

# FUSION

## AGM BATTERIES



**3** YEAR  
WARRANTY

### 2 Volt CBS Solar Series



## Solar - Farm - Green Energy

- *High Performance Genuine AGM Battery - Non-spillable Dry Cell*
- *8 - 12 Years Design Life*
- *Enhanced Overcharge Endurance & Over Discharge Recovery Properties*
- *Lower Acid Density, Excess Electrolyte & Larger Distance between Plates - To keep battery at lower temperature and slow down plate grid corrosion speed*
- *Uses Oxygen Recombination Technology - Never needs filling*
- *Longer Service Life*
- *Absorbed Glass Matt Separators (AGM)*
- *Can Handle Extended Periods in Discharge State*
- *High Purity Raw Material - Ensuring a low self discharge rate*
- *Superior Design & Quality - Manufactured to Quality Assurance Standard ISO 9001*
- *Flame Retardant ABS Plastic - Making it the safest available in Australia*
- *When Failure is not an Option - Use only Fusion AGM Batteries*

QUALITY ASSURANCE  
**ISO 9001**



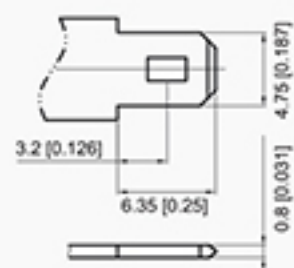


# Fusion AGM Batteries Terminal Options

## T1 Terminal

Unit: mm [inches]

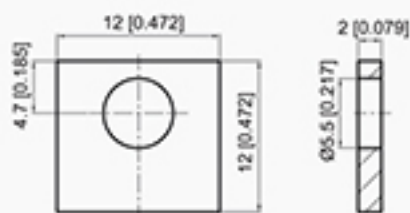
FASTON TYPE (Copper) quick disconnect tabs:  
Silver coating for better conductivity



## T3 Terminal

Unit: mm [inches]

Brass Coated with Tin  
Terminal Torque 3.9 - 5.4 N m



## T5 Terminal

Unit: mm [inches]

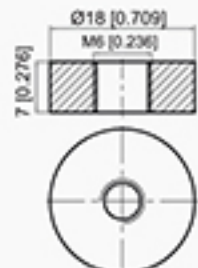
Lead  
Terminal Torque 3.9 - 5.4 N m



## T7 Terminal

Unit: mm [inches]

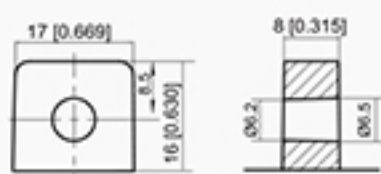
Brass Coated with Tin, Threaded Insert 6mm STUD  
Terminal Torque 3.9 - 5.4 N m



## T10 Terminal

Unit: mm [inches]

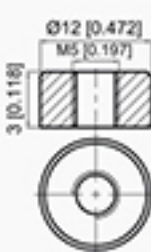
Lead  
Terminal Torque 3.9 - 5.4 N m



## T12 Terminal

Unit: mm [inches]

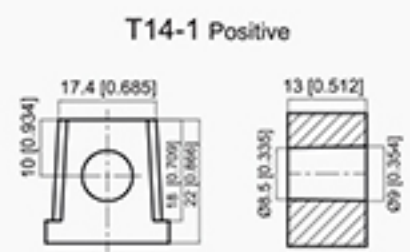
Brass Coated with Tin, Threaded Insert 5mm STUD  
Terminal Torque 2.0 - 3.0 N m



## T14 Terminal

Unit: mm [inches]

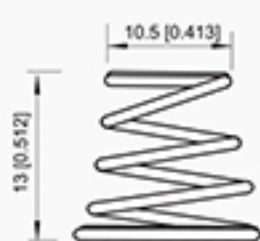
Lead  
Terminal Torque 11 - 14.7 N m



## Spring Terminal

Unit: mm [inches]

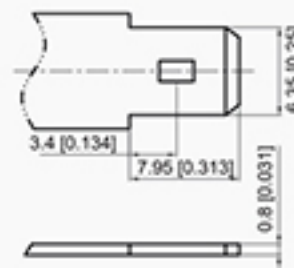
Spring Steel  
Fully Collapsible



## T2 Terminal

Unit: mm [inches]

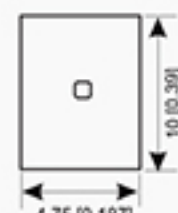
FASTON TYPE (Copper) quick disconnect tabs:  
Silver coating for better conductivity



## T4 Terminal

Unit: mm [inches]

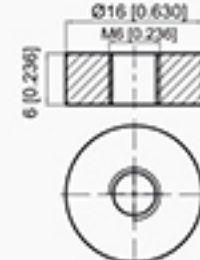
Brass Coated with Tin  
Terminal Torque 3.9 - 5.4 N m



## T6 Terminal

Unit: mm [inches]

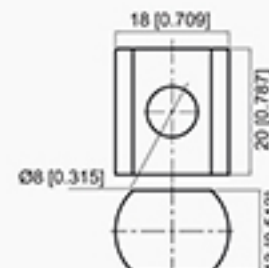
Brass Coated with Tin, Threaded Insert 6mm STUD  
Terminal Torque 3.9 - 5.4 N m



## T9 Terminal

Unit: mm [inches]

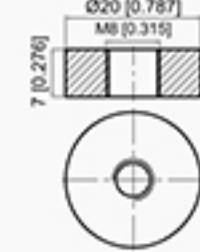
Lead  
Terminal Torque 11 - 14.7 N m



## T11 Terminal

Unit: mm [inches]

