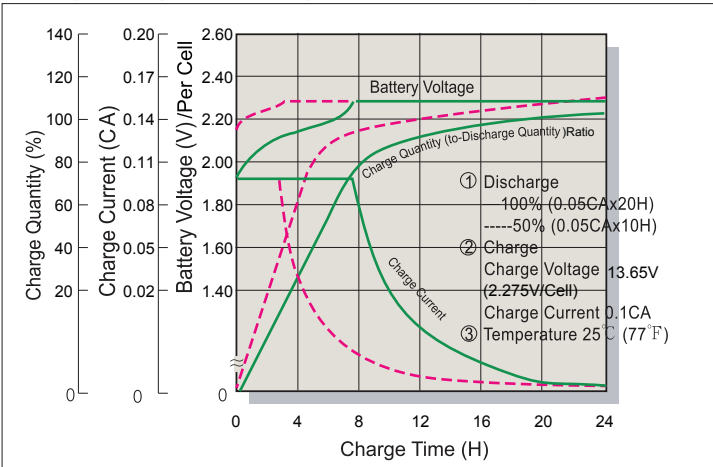
### Trickle (or Float) Service Life



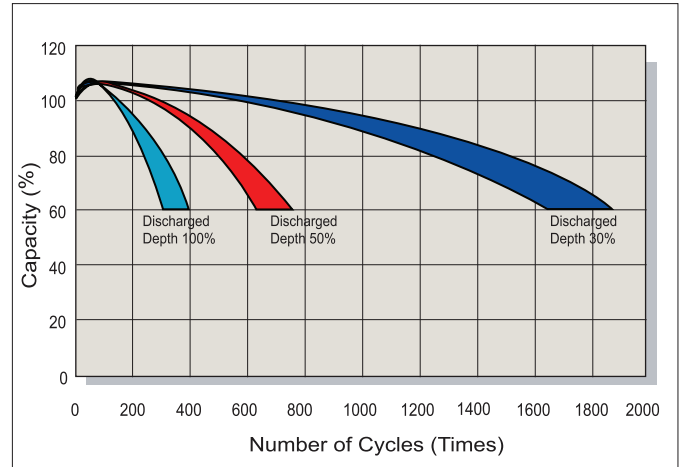
### Capacity Retention Characteristic



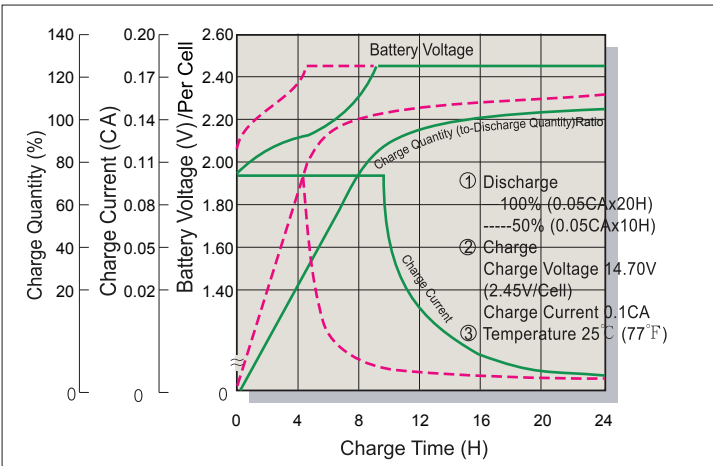
### Battery Voltage and Charge Time for Standby Use



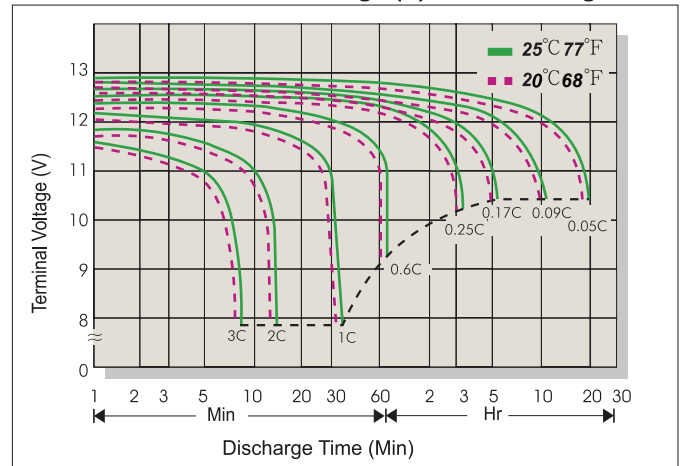
### Series Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.3C
Standby	25°C (77°F)	2.275	2.25~2.30	

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

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