







ALPHA POWER

VRLA AGM Battery

AP12-9.0[12V9.0Ah]



General Features

- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

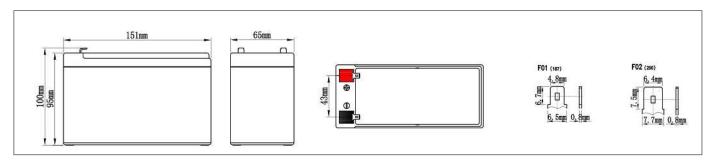
Application

- DC power supply
- UPS/EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- · Telecom stations and power stations
- Medical equipments
- · Emergency lighting systems

Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)		Dime	nsion		Internal	Standard	
		L	W	Н	TH	Weight ±3%	Resistance (In full charge status)	Terminals
12V	9.0AH	151±2mm	65±2mm	95±2mm	100±2mm	Approx2.55kg (5.62lbs)	≈13.5 mΩ	F01/F02 (standard)

X Dimensions



Constant-Voltage Charge

Rated Capacity								
20 hour rate (0.45A)	9.00AH							
10 hour rate (0.90A)	8.30AH							
5 hour rate (1.53A)	7.45AH							
27 minute rate(9.0A)	4.50AH							
7 minute rate (27.0A)	3.60AH							
Capacity affected by Temperature								
40°C(104°F)	103%							
25°C(77°F)	100%							
0°C(32°F)	86%							

Cycle Application

- 1. Limit initial current less than 2.25A.
- 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F)
- 3. Hold at 14.1V to 14.4V until current drop to under 0.054A for at least 3 hours.
- 4. Temperature compensation coefficient of charging voltage is -30mV/°C.

Standby Service

- 1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit2.25A continuously .When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status.
- 2. Temperature compensation coefficient of charging voltage is -18mV/°C.

▲ NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation







Battery Discharge Table

End	Minute (M)					Hour (H)							
Voltage (V)	5	10	15	30	45	1	1.5	2	3	5	8	10	20
	Constant Current Discharge Data Sheet (Amperes at 25°C)												
10.20	33.3	21.7	17.0	8.72	6.29	5.40	4.31	3.21	2.42	1.55	1.04	0.853	0.45
10.50	33.0	21.5	16.8	8.59	6.22	5.37	4.23	3.08	2.34	1.51	1.03	0.844	0.455
10.80	32.6	21.3	16.7	8.51	6.15	5.32	4.14	2.96	2.25	1.49	1.02	0.836	0.450
	Constant Power Discharge Data Sheet (Watt at 25°C)												
10.20	362	261	211	119.3	86.98	66.17	50.75	38.18	27.25	17.96	12.65	10.24	5.51
10.50	347	252	205	116.8	84.98	65.12	50.01	37.64	26.63	17.75	12.55	10.08	5.43
10.80	329	243	198	113.5	82.82	64.04	49.26	37.10	26.17	17.55	12.42	9.91	5.36

Performance Characteristics

