

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.

GENERAL FEATURES

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

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

TECHNOLOGY PARAMETER

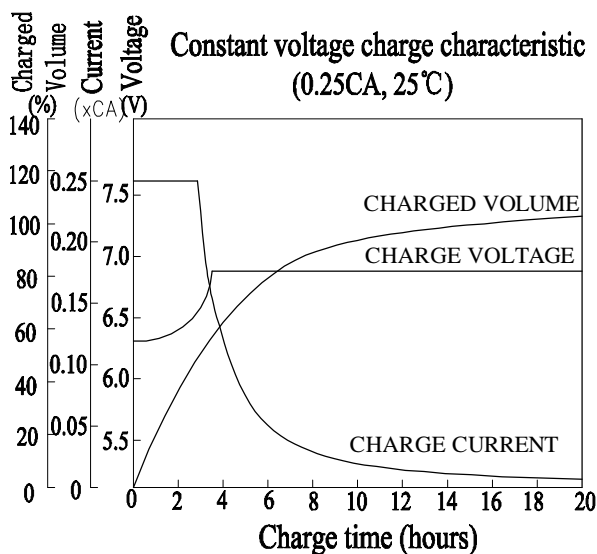
Battery model	3FM200D-X							
Nominal voltage	6V							
Number of cell	3							
Capacity (25°C)	10hR(20A, 5.4V)		5hR(36.7A, 5.25V)			1hR(131A, 4.80V)		
	200Ah		183.5Ah			131Ah		
Dimensions	Length		Width		Height		Total Height	
	240±2mm		185±1mm		275±2mm		275±2mm	
Approx. weight	32.5Kg (71.69 lbs)							
Internal resistance	Full charged at 25°C: 1.4mOhms							
Self discharge	3% of capacity declined per month at 20°C (average)							
Operating temperature range	Discharge		Charge			Storage		
	-20~60°C		-10~60°C			-20~60°C		
Max. discharge current (25°C)	1000A (5s)							
Short circuit current	4200A							

Constant current discharge rating-amperes at 25°C(77 °F)

End Point Volts/Cell	10min	15min	30min	45min	1h	3h	5h	10h	20h
1.60V	390	322	207	159	131	58.2	38.7	20.4	10.8
1.65V	366	305	201	154	128	57.2	38.0	20.3	10.7
1.70V	341	287	193	150	125	56.2	37.4	20.2	10.6
1.75V	317	270	186	146	123	55.0	36.7	20.1	10.5
1.80V	292	252	179	141	120	53.7	36.0	20	10.4

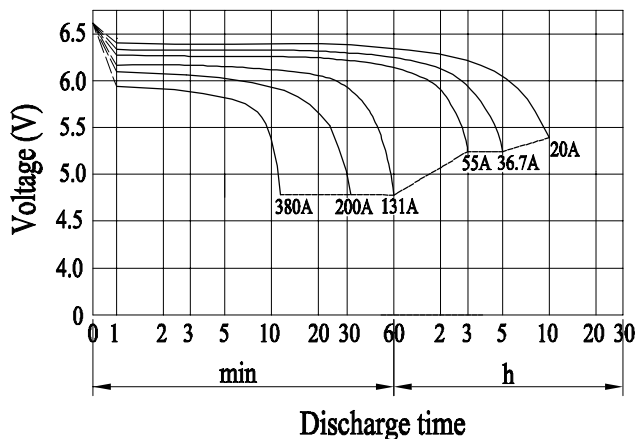
Constant power discharge rating-watts per cell at 25°C(77 °F)

End Point Volts/Cell	10min	15min	30min	45min	1h	2h	3h	5h	10h
1.60V	727	603	392	306	247	145	105	70.3	39.4
1.65V	701	583	386	302	245	144	103	69.7	39.3
1.70V	664	557	378	297	243	143	102	69.2	39.2
1.75V	627	534	368	289	241	143	101	68.7	39.0
1.80V	590	510	359	281	239	142	100	68.1	38.6

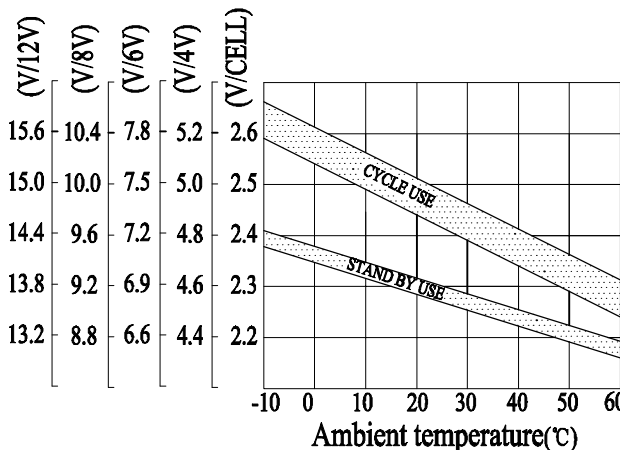


CHARGING METHODS: Constant voltage charging at 25°C
 Standby use: No charging current limit is required
 Charging voltage: 2.23-2.27VPC
 Cyclic use: Maximum charging current: 30% of rated capacity
 Charging voltage: 2.30-2.35VPC
 Temperature compensation :
 stand by -10mV/°C ; cyclic use -15mV/°C

