

AT10 Series (1-Phase)

Microprocessor Controlled SCR Battery Charger



The world's premium microprocessor controlled digital SCR battery charger

The AT10 is the world's easiest operation float battery charger. It has over 20 years of proven reliability and has become the industry's "gold standard" for all stationary battery charging applications. We are so confident in our product that we've backed the AT10 with our unrivaled 5 Year Standard Warranty.



CSA C22.2 · NRTL/C · UL 1012/UL 1564 compliant
Seismic qualified
ABS · CE certification available upon request



N56 W16665 Ridgewood Dr. Menomonee Falls, WI 53051 USA
Call: 1-800-554-2243 or email: stationary@sbsbattery.com
www.sbsbattery.com

What is the AT10?

Combining the performance and accuracy of a microprocessor with the reliability of SCR power conversion technology makes the AT10 Series the standard in stationary battery chargers. AT10s are easy to install, operate and maintain. The AT10 is packed with the most standard features and best warranty in the industry.

What are the most common applications for the AT10?



Utility & Communications

Power Generation
Substations
Microwave Relay Sites
Switchgear



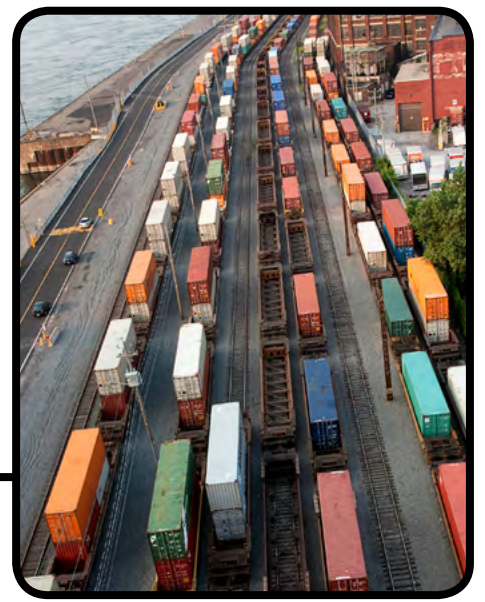
Manufacturing

Emergency DC Power
DC Operated Breakers
Alarm Systems



Commercial

Alarm Systems
Uninterrupted Power Systems
DC Control Systems



Transportation

Signal Systems
Switchgear
Alarm Systems

SPECIFICATIONS & STANDARD FEATURES

SPECIFICATIONS


AC Input

- **Group 1 (6-25 Adc) Voltage:**
120/208/240Vac *Multi-tap* 60Hz
480Vac 60Hz
220Vac, 380/416Vac 50/60Hz
550-600 Vac 50/60Hz
- **Group 2 (30-100 Adc) Voltage:**
120, 208, 240 or 480Vac 60Hz
220Vac, 380 or 416Vac 50/60Hz
550-600 Vac 50/60Hz
- **Input Voltage Tolerance:**
+10%, -12%
- **Input Frequency Tolerance:**
±5%
- **Efficiency:**
85-90% typical for 130Vdc at 50-100% load

DC Output

- **Voltage Ratings:**
12, 24, 48, or 130Vdc nominal
- **Current Ratings:**
GROUP I: 6, 12, 16, 20, 25Adc
GROUP II: 30, 40, 50, 75, 100Adc
- **Continuous Rating:**
110% rated current at maximum equalize voltage at 50°C
- **Current Limit Adjustment Range:**
50% to 110% rated output
- **Voltage Regulation:**
±0.25% for line, load and temp. variations
- **Electrical Noise:**
32dBrc
- **Ripple:**
12/24/48Vdc
 - Unfiltered on battery 1% Vrms
 - Filtered on battery 30mVrms
 - Filtered off battery 1% Vrms
 - Battery Eliminator 30mVrms
- 130Vdc
 - Unfiltered on battery 2% Vrms
 - Filtered on battery 100mVrms
 - Filtered off battery 2% Vrms
 - Battery Eliminator 100mVrms
- **Surge Withstand Capability:**
Meets IEEE-472, ANSI C37.90a

