

Power

AlphaCell RE Top Terminal

VRLA Battery for Renewable Energy Applications



- Designed for Renewable Energy Applications
- Robust plate for extended cycle life
- Computer generated grid design optimized for high power density
- Low calcium grid alloy for reduced gas emissions and ease of recycling
- Flame-arresting one-way pressure-relief vent for safety and long life
- UL-recognized component

The AlphaCell RE Top Terminal valve regulated lead acid battery is designed for high power density and renewable energy cycling applications. Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance. The AlphaCell RE also features low profile terminals with threaded copper alloy inserts providing increased safety and reduced maintenance.



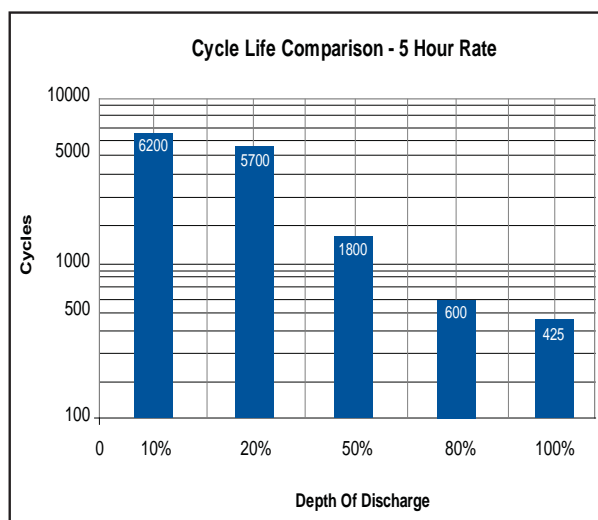
AlphaCell RE Top Terminal

Specifications

Cells Per Unit:	6
Voltage Per Unit:	12
Electrolyte:	Absorbed H ₂ SO ₄ , SG = 1.300
Operating Temperature Range (with temperature compensation):	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Normal Operating Temperature Range:	+68°F (20°C) to +80°F (27°C)
Recommended Maximum Charging Current Limit:	C/5 amperes @ 20hr rate
Float Charging Voltage:	13.5 to 13.8 Vdc/unit Average at 77°F (25°C)
Equalization and Cycle Service Charging and Current Limits:	14.4 to 14.8 Vdc/unit Average at 77°F (25°C)
Maximum AC Ripple (Charger):	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results
Self Discharge:	Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures.
Terminal:	Inserted Terminal (Copper Alloy) 10-32 UNF bolt (AlphaCell 34 RE, 52 RE) ¼-20 UNC bolt (AlphaCell 78 RE, 95 RE, 106 RE)
Terminal Hardware Initial Torque:	30 in.-lbs (3.4 N-m) (AlphaCell 34 RE, 52 RE) 110 in.- lbs (12.4 N-m) (AlphaCell 78 RE, 95 RE, 106 RE)
Dimensions H x D x W (in/mm):	AlphaCell 34 RE: 6.80 x 7.76 x 5.19 / 172.7 x 197.1 x 131.9 AlphaCell 52 RE: 8.07 x 9.0 x 5.48 / 205.1 x 228.6 x 139.2 AlphaCell 78 RE: 8.01 x 10.76 x 6.83 / 203.5 x 273.2 x 173.4 AlphaCell 95 RE: 8.06 x 12.51 x 6.83 / 204.8 x 317.8 x 173.4 AlphaCell 106 RE: 8.52 x 13.42 x 6.80 / 216.4 x 340.9 x 172.7

12 Volts - Ampere Hour Capacity to 1.75 Volts per Cell @ 77°F (25°C)

Discharge in hrs.	1	2	3	4	5	6	7	8	10	12	20	24	72	100
AlphaCell 34 RE	19.7	23.6	26.1	28.0	29.0	29.6	30.1	30.4	31.1	31.7	33.0	33.1	33.8	34.0
AlphaCell 52 RE	29.6	35.1	38.9	41.4	43.3	44.6	45.4	46.0	47.2	48.0	50.0	50.4	51.8	52.0
AlphaCell 78 RE	43.5	53.2	58.5	62.0	64.5	66.6	68.6	69.6	71.0	72.0	75.0	75.6	77.6	78.0
AlphaCell 95 RE	47.0	58.0	66.0	70.8	74.0	76.2	78.0	79.2	81.7	83.6	88.0	88.8	93.0	95.0
AlphaCell 106 RE	49.2	61.5	70.0	76.0	80.6	84.0	86.8	89.0	92.0	94.2	100	101	104	106



Battery Cycle Life (number of cycles) as a function of Depth of Discharge

For contact information visit www.alpha.com

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