

# INFINITY

## BATTERY

# IT9-12-F2-FR

RECHARGEABLE SEALED LEAD ACID (VRLA) BATTERY

Nominal Voltage 12 Volt

20 Hour Rate Capacity 9 Ah



Dimensions	Inches	mm
Length	5.94	151
Width	2.56	65
Case Height	3.70	94
Terminal Height	4.02	102
Weight (Approx.)	Lbs.	Kg
	5.98	2.71

Constant Current Discharge Characteristics at 73.4°F (23°C)

Case Flame Retardant (FR) Grade, UL94: V0

Terminal Faston Type 250 (F2)

Maximum Short Duration Discharge Current	
(5 Seconds or Less)	135 Amperes
(10 Seconds or Less)	90 Amperes
(60 Seconds or Less)	54 Amperes

Internal Resistance (Fully Charged Battery)  
(Approximately) 14 mOhm

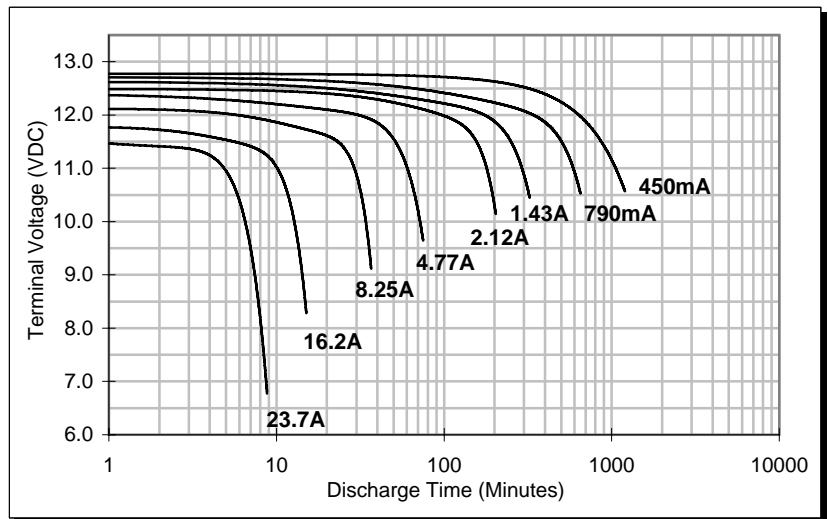
Energy Density (@ 20 Hour Rate)  
1.92 Watt-Hours/Cubic Inch (117.1 Watt-Hours/Litre)

Specific Energy (@ 20 Hour Rate)  
18.05 Watt-Hours / Pound (39.78 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)

Discharge Time	Discharge Amperes	Capacity in Ah's	Final Voltage	Discharge C-Rate
20.0 Hrs	0.45	9.00	10.50	0.05
9.2 Hrs	0.90	8.32	10.50	0.10
5.0 Hrs	1.53	7.63	10.29	0.17
4.1 Hrs	1.80	7.33	10.20	0.20
2.1 Hrs	3.15	6.70	9.94	0.35
64.0 Mins	5.40	5.76	9.54	0.60
32.5 Mins	9.00	4.87	9.00	1.00
7.2 Mins	27.00	3.23	6.00	3.00



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

- Limit the Initial Recharge Current to 1.8 Amperes or less.
- To promote satisfactory performance in Cyclic Applications, a minimum Recharge Current of 720 mA 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	
14.40	14.55	14.70	Volts D.C. Per Cell
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	
13.50	13.65	13.80	Volts D.C. Per Cell
2.25	2.275	2.30	

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