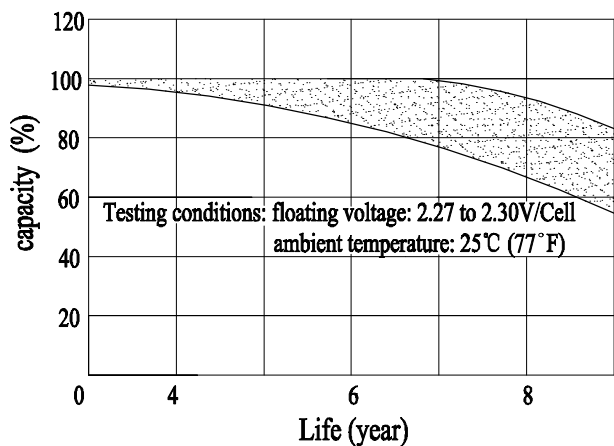
Discharge characteristic (25°C)



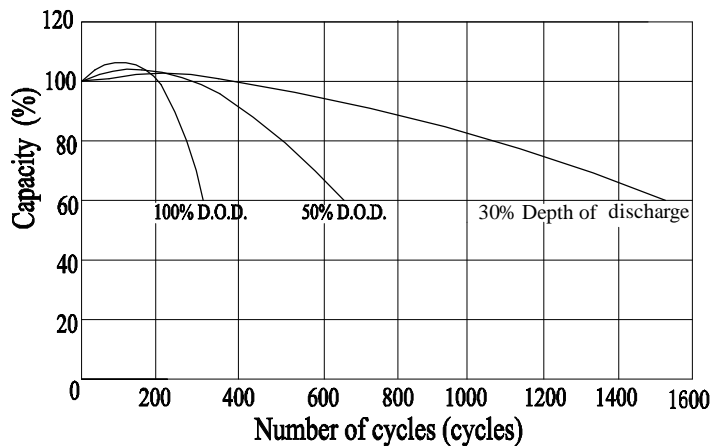
Relationship between charge voltage and temperature



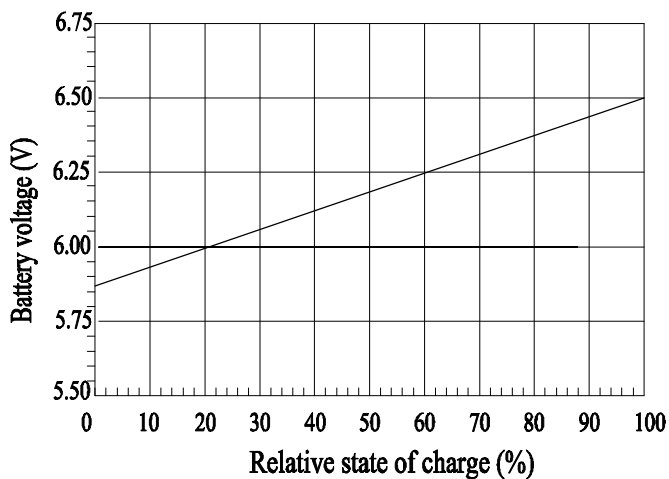
Life characteristics of standby use



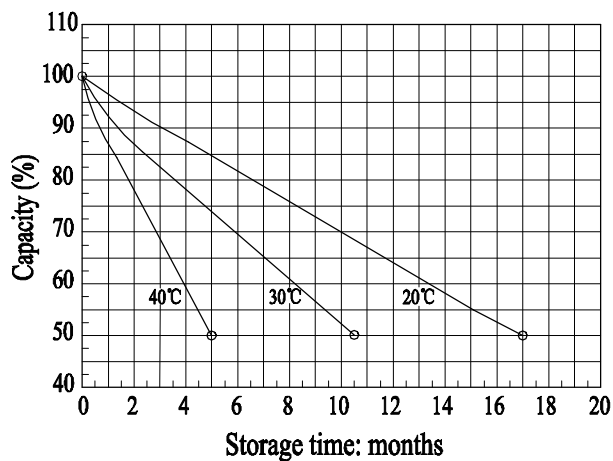
Cycle service life in relation to depth of discharge



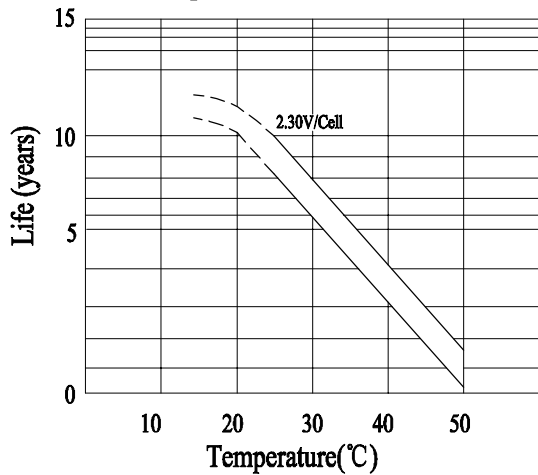
Relationship of OCV and state of charge (25°C)



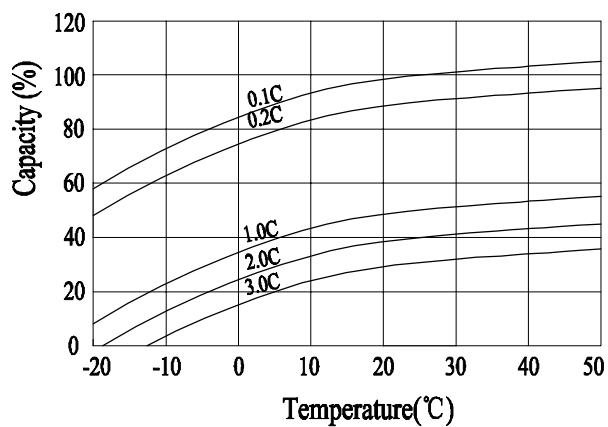
Self-discharge characteristic



Temperature effects on float life



Temperature effects on capacity



Battery and terminal dimensions