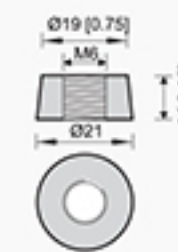
Brass Coated with Tin, Threaded Insert 8mm STUD  
Terminal Torque 11 - 14.7 N m



## T13 Terminal

Unit: mm [inches]

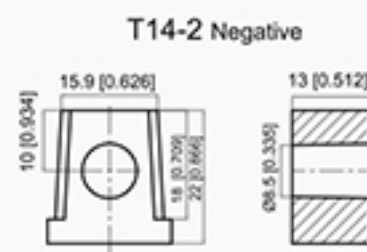
Brass Coated with Tin, Threaded Insert 6mm STUD  
Terminal Torque 3.9 - 5.4 N m



## T14 Terminal

Unit: mm [inches]

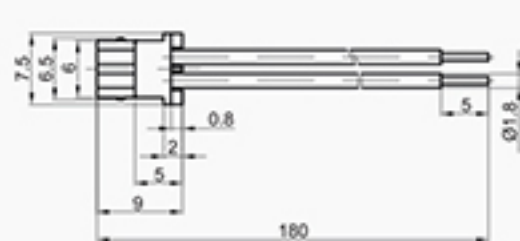
Lead  
Terminal Torque 11 - 14.7 N m



## Connector

Unit: mm [inches]

Toy Battery Connector  
H-Connector







## 2 Volt CBS Solar Series

Fusion 2 Volt CBS Solar Series batteries are a genuine AGM VRLA (Valve Regulated Lead Acid) battery that is completely sealed, spill proof, leak proof and can be used upside down or on their side. Its state-of-the-art design uses oxygen recombination technology meaning that the battery never requires filling and can be used in confined or poorly ventilated spaces.

Fusion CBS Series are specifically designed for solar & green energy systems and are suited to almost all Australian climates including Australia's top end.

We use advanced engineering techniques to ensure that Fusion CBS Series batteries remain one of the highest quality batteries available in Australia's not to mention its lower acid density, excess electrolyte & larger distance between plates to keep the battery at lower temperatures and slow down plate grid corrosion speed.

Fusion CBS Series also features enhanced overcharge endurance and over discharge recovery properties that enables the battery to better handle longer periods of time in a discharge state (ie when solar energy is limited due to cloud cover).

Fusion CBS Series batteries are manufactured to Quality Assurance Standard ISO 9001 and are made using Flame Retardant ABS Plastic, making it the one of the most versatile and safest battery available in Australia.

When failure is not an option, insist on Fusion AGM Batteries.

## Specifications

PART NUMBER	VOLTS	RATED CAPACITY (AH)					DIMENSIONS				ASSEMBLY FIGURE	TERMINAL TYPE	WEIGHT (KG)	WARRANTY
		100HR	20HR	10HR	5HR	1HR	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)	TERMINAL HEIGHT (mm)				
CBS2V115AH	2	115	106	100	86	61	170	72	205	212		T6	6.0	3 Years
CBS2V170AH	2	173	159	150	129	91	170	98	205	212		T7	8.5	3 Years
CBS2V230AH	2	230	212	200	173	121	170	110	328	350		T11	13.3	3 Years
CBS2V285AH	2	288	265	250	216	151	170	110	328	350		T11	14.5	3 Years
CBS2V350AH	2	345	318	300	259	182	170	150	328	350		T11	18.7	3 Years
CBS2V400AH	2	403	371	350	302	212	170	150	328	350		T11	19.5	3 Years
CBS2V450AH	2	460	424	400	345	242	210	175	330	350		T11	24.9	3 Years
CBS2V500AH	2	518	477	450	388	272	210	175	330	350		T11	26.0	3 Years
CBS2V550AH	2	575	530	500	431	303	240	175	330	350		T11	29.7	3 Years
CBS2V700AH	2	690	642	600	527	353	300	175	330	350		T11	36.6	3 Years
CBS2V900AH	2	920	848	800	690	484	410	175	330	350		T11	50.0	3 Years
CBS2V1000AH	2	1,035	954	900	776	545	410	175	330	350		T11	51.5	3 Years
CBS2V1100AH	2	1,150	1,060	1,000	863	605	475	175	328	350		T11	58.5	3 Years
CBS2V1350AH	2	1,380	1,272	1,200	1,035	726	475	175	328	350		T11	65.8	3 Years
CBS2V1700AH	2	1,725	1,590	1,500	1,294	908	403	354	339	349		T11	96.5	3 Years
CBS2V2300AH	2	2,300	2,120	2,000	1,725	1,210	490	350	339	349		T11	121.0	3 Years
CBS2V2800AH	2	2,875	2,650	2,500	2,156	1,513	490	350	339	349		T11	138.0	3 Years
CBS2V3500AH	2	3,450	3,180	3,000	2,588	1,815	709	350	337	347		T11	182.0	3 Years



