

STANDARD FEATURES



MUCH MORE THAN A STATIONARY BATTERY CHARGER

The AT Series Battery Chargers have been the industry standard in stationary utility applications for over 40 years. As demand for full system reliability increases, our products have evolved to include powerful diagnostics to better assess the health of your charging system. ATevo represents the next generation of our AT Series product line. It is designed and manufactured with the same high quality and reliability you've come to expect from HindlePower.

Not only is ATevo equipped with the same standard AT Series Charger features, it is loaded with a host of alarms and diagnostics designed to better identify both potential dc threats and real-time dc issues. ATevo's built-in Health System acts as both a configuration verification and self-diagnostic tool to ensure your dc system reliability.

Equipped with an easy to use interface with graphical LCD display, ATevo offers a more elegant and intuitive user experience. Packed with a host of powerful features and options, ATevo is the clear choice for utility battery charger applications.

evo EVOLVED
AT SERIES BATTERY CHARGER

PRODUCT OVERVIEW



SETUP MADE EASY

With its built-in setup wizard, the HindleHealth system will walk you through all the charger settings to ensure they are set to your requirements.



24/7 SUPERVISION

At any moment, if a DC System or battery charger abnormality occurs, the HHS will identify the issue and alert the operator via the HMI Screen and LED indicator lamps. Every feature of the battery charger will be alarmed by the HHS, plus any third party device connected through the auxiliary board.



INSIGHT AT A GLANCE

The HindleHealth System status lights let you know your system's condition instantly. Green, you are good to go. Solid Red, some maintenance is required. Blinking Red, immediate action is required.



SYSTEM COMPATIBILITY

The ATevo HHS was designed to work independently with the battery charger or in tandem with any new HindlePower products. When paired with an EPIC Series Console or EPIC Battery House, the HHS will act as a supervisory device, overseeing the system as a whole.

ALARMING (DIAGNOSTIC) CAPABILITY

ATevo provides you with advanced alarming capability right out of the box that will meet most utility specifications and requirements. An LED indicator light comes standard with HVDC, LVDC, dc output failure, ac input failure, and (+) (-) ground fault.

- High DC Voltage
- Low DC Voltage
- DC Output Failure
- AC Input Failure
- Ground Fault
- Summary
- High Level Detect
- Low Level Detect
- SCR Failure
- Rectifier Over-temp
- AC Ripple
- Relay Failure
- Open Breaker
- Open External and Internal Feedback
- End of Discharge
- Open DC Output
- Current Limit

The ATevo allows users to aggregate alarms by high priority alarm and low priority alarm. This allows users to customize alarm groupings based on their interpretation of priority requiring attention.

SPECIFICATIONS

AC Input

- **Input Voltage:**
120, 208, 240, 480, 600 @ 60Hz
120/208/240 (multi-tap) @ 60Hz
220, 380, 416 @ 50/60Hz
*120 VAC and multi-tap inputs not available for certain single phase units and all three-phase units
- **Input Voltage Tolerance::**
+10%, -12%
- **Input Frequency Tolerance::**
±5%
- **Efficiency:**
85-90% typical for 130Vdc at 50-100% load

HOW TO SIZE YOUR BATTERY 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

DC Output

- **Voltage Ratings:**
24, 48, 130 or 260 Vdc nominal
- **Current Ratings:**
6, 12, 16, 20, 25, 30, 40, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500, 600, 800, 1000 A dc
1ph units available from 6-100A (130V only up to 75A)
3ph units available from 25A-1000A (24 and 48V start at 50A)
(refer to pages 4-5 available charger output ratings)
- **Continuous Rating:**
110% rated current at maximum equalize voltage at -18 to 50°C
- **Transient Rating:**
Per NEMA PE-5
- **Current Limit Adjustment Range:**
50% to 110% rated output
- **Voltage Regulation:**
±0.25% for line, load and temp. variations
*Regulation at max. extended equalize voltages may not meet ±0.25%
- **Electrical Noise:**
26dBrc
- **Ripple:**
24/48Vdc
 - Filtered on battery 30mVrms
 - Filtered off battery 1% Vrms
 - Battery Eliminator 30mVrms
- 130Vdc
 - Filtered on battery 100mVrms
 - Filtered off battery 2% Vrms
 - Battery Eliminator 100mVrms
 - Super Eliminator 30mVrms
- 260Vdc
 - Battery Eliminator 200mVrms
- **Surge Withstand Capability:**
Designed to meet IEEE-472, ANSI C37.90a

Environmental

- Operating Ambient Temperature 5°F to 122°F (-10°C to 50°C) w/o derating
- Operating Altitude 3300 feet (1000 meters) above sea level w/o derating
- Relative Humidity 0% to 95% (w/o condensation)
- Audible Noise Less than 65 dBA at any point 5ft (1.5m) from any vertical surface of enclosure

Safety & Acceptance

- Meets NEMA PE5
- Third party agency approvals:



Seismic qualified IEEE 693/IBC CBC ABS or
CE certification available upon request

