AT30 SERIES

Microprocessor Controlled Float Battery Charger







Looking for the world's premium microprocessor controlled float battery charger?

The AT30 is the world's easiest to operate float battery charger. It has over 10 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 have backed the AT30 with our unrivaled

5 Year Standard Warranty.



JF5018

SCANWITHYOURSMARTPHONE FOR HINDLEPOWERING.COM



CSA C22.2·NRTL/C·ULTUT2/ULT564 compilar Seismic qualified ABS·CEcertification available upon request Quality & Integrity - Our Passion



What is the AT30?

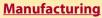
Combining the performance and accuracy of a microprocessor with the reliability of SCR power conversion technology makes the AT Series the standard in stationary battery chargers. AT30s are easy to install, operate and maintain. The AT30 is packed with the most standard features and best warranty in the industry.

What are the most common applications for the AT30?



Utility & Communications

Power Generation
Substations
Microwave Relay Sites
Switchgear



Emergency DC Power DC Operated Breakers Alarm Systems

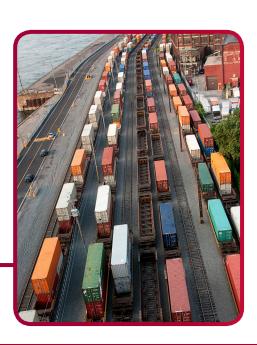


Commercial

Alarm Systems
Uninterrupted Power Systems
DC Control Systems

Transportation

Signal Systems
Switchgear
Alarm Systems



SPECIFICATIONS & STANDARD FEATURES

SPECIFICATIONS

AC Input

Voltage:

208 Vac 60Hz

240 Vac 60Hz

480 Vac 60Hz

550-600 Vac 60Hz

220 Vac 50/60Hz

380 Vac 50/60Hz

416 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 (Adc):

25, 30, 40, 50, 75, 100,125, 150, 200,

250, 300, 400, 500, 600, 800, 1000

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

· Electrical Noise:

32dBrnc

· 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

Safety and Acceptance

- Meets NEMA PE 5-1996, PE 5-1997(R2003) specification
- NEMA-1/IP20 type standard enclosure
- Third party agency approvals:



- CSA C22.2 compliant (up to and including 400A)
 - NRTL/C · UL 1012/UL 1564 compliant
- Seismic qualified (5018/5030 cabinet styles only)
- ABS or CE certification available upon request.
- Made in the United States of America

Environmental

- Operating Ambient Temperature 0°F to 122°F (-18°C to 50°C) w/o derating
- Operating Altitude 10,000 feet (3,000 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

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
- 6 pulse rectification

- 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

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
- AC Input/DC output fuses
- Auxiliary alarm relay board
- Copper ground bus
- AC lightning arrestor
- Fungus proofing (tropicalization)
- Static proofing

- Forced load share cable
- Communications module: DNP3 Level 2 or MODBUS protocols
- Battery temp. compensation
- Custom Paint
- NEMA 4 (12) type enclosure w/fan
- NEMA Type 2 Drip Shield
- Barrier type alarm terminal block
- 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
- Fan control contactor
- Custom drawing package (DWG/PDF)
- Mechanical lock for front door



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 installations using VRLA or gelled electrolyte batteries.

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.

FACTORY INSTALLATION

YES

Factory Installation use Specification Table on page 11

ORDERING

AVAILABLE FOR FIELD INSTALLATION

YES

Contact factory with serial number of original unit and type of filtering upgrade.



Medium & High AIC Breaker

This feature provides thermal-magnetic circuit breakers with higher Ampere Interrupting Capacity ratings than the standard. See the tables on Page 11 for medium and high AIC breaker ratings. FACTORY INSTALLATION

YES

Factory Installation use Specification Table on page 11

ORDERING

AVAILABLE FOR FIELD INSTALLATION

YES

Contact factory with serial number of original unit and type of breaker upgrade for proper fiela kit parts.