# Typical Applications

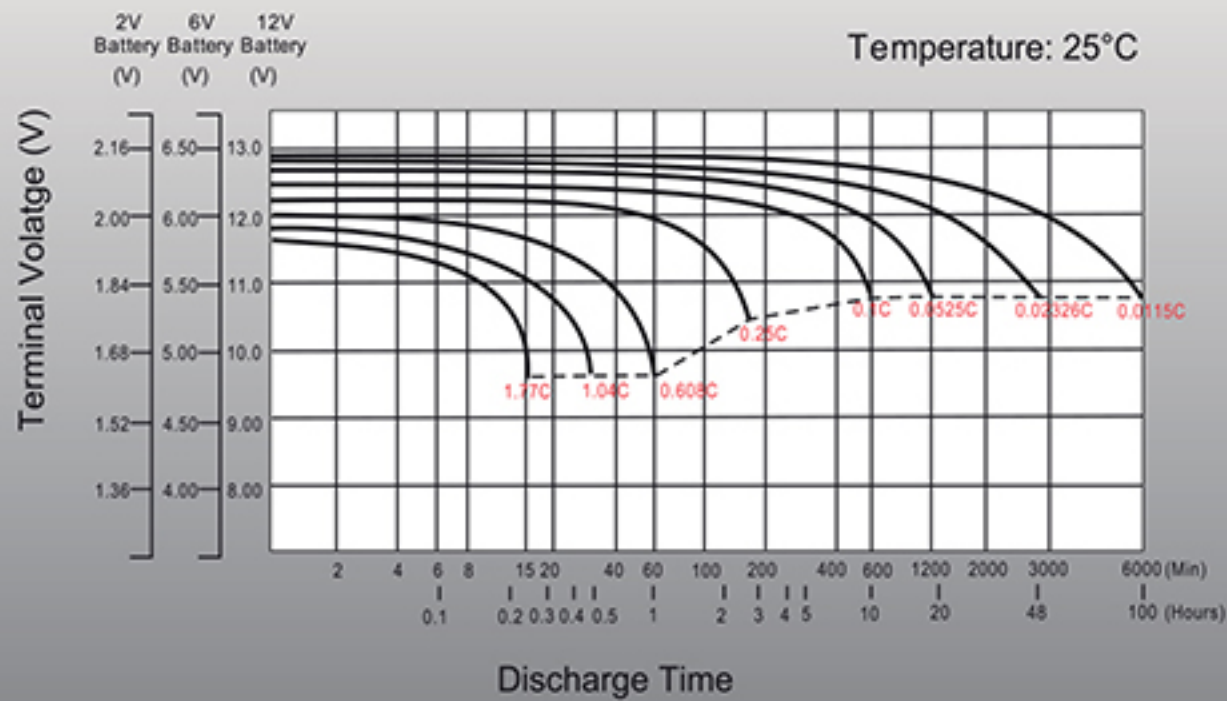
- Green Energy Systems
- Solar Power

- Communication Systems
- House Power

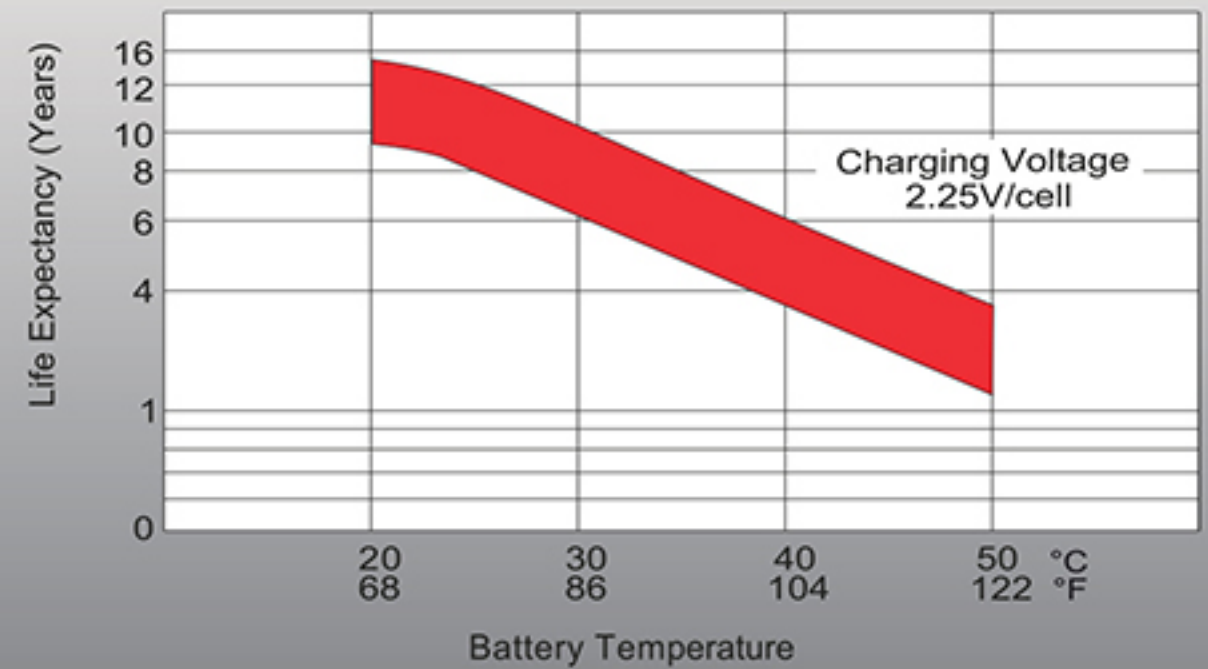
- Farm & Agricultural Power
- Other Speciality Applications

