



Specification

Nominal Voltage		12V
Rated Capacity (20 hour rate)		42Ah
Dimensions	Total Height (with terminals)	175mm
	Length	199mm
	Width	167mm
Weight		Approx. 14Kg

Characteristics* :

Capacity 770F (25°C)	20 hour rate (2.1A) upto 10.5V	42Ah
	10 hour rate (3.91A) upto 10.5V	39Ah
	5 hour rate (7.14A) upto 10.2V	35.7Ah
	1 hour rate (27A) upto 9.6V	27Ah
	15 minute Rate (79A) upto 7.8V	19.75Ah
Internal Resistance	Full charged Battery 81°F (27°C)	7.6 mΩ
Capacity affected by (temperature (20 hour rate)	104°F (40°C)	110%
	81°F (27°C)	100%
	32°F (0°C)	80%
Self discharge 88°F (27°C)	Capacity after 3 month storage	90%
	Capacity after 6 month storage	85%
Terminal	B6	
Max. discharge current 81°F (27°C)	630 A (5S)	
Short circuit current	1644.8 A	

Constant power discharge rating watts per battery at 27°C *

ECV	TIME									
	5min	10min	15min	20min	30min	60min	2hrs	3hrs	5hrs	8hrs
1.8	1395	1010	800	672	505	305	180	130	89	58
1.7	1555	1092	842	693	520	320	185	132	90	59
1.6	1639	1136	882	715	565	330	192	134	91	60

CONSTANT CURRENT DISCHARGE RATINGS-AMPERES AT 27°C*

Duration ECV	TIME											
	5min	10min	15min	20min	30min	60min	2hrs	3hrs	5hrs	8hrs	10hrs	20hrs
1.3	168.00	105.00	80.7	64.6	46.6							
1.55	150.00	97.6	77.7	61.7	46.1	28.3						
1.6	139.53	94.8	75.8	60.1	45.6	27.2	16.5	11.3	7.7	4.8	4.0	2.2
1.7	126.13	89.0	69.3	55.7	42.0	26.5	15.2	10.6	7.2	4.6	3.9	2.1
1.75	123.53	85.7	67.7	55.2	41.5	26.2	15.0	10.6	7.1	4.5	3.9	2.1
1.8	118.94	84.0	66.6	53.8	41.1	25.1	14.8	10.5	7.1	4.5	3.8	2.0

* The above data are average values, and can be obtained within 3 charge / discharge cycles.

DIMENSIONS*

12AL042
12V-42Ah

199

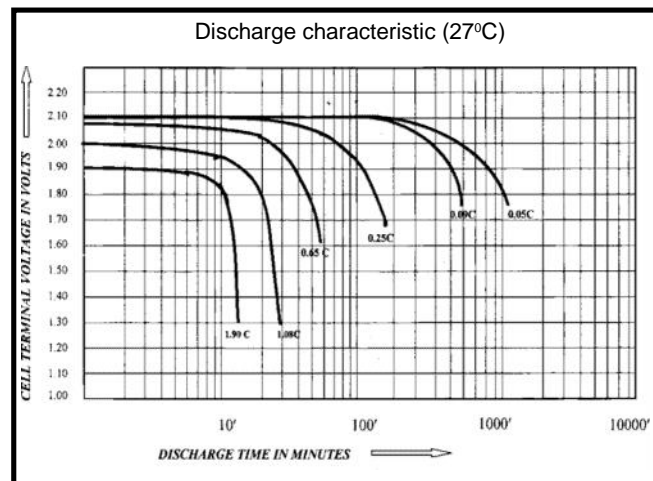
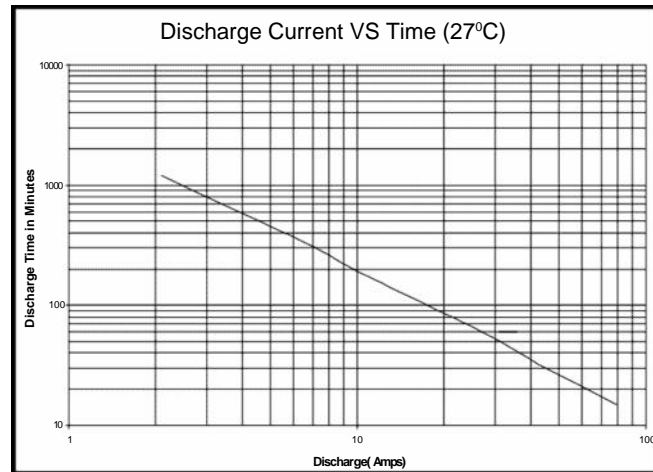
167

