



ESC 120-12 AGM - VRLA

12V - 120Ah

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

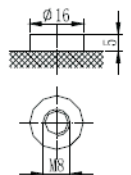
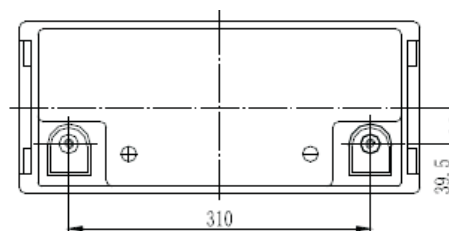
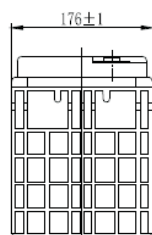
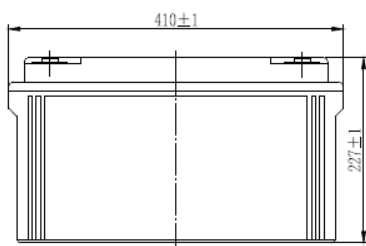
SPECIFICATION

Nominal Voltage		12V
Capacity (20HR, 25°C)		120Ah
Dimension	Length	410mm (16.14inch)
	Width	176mm (6.93inch)
	Height	227mm (8.94inch)
	Total Height	227mm (8.94inch)
Approx Weight		38kg (83.8lbs)
Design Life		12 Years

CHARACTERISTICS

Capacity 25°C (77°F)	20 hour rate	120Ah
	10 hour rate	117Ah
	5 hour rate	103.5Ah
	1 hour rate	79.6Ah
Internal resistance (Fully charge, 25°C)		4m 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) 950A(5 Sec.)
Short circuit current		2400A
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use		Cycle Use 14.4 to 14.7V
		Max. charging Current 36A
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Standby Use		Temp. compensation - 30mV/°C
		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).





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CONSTANT CURRENT DISCHARGE (Amperes) at 25°C

End Point Volts/Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min
1.60V	371	281	228	178	149	129	115	104	92.5	86.9	81.8
1.65V	347	266	219	170	143	125	112	101	90.4	85.5	80.9
1.70V	323	251	210	162	137	121	109	98.0	88.3	84.1	80.0
1.75V	299	236	201	154	131	116	106	94.8	86.2	82.7	79.1
1.80V	275	221	192	146	125	114	103	91.7	84.1	81.3	78.2

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	79.6	60.9	52.8	46.2	41.8	39.2	36.0	33.6	32.1	25.4	21.8	18.2	16.1	14.5	13.3	12.6	10.6	5.54
1.65V	79.0	60.3	52.3	45.8	41.4	38.3	35.5	33.0	31.4	24.9	21.5	17.9	15.9	14.3	13.2	12.5	10.5	5.47
1.70V	77.4	59.7	51.8	45.3	41.0	37.4	34.9	32.4	30.8	24.4	21.1	17.6	15.7	14.1	13.1	12.4	10.4	5.39
1.75V	75.1	59.1	51.3	44.8	40.6	36.5	34.3	31.8	30.1	23.9	20.7	17.3	15.5	13.9	13.0	12.2	10.3	5.31
1.80V	72.7	58.5	50.7	44.3	40.2	35.6	33.7	31.2	29.3	23.4	20.3	17.0	15.2	13.6	12.9	12.0	10.2	5.22

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

End Point Volts/Cell	5min	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min
1.60V	633	504	402	312	273	244	208	186	172	159	149
1.65V	601	479	389	302	265	236	201	181	168	156	147
1.70V	570	454	376	291	257	230	194	176	165	153	145
1.75V	539	430	363	280	249	222	187	171	161	150	142
1.80V	504	402	350	269	241	215	180	166	158	147	139

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	139	117	104	93.8	87.4	74.5	68.6	63.4	61.6	48.3	42.8	34.2	30.6	27.2	25.1	23.2	20.6	10.6
1.65V	136	114	102	91.9	85.8	72.9	67.4	62.5	60.9	47.9	42.6	33.8	30.2	26.9	24.9	23.1	20.5	10.5
1.70V	133	111	100	89.9	84.2	71.3	66.2	61.6	60.2	47.5	42.2	33.4	29.8	26.6	24.7	23.0	20.4	10.4
1.75V	130	108	98.0	87.8	82.7	69.7	65.0	60.7	59.5	47.1	42.0	33.0	29.4	26.3	24.5	22.9	20.3	10.3
1.80V	127	105	95.9	85.7	81.9	68.1	63.8	59.8	58.5	46.7	41.6	32.6	29.2	26.0	24.2	22.8	20.1	10.2

ESC-CYCLE LIFE EXPECTANCY