## Technical Diagrams

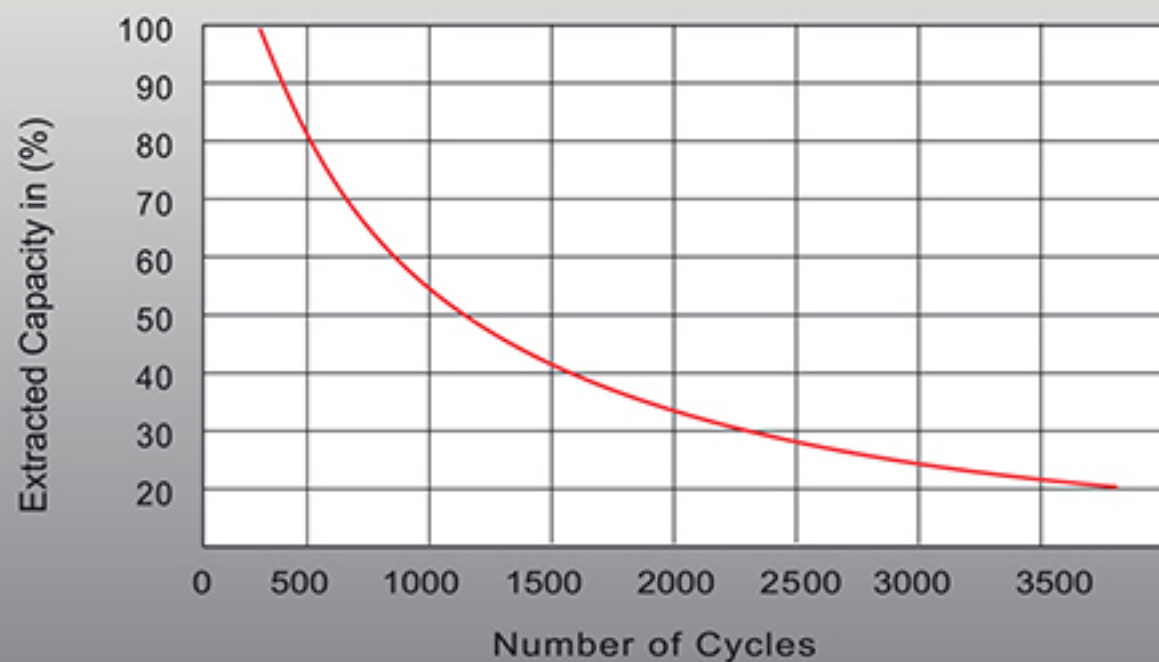
Discharge Characteristics



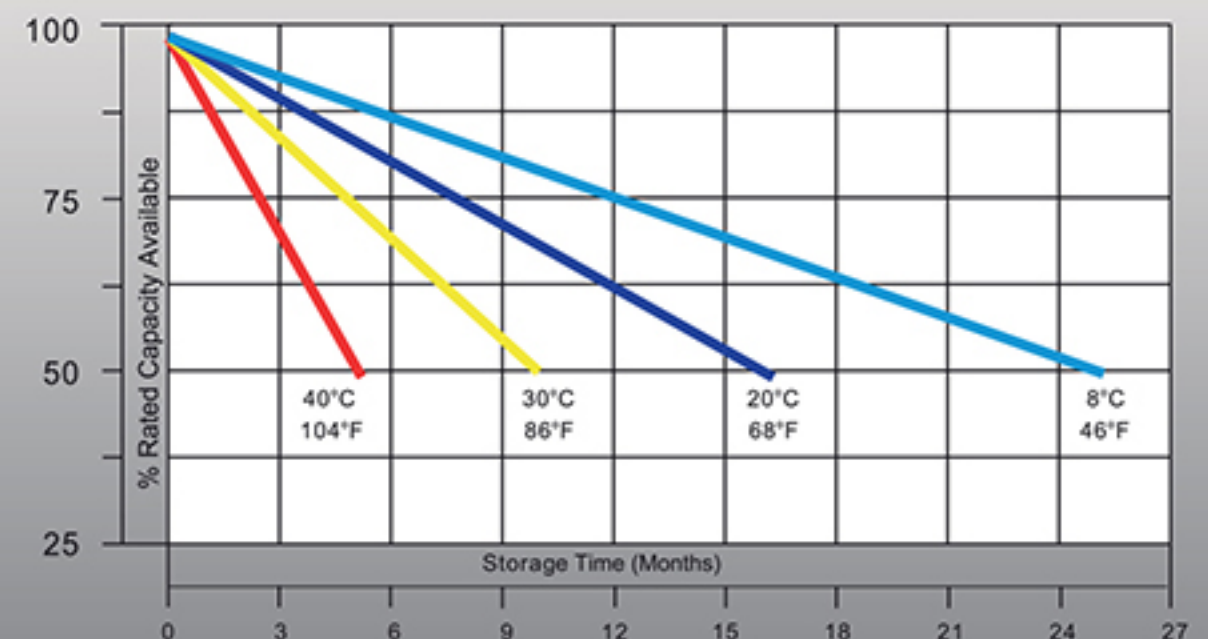
Effect of Temperature on Long Term Float Life



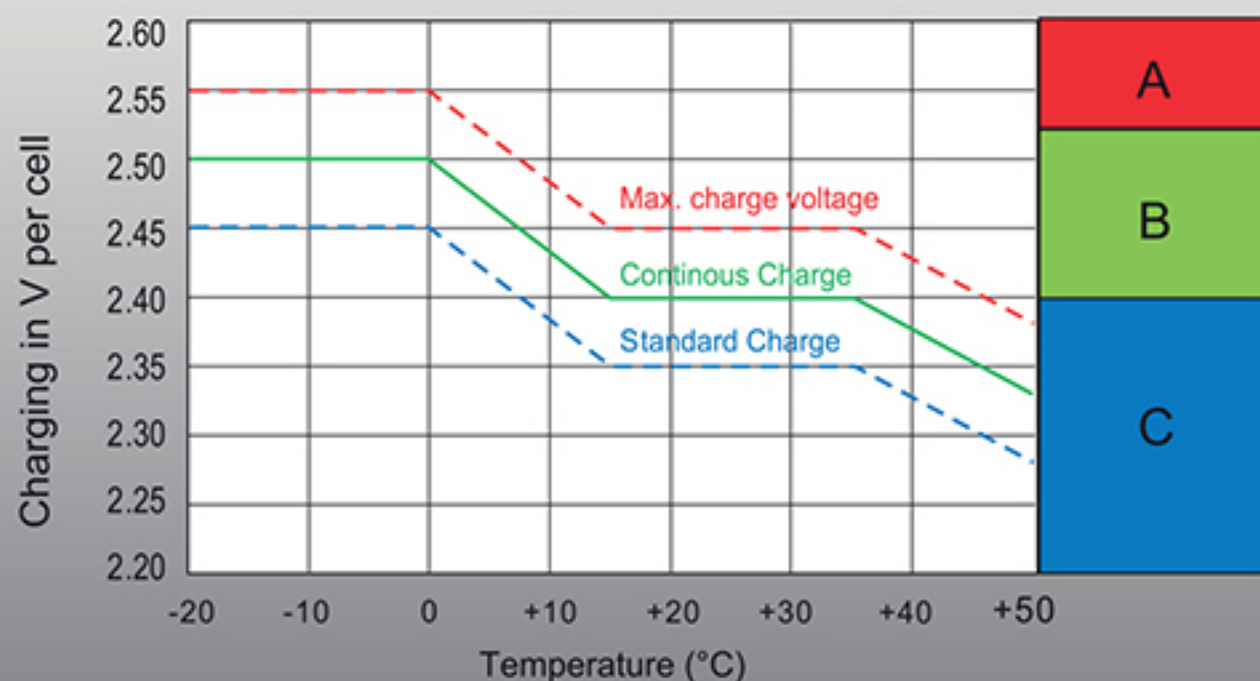
Cycle Life in Relation to Depth of Discharge