- MADE IN USA

SPECIFICATION CHART (SINGLE PHASE INPUTS)

| DC Output Rating | Maximum AC Input Current | | | | | | | | | AC Circuit Breaker Ampere Rating | | | | | | | DC Circuit Breaker Rating | Cabinet Style | Approx. Shipping Weights lbs.(kg) | Heat Loss Watts (BTU/hr) | | |
|------------------|--------------------------|------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|---------|---------|---------|---------|---------|---------|---------------------------|---------------|-----------------------------------|--------------------------|------------|------------|
| | Volts | Amps | 120 Vac | 208 Vac | 240 Vac | 480 Vac | 600 Vac | 220 Vac | 380 Vac | 416 Vac | 120 Vac | 208 Vac | 240 Vac | 480 Vac | 600 Vac | 220 Vac | | | | | 380 Vac | 416 Vac |
| 24Vdc | 6 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 10/15 | 5054 | 121 (55) | 33 (11) |
| | 12 | 7 | 5 | 4 | 3 | 3 | 5 | 4 | 4 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 5054 | 121 (55) | 60 (204) |
| | 16 | 9 | 5 | 5 | 4 | 4 | 6 | 4 | 4 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 25 | 5054 | 132 (60) | 78 (265) |
| | 20 | 11 | 6 | 6 | 4 | 4 | 6 | 5 | 4 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 32/30 | 5054 | 138 (62) | 96 (327) |
| | 25 | 13 | 7 | 7 | 4 | 4 | 7 | 5 | 5 | 20 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 40 | 5054 | 138 (62) | 118 (404) |
| | 30 | 15 | 9 | 8 | 5 | 4 | 9 | 6 | 5 | 20 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 50 | 5054 | 147 (66) | 141 (481) |
| | 40 | 20 | 12 | 10 | 6 | 5 | 11 | 7 | 7 | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 63/60 | 5054 | 149 (67) | 186 (635) |
| | 50 | 25 | 15 | 13 | 7 | 5 | 14 | 9 | 8 | 40 | 20 | 20 | 15 | 15 | 20 | 15 | 15 | 15 | 80 | 5054 | 177 (80) | 231 (789) |
| | 75 | 39 | 21 | 18 | 10 | 9 | 22 | 13 | 12 | 50 | 30 | 30 | 15 | 15 | 30 | 20 | 20 | 20 | 125 | 5070 | 282 (128) | 344 (1174) |
| | 100 | 53 | 31 | 27 | 14 | 11 | 30 | 18 | 16 | 70 | 40 | 40 | 20 | 20 | 40 | 25 | 25 | 25 | 150 | 5070 | 317 (143) | 457 (1558) |
| 48Vdc | 6 | 9 | 6 | 5 | 4 | 5 | 6 | 4 | 4 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 10/15 | 5054 | 121 (55) | 42 (144) |
| | 12 | 16 | 10 | 8 | 5 | 5 | 10 | 6 | 6 | 20 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 20 | 5054 | 135 (61) | 79 (268) |
| | 16 | 20 | 12 | 10 | 6 | 6 | 12 | 8 | 7 | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 25 | 5054 | 157 (71) | 103 (352) |
| | 20 | 23 | 14 | 12 | 7 | 7 | 13 | 9 | 9 | 30 | 20 | 20 | 15 | 15 | 20 | 15 | 15 | 15 | 32/30 | 5054 | 175 (79) | 128 (436) |
| | 25 | 27 | 16 | 14 | 8 | 7 | 15 | 10 | 9 | 40 | 20 | 20 | 15 | 15 | 20 | 15 | 15 | 15 | 40 | 5054 | 175 (79) | 158 (548) |
| | 30 | 27 | 16 | 14 | 8 | 7 | 15 | 10 | 9 | 40 | 20 | 20 | 15 | 15 | 20 | 15 | 15 | 15 | 50 | 5054 | 181 (82) | 189 (644) |
| | 40 | 36 | 21 | 18 | 10 | 8 | 20 | 12 | 11 | 50 | 30 | 30 | 15 | 15 | 30 | 15 | 15 | 15 | 63/60 | 5054 | 198 (90) | 250 (852) |
| | 50 | 45 | 26 | 23 | 12 | 10 | 25 | 15 | 14 | 60 | 35 | 35 | 15 | 15 | 35 | 20 | 20 | 20 | 80 | 5054 | 204 (92) | 311 (1061) |
| | 75 | 66 | 38 | 36 | 17 | 14 | 37 | 22 | 20 | 90 | 50 | 50 | 25 | 20 | 50 | 30 | 30 | 30 | 125 | 5070 | 321 (146) | 463 (1582) |
| | 100 | 91 | 54 | 47 | 24 | 19 | 52 | 30 | 28 | 125 | 70 | 70 | 30 | 30 | 70 | 40 | 40 | 40 | 150 | 5070 | 393 (178) | 616 (2013) |
| 130Vdc | 6 | 14 | 8 | 7 | 5 | 6 | 8 | 6 | 5 | 20 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 10/15 | 5054 | 146 (67) | 71 (243) |
| | 12 | 33 | 20 | 17 | 10 | 8 | 20 | 12 | 11 | 50 | 25 | 25 | 15 | 15 | 30 | 15 | 15 | 15 | 20 | 5054 | 186 (84) | 137 (467) |
| | 16 | 39 | 23 | 20 | 11 | 10 | 23 | 14 | 13 | 50 | 30 | 30 | 15 | 15 | 30 | 20 | 20 | 25 | 5054 | 211 (96) | 181 (617) | |
| | 20 | 45 | 27 | 23 | 12 | 10 | 27 | 15 | 15 | 63 | 40 | 40 | 15 | 15 | 40 | 20 | 20 | 32/30 | 5054 | 235 (107) | 224 (766) | |
| | 25 | 50 | 32 | 28 | 14 | 12 | 32 | 17 | 17 | 63 | 40 | 40 | 20 | 20 | 40 | 25 | 25 | 40 | 40 | 5054 | 235 (107) | 279 (953) |
| | 30 | 62 | 36 | 31 | 16 | 15 | 35 | 21 | 19 | 80 | 50 | 50 | 20 | 20 | 50 | 30 | 30 | 50 | 5054 | 241 (109) | 334 (1140) | |
| | 40 | 86 | 47 | 41 | 21 | 17 | 44 | 26 | 24 | 110 | 60 | 60 | 30 | 25 | 60 | 35 | 35 | 60 | 5070 | 341 (155) | 443 (1513) | |
| | 50 | | 58 | 51 | 26 | 21 | 52 | 32 | 30 | | 80 | 80 | 35 | 30 | 80 | 40 | 40 | 80 | 5070 | 384 (174) | 553 (1887) | |
| | 75 | | 89 | 78 | 39 | 31 | 84 | 50 | 45 | | 125 | 125 | 50 | 50 | 125 | 70 | 70 | 125 | 5070 | 422 (192) | 826 (2821) | |
| 260Vdc | 6 | 28 | 18 | 15 | 9 | | 19 | 12 | 11 | 40 | 25 | 25 | 15 | | 25 | 15 | 15 | 10 | 5054 | 199 (90) | 120 (411) | |
| | 12 | | 36 | 32 | 17 | | 33 | 20 | 19 | | 50 | 50 | 25 | | 50 | 25 | 25 | 20 | 5054 | 227 (103) | 235 (803) | |
| | 16 | 84 | 48 | 42 | 22 | 18 | 46 | 28 | 26 | 125 | 60 | 60 | 30 | 30 | 60 | 40 | 40 | 25 | 5070 | 380 (172) | 312 (1064) | |
| | 25 | | 67 | 59 | 30 | 25 | 69 | 41 | 38 | | 100 | 100 | 40 | 40 | 100 | 60 | 60 | 40 | 5070 | 420 (190) | 484 (1652) | |