Environmental

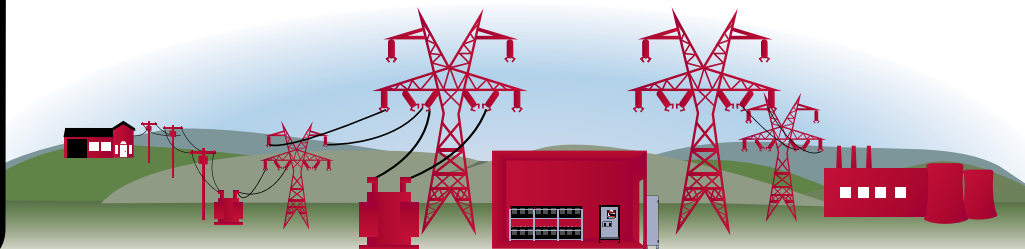
- Operating Ambient Temperature 0°F to 122°F (-18°C to 50°C) w/o derating
- Operating Altitude 3300 feet (1000 meters) above sea level w/o derating
- Relative Humidity 0% to 95% (without condensation)
- Audible Noise Less than 65 dBA at any point 5ft (1.5m) from any vertical surface of enclosure
- Made in the United States of America 
- Third party agency approvals:



CSA C22.2 · NRTL/C · UL 1012/UL 1564 compliant
Seismic qualified
ABS or CE certification available upon request.

STANDARD FEATURES

- 5 Year Product Warranty
- Universal main control board operates in any AT Series charger
- Alarm assembly with local LEDs and summary relay contact for AC Failure, DC Failure, High Vdc, Low Vdc, Positive(+) and Negative(-) ground fault
- High DC voltage shutdown
- Forced load share during parallel operation
- Float/equalize selector switch with indicating lights
- Manual equalize timer (0-255 hr.) with indicating lights
- AC line failure automatic equalize timer (0-255 hr.) with indicating light
- AC On indicating light
- 1% Digital LED meter for Vdc, Adc, timer hours and alarm settings
- NEMA 1 cabinet
- AC input and DC output circuit breakers
- Membrane front panel
- Front panel controls can be disabled for security
- A redundant analog circuit for LVDC alarm, independent of the microprocessor
- Redundant control loops for higher reliability
- Local or remote voltage sense with redundancy to protect against remote sense failure
- Self-diagnostics
- Input & output MOV surge suppressors
- Reverse polarity protection via free wheeling diodes
- CU-AL I/O compression lugs
- Switchboard wire, UL VW-1
- Enclosure pre-treated using a 5-stage iron phosphate process with baked epoxy powder coating in ANSI 61 gray






CUSTOMIZE YOUR AT10

OPTIONS THAT LET YOU DESIGN YOUR CHARGER EXACTLY HOW YOU NEED IT!

SUMMARY OF OPTIONS

- DC output filtering: per NEMA PE5 1996, standard and battery eliminator
 - Medium & High AIC Breakers
 - Auxiliary alarm relay board
 - Copper ground bus
 - AC lightning arrestor
 - Fungus proofing (tropicalization)
 - Static proofing
 - Battery temperature compensation
 - Fan control contactor
- Communications kit: DNP3 Level 2 or MODBUS protocols
 - Ethernet interface for comm. kit
 - NEMA 4/12 type enclosure w/fan
 - Relay rack mounting brackets
 - Wall mounting
 - Floor mounting stand
 - NEMA Type 2 Drip Shield
 - Barrier type alarm terminal block
 - Forced equal load sharing cable
 - End of discharge alarm
- Battery discharge alarm
 - Zero-center ground detection meter
 - Analog AC voltmeter
 - Analog AC ammeter
 - Cabinet heater assembly
 - CE marking upon request
 - ABS certification upon request
 - Custom drawing package w/ optional CAD and PDF files
 - AT-DC distribution panel

		ORDERING	
	Filtering STANDARD Output filtering is essential whenever there is need for low ac ripple and low noise on the dc bus for critical loads. The standard dc output filtering limits ripple to no more than 30mV RMS on 12, 24 & 48Vdc units, and 100mV RMS on 130Vdc units, measured at the battery terminals. This feature meets the specifications of NEMA standard PE5-1996, and is recommended for all long-life stationary battery installations.	FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
	BATTERY ELIMINATOR An additional "battery eliminator" feature is also available, meeting the specifications of NEMA standard PE5-1996 with no battery connected, measured at the dc output terminals. This feature is recommended for sites where the battery may occasionally be disconnected from the dc bus for maintenance. Additional filtering is essential to limit ac ripple and noise for critical dc loads.	AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number Group I: <i>EJ1072-9#</i> Group II: <i>EJ5023-9#</i> <i>Contact manufacturer for specific part number.</i>
	Medium & High AIC Breaker This feature provides thermal-magnetic circuit breakers with higher Ampere Interrupting Capacity ratings than the standard AT breakers. See the tables on Page 10 and 11 for Group I and Group II medium and high AIC breaker ratings. For AT10 Group 1, ac and dc breakers must be ordered together, and are supplied in a separate penthouse enclosure. For Group II, ac and dc breakers can be ordered separately and are mounted in the standard cabinet.	FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
	AVAILABLE FOR FIELD INSTALLATION NO	NOT AVAILABLE FOR FIELD INSTALLATION	
	Auxiliary Alarm Relay Board The AT10 features six industry-standard alarms, each with individual LED indicators on the front panel, accessible to the user via one (1) Summary Alarm contact on the Main Control Board. The Auxiliary Alarm Relay Board is a separate user-accessed pc board with two (2) form-C relays for each of the six (6) alarms. In AT10 Group I ratings, the board is supplied in an additional penthouse enclosure. In AT10 Group II ratings, it is supplied within the standard enclosure.	FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
	AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number GROUP I: <i>EI0213-0#</i> <i>Contact manufacturer for specific part number.</i> GROUP II: <i>EI0213-02</i>	

