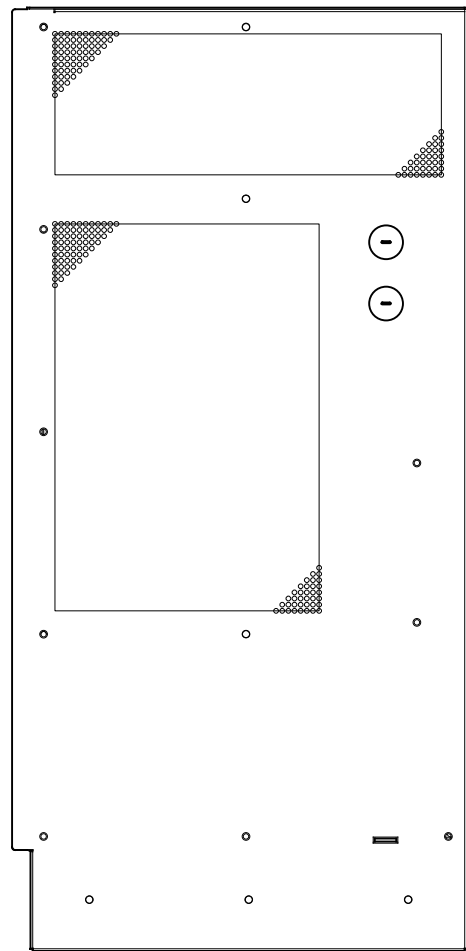
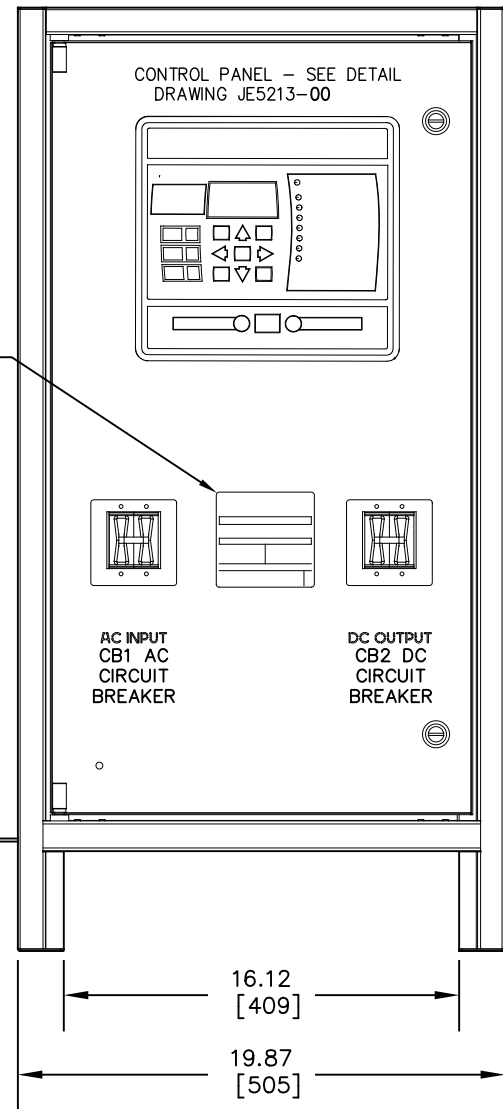


