



# EVH series EVH 12390



## Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.  
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

### General Design for Cyclic Applications

#### 【Design Life】

400 cycles @ 100%DOD at 25°C  
1800 cycles @ 30%DOD at 25°C

#### 【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)  
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)

#### 【Certification】

IEC 60254-1:2005 / IEC60254-2:2008

#### 【Equalization Charging Voltage】

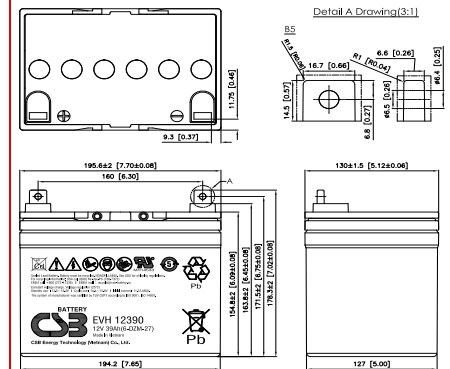
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

#### 【Self Discharge】

Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F);  
Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).

### Specification

Nominal Voltage	12V (6 cells per unit)		
Nominal Capacity	39 Ah @20hr-rate to 1.75V per cell @25°C (77°F)		
Weight	Approx. 11.50 Kg (25.35 lbs)		
Maximum Discharge Current	400 A (5sec)		
Internal Resistance	Approx. 8.9 mΩ		
Short Circuit Current	987.5 A		
Maximum Charge Current	11.70 A		
Terminal types	B5 terminal to accept M6 nut & bolt		
Terminal tightening torque	51.7±10.3 Kgf-cm / 44.9±9.0 Lbf-in / 5.10±1.0 N-m		
Container Material	ABS (UL 94-HB)		
Dimensions	Length (L)	195.6±2.0 mm	7.70±0.08 inch
	Width (W)	130.0±1.5 mm	5.12±0.06 inch
	Container Height (h)	154.8±2.0 mm	6.09±0.08 inch
	Overall Height (H)	178.3±2.0 mm	7.02±0.08 inch



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

F.V/Time	30MIN	45MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	39.6	28.2	23.3	17.8	14.4	10.4	8.25	6.93	5.58	4.68	3.89	2.13
1.67V	38.5	27.7	22.9	17.5	14.2	10.3	8.19	6.87	5.51	4.60	3.81	2.06
1.70V	37.4	27.0	22.4	17.2	14.0	10.2	8.13	6.79	5.43	4.53	3.73	2.01
1.75V	36.4	26.6	22.0	16.8	13.7	10.1	8.04	6.71	5.36	4.46	3.67	1.96
1.80V	35.4	26.0	21.6	16.6	13.50	9.93	7.94	6.62	5.29	4.40	3.60	1.91
1.85V	34.3	25.5	21.1	16.2	13.30	9.78	7.80	6.52	5.20	4.33	3.54	1.87

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

F.V/Time	30MIN	45MIN	60MIN	90MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	475	340	280	213	172	124	99.0	83.2	67.0	56.2	46.6	25.5
1.67V	463	335	276	210	170	123	98.1	82.4	66.2	55.3	45.6	24.8
1.70V	451	328	271	207	168	122	97.2	81.5	65.2	54.4	44.8	24.1
1.75V	438	319	265	204	166	120	96.2	80.5	64.4	53.6	44.0	23.5
1.80V	425	312	260	201	163	119	95.0	79.4	63.4	52.8	43.3	22.9
1.85V	412	302	253	197	160	117	93.7	78.2	62.5	52.0	42.6	22.4

Please refer to the official site for the latest rating confirmation. URL: [www.csb-battery.com](http://www.csb-battery.com)

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Recognized under UL 1989,  
and certified by ISO 9001, 14001, 45001, 50001.



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