

ABSOLYTE® III

SINGLE CELL MODULES

Section 26.12

I & O MANUALS

- 20 Year life expectancy
- 105 to 1140 AH
- Highest energy density
- Single cell module for ease of handling
- Recyclable to world standards
- UL recognized component



ABSOLYTE® IIP

SINGLE CELL MODULES

THE WORLD LEADER IN SEALED BATTERY POWER

Proven field experience since 1983. The Absolyte IIP represents the third generation of the Absolyte product line. Without an increase in size, it offers 15% more capacity than its predecessor, the Absolyte II.

Patented MFX positive grid alloy* provides long-life. This proprietary alloy gives Absolyte IIP superior cycling performance and excellent float characteristics: 1200 cycles to 80% D.O.D. and a twenty year life in float service @ 25°C (77°F). This alloy also has low gassing characteristics and is designed to allow for deep discharge recovery.

Absorbed glass mat separators for efficient operation. The positive and negative plates are separated by a highly porous fiberglass mat which functions as the electrolyte retainer and provides the highest oxygen recombination efficiency. In addition, the low resistance of the glass mat improves high rate discharge performance.

Reduced installation and maintenance time. The Absolyte IIP cells are housed in protective, individual steel trays with convenient lifting handles for easy transport to remote locations. The single cells may be operated in the horizontal (preferred) or vertical position. With the sealed design, maintenance is also kept to a minimum. No water additions or scheduled equalization charges are required. Periodic visual inspections, voltage readings and connection retorquing is all that is required.

Highest reliability is assured by GNB's quality program. Cell covers are hermetically sealed using a special GNB double-sealing process. Post seals are formed by fusing

the lead bushing to the post with a robotic welder. Cells are checked by an automated, ultra-sensitive helium leak detection unit prior to the electrolyte "fill by weight" process. These steps virtually eliminate any potential for leaking cells. Finally, all cells are capacity tested prior to shipment to verify attainment of specified ratings.

APPLICATIONS

The Absolyte IIP Single Cell Modules are ideal for numerous applications including:

- Railroad Signal and Communications
- Photovoltaics
- Cellular Radio
- Alternative Energy Systems
- Telecommunications

ADDED FEATURES & BENEFITS

- Does not require separate battery room
- Can be integrated into other equipment enclosures
- Recombination efficiency greater than 99%
- Freezing tolerant
- Deep discharge recovery
- Accepts high rate charge

CELL SPECIFICATIONS

Container and Cover—Polypropylene is standard. Flame retardant, UL94 V-0/28% L.O.I. is optional.

Separators—Spun glass, microporous matrix.

Safety Vent—400mb (6 psi) nominal, self-resealing (patented).

Terminals—Integral solid copper core.

Positive Plate—Patented MFX grid alloy*.

Negative Plate—Lead calcium grid alloy.

Life—20 years float @25°C (77°F).

Self Discharge—0.5 to 1% per week maximum @25°C (77°F).

Float Voltage—2.23 to 2.27 VPC (2.25 recommended) @25°C (77°F).

*U.S. Patent 4,401,730



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Absolyte IIP Single Cell Module Weights and Dimensions

CELL TYPE	NOM AH CAP (8 HR)	LENGTH		WIDTH		DEPTH OR HEIGHT		WEIGHT	
		IN	MM	IN	MM	IN	MM	LB	KG
50A									
50A05	105	3.80	97	6.49	165	16.00	406	32	15
50A07	160	3.80	97	6.49	165	16.00	406	39	18
50A09	210	3.80	97	6.49	165	16.00	406	43	20
50A11	265	4.55	116	6.49	165	16.00	406	50	23
50A13	320	5.30	135	6.49	165	16.00	406	58	26
50A15	370	6.05	154	6.55	166	16.00	406	66	30
50A17	425	6.92	176	6.67	169	16.00	406	82	37
50A19	475	7.67	195	6.67	169	16.00	406	91	41
50A21	530	8.40	214	6.67	169	16.00	406	99	45
50A23	580	9.17	233	6.67	169	16.00	406	107	49
50A25	635	9.92	252	6.67	169	16.00	406	115	52
50A27	685	10.67	271	6.67	169	16.00	406	124	56
90A									
90A05	175	3.80	97	6.49	165	23.31	592	50	23
90A07	265	3.80	97	6.49	165	23.31	592	61	28
90A09	350	3.80	97	6.49	165	23.31	592	67	30
90A11	440	4.55	116	6.49	165	23.31	592	79	36
90A13	530	5.30	135	6.49	165	23.31	592	92	42
90A15	615	6.05	154	6.55	166	23.31	592	104	47
90A17	700	6.92	176	6.67	169	23.31	592	128	58
90A19	790	7.67	195	6.67	169	23.31	592	141	64
90A21	880	8.40	213	6.67	169	23.31	592	155	70
90A23	965	9.17	233	6.67	169	23.31	592	168	76
90A25	1055	9.92	252	6.67	169	23.31	592	180	82
90A27	1140	10.67	271	6.67	169	23.31	592	193	88