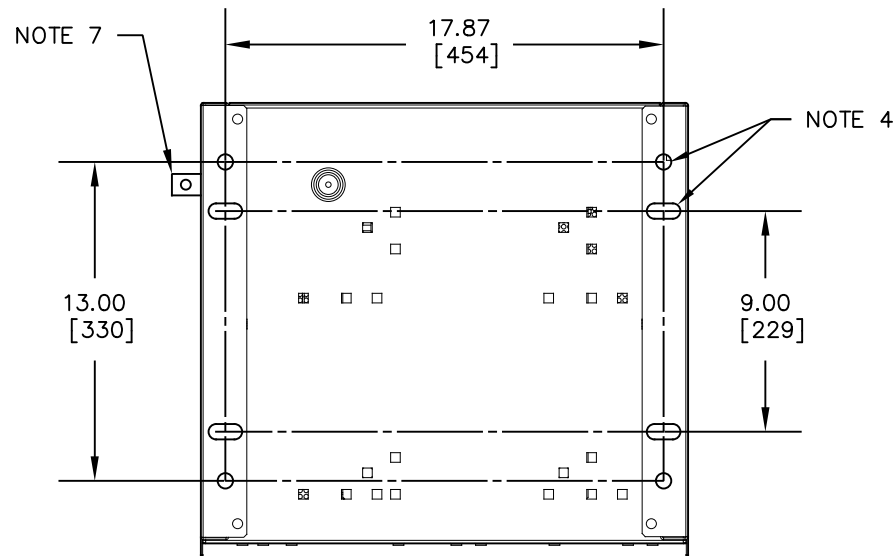
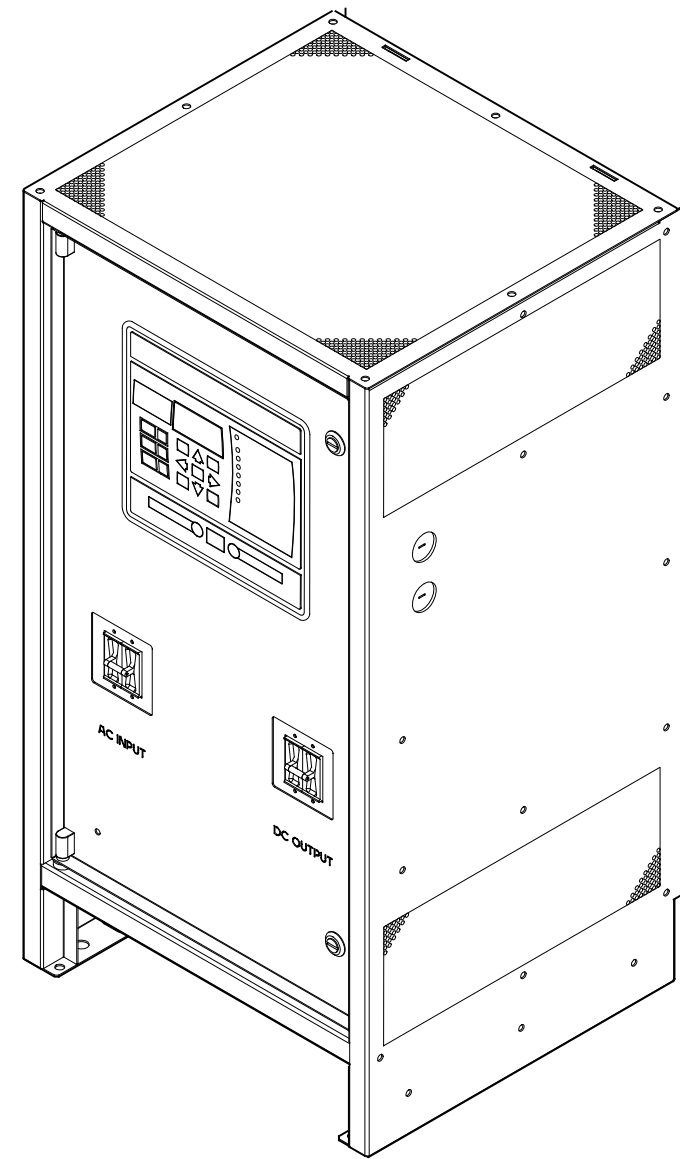
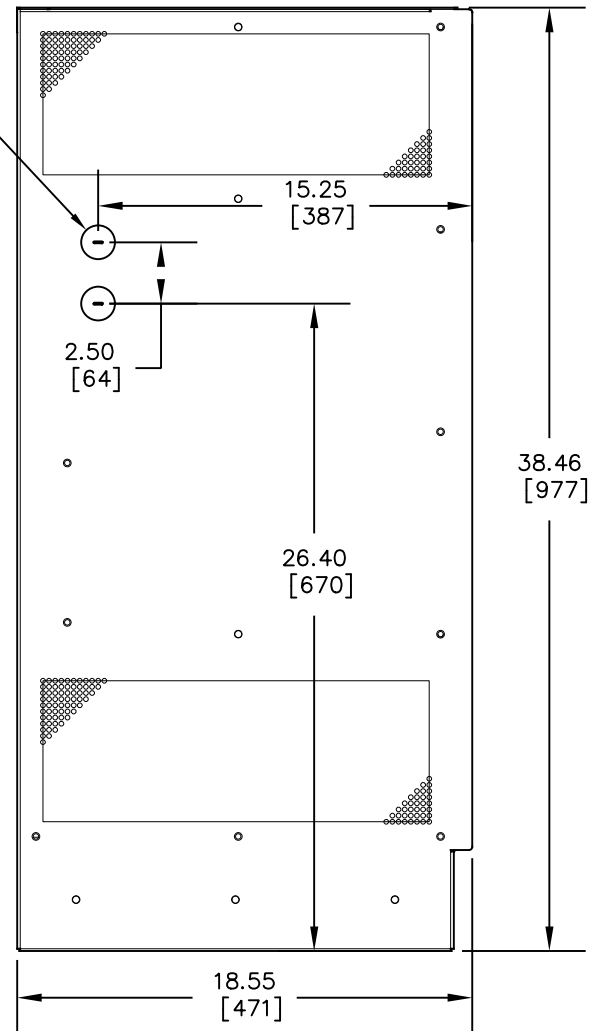
LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW



BOTTOM MOUNTING VIEW

NOTES:

- ENCLOSURE IS A NEMA TYPE 1 / IP20 TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT.
- ALLOW 6in / 152mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- DATA NAMEPLATE (WITH CHARGER RATINGS) MOUNTED ON DOOR.
- FOUR (4) 0.5in / 12mm FLOOR-MOUNTING HOLES AND FOUR (4) 1in x 0.625in / 25mm x 16mm FLOOR-MOUNTING SLOTS ARE PROVIDED ON BOTTOM OF ENCLOSURE AS SHOWN.
- FOUR (4) 1.31in / 33mm DIA STANDARD PRE-FAB KEY-SLOT KNOCKOUTS ARE PROVIDED AS SHOWN FOR 1in / 25mm CONDUIT ENTRY. IF ADDITIONAL CONDUIT ENTRANCES ARE REQUIRED, ENCLOSURE SHOULD BE FIELD-MODIFIED BY INSTALLER.
- BATTERY CHARGER SHIPPING WEIGHT: APPROXIMATELY TBD lbs / TBD kg
- OPTIONAL GROUND BUS BAR WITH 0.41 in / 10.41 mm DIA HOLE.

DUAL DIMENSIONS <sup>in</sup>  
[mm]

REV. 0	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 11/07/19	DRN BY KJB	DATE 11/07/19
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE 11/07/19
					APP BY MCR	DATE 11/07/19