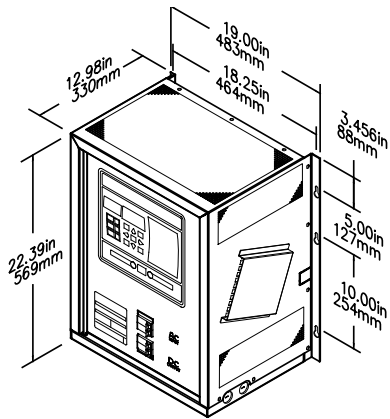
SPECIFICATION CHART (THREE PHASE INPUTS)

| DC Output Rating | Maximum AC Input Current | | | | | | | | AC Circuit Breaker Ampere Rating | | | | | | DC Circuit Breaker Rating | Cabinet Style | Approx. Shipping Weights lbs.(kg) | Heat Loss Watts (BTU/hr) | |
|------------------|--------------------------|------|---------|---------|---------|---------|---------|---------|----------------------------------|---------|---------|---------|---------|---------|---------------------------|---------------|-----------------------------------|--------------------------|--------------|
| | Volts | Amps | 208 Vac | 240 Vac | 480 Vac | 600 Vac | 220 Vac | 380 Vac | 416 Vac | 208 Vac | 240 Vac | 480 Vac | 600 Vac | 220 Vac | | | | | 380 Vac |
| 24Vdc | 50 | 9 | 8 | 6 | 5 | 8 | 6 | 6 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 80 | 5070 | 232 (105) | 231 (789) |
| | 75 | 12 | 11 | 7 | 7 | 11 | 8 | 8 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 125 | 5070 | 251 (114) | 344 (1174) |
| | 100 | 16 | 14 | 9 | 8 | 15 | 10 | 10 | 20 | 20 | 15 | 15 | 20 | 15 | 15 | 150 | 5070 | 269 (122) | 457 (1558) |
| | 125 | 19 | 17 | 10 | 9 | 18 | 12 | 11 | 25 | 25 | 15 | 15 | 25 | 15 | 15 | 175 | 5030 | 392 (178) | 569 (1943) |
| | 150 | 23 | 20 | 12 | 10 | 22 | 14 | 13 | 30 | 30 | 15 | 15 | 30 | 20 | 20 | 225 | 5030 | 413 (187) | 682 (2328) |
| | 200 | 30 | 26 | 15 | 13 | 28 | 18 | 15 | 40 | 40 | 20 | 20 | 40 | 25 | 25 | 300 | 5030 | 479 (217) | 908 (3098) |
| | 250 | 37 | 32 | 18 | 15 | 35 | 22 | 20 | 50 | 50 | 25 | 20 | 50 | 30 | 30 | 350 | 5030 | 658 (298) | 1133 (3868) |
| | 300 | 40 | 35 | 19 | 16 | 38 | 23 | 22 | 50 | 50 | 25 | 25 | 50 | 30 | 30 | 450 | 5030 | 670 (304) | 1359 (4638) |
| | 400 | 64 | 56 | 28 | 25 | 61 | 37 | 35 | 80 | 80 | 40 | 35 | 80 | 45 | 45 | 600 | 163 | 1150 (522) | 1810 (6178) |
| | 500 | 80 | 69 | 36 | 30 | 76 | 45 | 42 | 100 | 100 | 50 | 40 | 100 | 60 | 60 | 700 | 163 | 1300 (590) | 2261 (7717) |
| | 600 | 96 | 83 | 43 | 35 | 84 | 53 | 49 | 125 | 125 | 60 | 50 | 125 | 70 | 70 | 900 | 163 | 1530 (694) | 2712 (9257) |
| | 800 | 140 | 121 | 27 | 47 | 120 | 71 | 65 | 175 | 175 | 80 | 70 | 175 | 90 | 90 | 1200 | 198 | 2020 (916) | 3614 (12336) |
| 1000 | 152 | 133 | 68 | 60 | 148 | 84 | 77 | 200 | 200 | 100 | 80 | 200 | 110 | 110 | 1200 | 198 | 2440 (1107) | 4516 (15416) | |
| 48Vdc | 50 | 15 | 14 | 9 | 8 | 15 | 10 | 10 | 20 | 20 | 15 | 15 | 20 | 15 | 15 | 80 | 5070 | 257 (117) | 311 (1061) |
| | 75 | 22 | 19 | 11 | 10 | 21 | 14 | 13 | 30 | 30 | 15 | 15 | 30 | 20 | 20 | 125 | 5070 | 305 (138) | 463 (1582) |
| | 100 | 28 | 24 | 14 | 12 | 27 | 17 | 16 | 40 | 40 | 20 | 20 | 40 | 25 | 25 | 150 | 5070 | 327 (148) | 616 (2103) |
| | 125 | 34 | 30 | 16 | 15 | 33 | 21 | 19 | 50 | 50 | 20 | 20 | 50 | 30 | 30 | 175 | 5030 | 461 (209) | 769 (2624) |
| | 150 | 40 | 35 | 19 | 17 | 39 | 24 | 22 | 50 | 50 | 25 | 25 | 50 | 30 | 30 | 225 | 5030 | 471 (214) | 921 (3145) |
| | 200 | 53 | 47 | 25 | 21 | 52 | 31 | 29 | 70 | 70 | 35 | 30 | 70 | 40 | 40 | 300 | 5030 | 535 (243) | 1227 (4187) |
| | 250 | 66 | 58 | 31 | 25 | 63 | 35 | 32 | 90 | 90 | 40 | 35 | 90 | 50 | 50 | 350 | 5030 | 750 (340) | 1532 (5229) |
| | 300 | 79 | 69 | 36 | 30 | 76 | 45 | 42 | 100 | 100 | 50 | 40 | 100 | 60 | 60 | 450 | 5030 | 816 (370) | 1837 (6272) |
| | 400 | 114 | 101 | 51 | 42 | 109 | 64 | 59 | 150 | 150 | 70 | 60 | 150 | 80 | 80 | 600 | 163 | 1100 (499) | 2448 (8356) |