AC Input and/or DC Output Fuses

Default protection devices for the AT30 are molded case circuit breakers. Fuses may also be ordered to augment them, wired in series with the breakers. Three (3) ac input fuses provide 200 kAlC protection. Two (2) dc output fuses provide 20 kAlC protection. Fuses may also be ordered in conjunction with standard breakers as a cost-saver. If an AT30 is ordered without breakers, fuses must be ordered.

FACTORY INSTALLATION

YES

Factory Installation use Specification Table on page 11

ORDERING

AVAILABLE FOR

YES

Contact factory with serial number of original unit and type of fuses (ac and/or dc) for proper field kit parts.

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



Auxiliary Alarm Relay Board

The AT30 features several industry-standard alarms, with individual LED indicators on the front instrument panel, and are accessible to the user via one (1) Summary Alarm contact on the Main Control PC Board. This feature provides a separate user-accessed pc board, featuring discreet two (2) form-C relay contacts for all six (6) alarms.

FACTORY INSTALLATION

YES

Factory Installation use Specification Table on page 11

ORDERING

YES

Style 5030: *EI0213-03*Style 163: *EI0213-04*

ORDERING



Copper Ground Bus

This option provides a convenient means to tie the AT30 to the site building ground. A copper ground bus bar is provided with an extra CU-AL compression box lug.

FACTORY INSTALLATION

YES

Factory Installation use Specification Table on page 11

YES

Style 5018: *EI0195-02*

Style 5030: *EI0195-03*Style 163: *EI0195-04*

ORDERING



AC Lightning Arrestor

This options features an industrial-grade surge arrestor 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.

FACTORY INSTALLATION

YES

Factory Installation use Specification Table on page 11

FIELD INSTALLATION

YES

EJ1074-02



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.

FACTORY INSTALLATION

YES

Factory Installation use Specification Tables on pages 10 & 11

ORDERING

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, nonconductive 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.

FACTORY INSTALLATION

YES

Factory Installation use Specification Tables on

ORDERING

FIELD INSTALLATION

NO

pages 10 & 11

NOT AVAILABLE FOR FIELD INSTALLATION

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



Communications

This option allows full remote monitoring of the AT30 and control of the front panel features, using MODBUS or DNP3 Level 2 protocols. Standard serial connections are provided for use with local SCADA systems.

Ethernet or Fiber Optic Modem interfaces are also available for use with the AT Communications option. Contact factory for part number.

FACTORY INSTALLATION

YES

Factory Installation use Part Number when ordering 12Vdc: *EJ5037-01* 24Vdc: *EJ5037-02* 48Vdc: *EJ5037-03* 130Vdc: *EJ5037-04*

ORDERING

AVAILABLE FOR FIELD INSTALLATION

YES

eld Installation use Part Number 12Vdc: *EJ5037-11* 24Vdc: *EJ5037-12*



Temperature Compensation

Supplied in a kit, this option adjusts the AT30 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 leadacid and nickel-cadmium batteries, and recommended for VRLA batteries. Cable lengths of 25, 50, 100, and 200 ft are available.

FACTORY INSTALLATION

NO

CAN BE ORDERED WITH CHARGER BUT MUST BE FIELD INSTALLED

ORDERING

AVAILABLE FOR FIELD INSTALLATION

YES

Field Installation use Part Number 25ft: EJ5033-00

> 100ft: *EJ5033-02* 200ft: *EJ5033-03*



Barrier Type Alarm Terminal Blocks

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 spade type lugs. The #6-32 binder hear screw terminals are rated for 20A at 150 Vac/Vdc, and accept wire sizes #16 to #14 AWG.

FACTORY INSTALLATION

YES

AVAILABLE FOR FIELD INSTALLATION

YES

ORDERING

Factory & Field Installation use Part Number when ordering

(1) FORM-C: *EJ5130-01* (2) FORM-C: *EJ5130-02*



Mechanical Lock For Front Door

The AT30 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.