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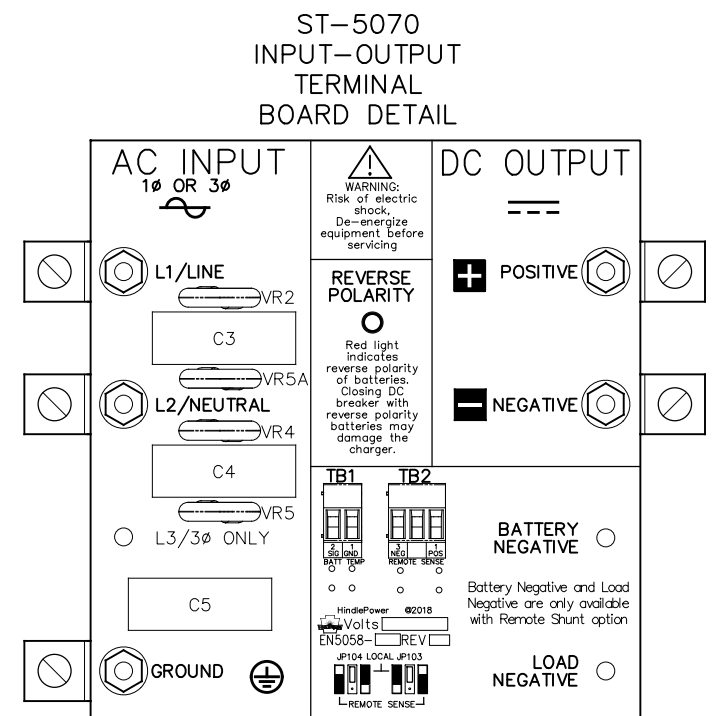
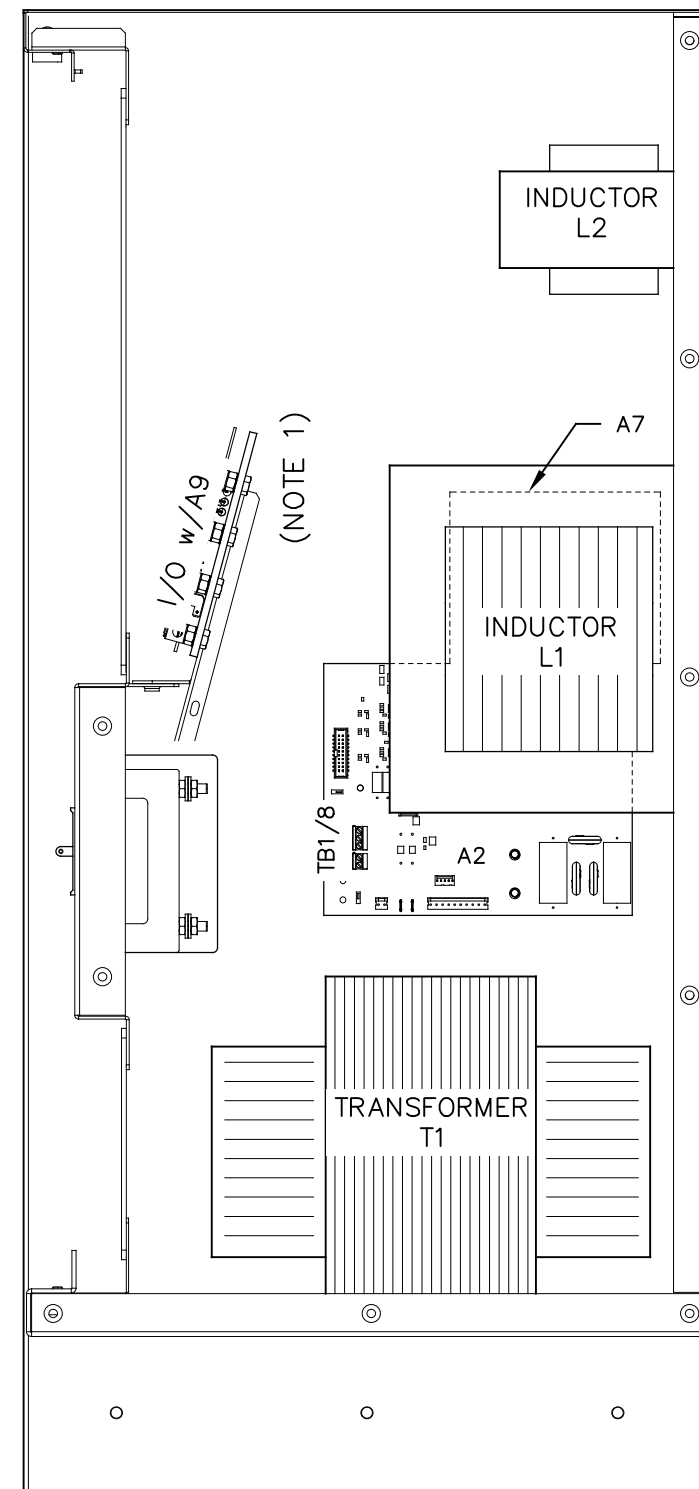