| | 500 | 144 | 126 | 65 | 52 | 137 | 81 | 74 | 200 | 200 | 90 | 80 | 200 | 100 | 100 | 700 | 163 | 1350 (612) | 3058 (10440) |
| | 600 | 172 | 149 | 76 | 62 | 161 | 96 | 87 | 250 | 250 | 100 | 90 | 250 | 125 | 125 | 900 | 198 | 1600 (726) | 3669 (12524) |
| | 800 | 227 | 197 | 101 | 82 | 216 | 126 | 115 | 300 | 300 | 150 | 125 | 300 | 175 | 175 | 1200 | 198 | 2020 (916) | 4890 (16693) |
| 1000 | 261 | 225 | 113 | 99 | 248 | 143 | 132 | 350 | 350 | 150 | 150 | 350 | 200 | 200 | 1200 | 198 | 2400 (1089) | 6111 (20861) | |
| 130Vdc | 25 | 19 | 17 | 10 | 9 | 19 | 12 | 12 | 25 | 25 | 15 | 15 | 25 | 15 | 15 | 40 | 5070 | 261 (118) | 279(953) |
| | 30 | 22 | 19 | 11 | 10 | 22 | 14 | 13 | 30 | 30 | 15 | 15 | 30 | 20 | 20 | 50 | 5070 | 261 (118) | 334 (1140) |
| | 40 | 28 | 25 | 14 | 12 | 28 | 17 | 16 | 35 | 35 | 20 | 20 | 40 | 25 | 25 | 60 | 5070 | 300 (136) | 443 (1513) |
| | 50 | 35 | 31 | 17 | 14 | 34 | 21 | 20 | 50 | 50 | 25 | 20 | 50 | 30 | 30 | 80 | 5070 | 333 (151) | 553 (1887) |
| | 75 | 50 | 44 | 23 | 20 | 48 | 29 | 27 | 70 | 70 | 30 | 30 | 70 | 40 | 40 | 125 | 5070 | 407 (184) | 826 (2821) |
| | 100 | 65 | 57 | 30 | 25 | 63 | 38 | 35 | 90 | 90 | 40 | 35 | 90 | 50 | 50 | 150 | 5030 | 629 (285) | 1100 (3755) |
| | 125 | 81 | 71 | 37 | 31 | 78 | 47 | 43 | 110 | 110 | 50 | 40 | 110 | 60 | 60 | 175 | 5030 | 661 (300) | 1376 (4690) |
| | 150 | 97 | 85 | 44 | 39 | 93 | 56 | 51 | 125 | 125 | 60 | 50 | 125 | 70 | 70 | 225 | 5030 | 663 (301) | 1647 (5624) |
| | 200 | 134 | 114 | 58 | 46 | 123 | 73 | 67 | 175 | 175 | 80 | 70 | 175 | 100 | 100 | 300 | 5030 | 746 (338) | 2195 (7492) |
| | 250 | 154 | 135 | 69 | 56 | 147 | 87 | 80 | 200 | 200 | 100 | 80 | 200 | 125 | 125 | 350 | 163 | 1130 (513) | 2742 (9360) |
| | 300 | 189 | 164 | 81 | 68 | 185 | 106 | 98 | 250 | 250 | 125 | 100 | 250 | 150 | 150 | 450 | 163 | 1330 (603) | 3289 (11229) |
| | 400 | 222 | 112 | 91 | 239 | 143 | 131 | | 300 | 150 | 150 | 300 | 200 | 200 | 600 | 163 | 1580 (717) | 4384 (14965) | |
| 500 | | 138 | 112 | 269 | 172 | 160 | | | 175 | 150 | 350 | 250 | 250 | 700 | 198 | 2150 (975) | 5478 (18702) | | |
| 600 | | 167 | 134 | | 209 | 191 | | | 250 | 200 | | 300 | 300 | 900 | 198 | 2650 (1202) | 6573 (22439) | | |
| 800 | | 219 | | | 280 | 255 | | | 300 | | | 350 | 350 | 1200 | 198 | 3250 (1474) | 8762 (29912) | | |
| 260Vdc | 16 | 29 | 26 | 14 | 12 | 29 | 18 | 17 | 40 | 40 | 20 | 20 | 40 | 25 | 25 | 25 | 5070 | 344 (156) | 312 (1064) |
| | 25 | 35 | 31 | 20 | 17 | 41 | 25 | 23 | 50 | 50 | 25 | 25 | 60 | 35 | 35 | 40 | 5070 | 372 (168) | 484 (1652) |
| | 50 | 66 | 58 | 30 | 25 | 64 | 44 | 41 | 90 | 90 | 40 | 35 | 90 | 60 | 60 | 70 | 5030 | 683 (309) | 963 (3286) |
| | 75 | 98 | 85 | 43 | 35 | 92 | 55 | 50 | 125 | 125 | 60 | 50 | 125 | 70 | 70 | 125 | 5030 | 725 (329) | 1441 (4920) |
| | 100 | 128 | 111 | 58 | 47 | 125 | 73 | 67 | 175 | 175 | 80 | 70 | 175 | 100 | 100 | 150 | 5030 | 819 (371) | 1920 (6553) |
| | 150 | 195 | 169 | 85 | 69 | 188 | 107 | 98 | 250 | 250 | 125 | 100 | 250 | 150 | 150 | 225 | 163 | 1319 (598) | 2877 (9820) |
| | 200 | 240 | 220 | 111 | 90 | 221 | 138 | 128 | 300 | 300 | 150 | 125 | 300 | 175 | 175 | 300 | 163 | 1502 (681) | 3834 (13088) |
| | 300 | | 167 | 134 | | 211 | 193 | | | 250 | 200 | | 300 | 300 | 450 | 198 | 2323 (1053) | 5784 (19622) | |
| 400 | | 222 | 178 | | | | | | 300 | 250 | | | | 600 | 198 | 2428 (1101) | 7662 (26156) | | |