FACTORY INSTALLATION

YES

AVAILABLE FOR FIELD INSTALLATION

Padlock - YES Keylock - NO

ORDERING

Factory & Field Installation use Part Number when ordering

Padlock Style 5018: *EI0215-00*Padlock Style 5030: *EI0215-01*Padlock Style 163: *EI0215-02*Padlock Style 198: *EI0215-03*Keylock Style 5018: *EI0215-11*Keylock Style 5030: *EI0215-12*

Keylock Style 163: *EI0215-13* Keylock Style 198: *EI0215-14*



Custom Paint

AT30 NEMA Type 1 enclosures feature an ANSI 61 gray epoxy powdercoat finish. Custom exterior and interior (e.g. semigloss white) colors are available in ANSI, PMS, and RAL color codes to meet specific requirements..

FACTORY INSTALLATION

YES

EI5064-00

ORDERING

SPECIFY WHEN PLACING ORDER USING YOUR SPECIFIC PAINT REQUIREMENTS

AVAILABLE FOR IELD INSTALLATION

NO

NOT AVAILABLE FOR

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



Wall Mounting Brackets or Rack Mounting

AT30 Chargers in Style-5018 enclosures can be wall or rack mounted. Wall-mounting brackets (EI5080-00) are shipped as a field kit. Use of this option increases the vertical footprint of the charger by 14". Anchor bolts are not supplied.

The Style-5018 enclosure is also EIA 23" or 24" rack mountable. Mounting brackets (El0193-03) are factory installed. Relay rack mounting hardware is not supplied.

FACTORY INSTALLATION

Wall - No Rack - Yes

AVAILABLE FOR FIELD INSTALLATION

YES

ORDERING

Factory & Field Installation use Part Number when ordering

> WALL MOUNTING Style-5018: EI5008-00

RACK MOUNTING Style-5018 (23/24in): EIO193-03



NEMA Type 2 Drip Shield

Standard AT30 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.

FACTORY INSTALLATION

YES

FIELD INSTALLATION

YES

ORDERING

Factory & Field Installation use Part Number when ordering

STYLE 5018: *EI0191-02* STYLE 5030: *EI0191-03* STYLE 163: EI0191-04 STYLE 198: *EIO191-05*



NEMA Type 4 Cabinet

With this accessory, a fully assembled standard AT30 NEMA-1 vented enclosure is installed within another gasketed, sealed cabinet. The combined assembly meets the NEMA Type 4 (and therefore Type 12 and 13) enclosure specification. All ratings feature forced cooling, with user-supplied 120Vac for the fan.

FACTORY INSTALLATION

YES

FIELD INSTALLATION

YES

ORDERING

Factory Installation use Part Number when ordering Style 5018: *El5037-00* Style 5030: *El5057-00* Style 163: *EB5039-00* Style 198: *EB5046-00*

Style 5018: *El5037-00*Style 5030: *El5057-00*

ORDERING



SUPPLEMENTAL PRODUCT

Fan Control Contactor

Lead-acid batteries produce hydrogen gas. This small wallmounted 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 AT30 enters into Equalize mode.

FACTORY INSTALLATION

NO

CAN BE ORDERED WITH CHARGER BUT MUST BE FIELD INSTALLED

AVAILABLE FOR FIELD INSTALLATION

YES

10 Amp Rating: EJ5017-0# 20 Amp Rating: EJ5017-1# Contact manufacturer for specific part number

SUPPLEMENTAL PRODUCT



AT-DC Distribution Panel

This product augments AT30 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 optimally supplied from the factory, mounted to the AT30 and prewired to the charger's dc output terminals. For further details, refer to the AT-DC product literature (JF5032-00).

FACTORY INSTALLATION

YES

YES

ORDERING

Factory & Field Installation use Part Number when ordering

EJ5110-##

Refer to document (JF5032-00) for model specific part number.

