

ALL LISTINGS  
AVAILABLE OCT. 2004

# AT30 SERIES

## FLOAT BATTERY CHARGERS 3 PHASE INPUT



UL-1012/UL-1564



CSA-C22.2



Seismic Zone 4  
Qualification



**Advanced Technology  
Microprocessor Control  
Battery Charger**

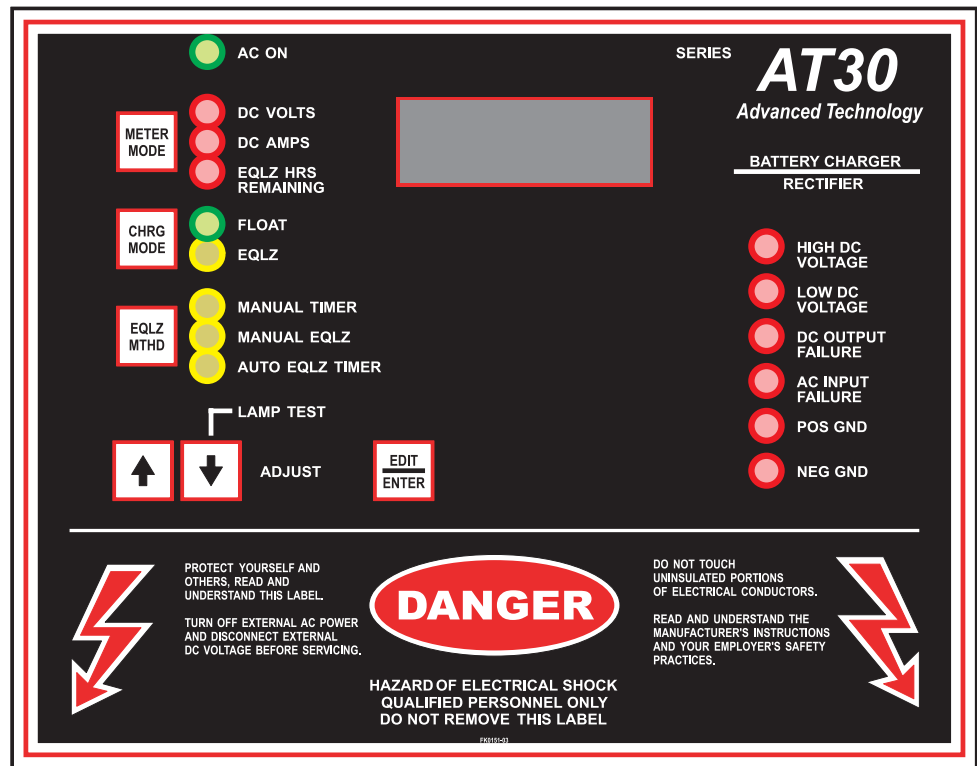
**Constant potential  
DC power supplies for:**

- Floating & charging stationary batteries
- Power for utility, UPS and Communications or Industrial type loads



**HINDLEPOWER**

**A combination of advanced technology microprocessor control and performance-engineered modular construction make AT30 Series chargers and rectifiers easy to set up, easy to operate, and easy to maintain.**



All controls can be disabled for tamper-free operation. Operational conditions remain displayed.

## APPLICATIONS

### Utility & Communications

- Power Generation
- Substations
- Microwave Relay Sites
- Switchgear

### Manufacturing

- Emergency DC Power
- DC Operated Breakers
- Alarm Systems

### Commercial

- Alarm Systems
- Uninterruptible Power Systems
- DC Control Systems

### Transportation

- Signal Systems
- Switchgear
- Alarm Systems

## DESIGN FEATURES

### Modular Construction

- Rectifier, microprocessor control, input/output, power transformer filter and alarm assemblies are all modular and easily replaceable.

### Thirty-Year Life

- All units are engineered for greater than 30-year life with an MTBF of 100,000 hours.

### Field Service

#### Less than 60 Minutes

- For fast service, enclosure and instrument panel are easily removable without disturbing chassis or installed conduit. Schematic and diagnostic information plates are mounted on enclosure. Modular construction and self-diagnostics result in an MTTR of less than 60 minutes.

