



PK12V18B1

RECHARGEABLE SEALED LEAD ACID (VRLA) BATTERY

Nominal Voltage **12 Volt**

20 Hour Rate Capacity **18 Ah**

Dimensions

	Inches	mm
Length	7.13	181
Width	2.99	76
Case Height	6.57	167
Terminal Height	6.57	167

[See Drawing for Tolerances]

Weight (Approx.)

Lbs.	Kg
13.68	6.21



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

Terminal Bolt and Nut Type (M5)

Maximum Short Duration Discharge Current

(5 Seconds or Less) 270 Amperes

(10 Seconds or Less) 180 Amperes

(60 Seconds or Less) 108 Amperes

Internal Resistance (Fully Charged Battery)

(Approximately) 10 mOhm

Energy Density (@ 20 Hour Rate)

1.54 Watt-Hours/Cubic Inch (94.03 Watt-Hours/Litre)

Specific Energy (@ 20 Hour Rate)

15.78 Watt-Hours / Pound (34.8 Watt-Hours / Kg)

Operating Temperature Range

Discharge -4°F (-20°C) ~ 122°F (50°C)

Recharge 32°F (0°C) ~ 104°F (40°C)

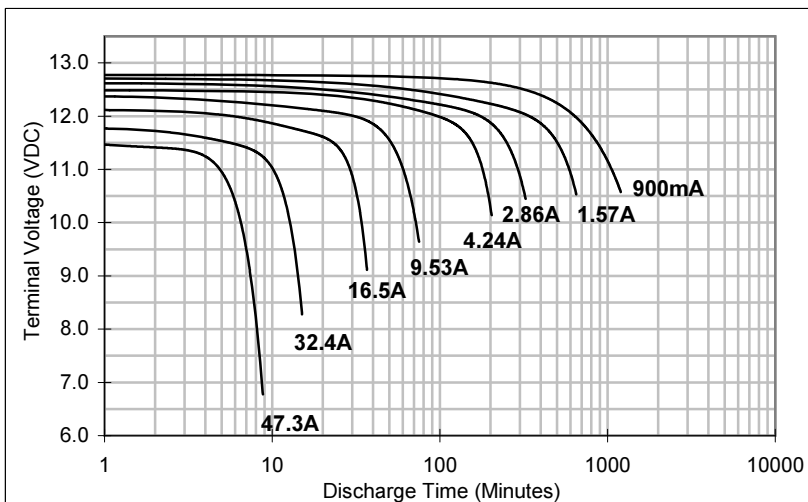
Storage -4°F (-20°C) ~ 104°F (40°C)

Self Discharge Rate

About 3% / Month @ 68~77°F (20~25°C)

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

Discharge Time	Discharge Amperes	Capacity in Ah's	Final Voltage	Discharge C-Rate
20.0 Hrs	0.90	18.00	10.50	0.05
9.2 Hrs	1.80	16.65	10.50	0.10
5.0 Hrs	3.06	15.25	10.29	0.17
4.1 Hrs	3.60	14.66	10.20	0.20
2.1 Hrs	6.30	13.41	9.94	0.35
64.0 Mins	10.8	11.52	9.54	0.6
32.5 Mins	18	9.74	9.00	1.0
7.2 Mins	54	6.46	6.00	3.0



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

- Limit the initial recharge current to 4.5 Amperes or less.
- To promote satisfactory performance in Cyclic applications, a minimum recharge current of 1.8 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)

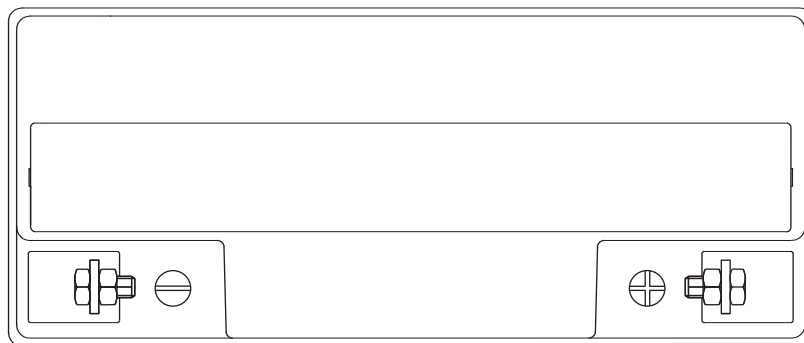
Minimum	Recommended	Maximum	
14.40	14.55	14.70	Volts D.C.
2.40	2.425	2.45	Per Cell


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.
2.25	2.275	2.30	Per Cell

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



PEAK Energy Products PK Series Rechargeable Sealed Lead-Acid (VRLA) Battery			
Model:	PK12V18		
Voltage:	12	Capacity:	18 Ah (20 Hr)
Terminal:	Bolt and Nut Type (M5)		
Dimensions:	mm (Inch)		
Drawing:	PK12V18T-0905CE		
Date:	2009.05.06		
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DO NOT SCALE DRAWING			