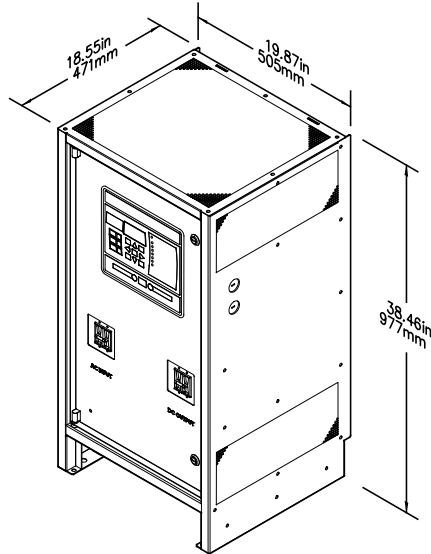
CONFIGURATION & CABINET SIZE

| ATEVO SPECIFICATION TABLE | | | | | | | | | | | | |
|---------------------------|---|----------------|--|--|----------------|--|--|------|---------------|--|--|----------------------------------|
| MODEL# | Ø | Output Voltage | | | Output Current | | | Filt | Input Voltage | | | Factory configurations & options |
| ATEVO | | | | | | | | | | | | Contact us for configuration |

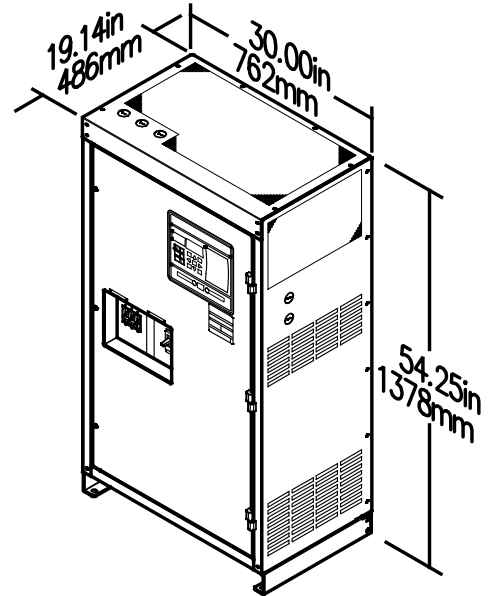
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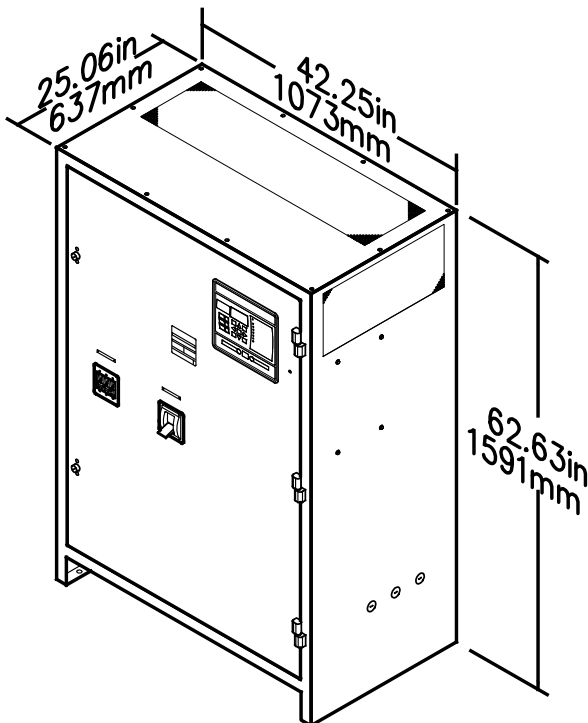
Cabinet 5070



