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

CTA12-50X

12V 50Ah(10hr)

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	Copper	Fiberglass	Sulfuric acid

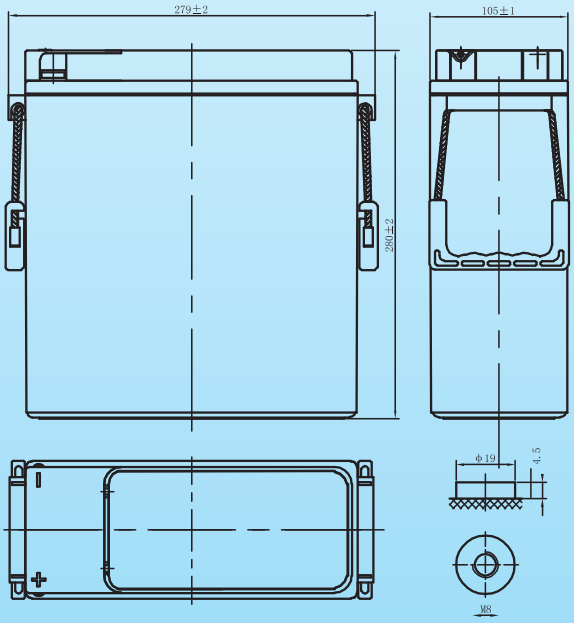
General Features

- 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)	279 / 11.0
Width(mm / inch)	105 / 4.13
Height(mm / inch)	280 / 11.0
Total Height(mm / inch)	280 / 11.0
Approx. Weight(Kg / lbs)	20.0 / 44.1

* Weight deviation: ± 3%



Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Design Life	12years
Nominal Capacity 68℉(20℃)	
10 hour rate (5.0A, 10.8V)	50Ah
5 hour rate (9.37A, 10.5V)	46.9Ah
1 hour rate (35.8A, 9.6V)	35.8Ah
Internal Resistance	
Fully Charged battery 68℉(20℃)	≤6.5mOhms
Self-Discharge	
3% of capacity declined per month at 20℃(average)	
Operating Temperature Range	
Discharge	-20~60℃
Charge	-10~60℃
Storage	-20~60℃
Max. Discharge Current 68℉(20℃)	500A(5s)
Charge Methods: Constant Voltage Charge68℉(20℃)	
Cycle use	2.40-2.45VPC
Maximum charging current	30% of rated capacity
Temperature compensation	-30mV/℃
Standby use	2.23-2.27VPC
Temperature compensation	-20mV/℃

Discharge Constant Current (Amperes at 68℉20℃)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	132	104	63.2	45.6	35.8	14.7	10.0	5.30
1.65V	123	96.0	60.7	43.4	35.0	14.4	9.84	5.22
1.70V	113	90.8	58.0	42.0	34.3	14.0	9.62	5.15
1.75V	107	85.5	55.7	41.0	33.0	13.7	9.37	5.10
1.80V	100	82.0	53.9	40.0	32.1	13.5	9.14	5.00

Discharge Constant Power (Watts at 68℉20℃)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	228	177	111	82.8	66.5	37.1	27.5	19.2
1.65V	211	168	108	79.2	64.4	36.0	27.1	18.8
1.70V	195	159	103	77.1	63.5	35.4	26.7	18.4
1.75V	182	149	99.0	75.7	61.8	34.9	26.3	18.2
1.80V	166	137	94.0	73.3	60.1	34.3	25.9	17.9

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

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