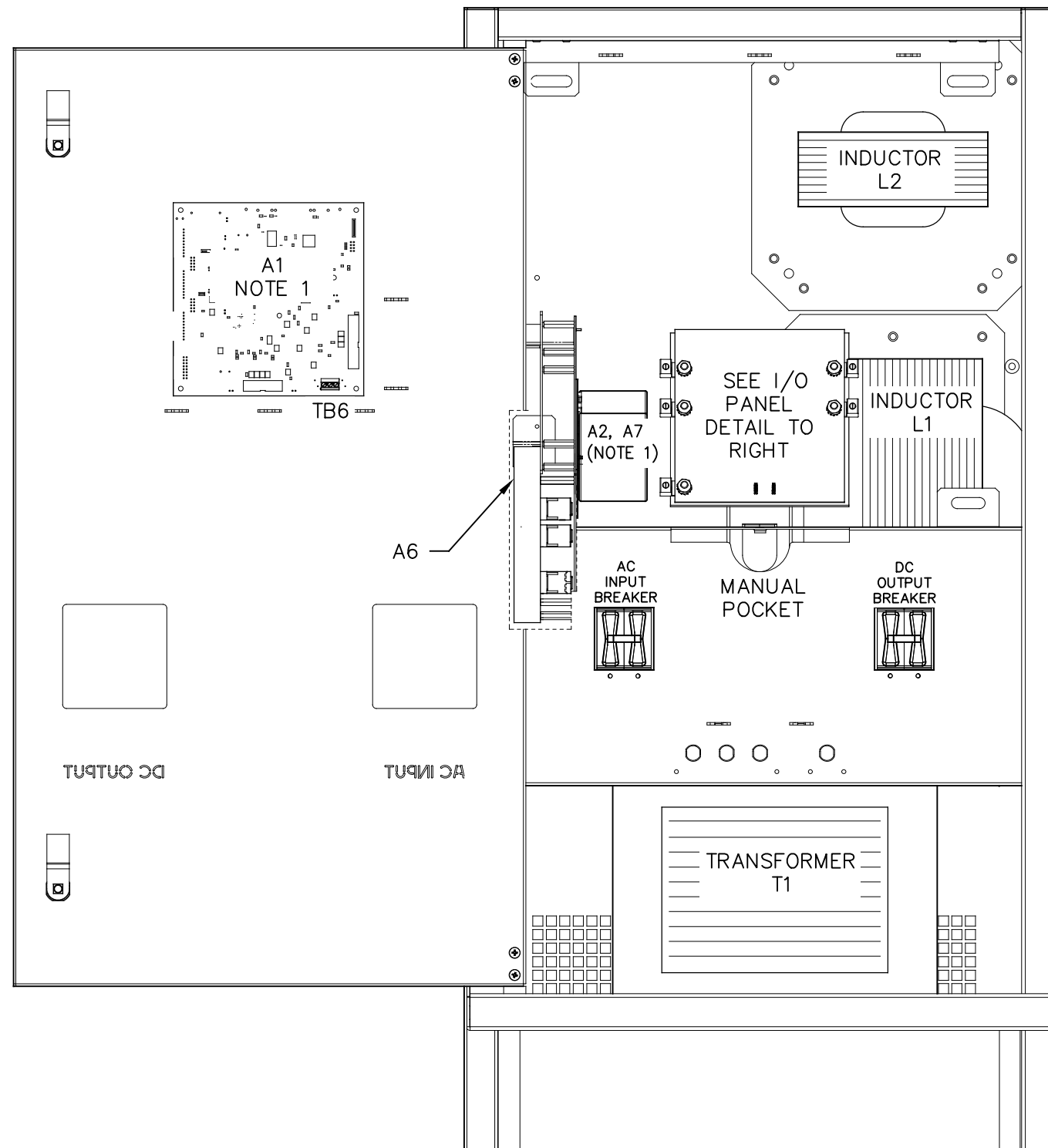
TITLE  
**ATEVO BATTERY CHARGER  
OUTLINE: NEMA-1 STYLE-5070 ENCL**