Self-Discharge at Different Temperatures



Charge Mode

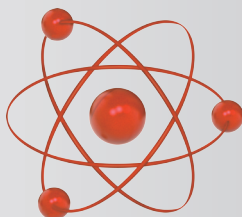


- A** With switch regulator (two-step controller) charge on curve max. charge voltage for max. 2 hrs/day then switch over to continuous charge.
- B** Standard charge without switching.
- C** Boost charge (Equalizing charge with external generator) charge on curve continuous charge for max. 5 hrs/month, then switch over to curve Standard charge.

**3 YEAR WARRANTY**

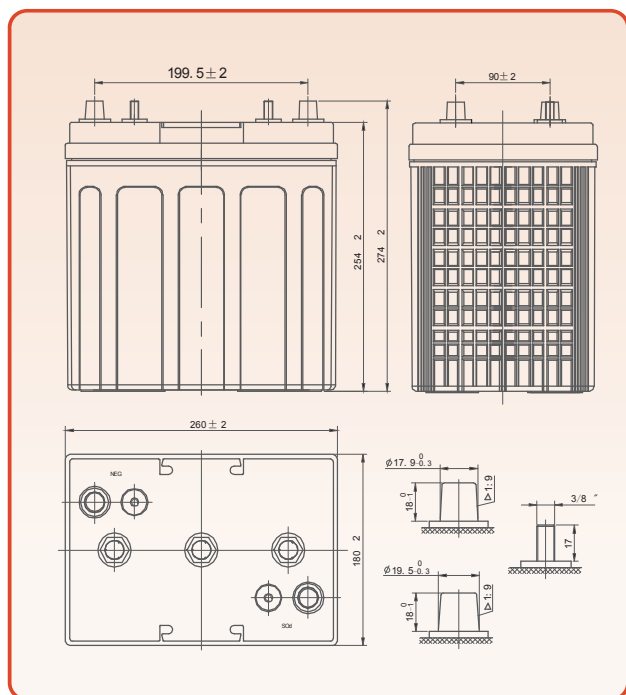
Made with  **FIRE RETARDANT ABS PLASTIC**

QUALITY ASSURANCE  
**ISO 9001**



# CBS6V240AH

## CBS Solar Series



Fusion 6V CBS Solar Series provide superior performance, capacities and reliability. Using state of art dry cell technology the CBS series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial, industrial, residential, and private applications. The maintenance-free (VRLA) construction and advanced design features makes the CBS Series the definitive choice for a wide variety of markets; Solar and Renewable Energy Storage; Electric Vehicle and Golf cart; Industrial equipment, Floor Machines, Forklifts, Aerial lifts, and Robotics; Marine, RV, and no-idle solutions; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems.

### Features and Benefits

- High density lead paste and specialized paste formula for deep cycle application.
- High strength ABS or PP case & cover and valve-regulated construction.
- Maintenance-free.
- High capacities.
- Environmentally friendly, Classified as “Non-Spillable Battery” for transportation.
- High tin alloy grids offer: Less gassing, High corrosion-resistant, Low self discharge, Alloy sheeting material for deep cycle applications.
- Exceptional adaptability to operate at high and low temperature environments.
- Durable copper and stainless steel terminals for high electric conductivity.
- Excellent cycle life: 80% DOD 800 cycles.
- Exclusive electrolyte formula and separator, For protecting the electrolyte density from stratification.
- Superior design allows for fast charge acceptance and resistance to over-discharge.

### Mechanical Characteristics

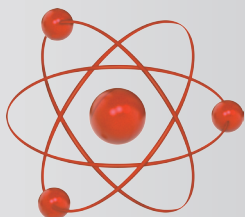
Industry Type No.	GC6
Length(mm/inch)	260/10.2
Width (mm/ inch)	180/7.1
Height(mm/inch)	254/10.0
Total Height(mm/inch)	274/10.8
Approx. Weight (kg/lbs)	30/66.1
Terminal	AM
Container material	PP
Cells	3 cell
Nominal Voltage	6 V

### Electrical Characteristics

Nominal Capacity	240Ah@100 hour rate F. V. (1.75V/Cell)	
Internal Resistance (Approx. )	≤ Fully Charged battery (25°C) : 1.9mOhms	
Self Discharge	3% of capacity per month@68°F/20°C	
Cranking Amps	1430A@32°F/0°C	1100A@0°F/-18°C
Max. Discharge	1650A(5s)	
Reserve Capacity (80°F/27°C)	@25A F.V.(1.75V/Cell)	460Min
	@75A F.V.(1.75V/Cell)	120Min
Charging(25°C) (Constant Voltage)	Cycle use	Initial Charging Current: 66A, 2.40-2.45VPC
	Float use	2.20-2.30VPC