AT30 SERIES SPECIFICATION CHART

| | DC Output AC Input Ampere Rating Based on maximum rms value of the input current delivered to the charger | | | | Battery Charger AC Circuit Breaker Ampere Rating | | | | | | | | | | | | | |
|-----------------------------|---|------------|-------------|------------|--|-------------------------|------------|------------|----------|------------|------------|------------|-------------------|------------|----------|------------|------------|------------|
| | Rating under all operating conditions within manufacturer's specifications | | | | | (standard AIC breakers) | | | | | | | | | | | | |
| | Volts | Amps | 208 VAC | 220 VAC | 240 VAC | 380 | 416 VAC | 440 VAC | 480 | 600 VAC | 208 VAC | 220 VAC | 240 VAC | 380 VAC | 416 | 440 VAC | 480 VAC | 600 VAC |
| 1 | | 50 | 5 | 5 VAC | 4 | VAC | 3 | 2 | VAC | 2 | 10 | 10 | 10 | 5 VAC | VAC | 5 | 5 | 15 |
| (12Vdc) | \ | 75 | 7 | 6 | 6 | 4 | 3 | 3 | 3 | 3 | 10 | 10 | 10 | 5 | 5 | 5 | 5 | 15 |
| Float Adjust 11.0-14.5Vd | \ | 100 | 9 | 8 | 8 | 5 | 5 | 4 | 4 | 4 | 15 | 10 | 15 | 10 | 10 | 5 | 5 | 15 |
| 11.0-14.5Vu | \ | 125 | 12 | 11 | 10 | 6 | 6 | 5 | 5 | 5 | 15 | 15 | 15 | 10 | 10 | 10 | 10 | 15 |
| (12Vdc) |) 12Vdc | 150 | 13 | 13 | 12 | 9 | 7 | 6 | 6 | 6 | 20 | 20 | 20 | 15 | 15 | 10 | 10 | 15 |
| Equalize | / | 200 | 16 | 16 | 14 | 9 | 9 | 8 | 7 | 6 | 20 | 20 | 20 | 15 | 15 | 10 | 15 | 15 |
| Adjust | 1 | 250 | 22 | 20 | 19 | 12 | 11 | 10 | 9 | 8 | 30 | 25 | 30 | 15 | 15 | 15 | 15 | 15 |
| 11.7-15.5Vdc | | 300 | 28 | 24 | 24 | 14 | 13 | 12 | 12 | 11 | 35 | 30 | 35 | 20 | 20 | 15 | 15 | 15 |
| 1 | | 50 | 9 | 9 | 8 | 5 | 5 | 6 | 4 | 4 | 15 | 15 | 15 | 10 | 10 | 10 | 10 | 15 |
| 1 | | 75 | 12 | 11 | 10 | 7 | 6 | 5 | 5 | 5 | 15 | 15 | 15 | 10 | 10 | 10 | 10 | 15 |
| (24Vdc) | 1 | 100 | 16 | 15 | 14 | 9 | 8 | 7 | 7 | 6 | 20 | 20 | 20 | 15 | 15 | 10 | 10 | 15 |
| -loat Adjust | 1 | 125 | 21 | 20 | 18 | 11 | 10 | 9 | 9 | 8 | 30 | 25 | 30 | 15 | 15 | 15 | 15 | 15 |