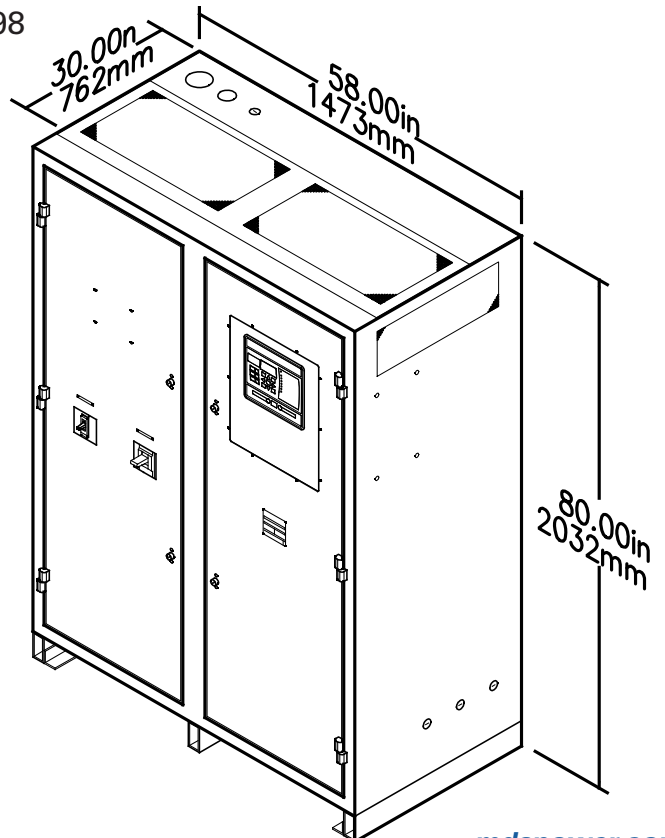
Cabinet 5030



Cabinet 163



Cabinet 198



STANDARD FEATURES



EVENT LOGGING

Don't miss a thing! ATevo can log up to 1024 events such as alarms and/or parameter changes.



GRAPHICAL LED DISPLAY

ATevo's easy to use interface gives you all the information you need with no guess-work.



GROUND FAULT METERING

Standard zero-center voltmeter alerts users of any imbalance on the DC bus.



SECURITY

Password protection prevents unauthorized users from changing any settings on the ATevo charger.



DYNAMIC CURRENT LIMIT

Prevents rectifier components from failing in ambient temperatures above 50°C.



BATTERY OPEN ALARM

Ensures battery continuity and alerts you should the charger not be connected to a battery.



UNIVERSAL CONTROL BOARD

No more overstocked boards. Main control board is not voltage specific and can operate in any ATevo charger.



LOCAL AND REMOTE VOLTAGE SENSE

Allows the charger to read the actual battery terminal voltage!



CIRCUIT BREAKER PROTECTION

ATevo comes factory equipped with thermal magnetic or hydraulic magnetic breakers for both the AC input and DC output. Optional Ampere Interrupting Capacity (AIC) ratings that are higher than standard are available:

- Medium
- High
- Ultimate

Refer to circuit breaker table document JF5072-01 for a full list of AIC ratings. Please note that certain size chargers do not offer optional AIC ratings.

Standard Filtering

Definitions are consistent with current NEMA PE5 standards. The standard DC output filter reduces the output ripple voltage to:

less than 30mVrms through 48Vdc
less than 100mVrms for 130Vdc batteries

when measured at the battery terminals
with a battery connected.



ELIMINATOR (OPTIONAL)

Eliminator filtering is:

30mV without battery for 24Vdc and 48Vdc chargers.
100mV without battery 130Vdc chargers.
200mV without battery 260Vdc chargers.

*260Vdc chargers only available with eliminator filtering.



SUPER FILTERING (OPTIONAL)

30mV on battery for 130Vdc chargers.