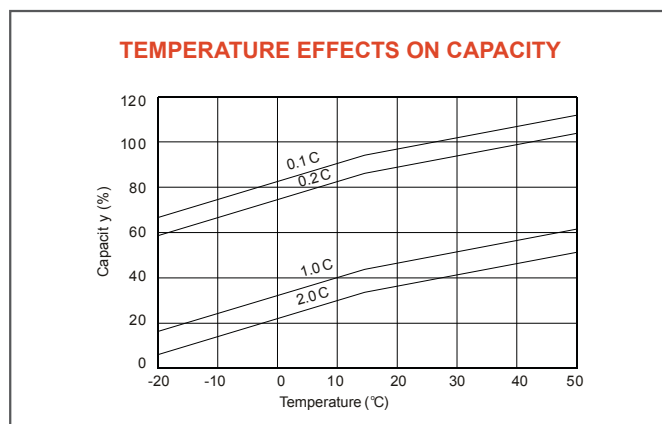
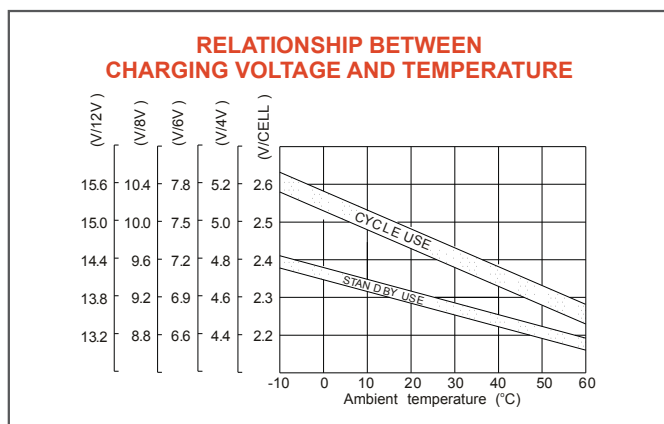
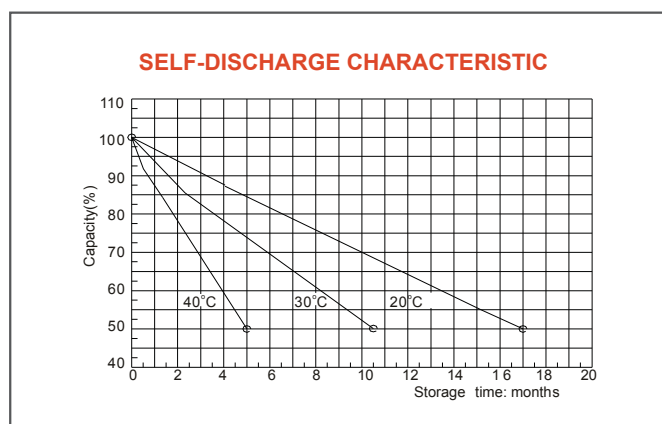
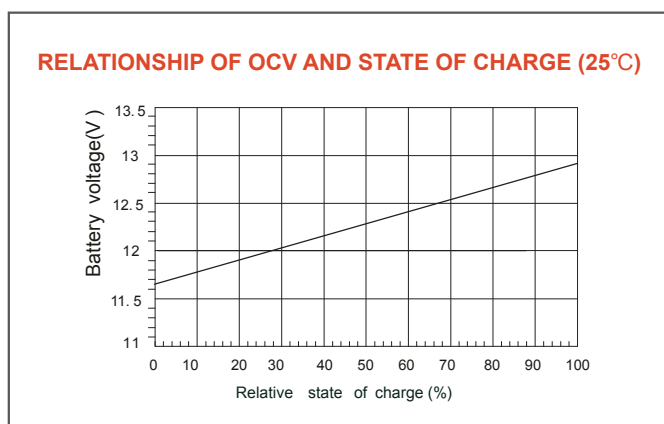
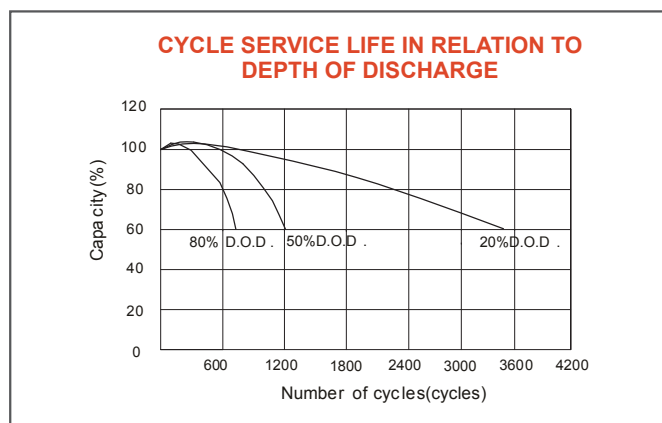
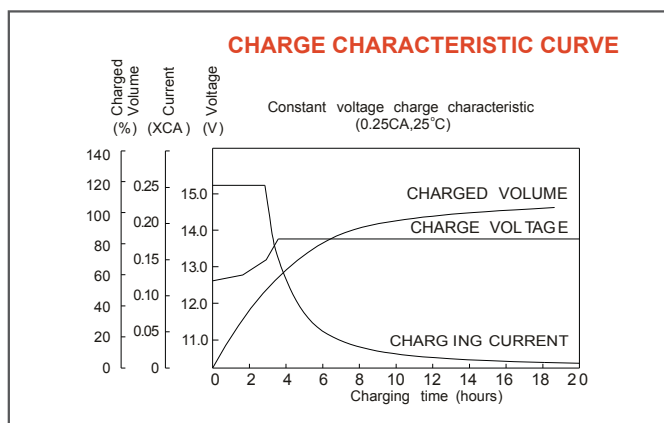
### Electrical Characteristics

