





# SAITE TECHNOLOGY VIET NAM JSC

## **VRLA AGM Battery**

BT-HSE-40-12 [12V40Ah]



### 🖧 General Features

- Designed floating charging service life: 12 years (25°C)
- Sealed and maintenance free operation
- · Safety valve installation for explosion proof
- Low self-discharge characteristic, approx3% of capacity per month at 20°C (average)
- Wide operating temperature range from 0°C~40°C
- · Lead-Aluminum-Calcium-Tin alloy high energy, prevent corrosion

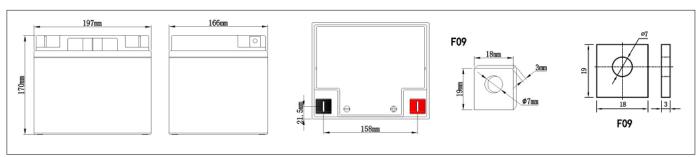
## **Application**

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

### **Description** Physical Specifications

Nominal Voltage	Nominal Capacity (10HR)		Dime	nsion		Internal	Standard	
		L	W	Н	TH	Weight ±3%	Resistance (In full charge status)	Terminals
12V	40AH	197±2mm	166±2mm	170±2mm	170±2mm	Approx12.3kg (27.06lbs)	≤9.5mΩ	F09 (standard)

#### **X** Dimensions



# Constant-Voltage Charge

Rated Capacity								
20 hours rate (2.0A)	40.0AH							
10 hours rate (3.8A)	38.5AH							
5 hours rate (6.46A)	32.3AH							
3 hours rate (9.5A)	29.0AH							
1 hour rate (20.9A)	21.0AH							
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 9.5A.
- 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 under0.23A 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 13.6 to 13.8 volts with current limit 9.5A 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.

A 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** 

Ford Walters	Minute (M)				Hour (H)							
End Voltage	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
9.6V	92	73	41.1	35.3	24.1	19.1	16.1	10.1	6.9	4.7	4.00	2.09
9.9V	88	70	39.1	34.1	23.5	18.6	15.7	9.9	6.7	4.6	3.96	2.07
10.2V	84	66	37.3	33.0	23.0	18.2	15.3	9.7	6.6	4.5	3.92	2.05
10.5V	80	63	35.5	31.9	22.4	17.7	14.9	9.4	6.4	4.5	3.88	2.03
10.8V	76	60	33.8	30.8	21.9	17.3	14.6	9.2	6.3	4.4	3.84	2.00
Constant Power Discharge Data Sheet (@25°C) Unit: W								Unit: W				
9.6V	986	775	529	371	308	225	168	126	81	61.3	47.5	25.5
9.9V	939	739	504	358	300	220	164	123	79	60.1	47.0	25.3
10.2V	894	703	480	346	293	214	160	120	77	58.9	46.5	25.0
10.5V	852	670	457	334	286	209	156	117	75	57.7	46.1	24.8
10.8V	811	638	435	323	279	204	152	114	73	56.6	45.6	24.5

#### **Performance Characteristics**