### Flexible Installation

- All units can be floor mounted
- Units in style 5018 enclosure can be wall or rack mounted (optional)

### Fast, Online Adjustment

- Control, alarm and operating level set points are adjusted digitally from the front panel while online, without the need to vary loads or external conditions.

### Engineered for Safety and Acceptance

- Units are designed and tested for worldwide applications

NEMA-1/IP20 Compliant Enclosure  
 UL-1012/UL-1564 NRTL/C  
 CSA C22.2 Certified  
 CE/IEC Compliant  
 Meets FCC requirements for part 15 subpart J class A  
 Seismic Zone 4 Analyzed and Qualified  
 NEMA PE5-1996 Filtering (optional)

## SPECIFICATIONS

### AC Input

- **Voltage:**  
208, 240 Vac 60Hz 3Phase  
480 Vac 60Hz 3Phase  
220 Vac 50/60Hz (special order)  
380, 416 Vac 50/60Hz (special order)
- **Input Voltage Tolerance:**  
+ 10%, - 12%
- **Input Frequency Tolerance:**  
± 5%
- **Power Factor:**  
0.80 typical full load
- **Efficiency:**  
89-93% (typical at 130Vdc)  
At 50-100% load

### DC Output

- **Voltage Ratings:**  
12, 24, 48, or 130 Vdc nominal
- **Current Ratings:**  
25-1000 Adc (see ordering table)
- **Continuous Rating:**  
110% rated current at maximum equalize voltage at 50°C
- **Voltage Regulation:**  
± 0.25% for line, load and temperature variations
- **Electrical Noise:**  
30mVrms/32dBnC weighted maximum on filtered units
- **Surge Withstand Capability:**  
Meets IEEE-472/ANSI C37.90a

## STANDARD FEATURES

- 1% Digital LED meter for Vdc, Adc, timer hours and alarm settings
- AC On indicating light
- AC input and dc output circuit breakers
- Float/equalize selector switch with indicating light
- Manual equalize timer (0-255 hr.) with indicating light
- AC line failure automatic equalize timer (0-255 hr.) with indicating light
- Self-diagnostics
- Local or remote voltage sense with redundancy to protect against remote sense failure
- High DC voltage shutdown
- Reverse polarity protection
- Front panel controls can be disabled for security
- MOV surge suppressors, input and output
- I/O compression lugs
- Switchboard wiring 105°C
- Membrane front panel
- ANSI 61 gray finish, baked epoxy paint
- Alarm assembly with local LEDs and summary relay contact for ac failure, dc failure, high Vdc, low Vdc, positive and negative ground fault
- Redundant control loops for higher reliability.
- A redundant analog circuit for LVDC alarm, totally independent of the microprocessor
- Parts data package & custom drawings



AT Series Main Control Card

## OPTIONS AND ACCESSORIES

- Output filter for 30mVrms ripple with battery
- Battery eliminator filter
- Medium or high AIC circuit breakers
- Two individual Form-C contacts for all alarms
- Copper ground pad (with optional compression lug)
- AC Input lightning arrestor
- Fungus proofing (tropicalization) or static proofing
- Enclosure drip shield
- External Temperature compensation via remote probe
- Relay rack mounting (style-5018 only)
- Provision for locking front panel
- Cabinet heater assembly
- NEMA 4 or NEMA 12 enclosure
- Communications module for DNP3 Level 2 or MODBUS protocols