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OPTIONS THAT LET YOU DESIGN YOUR CHARGER EXACTLY HOW YOU NEED IT!



Copper Ground Bus
 This option provides a convenient means to tie the AT10 to the site building ground. A copper ground bus bar is provided at the I/O terminal, with an extra CU-AL compression box lug.

ORDERING	
FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number GROUP I: EJ0195-00 GROUP II: EJ0195-02



AC Lightning Arrestor
 This options features an industrial-grade surge arrester in polycarbonate housing, rated for 20,000 Amperes. It is recommended for installations with risk of frequent AC surges, such as high elevations or severe weather.

ORDERING	
FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number GROUP I: EJ1074-00 GROUP II: EJ1074-01



Fungus Proofing
 This treatment is also referred to as "tropicalization". It coats electrical components and internal wiring connections with a fungus-resistant, non-conductive film (approx. 1 mil thickness). User termination points are not coated, nor are relay contacts, and any electrical connectors where the spray would interfere with functionality. The application is fully cured at time of shipment.

ORDERING	
FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
AVAILABLE FOR FIELD INSTALLATION NO	NOT AVAILABLE FOR FIELD INSTALLATION



Static Proofing
 Used in "arid" environments, this treatment coats electrical components and connections with a static-resistant, non-conductive film (approx. 1 mil thickness). User termination points are not coated, nor are relay contacts, and any electrical connectors where the spray would interfere with functionality. The application is fully cured at time of shipment.

ORDERING	
FACTORY INSTALLATION YES	Factory Installation use Specification Tables on pages 10 & 11
AVAILABLE FOR FIELD INSTALLATION NO	NOT AVAILABLE FOR FIELD INSTALLATION

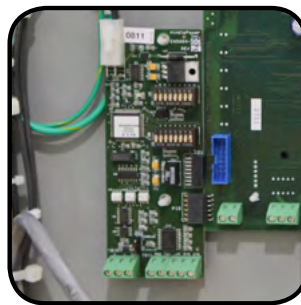


Temperature Compensation
 Supplied in a kit, this option adjusts the AT10 dc output voltage up or down, in response to battery temperature fluctuations. Temperature is measured by an epoxy-enclosed thermistor. This probe is mounted on or near the battery, and connected by a cable to the Main Control PC Board. It is compatible with both lead-acid and nickel-cadmium batteries, and recommended for VRLA batteries. Cable lengths of 25, 50, 100, and 200 ft are available.

ORDERING	
FACTORY INSTALLATION NO	CAN BE ORDERED WITH CHARGER BUT MUST BE FIELD INSTALLED
AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number 25ft: EJ5033-00 50ft: EJ5033-01 100ft: EJ5033-02 150ft: EJ5033-03

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Communications Kit

This option allows full remote monitoring of the AT10 and control of the front panel features, using MODBUS or DNP3 Level 2 protocols. Standard serial (RS-232 & RS-485) connections are provided for use with local SCADA systems. Ethernet and Fiber Optics Modem interfaces are also available options for use with the AT Communications Kit.

ORDERING	
FACTORY INSTALLATION YES	Factory Installation use Part Number when ordering 12Vdc: <i>EJ5037-01</i> 24Vdc: <i>EJ5037-02</i> 48Vdc: <i>EJ5037-03</i> 130Vdc: <i>EJ5037-04</i>
AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number 12Vdc: <i>EJ5037-11</i> 24Vdc: <i>EJ5037-12</i> 48Vdc: <i>EJ5037-13</i> 130Vdc: <i>EJ5037-14</i>



Ethernet Gateway

Enable Serial Modbus/DNP3 devices to communicate with an Ethernet host. Get 10BASE-T and 100BASE-T connectivity over DNP/IP or Modbus TCP/IP with the combination of the Communication Kit and Ethernet Gateway option.

Must be ordered with the Communications Kit option (above)!

