

General Purpose VRLA Battery

FC12-20AT

12V
Voltage

20Ah
Capacity

AGM
Technolog

General
Purpose

FC series General Purpose VRLA batteries are designed with AGM(Absorbent Glass Mat) technology. FC series offers 5 years($\leq 20Ah$) and 10 years($\geq 20Ah$) full maintenance free design life. With a compact design and good reliability, this series is highly suited for security and alarm systems, UPS systems, emergency light systems and other small backup applications.



COMPLIED STANDARDS

IEC 60896-21/22 JIS C8704
YD/T799 BS6290 part4
GB/T 19639 UL 1989

GENERAL FEATURES

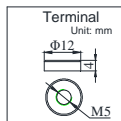
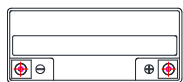
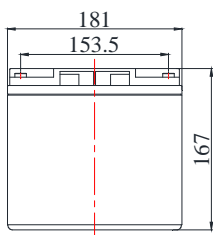
- Can be used at vertical or horizontal orientation
- High Reliability and Good Quality
- High gas recombination efficiency
- High Power Density
- Maintenance-Free Operation

APPLICATIONS

- Ø UPS & EPS
- Ø Emergency lighting Systems
- Ø Medical Equipment
- Ø Cable TV Systems
- Ø Alarm Systems
- Ø Electric Test Equipment
- Ø Security Systems

DIMENSIONS & WEIGHT

Length(mm)	181 ± 1
Width(mm)	77 ± 1
Height(mm)	167 ± 1
Total Height(mm)	167 ± 1
Weight(kg)	6.0 ± 3%



TECHNICAL SPECIFICATIONS

Nominal Voltage		12V(6 cells per unit)
Design Floating Life @25°C		5 Years
Nominal Capacity @25°C (20 hour rate@1.0A,10.8V)		20Ah
Capacity @25°C	10hour rate (1.9A,10.8V)	19Ah
	5 hour rate (3.56A,10.5V)	17.8Ah
	1 hour rate (13.3A,9.6V)	13.3Ah
Internal Resistance	Full Charged Battery@25°C	≤14mΩ
Ambient Temperature	Discharge	-15°C~45°C
	Charge	-15°C~45°C
	Storage	-15°C~45°C
Max.Discharge Current@25°C		200A(5s)
Capacity affected by Temperature (10 hour)	40°C	105%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 6A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 6A Voltage 14.4-14.9V

BATTERY DISCHARGE TABEL

Discharge Constant Current per Cell (Amperes at 25°C)

