

- High Quality With 12 Year Design Life
- Completely Maintenance Free
- Increased Durability & Deep Cycle Ability For Heavy Demand Applications.
- Fully Tank Formed Plates
- Spill Proof / Leak Proof
- Valve Regulated
- Rack Mount Or Multi Position Usage
- ABS Case & Cover
- Designed for Cyclic & Standby Applications



## Specification

Nominal Voltage.....	12 V
Design Life.....	12 Years
Technology.....	AGM (HZB-FA) GEL (HZY-FA)
Grid Alloy.....	Calcium / Tin Lead Alloy
Plates.....	Flat Pasted
Separator.....	HZY-FA = Microporous Duroplastic HZB-FA = Absorbent Glass Mat
Charge Voltage.....	Float : 2.27 to 2.30 VPC (20°C) Cycling : 2.35 VPC (20°C) Max : 2.4 VPC
Max Charge Current Ripple.....	0.05C (A)
Electrolyte.....	Sulphuric Acid of analytical grade purity
Venting Valve.....	EPDM Rubber, 1.5 – 2 PSI (10~15 kPa) release pressure resealing at 1 PSI (7kPa)
Terminal.....	Epoxy sealed by extended mechanical paths
Operating Temperature .....	-20 to +50 °C
Connections.....	M6 Threaded Insert
Torque Setting.....	5-7 Nm

## Models and Ratings

Model	Output Voltage	Capacity ( Ah )	Terminal Type	Size mm (L,W,H)
<b>HZB 12-55FA</b>	12 V	55 Ah	M6	280x105x225
<b>HZB 12-80FA</b>	12 V	80 Ah	M6	560x113x190
<b>HZB 12-95FA</b>	12 V	95 Ah	M6	505x110x235
<b>HZB 12-100FA</b>	12 V	100 Ah	M6	395x110x285
<b>HZB 12-150FA</b>	12 V	150 Ah	M6	550x110x285
<b>HZB 12-180FA</b>	12 V	180 Ah	M6	530x125x320
<b>HZY 12-50FA</b>	12 V	50 Ah	M6	280x105x225
<b>HZY 12-70FA</b>	12 V	70 Ah	M6	560x113x190
<b>HZY 12-90FA</b>	12 V	90 Ah	M6	505x110x235
<b>HZY 12-100FA</b>	12 V	100 Ah	M6	395x110x285
<b>HZY 12-150FA</b>	12 V	150 Ah	M6	550x110x285

**HZB..FA** Front Access AGM batteries are designed for Float Charge Stand-By applications

**HZY..FA** Front Access GEL batteries are designed for Cyclic or Stand-By applications

### Charging Characteristics vs Temperature

Operating Temperature °C	Recommended Float Charge VPC
0~9	2.33~2.35
10~14	2.30~2.33
15~19	2.27~2.30
20~24	2.27~2.30
25~29	2.25~2.27
30~34	2.23~2.25
35~40	2.21~2.23

### Float Charging,

The optimum float voltage for a battery is temperature dependant. At 15~24°C the recommended value is 2.27~2.30 VPC. It is recommended that battery installation sites are temperature controlled, however float voltage can be increased or decreased to compensate for temperature variations as shown in the table above (-3mV per degree C)

The most suitable charging method for battery life and performance is the constant voltage method with a limited initial current, usually to a maximum of C20/4

### Battery Capacity Temperature Correction Factor.

Temperature Discharge Time	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C
5~60 Min	0.8	0.86	0.91	0.96	1	1.037	1.063	1.085	1.1
1~100 hr	0.86	0.9	0.93	0.97	1	1.028	1.05	1.063	1.07

Note for table above, Multiply nominal Ah Capacity rating by factor in above table depending on discharge time and temperature, ie : 100Ah battery used at 10°C & discharged over 4 hours = 93Ah effective capacity.

Specifications may change without notice. E&OE. ALL PSU Terms & Conditions apply.

**ALL PSU Ltd, Unit D6 Laser Quay, Culpeper Close, Medway City Estate,  
Rochester, Kent, ME2 4HU, Tel : 01634 725527, Fax : 01634 739111,  
Email : sales@allpsu.co.uk Web : www.allpsu.co.uk**