

**Specification**

Nominal voltage	12 Volts	
Rated capacity (C ₂₀ Hour rate at 27°C)	84 Ampere Hour	
Dimensions	Length	351 mm
	Width	167 mm
	Height	203 mm
Weight ± 1.0 Kgs (approx.)	27.0 Kgs	

Characteristics*

Capacity@ 80.6°F (27°C)	20 hour rate (4.20A) upto 10.5V	84.0 Ah
	10 hour rate (7.82A) upto 10.5V	78.20 Ah
	5 hour rate (14.41A) upto 10.2V	72.05 Ah
	1 hour rate (54.55A) upto 9.6V	54.55 Ah
	15 minute rate (151.62A) upto 9.6V	37.90 Ah
Internal resistance	Fully charged battery 80.6°F (27°C)	3.54mΩ
Capacity affected (Temperature at C ₂₀ hour rate)	104°F (40°C)	110%
	80.6°F (27°C)	100%
	32°F (0°C)	80%
	5°F (-15°C)	60%
Self discharge 80.6°F (27°C)	Capacity after 3 month storage	90%
	Capacity after 6 month storage	80%
Terminal Type	M6×20 mm bolted	
Short circuit current	2420 A	

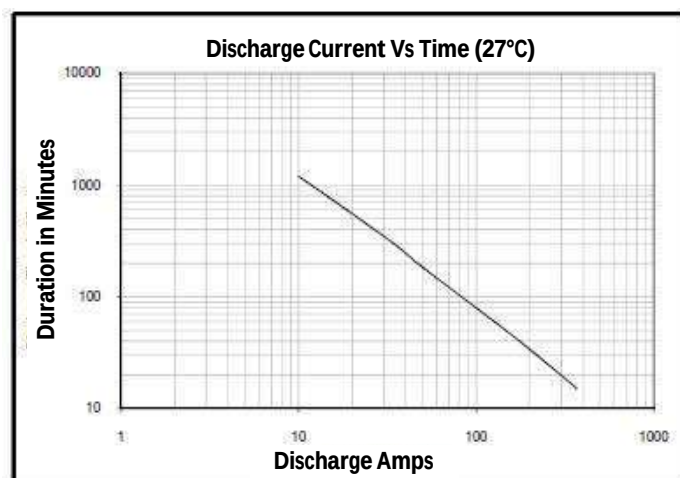
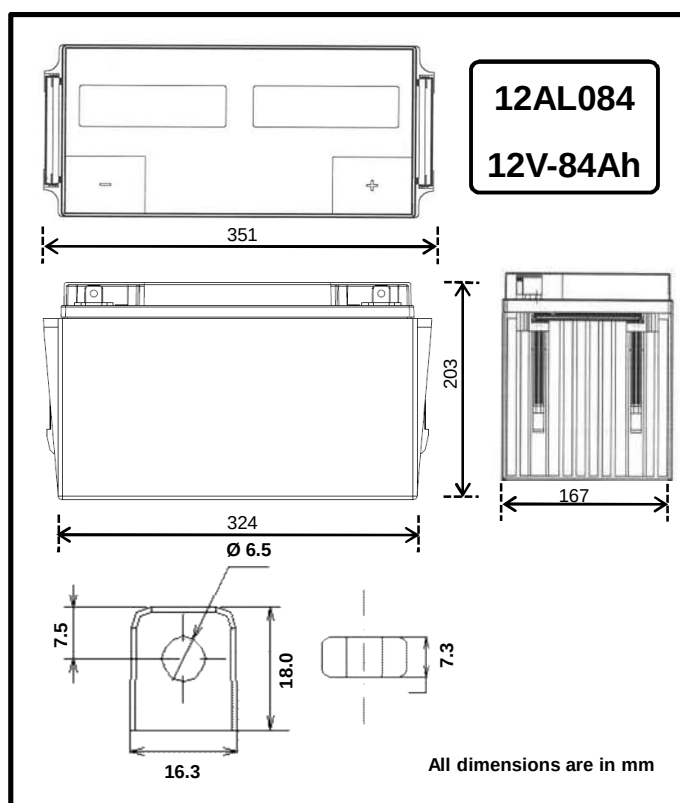
Constant power discharge rating watts per battery @ 27°C*