175

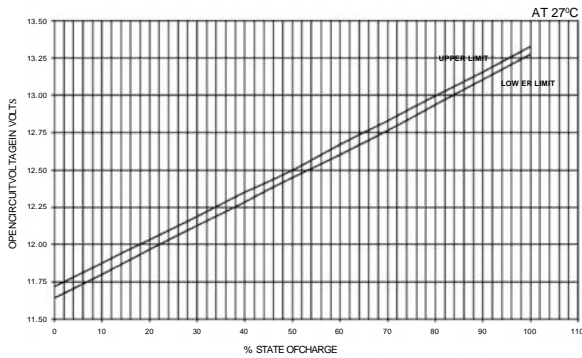
TERMINAL

* Without FLAPPON™

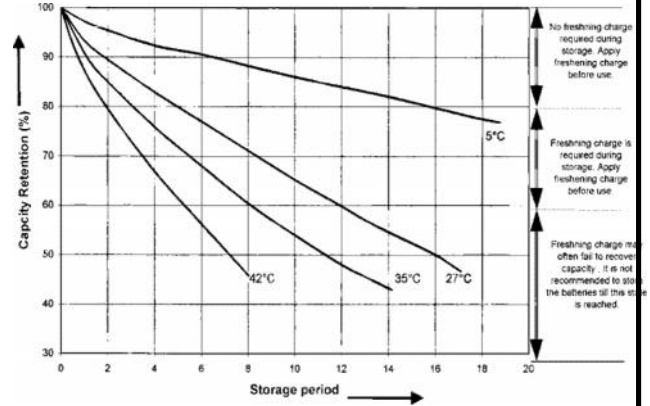
Dimensions in mm



OPEN CIRCUIT VOLTAGE VS % STATE OF CHARGE

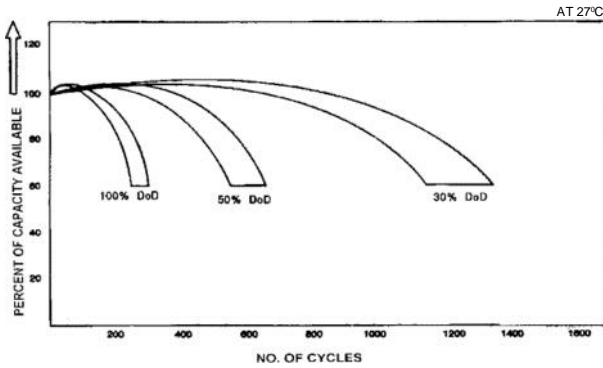


SELF DISCHARGE CHARACTERISTIC

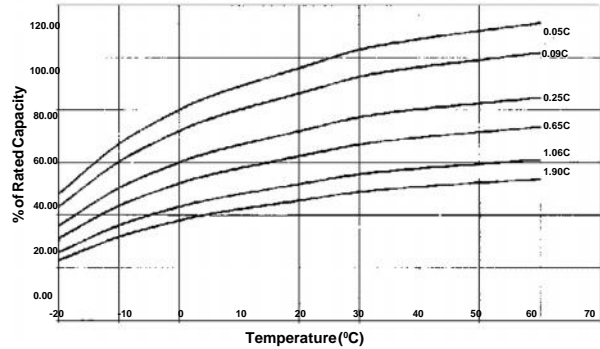


CYCLIC SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE

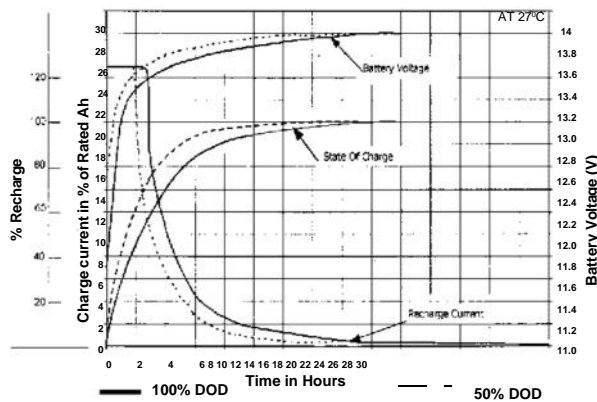
SPEC: JIS 8702C



TEMPERATURE EFFECT IN RELATION TO BATTERY CAPACITY



CONSTANT VOLTAGE CHARGING CHARACTERISTIC



CHARGING METHODS:

Constant Voltage Charging	at 27°C.	
Standby use	charging voltage	13.5volts/Battery
Max.Charging current	:25% of rated capacity	
Cyclic use	charging voltage	:13.8volts/Battery
Max.Charging current	:25% of rated capacity	
Temperature compensation	:-5 mV / °C	

AMARA RAJA BATTERIES LTD.

Costa Power Industries Pvt Ltd

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Contact No. - 9820710392

Email:- [sales@upsbatteriesindia.com/](mailto:sales@upsbatteriesindia.com)
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CAUTION:

Avoid short circuit
Do not charge in a sealed container.