



# ESC 200-12 AGM-VRLA

## 12V - 200Ah

### INTRODUCTION

The most popular series of ROCKET Batteries; The ESC series has been performing with a proven track record for more than 52 years. It has successfully exemplified its quality and reliability in some of the most demanding power conditions by providing unrelentless backup power supply.

With the same characteristics as that of the ES series, the ESC series provides power reliability to applications which require longer backup time.

This series is widely used in UPS as well as Telecommunication Applications in many parts of the world. The ESC series is world renowned and recognised as a Highly reliable Battery System in the industry.

### TECHNICAL FEATURES

- Non-Spillable Sealed Construction
- Absorbent Glass Mat System (AGM System)
- ABS (Acrylonitrile Butadiene Styrene) container and cover
- Gas Recombination
- Maintenance-Free Operation
- Low Pressure Venting System
- Heavy - Duty Grids
- Low Self-Discharge - Long Shelf Life
- Wide Operating Temperature Range

### APPLICATIONS

- UPS
- Telecom Communication Equipments
- Fire Alarm & Security Systems
- Medical Instruments
- Emergency Lighting
- Computer Backup

### COMPLAINTS STANDARD

- IEC 60896 PART 1 & 2
- BS6290-4,
- Eurobat Guide - HIGH Performance

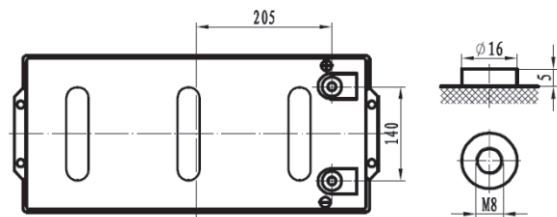
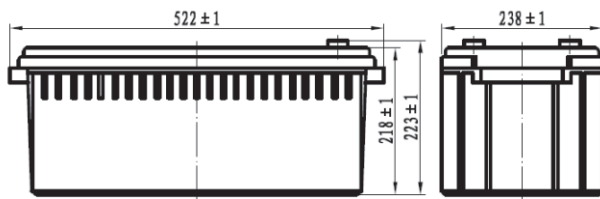
### SPECIFICATION

Nominal Voltage		12V
Capacity (20HR, 25°C)		200Ah
Dimension	Length	522mm (20.55inch)
	Width	238mm (9.37inch)
	Height	218mm (8.58inch)
	Total Height	223mm (8.78inch)
Approx Weight		65kg (143.3lbs)
Design Life		12 Years

### CHARACTERISTICS

Capacity 25°C (77°F)	20 hour rate	200Ah	
	10 hour rate	196Ah	
	5 hour rate	183.5Ah	
	1 hour rate	138Ah	
Internal resistance (Fully charge, 25°C)		3m Ω	
Self-discharge (20°C)	1 month	Remaining Capacity:97%	
	Operating temperature range	Discharge	-20°C~60°C
		Charge	-10°C~60°C
Storage		-20°C~60°C	
Maximum discharge current		77°F(25°C) 1000A(5 Sec.)	
Short circuit current		3500A	
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use	Cycle Use 14.4 to 14.7V		
	Max. charging Current 60A		
	Temp. compensation - 30mV/°C		
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Standby Use	Standby Use 13.6-13.8V		
	Temp. compensation - 20mV/°C		

**THE BATTERY CONTAINER AND COVER ARE AVAILABLE BOTH IN ABS plastic and Flame Retardant (FR).**





# ESC 200-12 AGM

## 12V - 200Ah

### CONSTANT CURRENT DISCHARGE (Amperes) at 25°C

End Point Volts/Cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.25h
1.60V	440	358	292	249	210	195	176	160	148	141	138	109
1.65V	414	337	283	242	203	189	171	155	144	139	135	106
1.70V	390	316	274	234	195	183	166	150	140	137	132	103
1.75V	364	295	262	226	188	177	161	145	136	135	129	100
1.80V	334	274	245	205	180	171	156	140	132	133	126	97.0

End Point Volts/Cell	1.5h	1.75h	2h	2.25h	2.5h	2.75h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60V	92.8	83.3	75.2	69.8	64.6	61.0	53.1	44.5	39.0	32.3	28.0	24.9	22.4	20.5	17.5	9.34
1.65V	89.8	80.8	72.7	67.7	62.4	59.3	52.0	43.1	38.2	31.6	27.5	24.5	22.2	20.4	17.3	9.29
1.70V	87.5	78.3	71.3	65.7	61.5	57.5	51.0	42.5	37.5	31.1	27.2	24.3	22.0	20.3	17.2	9.25
1.75V	85.2	75.7	69.3	63.6	59.8	55.8	49.8	41.5	36.7	30.7	26.9	24.1	21.9	20.2	17.1	9.20
1.80V	82.5	73.2	66.8	61.5	57.3	54.0	48.4	40.3	35.9	30.3	26.6	23.9	21.7	20.0	17.0	9.16

### CONSTANT POWER DISCHARGE (Watts per cell) at 25°C

End Point Volts/Cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min
1.60V	756	611	516	450	402	356	321	287	278	272
1.65V	719	591	502	437	387	345	312	282	275	270
1.70V	681	572	487	424	372	338	305	276	272	268
1.75V	641	553	473	411	357	330	299	270	268	265
1.80V	609	520	460	398	342	324	294	265	264	260

End Point Volts/Cell	1h	1.25h	1.5h	1.75h	2h	2.25h	2.5h	2.75h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60V	266	195	170	153	145	130	121	115	103	86.5	74.3	62.1	54.3	48.4	43.8	40.2	34.2	18.4
1.65V	261	191	166	150	142	127	119	112	102	85.1	73.7	61.1	53.3	47.4	42.8	39.2	33.3	17.9
1.70V	256	187	163	147	139	124	117	110	100	83.9	73.1	60.3	52.5	46.6	42.0	38.4	32.6	17.6
1.75V	250	183	159	143	136	121	113	107	98.8	81.8	72.6	59.3	51.6	45.8	41.2	37.6	31.9	17.2
1.80V	245	179	157	140	132	118	110	104	97.7	80.1	72.0	58.4	50.7	44.9	40.3	36.7	31.2	16.8

### ESC-CYCLE LIFE EXPECTANCY