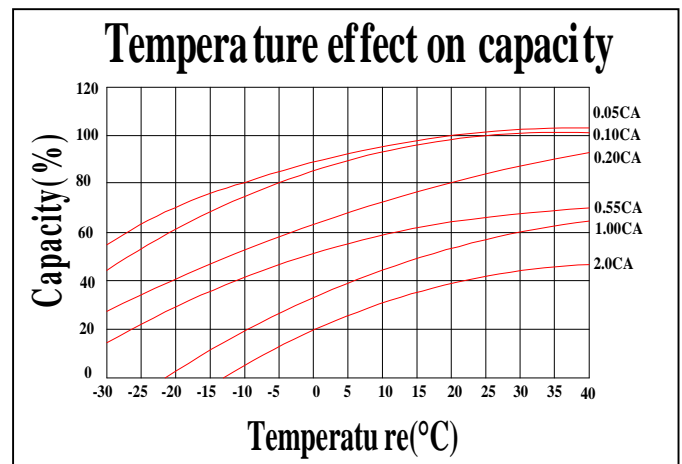
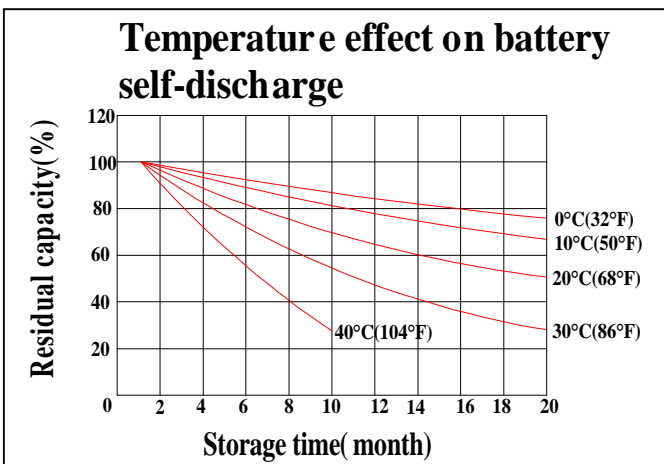
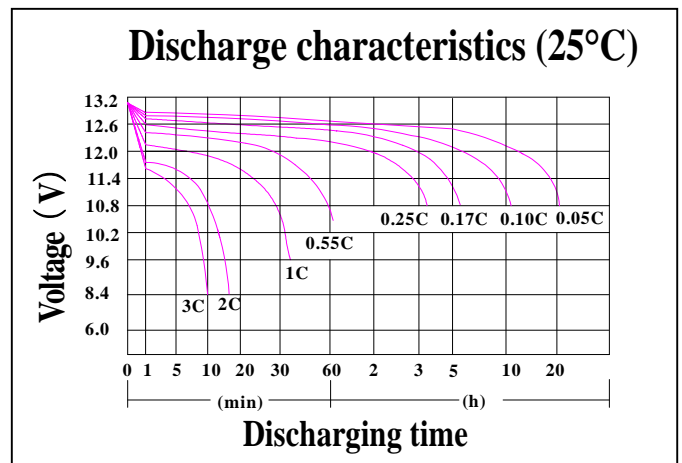
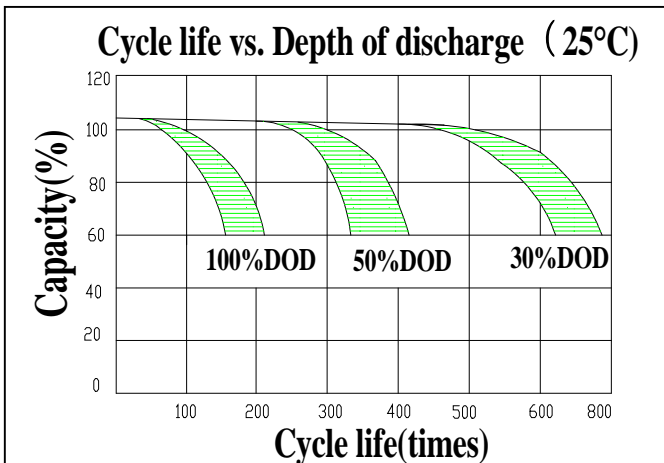
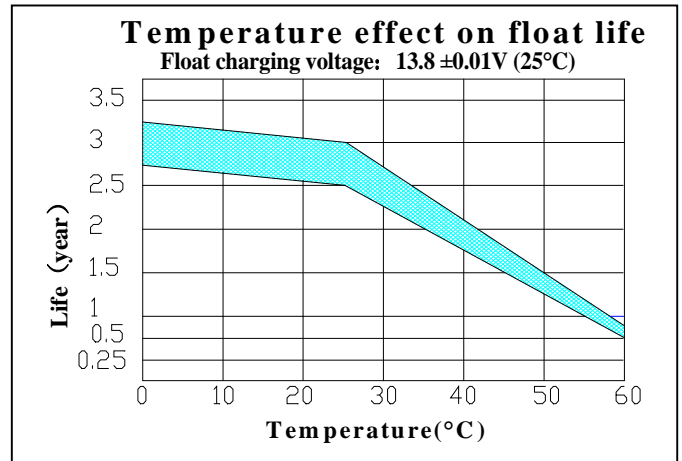
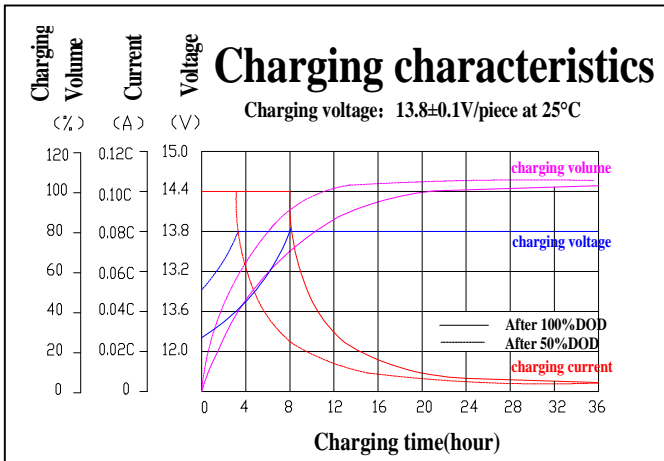
F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	68.2	44.0	33.1	22.0	15.4	13.3	8.25	5.65	3.77	2.53	2.09	1.10
1.65V	67.0	43.2	32.5	21.6	15.1	13.1	8.10	5.55	3.70	2.49	2.06	1.08
1.70V	65.7	42.4	31.9	21.2	14.8	12.8	7.95	5.45	3.63	2.44	2.02	1.06
1.75V	64.5	41.6	31.3	20.8	14.6	12.6	7.80	5.35	3.56	2.40	1.98	1.04
1.80V	62.0	40.0	30.1	20.0	14.0	12.1	7.50	5.14	3.43	2.30	1.90	1.00

Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	131.3	84.7	63.7	42.4	29.6	25.6	15.9	10.9	7.26	4.88	4.03	2.12
1.65V	128.9	83.2	62.6	41.6	29.1	25.2	15.6	10.7	7.12	4.79	3.96	2.08
1.70V	126.5	81.6	61.4	40.8	28.6	24.7	15.3	10.5	6.99	4.70	3.88	2.04
1.75V	124.1	80.1	60.3	40.0	28.0	24.2	15.0	10.3	6.86	4.61	3.81	2.00
1.80V	119.4	77.0	57.9	38.5	27.0	23.3	14.4	9.9	6.60	4.43	3.66	1.93

Note The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact MCA for the latest information.

PERFORMANCE CHARACTERISTICS



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Standard Pb-Ca-Sn grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	ABS (UL94-V0 optional)	Flame Si-Rubber aging resistant	Female Copper Insert M5 (torque: 3~4N.m)	Advanced AGM separator for high pressure cell design	Dilute high purity sulphuric acid	Two layers epoxy resin seal

MCA Battery Manufacture Co.,Ltd.

Cangjiang Industrial Estate Gaoming District Foshan City China
Tel: +86-757-66852620 Fax: +86-757-66852621



HTTP: //WWW.MCABATTERY.COM