ORDERING	
FACTORY INSTALLATION YES	Factory and Field Installation use Part Number when ordering 12Vdc Modbus: <i>EJ5226-00</i> 24Vdc Modbus: <i>EJ5226-01</i> 48Vdc Modbus: <i>EJ5226-02</i> 130Vdc Modbus: <i>EJ5226-03</i>
AVAILABLE FOR FIELD INSTALLATION YES	12Vdc DNP: <i>EJ5226-10</i> 24Vdc DNP: <i>EJ5226-11</i> 48Vdc DNP: <i>EJ5226-12</i> 130Vdc DNP: <i>EJ5226-13</i>



Mechanical Lock For Front Door

The AT10 front panel controls can be disabled by setting a jumper on the back of the Main Control PC board. For installations where extra security is required, the front instrument panel, or door, can be physically locked closed. This option provides a locking provision on the enclosure, a padlock, and two (2) keys. A fully installed door key lock is also available.

ORDERING	
FACTORY INSTALLATION YES	Factory & Field Installation use Part Number when ordering Padlock 586/594: <i>EI0215-00</i> Padlock 5017/5018: <i>EI0215-01</i> Keylock 586/594: <i>EI0215-10</i> Keylock 5017/5018: <i>EI0215-11</i>
AVAILABLE FOR FIELD INSTALLATION YES	



Fan Control Contactor

Lead-acid batteries produce hydrogen gas. This small wall-mounted external accessory provides a relay contactor to activate a battery installation vent or exhaust fan. Available in 10A or 20A models, the accessory is factory-set to provide relay closure when the AT10 enters into Equalize mode.

ORDERING	
FACTORY INSTALLATION NO	CAN BE ORDERED WITH CHARGER BUT MUST BE FIELD INSTALLED
AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number 10 Amp Rating: <i>EJ5017-0#</i> 20 Amp Rating: <i>EJ5017-1#</i> <i>Contact manufacturer for specific part number</i>








Barrier Type Alarm Terminal Block

This option features a separate molded phenolic terminal block, wired directly to the Auxiliary Alarm Relay PC Board. It allows the user to connect remote alarm wiring with ring or fork type lugs. The terminals are rated for 20A at 150 Vac/Vdc, and accept wire sizes #16 to #14 AWG.

ORDERING	
FACTORY INSTALLATION YES	Factory Installation use Part Number when ordering 1 FORM C: <i>EJ5130-01</i> 2 FORM C: <i>EJ5130-02</i>
AVAILABLE FOR FIELD INSTALLATION YES	Field Installation use Part Number 1 FORM C: <i>EJ5130-01</i> 2 FORM C: <i>EJ5130-02</i>

CUSTOMIZE YOUR AT10

OPTIONS THAT LET YOU DESIGN YOUR CHARGER EXACTLY HOW YOU NEED IT!

	<p>NEMA 4 or 12 Cabinet</p> <p>With this accessory, a fully assembled standard AT10 NEMA-1 vented enclosure is installed within another gasketed, sealed cabinet. The combined assembly meets the NEMA Type 4 (Type 12 optional) enclosure specification. 120Vac fan, filters, and viewing window included.</p>	<p>FACTORY INSTALLATION YES</p>	<p>ORDERING</p> <p>CONTACT SBS</p>
	<p>Relay Rack Mounting Brackets</p> <p>These accessories are provided when the AT10 enclosure is to be installed on a standard EIA relay rack. Smaller AT10 models may be installed on 19in racks, and all AT10s may be installed on 23in or 24in relay racks. All hardware is included for assembling the brackets to the AT10. Relay rack mounting hardware is user-supplied.</p>	<p>FACTORY INSTALLATION YES</p>	<p>ORDERING</p> <p>Factory & Field Installation use Part Number when ordering</p> <p>Style-586 (19/23/24in): <i>EI0193-00</i></p> <p>Style-594 (23/24in): <i>EI0193-00</i></p> <p>Style-5017 (19in): <i>EI0193-01</i></p> <p>Style-5017 (23/24in): <i>EI0193-02</i></p> <p>Style-5018 (19/23/24in): <i>EI0193-03</i></p>
	<p>Floor Mounting Brackets</p> <p>This accessory is provided with smaller wall-mounted AT10 chargers when a vertical mounting surface is not available. The assembly mounts the AT10 approximately 44in / 1.12m from the floor. The kit features mounting brackets, assembly hardware to secure the AT10 to the brackets, and user instructions with a drilling pattern. Floor mounting anchor bolts are user-supplied.</p>	<p>FACTORY INSTALLATION YES</p>	<p>ORDERING</p> <p>Factory Installation use Part Number when ordering <i>EI0192-00</i></p> <p>Field Installation use Part Number <i>EI0192-00</i></p>
	<p>NEMA Type 2 Drip Shield</p> <p>Standard AT10 battery chargers are supplied in NEMA Type 1 vented enclosures. The optional drip shield prevents overhead water and small falling particles from entering the top vented panels, protecting internal equipment from damage. The combined standard enclosure and drip shield meets the NEMA Type 2 specification.</p>	<p>FACTORY INSTALLATION YES</p>	<p>ORDERING</p> <p>Factory & Field Installation use Part Number when ordering</p> <p>STYLE 586: <i>EI0191-00</i></p> <p>STYLE 594: <i>EI0191-00</i></p> <p>STYLE 5017: <i>EI0191-01</i></p> <p>STYLE 5018: <i>EI0191-02</i></p>
	<p>AT-DC Distribution Panel</p> <p>This product augments your AT10 with a customized dc distribution panel for user-specified loads. The AT-DC is configurable to various combinations of main and branch breakers. The AT-DC panel is supplied from the factory, mounted to the base of Group I AT10 cabinets and pre-wired to the charger's dc output terminals. For additional product details, including applicable 3rd party agency approvals, refer to the AT-DC literature (JF5032-00).</p>	<p>FACTORY INSTALLATION YES</p>	<p>ORDERING</p> <p>Factory & Field Installation use Part Number when ordering <i>EJ5110-##</i></p> <p>Refer to document (JF5032-00) for model specific part number.</p>