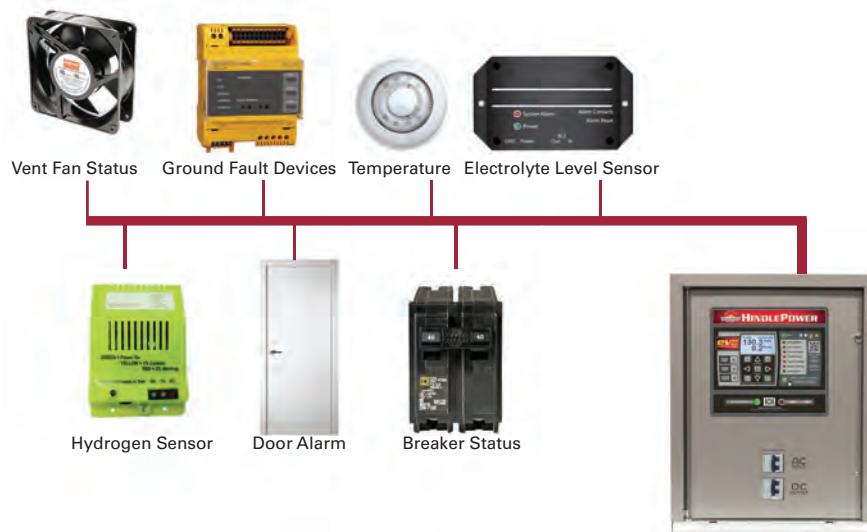
ADVANCED OPTIONS

Auxiliary Input/Output (I/O) Board

ATevo now becomes the central point of your DC system. The optional Auxiliary I/O Board (A4) gives users the ability to monitor status of third party equipment. It is equipped with:

- (6) programmable alarm relays
- (4) programmable generic binary inputs
- (4) programmable generic analog inputs.

Up to 2 auxiliary input/output boards may be installed in an ATevo charger.



PROGRAMMABLE ALARM RELAYS

- Relays are rated for 0.5A @ 125Vac/Vdc
- Change states based on any alarm condition or status point
- Can be configured to be latching or non-latching
- Adjustable time delay

PROGRAMMABLE GENERIC BINARY INPUTS

- The four (4) binary inputs are optically isolated from ATevo and each other
- Input can be user configured for 24, 48, 130, or 260Vdc thresholds
- Can be configured to be active high or active low, and generate alarms and controls such as charger shut-down
- Typical uses include remote shut-down, electrolyte level, ventilation fan failure, etc.

PART #
EJ5301-XX

ADVANCED OPTIONS

PROGRAMMABLE GENERIC ANALOG INPUTS

- The four (4) analog inputs are rated for 0-10Vdc and are referenced to ATevo DC (-)
- Analog inputs can be scaled to report and alarm in primary values.
- Uses include: AC voltage, AC current, and temperature transducer inputs

PROGRAMMABLE GENERIC ANALOG INPUTS

- The four (4) analog inputs are rated for 0-10Vdc and are referenced to ATevo DC (-)
- Analog inputs can be scaled to report and alarm in primary values.
- Uses include: AC voltage, AC current, and temperature transducer inputs

BATTERY TYPE ALARM TERMINAL BLOCK

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 accept wire sizes #16 to #14 AWG.

PART #
EJ5130-XX

Communications

ATevo communications options allow users to remotely observe any status or perform any function that is accessible at the charger's front panel display. Multiple communication options are available as follows:

SERIAL COMMUNICATIONS ADAPTER

- Allows connections to either RS-232 or RS-485 networks
- Supports DNP3 Level 2 and Modbus Protocols

EN5034-XX

ETHERNET COMMUNICATIONS ADAPTER

- Supports standard RJ45 10/100 Mbps copper Ethernet connections
- ATevo can support one (1) Ethernet Communication Adapter
- Supports DNP3 Level 2 and Modbus Protocols simultaneously

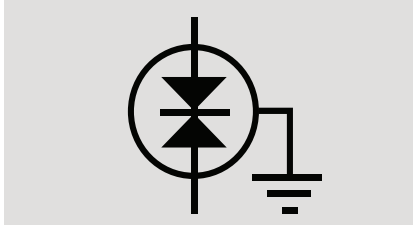
EN5035-XX

IEC 61850 COMMUNICATIONS ADAPTER

- IEC 61850 communications capability, an international standard defining communication protocols for intelligent devices used in electrical substations

EJ5701-XX

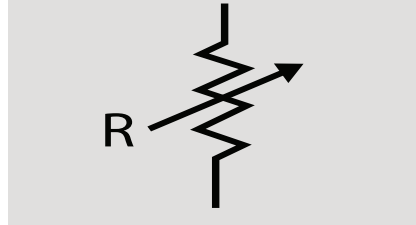
ADDITIONAL ACCESSORIES



AC LIGHTNING ARRESTOR

Recommended for installations with risk of frequent AC surges, such as high elevations or severe weather. Is in accordance with IEEE 472 requirements.

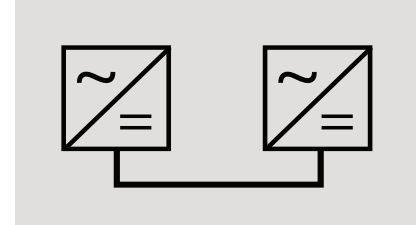
EJ5308-XX



TEMPERATURE COMPENSATION

Adjusts the dc output voltage up or down, in response to battery temperature fluctuations. Consists of an external temperature probe mounted on or near the battery. Useful for lead-acid or nickel-cadmium batteries and available probe lengths of 25, 50, 100 and 200 ft.

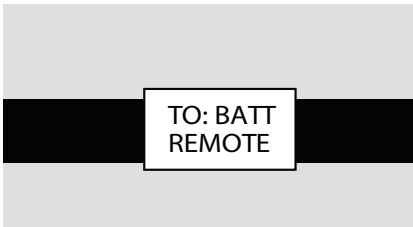
EJ5304-XX



FORCED LOAD SHARE

Provides for load sharing of 2 similar chargers in parallel, allowing for system redundancy.