| 22.0-29.5Vdc | 1 | 150 | 23 | 24 | 21 | 12 | 12 | 11 | 11 | 10 | 35 | 30 | 35 | 20 | 20 | 15 | 15 | 15 |
| | | 200 | 27 | 28 | 25 | 16 | 14 | 13 | 13 | 11 | 40 | 35 | 40 | 25 | 25 | 20 | 20 | 15 |
| | 24Vdc | 250 | 39 | 37 | 34 | 22 | 20 | 19 | 17 | 15 | 50 | 50 | 50 | 30 | 30 | 25 | 25 | 20 |
| | | 300 | 51 | 44 | 44 | 25 | 23 | 22 | 22 | 19 | 70 | 60 | 70 | 35 | 35 | 30 | 30 | 25 |
| (24Vdc) | 1 | 400 | 59 | 59 | 51 | 34 | 32 | 30 | 27 | 24 | 80 | 80 | 80 | 50 | 50 | 40 | 40 | 35 |
| Equalize | | 500 | 72 | 72 | 63 | 42 | 38 | 36 | 32 | 29 | 90 | 90 | 90 | 60 | 60 | 50 | 40 | 40 |
| Adjust 23.4-31.0Vdc | | 600 | 88 | 87 | 76 | 51 | 46 | 44 | 40 | 35 | 125 | 125 | 125 | 70 | 70 | 60 | 50 | 50 |
| 23.4-31.0Vac | | 800 | 122 | 119 | 107 | 67 | 62 | 57 | 55 | 48 | 175 | 175 | 175 | 90 | 90 | 80 | 70 | 70 |
| | | 1000 | 152 | 148 | 133 | 84 | 77 | 72 | 68 | 60 | 200 | 200 | 200 | 125 | 125 | 100 | 90 | 80 |
| | | 50 | 15 | 13 | 13 | 8 | 8 | 7 | 7 | 6 | 20 | 20 | 20 | 15 | 15 | 10 | 10 | 15 |
| (48Vdc) | 48Vdc | 75 | 20 | 19 | 16 | 11 | 10 | 10 | 9 | 8 | 25 | 25 | 25 | 15 | 15 | 15 | 15 | 15 |
| Float Adjust | | 100 | 26 | 25 | 24 | 13 | 13 | 12 | 12 | 10 | 35 | 35 | 35 | 20 | 20 | 15 | 15 | 15 |
| 14.0-58.0Vdc | | 125 | 35 | 33 | 29 | 19 | 18 | 17 | 15 | 13 | 50 | 50 | 50 | 25 | 25 | 25 | 20 | 20 |
| | | 150 200 | 37 | 35 | 32 | 20 | 19 | 18 25 | 16 | 14 | 50 70 | 50 70 | 50 | 25 | 25 | 25 | 20 | 20 25 |
| | | | 53 69 | 50 | 46 | 29 | 27 | | 23 | 20 | | | 70 | 40 | 40 | 35 | 30 | 40 |
| | | 250 300 | 78 | 66 | 58 68 | 38 43 | 35 39 | 33 37 | 30 34 | 26 30 | 100 100 | 100 100 | 100 100 | 50 60 | 50 60 | 50 50 | 40 50 | 40 |
| | | 400 | 100 | 74 96 | 88 | 56 | 51 | 48 | 34 44 | 39 | 125 | 125 | 125 | 70 | 70 | 60 | 60 | 50 |
| (48Vdc) | | 500 | 128 | 120 | 110 | 70 | 64 | 60 | 55 | 48 | 175 | 175 | 175 | 90 | 90 | 80 | 70 | 70 |