AT10 SERIES SPECIFICATION CHART

DC Output Rating		AC Input Ampere Rating <i>Based on maximum rms value of the input current delivered to the charger under all operating conditions within manufacturer's specifications</i>					Battery Charger AC Circuit Breaker Ampere Rating <i>(standard AIC breakers)</i>					DC Circuit Breaker Rating	Cabinet Style	Approx. Shipping Weights <i>lbs.(kg)</i>	Heat Loss <i>Watts (BTU/hr)</i>	
		Volts	Amps	120 Vac	208 Vac	220 Vac	240 Vac	480 Vac	120 Vac	208 Vac	220 Vac					240 Vac
Float Adjust 11.0-14.5Vdc	12Vdc GROUP I	6	3	2	2	1	1	10	10	10	10	2	10	586	83 (38)	31 (105)
		12	3	2	2	2	1	10	10	10	10	2	20	586	87 (40)	58 (199)
		16	4	2	3	2	1	10	10	10	10	2	25	586	92 (42)	77 (262)
		20	6	3	3	3	2	10	10	10	10	3	30	586	118 (54)	95 (326)
		25	7	4	4	4	2	10	10	10	10	4	40	586	100 (46)	119 (404)
Equalize Adjust 11.7-16Vdc*	12Vdc GROUP II	30	9	6	5	5	3	15	10	10	10	5	50	5017	184 (84)	142 (483)
		40	11	7	6	6	3	20	10	10	10	5	60	5017	189 (86)	188 (641)
		50	14	8	8	7	4	20	15	15	15	5	80	5017	194 (88)	234 (798)
		75	21	13	12	11	6	35	20	20	20	10	100	5018	199 (91)	350 (1192)
		100	28	16	15	13	8	40	25	20	25	15	150	5018	225 (103)	465 (1587)
Float Adjust 22.0-29.5Vdc	24Vdc GROUP I	6	5	3	3	3	1	10	10	10	10	3	10	586	99 (45)	40 (136)
		12	8	5	4	4	2	10	10	10	10	3	20	586	109 (50)	75 (255)
		16	9	6	5	5	3	15	15	15	15	4	25	586	115 (53)	98 (334)
		20	11	7	6	6	4	15	15	15	15	6	30	586	119 (54)	121 (413)
		25	14	9	8	7	4	20	20	20	20	6	40	586	136 (62)	150 (512)
Equalize Adjust 23.4-32Vdc*	24Vdc GROUP II	30	16	8	8	8	4	20	10	10	10	5	50	5017	259 (118)	179 (612)
		40	20	12	12	11	6	25	15	15	15	10	60	5017	267 (122)	237 (810)
		50	26	15	15	14	7	35	20	20	20	10	80	5017	342 (156)	295 (1008)
		75	42	26	23	22	11	70	35	30	35	15	100	5018	355 (162)	441 (1503)
		100	51	25	24	22	11	80	35	30	35	20	150	5018	360 (164)	586 (1999)
Float Adjust 44.0-58.0Vdc	48Vdc GROUP I	6	9	5	5	5	3	15	15	15	15	4	10	586	105 (48)	60 (203)
		12	15	9	9	8	4	20	20	20	20	6	20	586	120 (55)	107 (365)
		16	18	12	11	10	5	25	25	25	25	8	25	594	155 (71)	139 (473)
		20	23	13	13	12	6	30	30	30	30	8	30	594	170 (78)	170 (581)
		25	29	17	17	16	8	40	40	40	40	10	40	594	180 (82)	210 (717)
Equalize Adjust 46.8-61Vdc*	48Vdc GROUP II	30	28	16	16	15	7	35	20	20	20	15	50	5017	217 (99)	250 (852)
		40	38	22	19	19	9	50	30	25	30	15	60	5017	225 (103)	329 (1122)
		50	52	28	28	26	12	70	35	35	35	15	80	5017	250 (114)	408 (1392)
		75	79	48	43	39	19	100	60	60	60	25	100	5018	433 (197)	606 (2068)
		100	88	50	48	44	22	125	70	60	70	35	150	5018	450 (205)	804 (2743)
Float Adjust 110.0-140.0Vdc	130Vdc GROUP I	6	15	9	8	8	4	20	20	20	20	8	10	586	130 (59)	99 (337)
		12	32	18	16	15	8	40	40	40	40	13	20	594	155 (71)	167 (571)
		16	34	20	18	17	9	50	50	50	50	13	25	594	215 (98)	213 (727)
		20	40	24	23	23	12	60	60	60	60	20	30	594	225 (103)	259 (883)
		25	50	30	28	27	14	70	70	70	70	20	40	594	265 (120)	316 (1078)
Equalize Adjust 117.0-149Vdc*	130Vdc GROUP II	30	75	44	42	40	20	100	60	60	60	25	50	5017	285 (130)	373 (1273)
		40	100	59	57	53	28	125	80	80	80	35	60	5018	340 (155)	484 (1664)
		50	N/A	72	68	63	32	N/A	100	100	100	40	80	5018	375 (171)	602 (2054)
		75	N/A	100	83	81	40	N/A	125	125	125	50	100	5018	482 (219)	888 (3030)