EJ5306-XX



HEAT SHRINKWIRE MARKERS

Provides additional durability of heat shrink wire markers on the ends of each wire. Corresponds to the schematic.

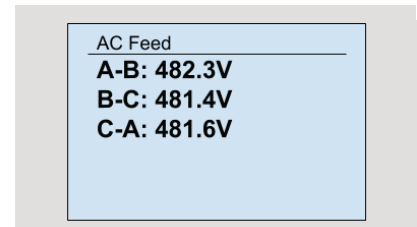
EJ1076-XX



TRANSDUCERS

Capability to transmit analog outputs as selected by you for either 4-20ma, 0-5VDC, 0-10VDC for each of the following measurements;

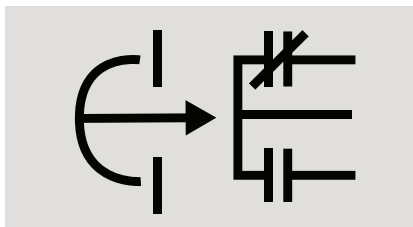
| | |
|-------------------------|-------------------------|
| AC Voltage EJ5316-XX | DC Voltage EJ5318-XX |
| AC Current EJ5317-XX | DC Current EJ5319-XX |



AC METERING

Displays AC voltage, current, and frequency on the charger's existing digital LCD display.

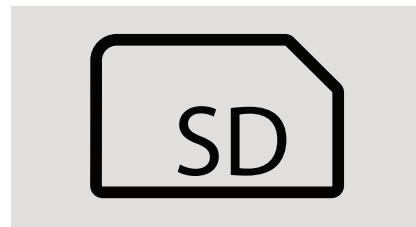
EJ5303-XX



AC/DC CIRCUIT BREAKER AUXILIARY CONTACTS

Allows for remote indication of breaker position.

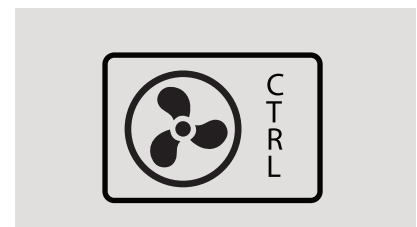
EJ5305-XX



SD MEMORY CARD

32G sim card formatted as FAT32.

PM5020-XX



FAN CONTROL CONTACTOR

Mounted in a separate NEMA 1 enclosure, this option provides a contactor that will close once the charger is in equalize or a bus voltage threshold has been surpassed.

10A-EJ5017-2X 20A-EJ5017-3X

ENCLOSURE OPTIONS



NEMA 2

Provides a drip shield on the standard enclosure to protect it from falling dirt and/or dripping water.

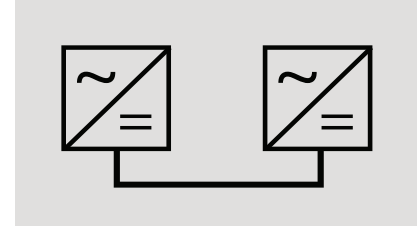
EI0191-XX



NEMA 4/12

All-weather enclosures, will also accommodate NEMA 12 and 13.

CONSULT FACTORY



RELAY RACK MOUNTING

Available for 5054 and 5070 enclosures. These mounting devices are useful for 23"/24" relay racks.

EI0193-XX



FLOOR STANDS

Allow for free standing smaller, typically wall-mounted enclosures. These stands universally allow for the base of the charger to be approximately 44 inches/1.12m from the base or floor.

EI0192-XX

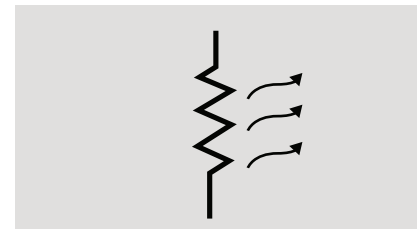


LOCKING PROVISIONS

Provides extra security by physically locking the front door.

Padlock
EI0215-05

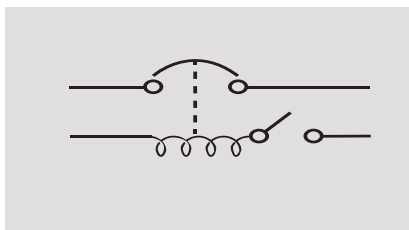
Keylock
EI0215-16



CABINET HEATERS

Provide for anti-condensation heating of the battery charger cabinet.

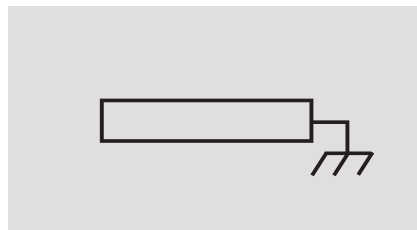
EJ5156-XX



CIRCUIT BREAKER INTERLOCKS

An added measure of protection that inhibits the operator's ability to open the battery charger door when the AC and DC breakers are closed.

EJ5311-XX



COPPER GROUND BUS

Offers a convenient means to tie the ATevo to the building's ground.

EI5098-XX



INTERNAL COATINGS

Offer various forms of protection for electrical components and internal wiring connections:

Fungus Proofing Anti-Static
EJ1076-00 EJ1076-01

Comformal
EJ1076-03