

# ENERGY SAFE

08412100

Energy Safe Valve Regulated Lead Acid battery.  
5 year design life for stand by power applications.

## Innovative Features

Completely maintenance free, sealed construction eliminates the need for watering

Fully tank formed plates

Analytical Grade electrolyte

Spill proof / leak proof

Valve regulated Max internal pressure 2.5 psi

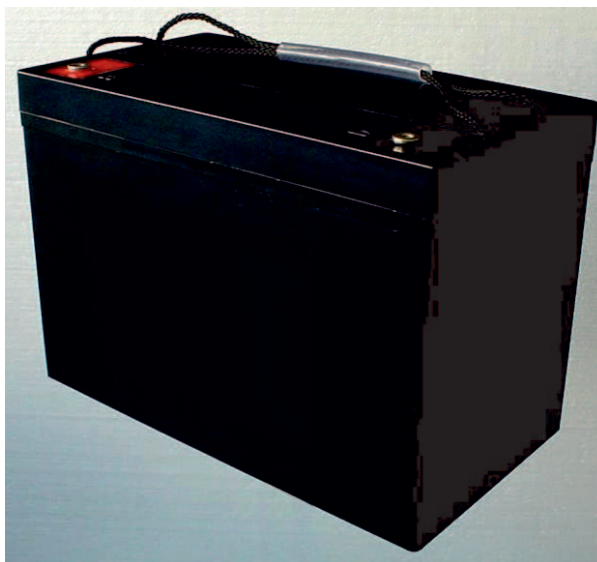
Multi-position usage

ABS Case and cover - V0 on request

Low self discharge

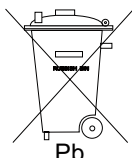
FAA and IATA approved as non-hazardous

Built to comply with IEC 896-2, DIN 43534, BS 6290 Pt4, Eurobat.



## Specifications

Nominal Voltage	12 Volts
Nominal Capacity	104 Ah (C20 @ 20 °C)
Design Life	5 Years
Operating Temperature	-20 °C to 50 °C
Grid alloy	Calcium / Tin lead alloy
Plates	Flat Pasted Absorbant Glass Mat
Active material	Very high purity lead
Case and cover	ABS (VO on request)
Charge Voltage	Float 2.25 - 2.30 VPC @25 °C Cycling 2.35 @25 °C Max. 2.4 VPC Max ripple 0.05C (A)
Venting Valve	Sulphuric acid Analytical grade purity EPDM Rubber 1.5 to 2 psi (10.5 - 14 KPa) release pressure. Resealing at 1 psi (7 KPa)
Terminal	Epoxy sealed by extended mechanical paths



Accu Italia SpA keenly encourages environmental awareness; PLEASE follow guidelines for the recycling /disposal of lead.

Website: [www.accu-italia.com](http://www.accu-italia.com)  
E mail : [infoaccu@accu-italia.com](mailto:infoaccu@accu-italia.com)

