



ES 65-12 AGM - VRLA

12V - 65Ah

INTRODUCTION

The most advanced technology of ROCKET, Valve Regulated Lead Acid batteries make them highly useful in a broad range of applications. The use of high-purity calcium alloy maximizes the longevity of ROCKET batteries to ensure excellent performance in any circumstances.

ES Series are specially designed to provide better cyclic life and are ideally suited for areas prone to frequent power failures.

The unique construction coupled with the use of special sealing epoxies and long sealing paths of ROCKET series ensures that no electrolyte leakage can occur from terminals or cases of any ROCKET Batteries. This feature ensures safe & efficient operation of ROCKET batteries in any position.

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

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

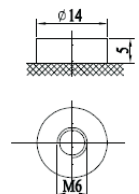
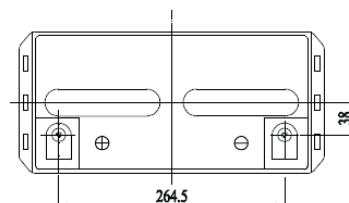
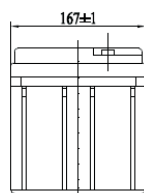
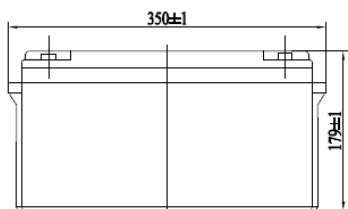
SPECIFICATION

Nominal Voltage		12V
Capacity (20HR, 25°C)		65Ah
Dimension	Length	350mm (13.78inch)
	Width	167mm (6.57inch)
	Height	179mm (7.05inch)
	Total Height	179mm (7.05inch)
Approx Weight		22.2kg (49.2lbs)
Design Life		10 Years

CHARACTERISTICS

Capacity 25°C (77°F)	20 hour rate	65Ah	
	10 hour rate	61Ah	
	5 hour rate	54.5Ah	
	1 hour rate	44.2Ah	
Internal resistance (Fully charge, 25°C)		6m 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) 650A(5 Sec.)	
Short circuit current		1700A	
Charge Methods (Constant Voltage Charge 77°F(25°C)) - Cyclic Use	Cycle Use 14.4 to 14.7V		
	Max. charging Current 19.5A		
	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).





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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	207	154	121	97.8	81.4	68.4	63.5	58.4	53.7	50.5	47.6
1.65V	196	149	116	92.2	77.7	66.3	62.0	57.2	52.6	49.5	46.6
1.70V	184	138	110	90.2	75.8	64.3	60.5	56.0	51.5	48.5	45.5
1.75V	172	127	104	87.1	74.6	62.2	59.0	54.8	50.4	47.4	44.3
1.80V	159	116	96.5	80.9	69.4	59.9	57.5	53.6	49.3	46.3	43.1

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	43.1	36.8	31.4	27.6	24.3	22.3	20.2	18.2	16.9	14.1	11.5	10.7	9.28	8.38	7.62	6.80	5.88	3.18
1.65V	42.0	35.8	30.5	26.7	23.5	21.6	19.6	17.7	16.5	13.7	11.2	10.4	9.03	8.23	7.49	6.71	5.80	3.11
1.70V	41.0	34.8	29.6	25.8	22.7	20.9	19.0	17.2	16.1	13.3	11.0	10.1	8.78	8.08	7.36	6.61	5.71	3.04
1.75V	39.9	33.7	28.7	24.9	21.9	20.2	18.4	16.7	15.7	12.9	10.8	9.80	8.53	7.93	7.23	6.50	5.62	2.97
1.80V	39.0	32.6	27.8	24.0	21.1	19.5	17.8	16.2	15.4	12.5	10.6	9.50	8.28	7.78	7.09	6.37	5.53	2.90

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	368	272	197	177	150	119	116	106	95.1	91.3	85.5
1.65V	346	258	193	166	143	118	114	104	93.6	89.5	83.8
1.70V	325	243	190	158	134	117	111	102	91.7	87.6	82.1
1.75V	304	229	186	155	131	114	108	100	89.6	85.7	80.4
1.80V	292	212	177	149	128	112	105	98.0	87.3	83.8	78.7

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	78.8	67.5	58.5	51.6	47.5	42.7	39.1	36.9	33.8	27.3	22.5	19.6	17.5	15.4	14.0	13.0	11.1	6.08
1.65V	77.0	65.9	57.2	50.5	46.5	41.7	38.2	36.1	33.1	26.8	22.3	19.4	17.3	15.2	13.9	12.9	11.0	6.01
1.70V	75.3	64.3	55.9	49.4	45.5	40.6	37.3	35.3	32.4	26.3	21.8	19.2	17.1	15.0	13.8	12.8	10.9	5.94
1.75V	73.5	62.7	54.6	48.3	44.5	39.5	36.4	34.5	31.8	25.8	21.6	19.0	16.9	14.8	13.7	12.7	10.8	5.86
1.80V	72.7	61.1	53.2	47.2	43.3	38.4	35.5	33.7	31.1	25.2	21.4	18.8	16.7	14.6	13.6	12.6	10.7	5.78

ES-CYCLE LIFE EXPECTANCY