Final voltage 1.75V/Cell	Amp Hours(AH)@77°F(25°C)							Minutes of Discharge@80°F(27°C)	
	100HR	20HR	10HR	5HR	3HR	2HR	1HR	@25A	@75A
	240	220	210	190	175	155	130	460	120



# CBS6V240AH

## Charge / Discharge Tables & Graphs

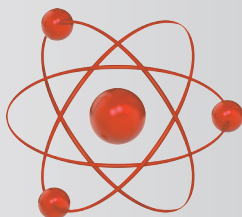


### Head Office

Unit 30  
76 Hume Highway  
LANSVALE NSW 2166  
Tel: (02) 9755 7851 Fax: (02) 9755 7852  
www.fusionagmbatteries.com.au

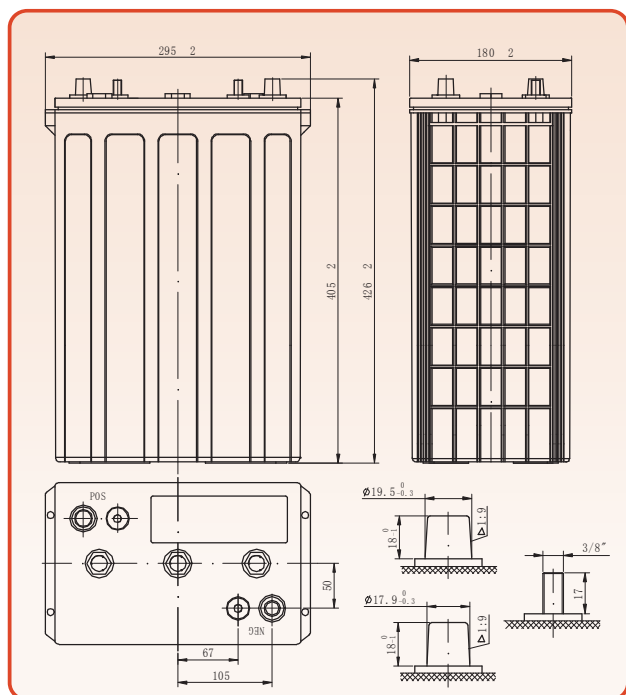






# CBS6V440AH

## CBS Solar Series



Fusion 6V CBS Solar Series provide superior performance, capacities and reliability. Using state of art cell technology the CBS series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial, industrial, residential, and private applications. The maintenance-free (VRLA) construction and advanced design features makes the CBS Series the definitive choice for a wide variety of markets; Solar and Renewable Energy Storage; Electric Vehicle and Golf cart; Industrial equipment, Floor Machines, Forklifts, Aerial lifts, and Robotics; Marine, RV, and no-idle solutions; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems.

### Features and Benefits

- High density lead paste and specialized paste formula for deep cycle application.
- High strength ABS or PP case & cover and valve-regulated construction.
- Maintenance-free.
- High capacities.
- Environmentally friendly, Classified as “Non-Spillable Battery” for transportation.
- High tin alloy grids offer: Less gassing, High corrosion-resistant, Low self discharge, Alloy sheeting material for deep cycle applications.
- Exceptional adaptability to operate at high and low temperature environments.
- Durable copper and stainless steel terminals for high electric conductivity.
- Excellent cycle life: 80% DOD 800 cycles.
- Exclusive electrolyte formula and separator, For protecting the electrolyte density from stratification.
- Superior design allows for fast charge acceptance and resistance to over-discharge.

### Mechanical Characteristics

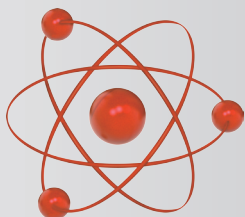
Industry Type No.	L16
Length(mm/inch)	295/11.6
Width (mm/ inch)	180/7.1
Height(mm/inch)	405/15.9
Total Height(mm/inch)	426/16.8
Approx. Weight (kg/lbs)	55.5/122.4
Terminal	AM
Container material	PP
Cells	3 cell
Nominal Voltage	6 V

### Electrical Characteristics

Nominal Capacity	440Ah@100 hour rate F. V. (1.75V/Cell)	
Internal Resistance (Approx. )	≤ Fully Charged battery (25°C) : 6.7mOhms	
Self Discharge	3% of capacity per month@68°F/20°C	
Cranking Amps	2580A@32°F/0°C	2010A@0°F/-18°C
Max. Discharge	3000A(5s)	
Reserve Capacity (80°F/27°C)	@25A F.V.(1.75V/Cell)	920Min
	@75A F.V.(1.75V/Cell)	270Min
Charging(25°C) (Constant Voltage)	Cycle use	Initial Charging Current: 120A, 2.40-2.45VPC
	Float use	2.20-2.30VPC

