



VISION GROUP
Shenzhen Center Power
Tech.Co.Ltd.,

CG12-55SGDA

12V 55Ah

Overview

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special oneway valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Pb	Fiberglass	Gelled acid

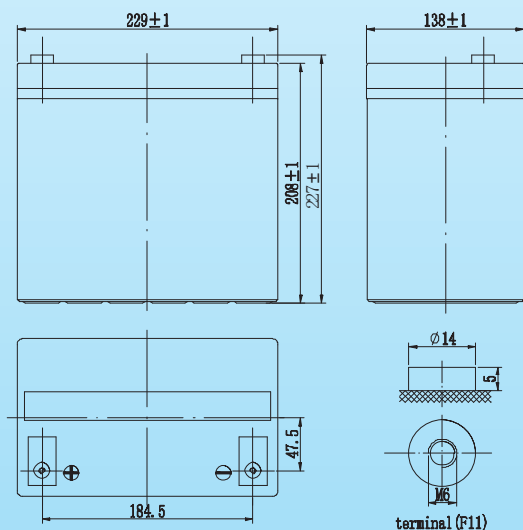
General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

Dimensions and Weight

Length(mm / inch)	229 / 9.01
Width(mm / inch)	138 / 5.43
Height(mm / inch)	208 / 8.18
Total Height(mm / inch)	227 / 8.93
Approx. Weight(Kg / lbs)	18.0 / 39.7

* Weight deviation: $\pm 3\%$



Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Nominal Capacity 77°F(25°C)	
20 hour rate (2.75A, 10.5V)	55Ah
10 hour rate (5.17A, 10.5V)	51.7Ah
5 hour rate (9.05A, 10.5V)	45.25Ah
1 hour rate (34A, 9.6V)	34Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	$\leq 7.2m\Omega$
Self-Discharge	
3% of capacity declined per month at 20°C (average)	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current 77°F(25°C)	550A(5s)
Short Circuit Current	1400A

Discharge Constant Current (Amperes at 77°F25°C)

End Point										
Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h	
1.60V	170	125	96.4	57.4	34.0	14.3	9.62	5.23	2.79	
1.65V	160	120	92.5	55.7	33.2	13.9	9.38	5.21	2.78	
1.70V	150	112	87.9	53.9	32.3	13.6	9.21	5.19	2.77	
1.75V	141	103	83.2	52.2	31.5	13.3	9.05	5.17	2.75	
1.80V	130	96.8	77.1	50.3	30.7	13.0	8.88	5.15	2.72	

Discharge Constant Power (Watts at 77°F25°C)

End Point									
Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	308	231	179	108	82.7	66.8	40.1	28.5	18.4
1.65V	291	218	172	106	81.5	65.3	39.2	27.9	18.2
1.70V	273	207	164	104	79.8	63.8	38.4	27.3	17.8
1.75V	253	194	157	102	78.1	62.4	37.4	26.8	17.6
1.80V	241	180	149	101	76.0	62.4	36.5	26.2	17.5

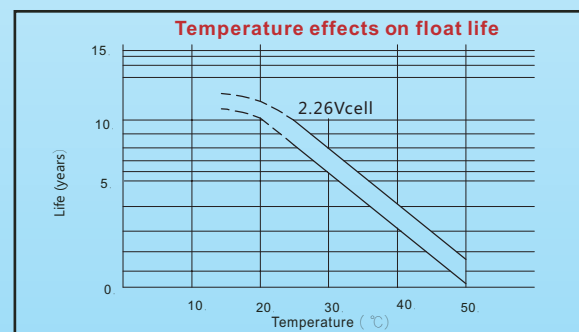
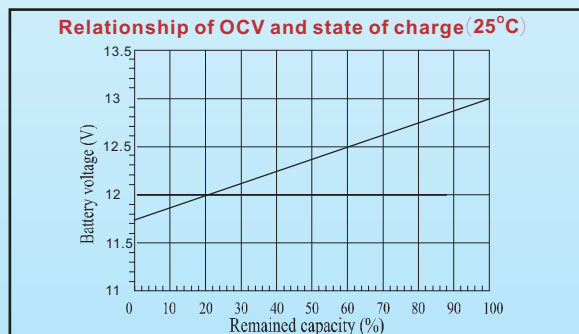
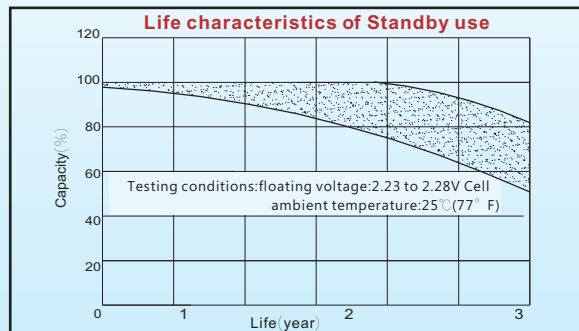
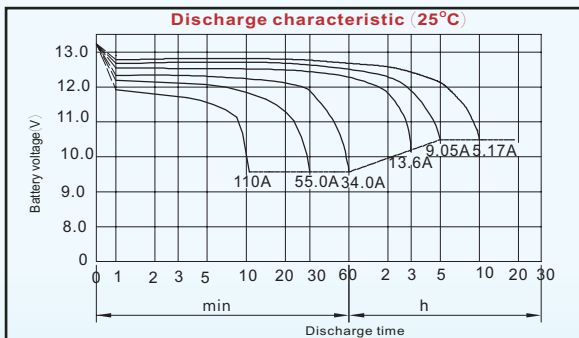
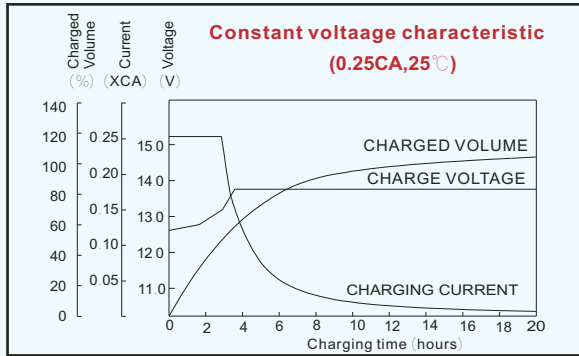
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



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CHARGING METHODS: Constant voltage charging at 25°C
 Standby use: No charging current limit is required
 Charging voltage: 2.20--2.30VPC
 Cyclic use: Maximum charging current: 30% of rated capacity
 Charging voltage: 2.40--2.45VPC
 Temperature compensation :
 stand by - 20mV/°C
 cyclic use -30mV/°C

