

# INFINITY

## BATTERY

# IT 13-12

RECHARGEABLE SEALED LEAD ACID (VRLA) BATTERY



Nominal Voltage **12 Volt**

20 Hour Rate Capacity **13 Ah**

Dimensions	Inches	mm
	Length	5.28
Width	3.15	80
Case Height	6.34	161
Terminal Height	6.50	165
Weight (Approx.)	Lbs.	Kg
	10.10	4.58

Case Material A.B.S. (UL94-HB)

Terminal Bolt and Nut Type (M5)

Maximum Short Duration Discharge Current	
(5 Seconds or Less)	165 Amperes
(10 Seconds or Less)	110 Amperes
60 Seconds or Less)	66 Amperes

Internal Resistance (Fully Charged Battery)  
(Approximately) 13 mOhm

Energy Density (@ 20 Hour Rate)  
1.25 Watt-Hours / Cubic Inch (76.48 Watt-Hours / Litre)

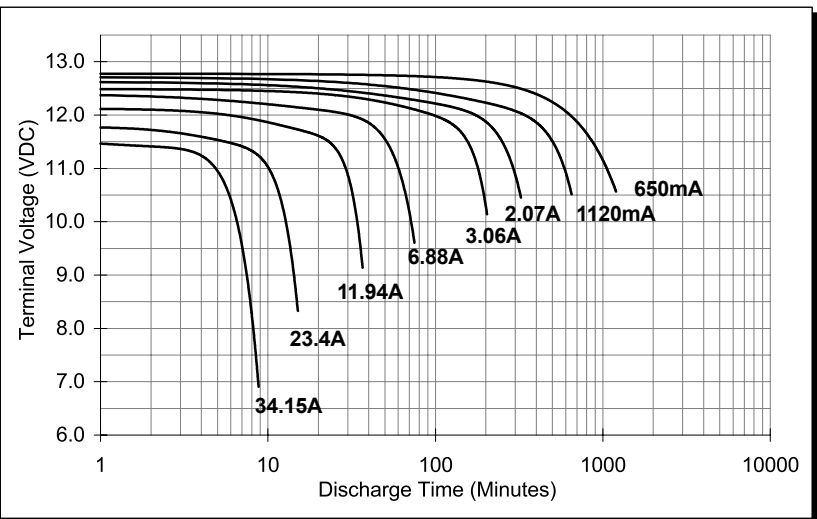
Specific Energy (@ 20 Hour Rate)  
12.95 Watt-Hours / Pound (28.54 Watt-Hours / Kg)

Operating Temperature Range	
Discharge	5°F (-15°C) ~ 122°F (50°C)
Recharge	32°F (0°C) ~ 104°F (40°C)
Storage	32°F (0°C) ~ 104°F (40°C)

Self Discharge Rate  
About 3% / Month @ 68~77°F (20~25°C)

### Constant Current Discharge Characteristics at 77°F (25°C)

Discharge Time	Discharge Amperes	Capacity in Ah's	Final Voltage	Discharge C-Rate
20.0 Hrs	0.65	13.00	10.50	0.05
9.2 Hrs	1.30	11.96	10.50	0.10
5.0 Hrs	2.21	11.05	10.29	0.17
4.1 Hrs	2.60	10.66	10.20	0.20
2.1 Hrs	4.55	9.56	9.94	0.35
64.0 Mins	7.80	8.32	9.54	0.60
32.5 Mins	13.00	7.05	9.00	1.00
7.2 Mins	39.00	4.68	6.00	3.00



### Recharge Method : Connect battery to a Current Limited, Constant Voltage Source.

- Limit the Initial Recharge Current to 2.75 Amperes or less.
- To promote satisfactory performance in Cyclic Applications, a minimum Recharge Current of 1.1 Amperes is recommended.
- Employ Charge Voltage Temperature Compensation when Battery Temperature is less than 50°F (10°C) or greater than 86°F (30°C). Use the **Recommended** Voltage and Normalize to 77°F (25°C).
- The use of Compensation through the whole Temperature range is not generally necessary, but doing so may optimize Service Life.
- If the **Recommended** Recharge voltage is used, no Temperature Compensation is required within the range of 50~86°F (10~30°C).

### Cyclic Application Recharge Voltage (77°F / 25°C)

Minimum	Recommended	Maximum	Volts D.C. Per Cell
14.40	14.55	14.70	
2.40	2.425	2.45	

Temperature Coefficient: -2.8mV/°F/Cell (-5mV/°C/Cell)

### Standby Application Recharge Voltage (77°F / 25°C)

Minimum	Recommended	Maximum	Volts D.C. Per Cell
13.50	13.65	13.80	
2.25	2.275	2.30	

Temperature Coefficient: -1.7mV/°F/Cell (-3mV/°C/Cell)