Sealed Lead Acid 12 Volt Bloc AGM Range  
PRODUCT SHEET 08412100

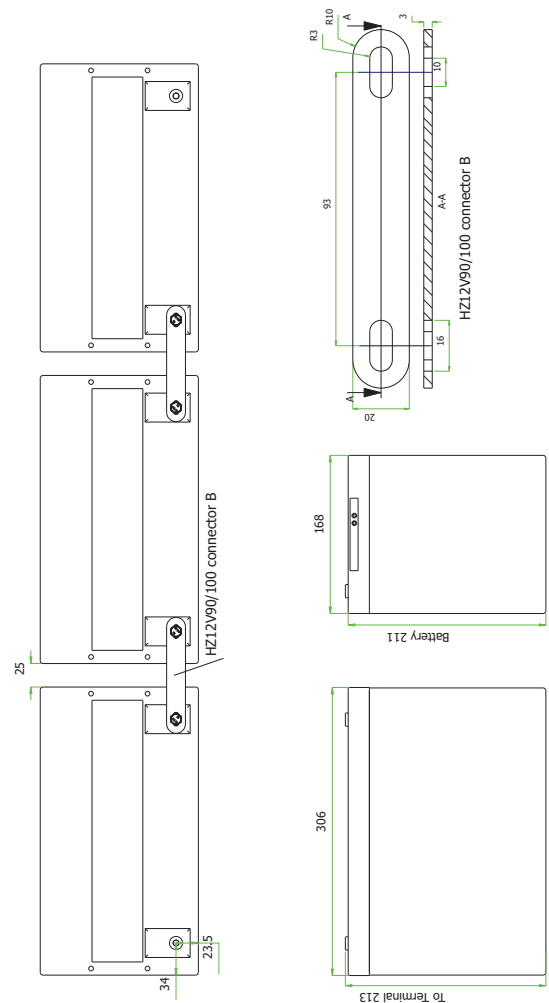
12V  
AGM

## Specifications

Nominal Voltage		12 V	
Nominal Capacity		104 Ah	
Dimensions	Height	211 mm	8.31 inches
	(To terminals)	213 mm	8.38 inches
	Length	306 mm	12.05 inches
	Width	168 mm	6.61 inches
	Weight	27.9 Kg	61.7 lbs

## Characteristics

Capacity 20 °C (68 °F) to 1.75 volts	20 hour rate	104 Ah
	10 hour rate	93.0 Ah
	5 hour rate	80.5 Ah
	1 hour rate	59.0 Ah
	15 min rate	40.5 Ah
	Internal Resistance	-- mOhms
Impedance	S	
Capacity correction for Temperature Variations (C20)	40 °C (104 °F)	102%
	20 °C (68 °F)	100%
	0 °C (32 °F)	85%
	-15 °C (5 °F)	65%
Self-Discharge 20 °C (68 °F)	Capacity after 1 months storage	98%
	Capacity after 3 months storage	94%
	Capacity after 6 months storage	86%
Short Circuit Current 20 °C (68 °F)	---	
Terminal	Standard	Insert
	Optional	
Charging (Constant Voltage)	Cyclic	2.35 - 2.40 VPC (20-25 °C)
	Float	2.27 - 2.30 VPC (15-25 °C)



## Constant Power Discharge - Watts per Cell @20 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	397	319	270	231	201	179	160	146	135	111	82.2	64.9	45.8	35.6	-	-	-	-	-
1.80	460	348	288	243	210	186	166	151	139	114	83.8	66.1	46.6	36.1	-	-	-	-	-
1.75	501	366	298	250	217	190	170	154	142	116	84.8	66.7	47.1	36.5	-	-	-	-	-
1.70	526	376	305	255	220	193	172	156	143	117	85.7	67.3	47.5	36.8	-	-	-	-	-
1.65	553	386	310	259	223	196	174	157	145	119	86.5	68.0	47.8	37.1	-	-	-	-	-
1.60	581	395	315	263	226	198	176	158	146	119	87.2	68.3	48.1	37.3	-	-	-	-	-

## Constant Amps Discharge - Amps @20 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	218	171	142	122	105	93.6	83.4	75.3	69.2	56.2	41.7	33.3	23.7	18.8	15.6	10.7	8.90	7.63	4.91
1.80	265	193	155	130	112	98.4	87.4	78.6	71.7	58.1	42.9	34.2	24.2	19.1	15.9	11.0	9.14	7.82	5.06
1.75	282	204	162	134	115	100	89.1	80.2	73.3	59.0	43.6	34.8	24.7	19.4	16.1	11.1	9.30	8.00	5.20
1.70	298	212	167	138	117	103	90.7	81.6	74.4	60.0	44.5	35.4	25.0	19.7	16.4	11.3	9.45	8.14	5.29
1.65	315	219	170	139	119	104	91.8	82.5	75.3	60.8	44.8	35.6	25.2	19.9	-	-	-	-	-
1.60	333	225	173	142	121	105	92.9	83.4	76.2	61.3	45.1	35.9	25.4	20.1	-	-	-	-	-

## Ampere Hour @20 °C

End V per Cell	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	66.6	71.1	75.2	78.0	85.6	89.0	91.5	98.2
1.80	68.4	72.6	76.4	79.5	88.0	91.4	93.8	101.2
1.75	69.6	74.1	77.6	80.5	88.8	93.0	96.0	104.0
1.70	70.8	75.0	78.8	82.0	90.4	94.5	97.7	105.8



UL Recognised  
Component  
MH28512