		12 Vdc			24 Vdc			48 Vdc			130 Vdc		
Ordering Code	Ampere Rating	Heat Loss BTU/hr*	Cabinet Style	Shipping Weight Lbs(Kg)**	Heat Loss BTU/hr*	Cabinet Style	Shipping Weight Lbs(Kg)**	Heat Loss BTU/hr*	Cabinet Style	Shipping Weight Lbs(Kg)**	Heat Loss BTU/hr*	Cabinet Style	Shipping Weight Lbs(Kg)**
025	25										1260	5018	300(136)
030	30										1510	5018	330(150)
040	40										2010	5018	380(172)
050	50	500		175(80)	740	5018	210(95)	1230	5018	255(116)	2510	5018	500(227)
075	75	750	5018	240(109)	1100	5018	275(125)	1850	5018	350(159)	3760	5018	550(249)
100	100	990	5018	315(143)	1470	5018	360(163)	2460	5018	460(209)	5010	5018	680(308)
125	125	1250	5018	360(164)	1840	5018	425(193)	3080	5018	500(272)	6260	5030	750(340)
150	150	1450	5018	400(182)	2200	5018	480(218)	3690	5018	540(245)	7510	5030	915(415)
200	200	1900	5018	440(200)	2940	5018	550(249)	4920	5018	650(295)	10100	5030	1100(499)
250	250	2400	5030	570(259)	3670	5030	600(272)	6150	5030	750(340)	12600	5030	1400(635)
300	300	2800	5030	650(295)	4400	5030	710(322)	7380	5030	860(390)	15100	5030	1500(680)
400	400				5870	5030	780(354)	9830	5030	950(431)	20100	5031	1650(748)
500	500				7340	5030	850(386)	12300	5031	1350(612)	25100	5031	1820(826)
600	600				8800	5030	925(420)	14800	5031	1500(680)	30100	5031	1950(885)
800	800				12000	5031	1100(2424)	19500	5031	1700(3747)	40000	5031	2275(5014)
1K0	1000				14500	5031	1200(2645)	24500	5031	1900(4188)	50000	5031	2600(5730)

Specifications are subject to change without notice. \* Heat loss is stated for nominal number of cells, float voltage, 100% output current. \*\* Shipping weights are approximate.

## ORDERING INFORMATION

Sample

A	B			C			D	E			F	G	H	J	K	L	M	N	P
AT30	1	3	0	0	5	0	F	4	8	0	S	F	S	X	A	X	X	X	X

Your Code

AT30																			
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	Description	Code	Features		Description	Code	Features
A		AT30	AT30 series			AT30	AT30 series
B	Nominal DC Output Voltage	012	12Vdc	G	AC Input Fuses	F	Installed
		024	24Vdc			X	Not Supplied
		048	48Vdc				
		130	130Vdc				
C	Nominal DC Output Current	See "ordering code" from previous page		H	DC Circuit Breaker	S	Standard AIC
						M	Medium AIC
						H	High AIC
						0	No DC Breaker
D	Filtering	U	Unfiltered	J	DC Output Fuses	F	Installed
		F	Filtered			X	Not Supplied
		E	Eliminator				
E	AC Input Voltage (3 Phase)	208	208V 60Hz	K	Auxiliary Relay Board	A	Installed
		240	240V 60Hz			X	Not Supplied
		480	480V 60Hz				
		220	220V 50/60Hz				
		380	380V 50/60Hz				
		416	416V 50/60Hz				
F	AC Circuit Breaker	S	Standard AIC	L	Ground Pad	G	Installed
		M	Medium AIC			X	Not Supplied
		H	High AIC				
		0	No AC Breaker				
M	Lightning Arrestor	L	Installed	N	Treatments	F	Fungus Proofing
		X	Not Supplied			S	Static Proofing
						X	No Treatment
P	Dripshields	D	Installed			D	Installed
		X	Not Supplied			X	Not Supplied

### Circuit Breaker AC & DC Ratings:

S- 5K AIC 208/240/480Vac; 5K AIC 125Vdc  
M-25K AIC 208/240/480Vac; 10K AIC 250Vdc  
H-65K AIC 208/240/480Vac; 25K AIC 250Vdc

These products and others distributed by

### Standard Product Literature Available from HindlePower:

Product	Brochure	Product	Brochure
AT10.I Battery Chargers	JF5006	Railroad Maintenance Charger	JF5015
AT10.I Series Options & Accessories	JF5020	SCR/SCRF Battery Chargers	JF5010
AT-OG Battery Chargers	JF5019	Single-Cell Battery Charger	JF5007
AT Series Communications	JF5014	Transit Battery Charging System	JF5023
Custom Design & Engineering Services	JF5011	Universal Maintenance Charger	JF5008