ECV	DURATION										
	10 min	15 min	20 min	30 min	60 min	2 hr	3 hr	5 hr	8 hr	10 hr	20 hr
1.60	2103	1761	1322	1032	590	381	297.0	193.0	126.0	105.0	52.0
1.65	2085	1721	1309	1000	580	376	285.0	190.0	124.0	104.5	51.5
1.70	2067	1681	1295	967	570	370	273.0	187.0	122.0	104.0	51.0
1.75	2032	1650	1271	951	558	363	271.5	184.0	120.5	103.0	50.5
1.80	1917	1619	1246	934	545	356	270.0	181.0	119.0	102.0	50.0

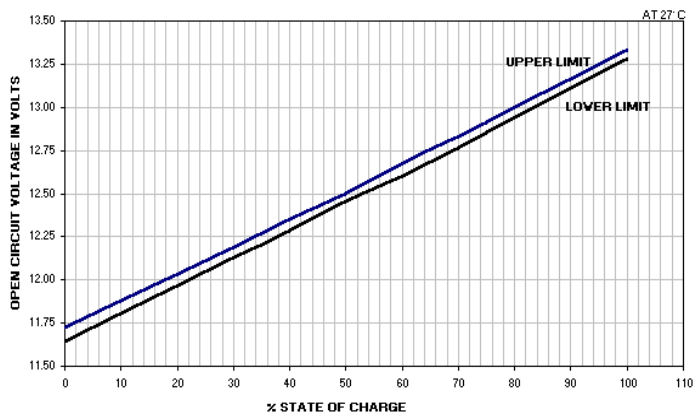
Constant current discharge rating amperes @ 27 °C*

ECV	DURATION										
	10 min	15 min	20 min	30 min	60 min	2 hr	3 hr	5 hr	8 hr	10 hr	20 hr
1.60	189.70	151.62	120.34	91.30	54.55	33.08	22.61	15.56	9.66	8.17	4.50
1.65	183.93	145.12	115.95	87.65	53.86	31.74	21.93	14.99	9.45	8.07	4.39
1.70	178.15	138.61	111.55	84.00	53.16	30.40	21.24	14.41	9.23	7.97	4.27
1.75	171.43	135.48	110.53	83.17	52.50	30.00	21.21	14.36	9.18	7.82	4.20
1.80	168.00	133.33	107.69	82.35	50.24	29.79	21.11	14.24	9.13	7.78	4.18

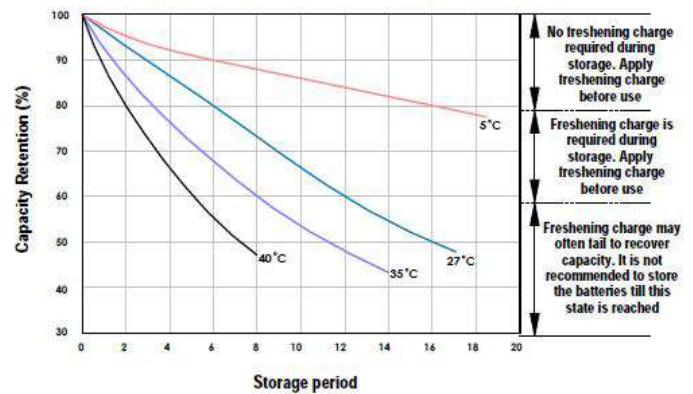
***Note:** The above data are average values and can be obtained within three charge/discharge cycles
A tolerance of ±5% is applicable for the above constant power discharge and constant current discharge values



