6FM100D-X

SMART Battery Deep Cycle 100A

Rating: Not Rated Yet
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Description

SMART Battery : 6FM100D-X

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 one-way 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

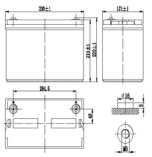
Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

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.

Dimensions and Weight

Length(mm / inch) ..... 330 / 12.99
Width(mm / inch) ..... 171 / 6.73
Height(mm / inch) ..... 215 / 8.46
Total Height(mm / inch) ..... 220 / 8.66
Approx. Weight(Kg / lbs) ..... 32 / 70.5



Performance Characteristics

Nominal Voltage 12V
Number of cell 6
Design Life ..... 10 years
Nominal Capacity 77ºF(25ºC)
10 hour rate (9.55A, 10.8V) 95.5Ah
5 hour rate (17.4A, 10.5V) 87.0Ah
1 hour rate (65.2A, 9.6V) 65.2Ah
Internal Resistance
Fully Charged battery 77ºF(25ºC) 5mOhms
Self-Discharge
3% of capacity declined per month at 20ºC(average)
Operating Temperature Range
Discharge ..... -20~60ºC
Charge ..... -10~60ºC
Storage ..... -20~60ºC
Max. Discharge Current 77ºF(25ºC) ..... 900A(5s)
Short Circuit Current 2100A
Charge Methods: Constant Voltage Charge 77ºF(25ºC)
Cycle use 14.4-14.7V
Maximum charging current 30A
Temperature compensation ..... -30mV/ºC
Standby use 13.6-13.8V
Temperature compensation ..... -20mV/ºC

Discharge Constant Current (Amperes at 77ºF25ºC)

End Point Voltage/Cell	5min	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	226	220	180	105	78.0	65.2	27.6	18.9	9.75
1.65V	245	212	172	101	77.1	63.6	27.4	18.2	9.70
1.70V	257	192	159	93.4	71.5	60.6	26.9	17.2	9.48
1.75V	220	180	148	90.7	69.9	59.6	26.6	17.4	9.60
1.80V	203	168	139	86.7	66.6	56.5	25.1	17.1	9.58

Discharge Constant Power (Watts at 77ºF25ºC)

End Point Voltage/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	520	376	311	194	145	123	69.7	52.3	35.6
1.65V	491	364	306	193	143	116	66.9	50.7	35.2
1.70V	454	346	290	179	136	112	65.9	50.4	34.9
1.75V	419	339	265	173	131	109	63.7	48.6	34.2
1.80V	394	316	251	167	126	102	61.7	48.0	33.8