

Power

AlphaCell BT

Broadband/Telecom VRLA Battery Series



- Front terminal battery for Broadband/Telecom applications
- Long life alloy design
- Reduced headspace driving higher energy density in cabinet or rack applications
- Removable handles for ease of installation
- Thermally welded case-to-cover bond to ensure a leak-proof seal

The AlphaCell BT valve regulated lead acid battery features innovative front terminal design to maximize energy density with direct connect extrusion fusion weld technology. This model features Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and flame-arresting, one-way pressure-relief vent for safety and long life. The AlphaCell BT also features threaded copper alloy inserts provide increased safety and reduced maintenance.

Specifications

Ampere Hour Capacity to 1.75 Volts per Cell @ 77°F (25°C)																		
Discharge in hrs.	1	2	3	4	5	6	7	8	9	10	12	16	20	24	36	48	72	100
AlphaCell 160 BT	107.1	124.4	134.6	141.5	146.7	150.8	154.3	157.3	159.5	161.5	164.7	169.4	172.6	174.9	179.2	181.4	183.4	183.8
AlphaCell 180 BT	123.1	143.5	155.2	163.2	169.2	174.0	177.9	181.2	184.0	186.4	190.4	196.3	200.3	203.3	208.9	211.9	214.6	215.5

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)
Nominal Operating Temperature Range:	+74°F (23°C) to +80°F (27°C)
Recommended Maximum Charging Current Limit:	C/5 amperes @ 20 Hr rate
Float Charging Voltage :	13.5 to 13.8 Vdc average per 12V unit
Maximum AC Ripple (Charger):	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = C/20
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.
Equalize charge and cycle service voltage:	14.40 to 14.80 Vdc average per 12V unit @ 77°F (25°C)
Terminal: Inserted Interunit connector provided:	Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt
Terminal Hardware Initial Torque:	110 in. lbs. (12.4 Nm)
Dimensions H x D x W (in/mm):	AlphaCell 160 BT: 11.14 x 22.01 x 4.95 / 282.96 x 559.05 x 125.73 AlphaCell 180 BT: 12.60 x 22.01 x 4.95 / 320.04 x 559.05 x 125.73

Battery	Voltage Per Unit	Ampere Hour Capacity 8 Hour Rate @ 77°F (25°C) to 1.75 v/c	Ampere Hour Capacity 10 Hour Rate @ 68°F (20°C) to 1.80 v/c	Maximum Discharge Current	Short Circuit Current	Ohms Impedance 60 Hz (Ω)	Battery Weight
AlphaCell 160 BT	12 V Monobloc	157 Ah	151 Ah	800 Amperes	4700 Amperes	0.0031 Ohms	115 lbs / 52.2 kg
AlphaCell 180 BT	12 V Monobloc	181 Ah	174 Ah	800 Amperes	4500 Amperes	0.0037 Ohms	131 lbs / 59.4 kg

CONSTANT CURRENT RATINGS AMPERES @ 77°F (25°C)

End point volts/cell	1	2	3	4	5	6	7	8	9	10	12	16	20	24	36	48	72	100
AlphaCell 160 BT																		
1.75	107.1	62.2	44.9	35.4	29.3	25.1	22.0	19.7	17.7	16.1	13.7	10.6	8.6	7.3	5.0	3.8	2.5	1.8
1.80	102.7	60.3	43.7	34.5	28.7	24.6	21.6	19.3	17.4	15.9	13.5	10.4	8.5	7.2	4.9	3.7	2.5	1.8
1.85	95.2	56.9	41.6	33.0	27.5	23.6	20.8	18.5	16.7	15.3	13.0	10.0	8.2	6.9	4.7	3.5	2.4	1.7
1.90	83.7	51.2	37.7	30.1	25.2	21.7	19.1	17.1	15.4	14.1	12.0	9.2	7.5	6.3	4.3	3.2	2.1	1.5
AlphaCell 180 BT																		
1.75	123.1	71.7	51.7	40.8	33.8	29.0	25.4	22.6	20.4	18.6	15.9	12.3	10.0	8.5	5.8	4.4	3.0	2.2
1.80	117.3	69.6	50.6	40.0	33.3	28.6	25.0	22.3	20.2	18.4	15.6	12.1	9.8	8.3	5.6	4.3	2.9	2.1
1.85	107.9	65.5	48.0	38.3	31.9	27.4	24.1	21.5	19.4	17.7	15.1	11.6	9.5	8.0	5.4	4.1	2.7	2.0
1.90	95.1	59.1	43.8	35.1	29.4	25.3	22.3	19.9	18.0	16.4	14.0	10.8	8.8	7.4	5.0	3.7	2.5	1.8

For contact information visit www.alpha.com

The Alpha Group >

North America	Europe, Middle East & Africa			Asia Pacific	Latin & South America
USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 52 359 595	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21	Lithuania Tel: +370 5 210 5291 Fax: +370 5 210 5292	P.R. China Tel: +852 2736 8663 Fax: +852 2199 7988	Contact USA office
Canada Tel: +1 604 436 5900 Fax: +1 604 436 1233	Russia Tel: +7 495 925 9844 Fax: +7 495 916 1349	United Kingdom Tel: +44 1279 501110 Fax: +44 1279 659870			