*Regulation at max. equalize voltages may not meet ±0.25%

HOW TO SIZE YOUR CHARGER

(simplified formula)

$$\left(\frac{Ah \times 1.R}{t} \right) + L = \text{Continuous Charger Output Rating}$$

AH=Ampere hours removed
 R= Recharge factor (1 = Pb) or (3 = NiCd)
 L= Additional standing load
 t= Recharge time in hours



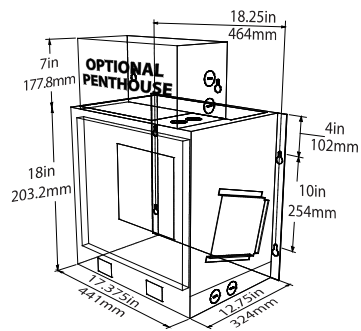
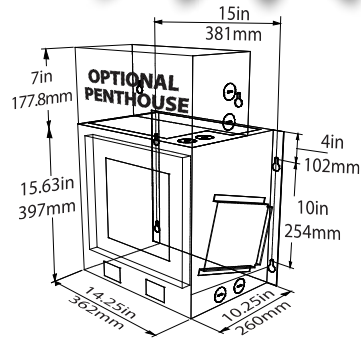
Cabinet Style 586



Cabinet Style 594

GROUP 1

6-25Adc



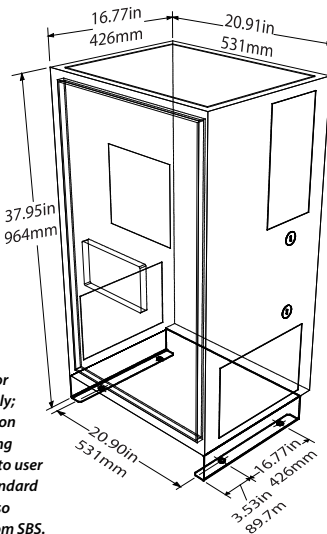
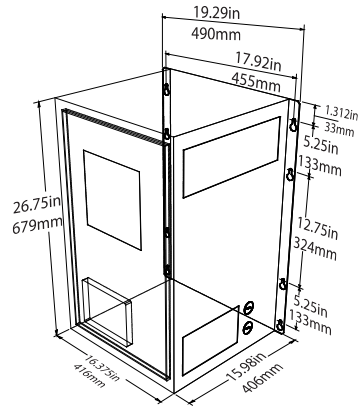
Cabinet Style 5017