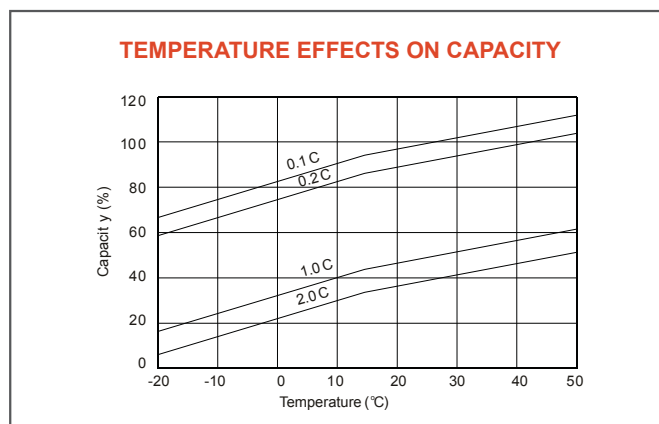
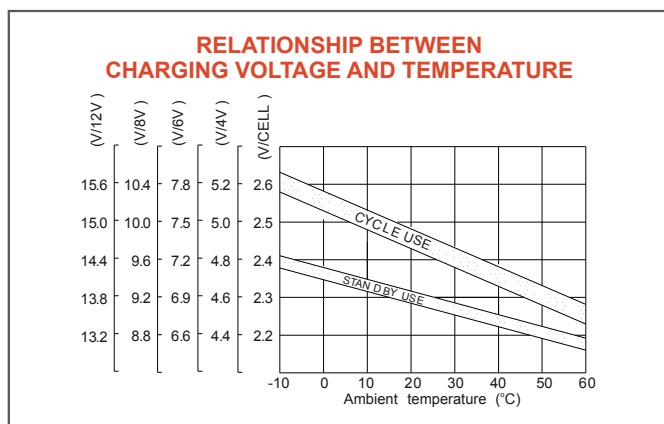
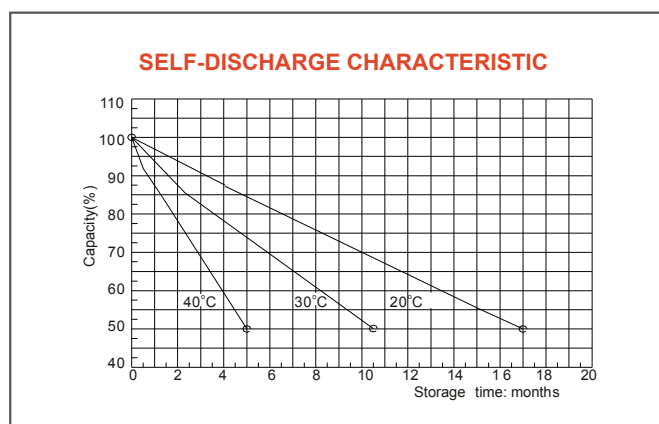
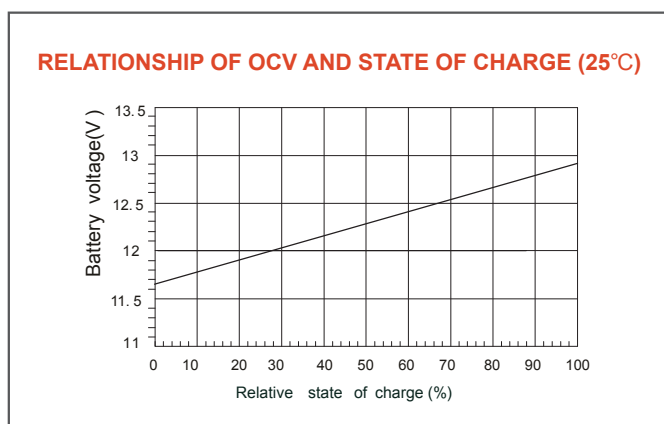
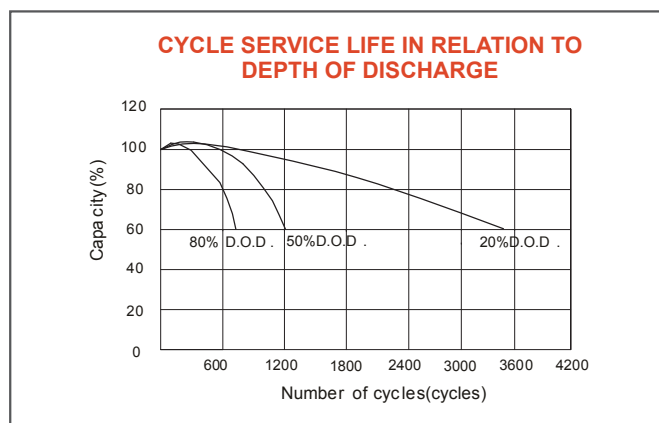
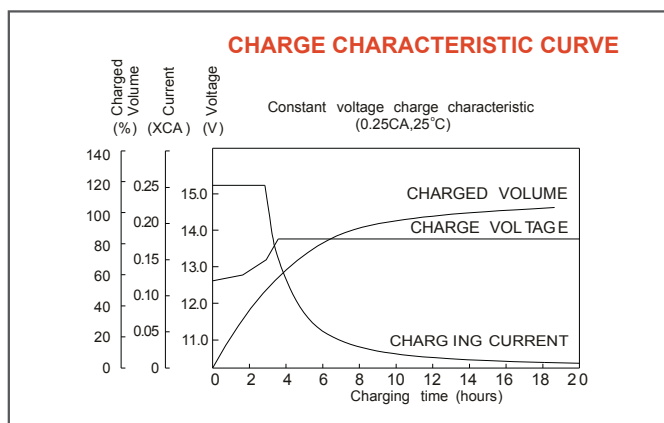
### Electrical Characteristics

Final voltage 1.75V/Cell	Amp Hours(AH)@77°F(25°C)							Minutes of Discharge@80°F(27°C)	
	100HR	20HR	10HR	5HR	3HR	2HR	1HR	@25A	@75A
	440	400	380	320	315	280	230	460	120



# CBS6V440AH

## Charge / Discharge Tables & Graphs



### Head Office

Unit 30  
76 Hume Highway  
LANSVALE NSW 2166  
Tel: (02) 9755 7851 Fax: (02) 9755 7852  
www.fusionagmbatteries.com.au

