

INFINITY

BATTERY

IT45-12

RECHARGEABLE SEALED LEAD ACID (VRLA) BATTERY



Nominal Voltage 12 Volt
20 Hour Rate Capacity 45 Ah

Dimensions	Inches	mm
Length	7.80	198
Width	6.54	166
Case Height	6.73	171
Terminal Height	6.73	171

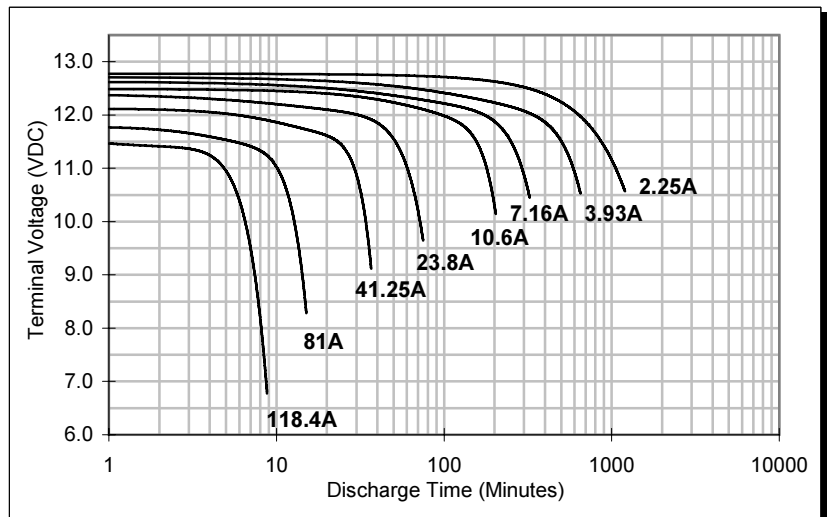
Weight (Approx.)	Lbs.	Kg
	31.81	14.43

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

Case Material	A.B.S. (UL94-HB)
Terminal	NUT & BOLT (M6)
Maximum Short Duration Discharge Current (5 Seconds or Less) (10 Seconds or Less) (60 Seconds or Less)	675 Amperes 450 Amperes 270 Amperes
Internal Resistance (Fully Charged Battery) (Approximately) 6 mOhm	

Discharge Time	Discharge Amperes	Capacity in Ah's	Final Voltage	Discharge C-Rate
20.0 Hrs	2.25	45.00	10.50	0.05
9.2 Hrs	4.50	41.62	10.50	0.10
5.0 Hrs	7.65	38.14	10.29	0.17
4.1 Hrs	9.00	36.64	10.20	0.20
2.1 Hrs	15.75	33.52	9.94	0.35
64.0 Mins	27	28.80	9.54	0.6
32.5 Mins	45	24.34	9.00	1.0
7.2 Mins	135	16.16	6.00	3.0

Energy Density (@ 20 Hour Rate) 1.57 Watt-Hours/Cubic Inch (96.08 Watt-Hours/Litre)
Specific Energy (@ 20 Hour Rate) 16.98 Watt-Hours / Pound (37.43 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)



Recharge Method : Connect battery to a Current Limited, Constant Voltage Source.																			
<ul style="list-style-type: none"> Limit the Initial Recharge Current to 11.25 Amperes or less. To promote satisfactory performance in Cyclic Applications, a minimum Recharge Current of 4.5 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). 	<p>Cyclic Application Recharge Voltage (77°F / 25°C)</p> <table border="1"> <thead> <tr> <th>Minimum</th> <th>Recommended</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>14.40</td> <td>14.55</td> <td>14.70</td> </tr> <tr> <td>2.40</td> <td>2.425</td> <td>2.45</td> </tr> </tbody> </table> <p>Volts D.C. Per Cell Temperature Coefficient: -2.8mV / °F / Cell (- 5mV / °C / Cell)</p> <p>Standby Application Recharge Voltage (77°F / 25°C)</p> <table border="1"> <thead> <tr> <th>Minimum</th> <th>Recommended</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td>13.50</td> <td>13.65</td> <td>13.80</td> </tr> <tr> <td>2.25</td> <td>2.275</td> <td>2.30</td> </tr> </tbody> </table> <p>Volts D.C. Per Cell Temperature Coefficient: -1.7mV / °F / Cell (- 3mV / °C / Cell)</p>	Minimum	Recommended	Maximum	14.40	14.55	14.70	2.40	2.425	2.45	Minimum	Recommended	Maximum	13.50	13.65	13.80	2.25	2.275	2.30
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