Cabinet Style 5018

GROUP 2

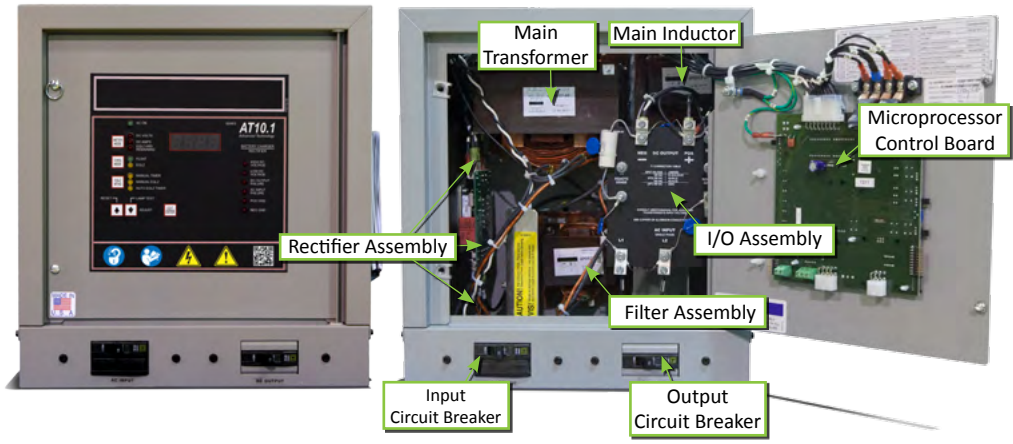
30-100Adc



*NOTE:
 Dimensions shown are for reference only; for installation and mounting please refer to user manual. Standard drawings also available from SBS.

GROUP 1

(6-25 Adc)



Circuit Breaker AC & DC Ratings

STANDARD
Input: 10kAIC - 240Vac 10kAIC - 480Vac Output: 10kAIC - 125Vdc*
MEDIUM
Input: 25kAIC - 240Vac 18kAIC - 480Vac 18kAIC - 600Vac Output: 10kAIC - 250Vdc
HIGH
Input: 65kAIC - 240Vac 25kAIC - 480Vac 18kAIC - 600Vac Output: 20kAIC - 250Vdc

*For chargers 16A dc and larger; consult factory for other ratings.

GROUP I (6-25 Adc) - SPECIFICATION TABLE

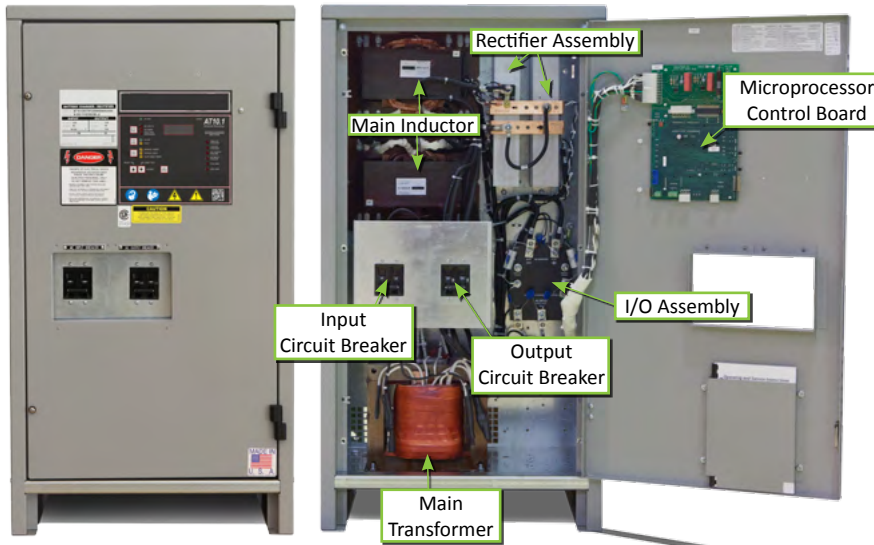
	A	B			C			D	E			F	G			H	J	K	L
SAMPLE	AT10	0	1	2	0	0	6	E	2	4	0	S	A	U	X	G	L	X	X

YOUR CODE	AT10																		
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	DESCRIPTION	CODE	FEATURE	DESCRIPTION	CODE	FEATURE	
A		AT10	AT10 SERIES				
B	Nominal DC Output Voltage	012	12Vdc	F	Circuit Breaker Rating	S	Standard AIC
		024	24Vdc			M	Medium AIC
		048	48Vdc			H	High AIC
		130	130Vdc	G	Auxiliary Alarm Relay Board	AUX	Installed
C	Nominal DC Output Current	006	6A dc	H	Copper Ground Bus	G	Installed
		012	12A dc			X	Not Supplied
		016	16A dc	J	AC Lightning Arrestor	L	Installed
		020	20A dc			X	Not Supplied
		025	25A dc			K	Fungus Proofing
D	DC Output Filtering	U	Unfiltered	L	Static Proofing	X	Not Supplied
		F	Filtered			S	Applied
		E	Batt. Eliminator	X	Not Supplied		
E	AC Input Voltage	120	120V 60Hz	This ordering code is unique for AT10 chargers rated 6-25A output.			
		208	208V 60Hz				
		240	240V 60Hz				
		480	480V 60Hz				
		220	220V 50/60Hz				
		380	380V 50/60Hz				
		416	416V 50/60Hz				
		600	550-600V 50/60Hz				