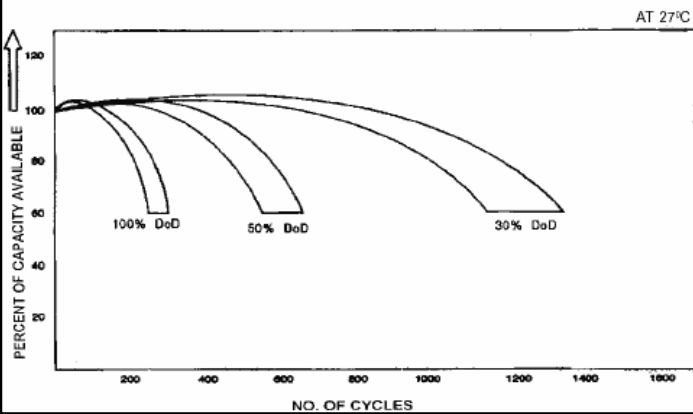
OPEN CIRCUIT VOLTAGE Vs % STATE OF CHARGE



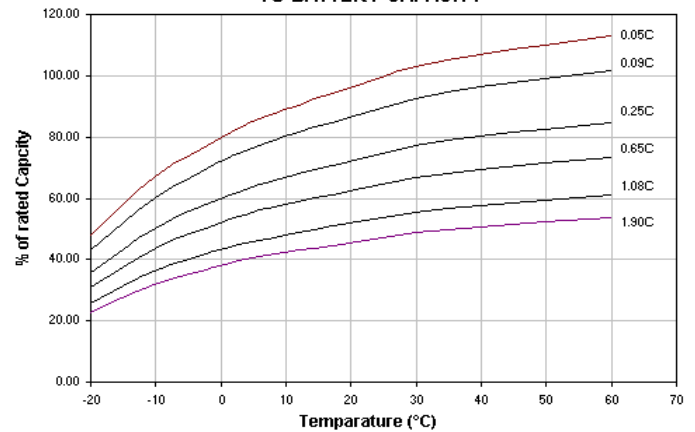
Shelf life characteristics at various Ambient Temperatures



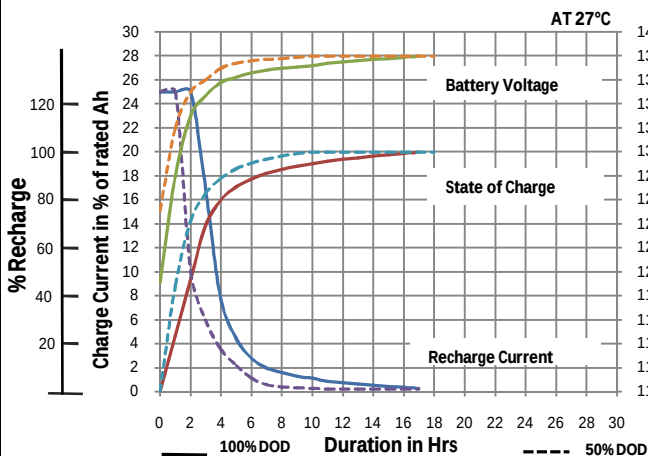
CYCLIC SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



TEMPERATURE EFFECT IN RELATION TO BATTERY CAPACITY



CONSTANT VOLTAGE CHARGING CHARACTERISTICS

**CHARGING METHODS:**

Constant voltage charging at 27° C

Stand by use : Charging voltage 13.5V/battery
 Max. Charging current : 25 % of rated Ah capacity
 Cyclic use : Charging voltage 13.8V/Battery
 Max. Charging current : 25 % of rated Ah capacity
 Temperature compensation : 18 mV/battery/°C

AMARARAJA BATTERIES LTD.

(An Amararaja – Johnson controls company)

Regd. Office**Manufacturing facility & Central Distribution center**

Karakambadi - 517520, Tirupathi – AP , INDIA

☎ +91-877-2265000 ☎ +91-877-2285600

✉ amararaja@amararaja.co.in

Amara Raja Batteries Ltd.

Terminal A

1-18/1/AMR/NR, Nanakramguda

Gachibowli, Hyderabad - 500032

INDIA ☎ +91-40-23139000 ☎ +91-40-23139001

✉ mktg@amararaja.co.in

CAUTION:

- ⚠ Avoid short circuit
- ⚠ Don't charge in a sealed container

Quality systems certified to

 EN ISO 14001:2004
 ISO/TS 16949: 2009