| Equalize Adjust | 1 | 600 | 157 | 149 | 135 | 85 | 79 | 75 | 69 | 60 | 200 | 200 | 200 | 125 | 125 | 100 | 90 | 80 |
| 16.8-59.0Vdc | 1 | 800 | 209 | 198 | 181 | 113 | 106 | 99 | 91 | 79 | 300 | 300 | 300 | 150 | 150 | 125 | 125 | 100 |
| | | 1000 | 261 | 248 | 225 | 143 | 132 | 125 | 113 | 99 | 350 | 350 | 350 | 200 | 200 | 175 | 150 | 125 |
| | | 25 | 17 | 16 | 14 | 10 | 9 | 9 | 8 | 7 | 25 | 20 | 25 | 15 | 15 | 175 | 10 | 15 |
| | | 30 | 20 | 20 | 18 | 12 | 11 | 10 | 9 | 8 | 25 | 25 | 25 | 15 | 15 | 15 | 15 | 15 |
| | | 40 | 26 | 23 | 22 | 14 | 13 | 12 | 12 | 10 | 35 | 30 | 35 | 20 | 20 | 15 | 15 | 15 |
| (130Vdc) | | 50 | 33 | 30 | 28 | 18 | 16 | 15 | 15 | 12 | 50 | 40 | 50 | 25 | 25 | 20 | 20 | 15 |
| Float Adjust | | 75 | 48 | 44 | 43 | 26 | 25 | 24 | 22 | 18 | 70 | 60 | 70 | 35 | 35 | 30 | 30 | 25 |
| 10.0-141.0Vdc | | 100 | 64 | 60 | 57 | 35 | 32 | 30 | 29 | 24 | 100 | 80 | 100 | 50 | 50 | 40 | 40 | 35 |
| | | 125 | 80 | 75 | 69 | 44 | 40 | 42 | 38 | 33 | 125 | 100 | 125 | 60 | 60 | 60 | 50 | 50 |
| | 1201/ | 150 | 93 | 87 | 80 | 52 | 46 | 46 | 42 | 37 | 125 | 125 | 125 | 70 | 70 | 60 | 60 | 50 |
| | 130Vdc | 200 | 125 | 120 | 110 | 70 | 62 | 60 | 55 | 48 | 175 | 150 | 175 | 100 | 100 | 80 | 70 | 60 |
| | | 250 | 158 | 150 | 137 | 79 | 72 | 68 | 68 | 59 | 200 | 200 | 200 | 125 | 125 | 100 | 100 | 80 |
| | | 300 | 180 | 170 | 160 | 93 | 85 | 80 | 80 | 72 | 250 | 225 | 250 | 125 | 125 | 100 | 100 | 100 |
| (130Vdc) | | 400 | 255 | 235 | 220 | 127 | 116 | 110 | 110 | 96 | 300 | 300 | 300 | 175 | 175 | 150 | 150 | 125 |
| Equalize Adjust | | 500 | 320 | 300 | 280 | 160 | 148 | 140 | 140 | 120 | 400 | 400 | 400 | 200 | 200 | 200 | 200 | 150 |
| 17.0-143.0Vdc | | 600 | <i>37</i> 8 | 354 | 331 | 200 | 180 | 177 | 169 | 145 | 500 | 500 | 500 | 250 | 250 | 250 | 250 | 200 |
| | | 800 | 503 | 473 | 439 | 266 | 241 | 233 | 224 | 194 | N/A | N/A | N/A | 350 | 350 | 300 | 300 | 250 |
| | | | | | | | | | | | | | | | | | | |