GROUP 2

(30-100 Adc)



Circuit Breaker AC & DC Ratings	
STANDARD	Input: 5kAIC - 120/208/240/480Vac Output: 5kAIC - 125Vdc
MEDIUM	Input: 25kAIC - 120/208/240/480Vac 18kAIC - 600Vac Output: 10kAIC - 250Vdc
HIGH	Input: 65kAIC - 120/208/240/480Vac 25kAIC - 600Vac Output: 20kAIC - 250Vdc

GROUP II (30-100 Adc)- SPECIFICATION TABLE

	A	B			C			D	E			F	G	H	J	K	L	M	N	P
SAMPLE	AT10	1	3	0	0	5	0	F	4	8	0	S	F	S	X	A	X	X	X	X

YOUR CODE	AT10																			
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	DESCRIPTION	CODE	FEATURE	DESCRIPTION	CODE	FEATURE			
A		AT10	AT10 SERIES						
B	Nominal DC Output Voltage	012	12Vdc	F	AC Input Circuit Breaker Rating	S	Standard AIC		
		024	24Vdc			M	Medium AIC		
		048	48Vdc			H	High AIC		
		130	130Vdc			0	No Breaker		
C	Nominal DC Output Current	030	30A dc	G	AC Input Fuses	F	Installed		
		040	40A dc			X	Not Supplied		
		050	50A dc			H	DC Output Circuit Breaker Rating	S	Standard AIC
		075	75A dc					M	Medium AIC
100	100A dc	H	High AIC	0	No Breaker				
D	DC Output Filtering	U	Unfiltered	J	DC Output Fuses	F	Installed		
		F	Filtered			X	Not Supplied		
		E	Batt. Eliminator			K	Auxiliary Alarm Relay Board	A	Installed
120	120V 60Hz	X	Not Supplied						
E	AC Input Voltage* <small>*Group 2 inputs cannot be retapped in field</small>	208	208V 60Hz	L	Copper Ground Bus	G	Installed		
		240	240V 60Hz			X	Not Supplied		
		480	480V 60Hz	M	AC Lightning Arrestor	L	Installed		
		220	220V 50/60Hz			X	Not Supplied		
		380	380V 50/60Hz	N	Fungus Proofing	F	Applied		
		416	416V 50/60Hz			X	Not Supplied		
		600	550-600V 50/60Hz	P	Static Proofing	S	Applied		
X	Not Supplied								

This ordering code is unique for AT10 chargers rated 30-100A output.

OUR UNRIVALED PRODUCT WARRANTY

Standard Warranty

(applies only to products delivered within the United States and Canada)

All charger products are warranted to be free from defects in material and workmanship for a period of five (5) years from date of manufacture. During the term of the warranty period: parts, assemblies, or components deemed to be defective will be repaired or replaced at our option, free of charge. All costs related to removal, reinstallation and transportation will be paid by the purchaser/customer and/or operator of the product. Evaluation, repair and/or replacement of any defective part(s) are FOB manufacturer's factory.

This warranty does not cover products or parts that are damaged from improper use or abuse, as determined by the manufacturer. Accessory items or additional items carry only their respective manufacturer's warranty. Consumable items (such as fuses and electrolytic capacitors), which wear out under normal use are specifically not covered by this standard warranty. Any consequential damage due to diagnosis or repair by any party other than the manufacturer's authorized personnel is not covered under this warranty.

NOTE: Requests for returns or claims must be submitted to our Factory Service Center for Return Material Authorization (RMA) instructions and assignment. Returns that do not follow this procedure will not be honored.

Extended warranty coverage available by request.



Other Products Available:

AT30 Microprocessor Battery Charger
AT Series Options & Accessories
AT Series Communications Module
AT-DC Series Distribution Panel
SCR/SCRF Series Utility Battery Charger

UMC Universal Maintenance Charger
Single Cell Charger
Mobile DC Power System
The EPIC Series Console
Best Battery Selector



**Mobile DC
Power System**



**Universal
Maintenance Charger**



**AT30 Microprocessor
Battery Charger**



**The EPIC
Series Console**

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