Note: Design and/or specifications subject to change without notice. If questions arise, contact your local GNB sales representative for clarification.

• For additional performance data, refer to section 26.10.

Absolyte IIP Performance Specifications*

Amperes to 1.75 Final Volts PerCell @ 25°C (77°F)

CELL TYPE	HOURS													
	100	72	36	24	20	16	12	10	8	6	4	3	2	1
50A														
50A05	1.4	1.9	3.6	5.1	6.0	7.3	9.3	11	13	16	22	27	37	58
50A07	2.1	2.9	5.5	7.7	9.1	11	14	16	19	24	3	41	56	87
50A09	2.9	3.9	7.3	10	12	14	18	22	26	33	44	55	75	116
50A11	3.6	4.9	9.1	13	15	18	23	27	33	41	56	69	94	146
50A13	4.3	5.9	11	15	18	22	28	33	39	49	67	83	112	175
50A15	5.1	6.9	12	18	21	25	32	38	46	57	78	97	131	204
50A17	5.8	7.9	14	20	24	29	37	44	52	66	89	111	150	233
50A19	6.5	8.9	16	23	27	33	42	49	59	74	101	125	169	262
50A21	7.3	9.9	18	26	30	36	46	55	66	82	112	139	188	292
50A23	8.0	10	20	28	33	40	51	60	72	90	123	153	206	321
50A25	8.7	11	22	31	36	44	56	66	79	99	134	167	225	350
50A27	9.5	12	23	33	39	47	60	71	85	107	146	181	244	379
90A														
90A05	2.4	3.2	6.0	8.6	10	12	15	18	21	27	37	46	62	100
90A07	3.6	4.9	9.1	12	15	18	23	27	32	41	55	69	93	151
90A09	4.8	9.1	12	17	20	24	31	36	43	54	74	92	124	201
90A11	6.0	8.1	15	21	25	30	39	46	54	68	93	115	155	251
90A13	7.2	9.8	18	25	30	36	47	55	65	82	111	138	186	302
90A15	8.4	11	21	30	35	42	55	64	76	96	130	162	217	352
90A17	9.6	13	24	34	40	48	63	73	87	109	149	185	248	402
90A19	10	14	27	38	45	55	71	82	98	123	167	208	279	453
90A21	12	16	30	43	50	61	79	92	109	137	186	231	310	503
90A23	13	18	33	47	55	67	87	101	120	151	205	254	341	553
90A25	14	19	36	51	60	73	95	110	131	164	223	277	372	604
90A27	15	21	39	56	65	79	103	119	142	178	242	300	403	654

GNB

ABSOLYTE® IIP

SINGLE CELL MODULES

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Total Battery Management

GNB's commitment to the environment constitutes a complete approach to the business of recycling, manufacturing and distribution that continues to set the standard in the battery industry.

For the past 75 years, GNB has led the industry's effort to recycle rather than discard used batteries. Last year alone, GNB safely processed more than 450,000 tons of lead.

Let GNB take the risk out of the disposal of your spent batteries. As part of a Total Battery Management program, GNB will pick up and transport any spent lead acid batteries to GNB-owned, EPA approved recycling centers globally.

Only companies with the strongest possible financial resources are able to make that kind of long-term commitment to recycling — and GNB has what it takes to help you.

GNB**TECHNOLOGIES**

A Pacific Dunlop Company