Ah x 1.R

 $+L = \frac{Continuous\ Charger}{Output\ Rating}$

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

| DC | | Approx. | Heat |
|---------|---------|-------------|----------------|
| Circuit | Cabinet | Shipping | Loss |
| Breaker | Style | Weights | Watts (BTU/hr) |
| Rating | | lb.(kg) | (, |
| 80 | 5018 | 260 (118) | 229 (783) |
| 100 | 5018 | 330 (150) | 340 (1160) |
| 150 | 5018 | 380 (173) | 448 (1529) |
| 175 | 5030 | 450 (205) | 560 (1911) |
| 200 | 5030 | 550 (250) | 668 (2279) |
| 250 | 5030 | 590 (268) | 890 (3039) |
| 350 | 5030 | 610 (277) | 1113 (3799) |
| 400 | 5030 | 650 (295) | 1327 (4531) |
| 80 | 5018 | 280 (127) | 289 (987) |
| 100 | 5018 | 340 (154) | 427 (1457) |
| 150 | 5018 | 390 (177) | 560 (1911) |
| 175 | 5030 | 540 (245) | 700 (2309) |
| 200 | 5030 | 580 263) | 833 (2843) |
| 250 | 5030 | 610 (277) | 1101 (3759) |
| 350 | 5030 | 650 (295) | 1376 (4699) |
| 400 | 5030 | 690 (313) | 1652 (5638) |
| 600 | 163 | 1150 (522) | 2202 (7518) |
| 700 | 163 | 1300 (590) | 2730 (9319) |
| 800 | 163 | 1530 (694) | 3275 (11183) |
| 1200 | 198 | 2020 (916) | 4367 (14910) |
| 1200 | 198 | 2440 (1107) | 5459 (18638) |
| 80 | 5018 | 310 (141} | 398 (1358) |
| 100 | 5018 | 390 (177) | 584 (1994) |
| 150 | 5018 | 500 (227) | 762 (2602) |
| 175 | 5030 | 550 (250) | 953 (3253) |
| 200 | 5030 | 600 (272) | 1131 (3860) |
| 250 | 5030 | 660 (299) | 1491 (5091) |
| 350 | 5030 | 720 (327) | 1864 (6363) |
| 400 | 5030 | 760 (345) | 2237 (7636) |
| 600 | 163 | 1100 (499) | 2949 (10068) |
| 700 | 163 | 1350 (612) | 3686 (12585) |
| 800 | 198 | 1600 (726) | 4424 (15102) |
| 1200 | 198 | 2020 (916) | 5898 (20137) |
| 1200 | 198 | 2400 (1089) | 7373 (25171) |
| 40 | 5018 | 370 (168) | 361 (1232) |
| 50 | 5018 | 380 (172) | 416 (1421) |
| 60 | 5018 | 390 (177) | 532 (1817) |
| 80 | 5018 | 400 (182) | 647 (2208) |
| 100 | 5018 | 490 (222) | 928 (3169) |
| 150 | 5030 | 650 (295) | 1201 (4099) |
| 175 | 5030 | 740 (336) | 1478 (5045) |
| 200 | 5030 | 750 (340) | 1773 (6054) |
| 250 | 5030 | 820 (372) | 2327 (7946) |
| 350 | 163 | 1130 (513) | 2909 (9932) |
| 400 | 163 | 1330 (603) | 3436 (11731) |
| 600 | 163 | 1580 (717) | 4582 (15641) |
| 700 | 198 | 2150 (975) | 5727 (16552) |
| 800 | 198 | 2650 (1202) | 6872 (23462) |
| 1200 | 198 | 3250 (1474) | 9163 (31283) |
| 1200 | 198 | 4200 (1905) | 11271 (38479) |
| | | | |

CABINET STYLES & DIMENSIONS

For detailed CAD drawings of all NEMA-1 type enclosures (and optional NEMA-4 (12) type enclosures), please visit the support section of our website www.hindlepowerinc.com



Cabinet Style 5018



Cabinet Style 5030

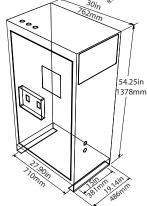


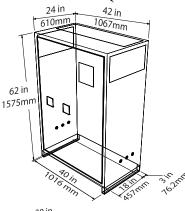
Cabinet Style 163

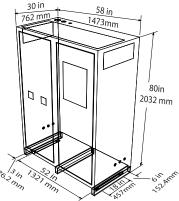


Cabinet Style 198









STANARD INTERNAL LAYOUT BY CABINET STYLE

For detailed CAD drawings of all NEMA-1 type enclosures (and optional NEMA-4 (12) type enclosures), please visit the support section of our website hindlepowerinc.com









| | AT30 - SPECIFICATION TABLE | | | | | | | | | | | | | | | | | | | |
|-----------|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Α | | В | | | С | | D | | Ε | | F | G | Н | J | K | L | М | N | Р |
| SAMPLE | AT30 | 1 | 3 | 0 | 0 | 5 | 0 | F | 4 | 8 | 0 | S | Х | S | Χ | А | Χ | Χ | Χ | Х |
| | | | | | | | | | | | | | | | | | | | | |
| YOUR CODE | AT30 | | | | | | | | | | | | | | | | | | | |

| | DESCRIPTION | CODE | FEATURE | | DESCRIPTION | CODE | FEATURE | | | | | |
|---|------------------------------|------|---------------|---------------|---|------------------------------|--------------|--|--|--|--|--|
| Α | | AT30 | AT30 SERIES | | | S | Standard AIC | | | | | |
| | | 012 | 12Vdc | F | AC Input Circuit Breaker | М | Medium AIC | | | | | |
| В | Nominal DC Output Voltage | 024 | 24Vdc | | Rating** | Н | High AIC | | | | | |
| D | | 048 | 48Vdc | | nating | 0 | No Breaker | | | | | |
| | | 130 | 130Vdc | G | AC Input Fuses | F | Installed | | | | | |
| | | 025 | 25Adc | G | AC IIIput Puses | Χ | Not Supplied | | | | | |
| | | 030 | 30Adc | | | S | Standard AIC | | | | | |
| | | 040 | 40Adc | Н | DC Output Circuit Breaker | М | Medium AIC | | | | | |
| | | 050 | 50Adc | П | Rating** | Н | High AIC | | | | | |
| | | 075 | 75Adc | | 1.049 | 0 | No Breaker | | | | | |
| | Nominal DC Output Current | 100 | 100Adc | J | DC Output Fuses | F | Installed | | | | | |
| | | 125 | 125Adc | | DC Output ruses | Χ | Not Supplied | | | | | |
| С | | 150 | 150Adc | K | Auxiliary Alarm | Α | Installed | | | | | |
| | | 200 | 200Adc | K | Relay Board | Χ | Not Supplied | | | | | |
| | | 250 | 250Adc | | Copper | G | Installed | | | | | |
| | | 300 | 300Adc | | Ground Bus | Х | Not Supplied | | | | | |
| | | 400 | 400Adc | М | AC Lightning | L | Installed | | | | | |
| | | 500 | 500Adc | 171 | Arrestor | Χ | Not Supplied | | | | | |
| | | 600 | 600Adc | N | Fungus Proofing | F | Applied | | | | | |
| | | 800 | 800Adc | 11 | Tungus Frooming | Χ | Not Supplied | | | | | |
| | | 1K0 | 1000Adc | Р | Static Proofing | S | Applied | | | | | |
| | DC Output | U | Unfiltered | | Static Frooming | Χ | Not Supplied | | | | | |
| D | Filtering | F | Filtered | * Co | ntact factory for other <i>l</i> | AC input voltages not listed | | | | | | |
| | | Е | Eliminator | ** I f | ** If you do not order an AC input or DC output circuit | | | | | | | |
| | | 208 | 208V 60Hz | ľ | breaker, fuses will be provided. | | | | | | | |
| | | 240 | 240V 60Hz | | | | | | | | | |
| | AC Input | 480 | 480V 60Hz | | | | | | | | | |
| Е | Voltage* | 600 | 550/600V 60Hz | | | | | | | | | |
| | (3~) | 220 | 220V 50/60Hz | | | | | | | | | |
| | | 380 | 380V 50/60Hz | | | | | | | | | |
| | | 416 | 416V 50/60Hz | | | | | | | | | |

Circuit Breaker AC & DC Ratings

STANDARD Input: 5kAIC - 120/208/240/480Vac 14kAIC - 600Vac

Output: 5kAIC - 125Vdc

MEDIUM Input: 25kAIC - 120/208/240/480Vac

18kAIC - 600Vac Output: 10kAIC - 250Vdc

HIGH Input: 65kAIC - 120/208/240/480Vac

N/A - 600Vac Output: 20kAIC - 250Vdc

OUR UNRIVALED PRODUCT WARRANTY

Standard Warranty

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

All HindlePower 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 HindlePower. 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 HindlePower 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.

Other Products Available from HindlePower:

AT10.1 Microprocessor Battery Charger JF5006 **UMC Universal Maintenance Charger** JF5008 **AT Series Options & Accessories** JF5020 Single Cell Charger JF5007 **AT Series Communications Module** JF5014 **Mobile DC Power System** JF5041 **AT-DC Series Distribution Panel** JF5032 **The EPIC Series Console** JF5043 SCR/SCRF Series Utility Battery Charger JF5010 JF5048 **Best Battery Selector**