SCALE **B** DWG No **JE5309-00**

REV 0 SHEET 1 OF 1

SYM STANDARD COMPONENT DESCRIPTION

- A1 MAIN CONTROL PC BOARD
- A2 POWER BOARD
- A6 RECTIFIER ASSEMBLY
- A9 MOV PC BOARD
- A7 FILTER BOARD
- CB1 AC INPUT CIRCUIT BREAKER (CD2)
- CB2 DC OUTPUT CIRCUIT BREAKER (CD2)
- AUXCB2 DC CKT BKR (CB2) AUXILIARY CONTACTS
- L1 MAIN INDUCTOR
- L2 FILTER INDUCTOR
- T1 POWER TRANSFORMER



MOV PC BOARD (A9)

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
I/O (+/-)	POS/NEG OUTPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
GND LUG	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
I/O (L1/L2)	AC INPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
(A2) TB1	POS/NEG REMOTE SENSE TERMS (A2) - SOLDERLESS COMP SCREW	#22-14 AWG
(A2) TB8	TEMPCO PROBE (A10) TERM BLK - SOLDERLESS COMP SCREW	#22-14 AWG
(A1) TB6	SUMMARY ALARM TERMINAL BLOCK (A1) - SLDRLESS COMP SCREW	#22-14 AWG

NOTES:  
1. FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, etc.) SEE DRAWING JE5313 - 00, 10 30.

REV. DRN BY	CHK BY	APP BY	DATE	DRN BY	DATE:
B	KJB	MCR	9/7/2020	KJB	11/08/19
DESCRIPTION				CHK BY	DATE:
STANDARD DRAWINGS.				MCR	11/08/19
				APP BY	DATE:
				RDB	11/08/19

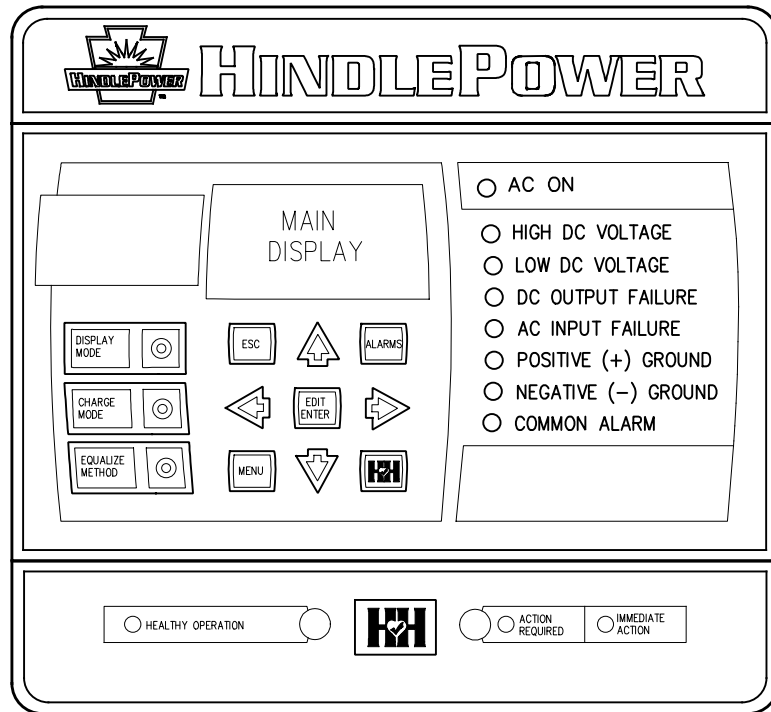
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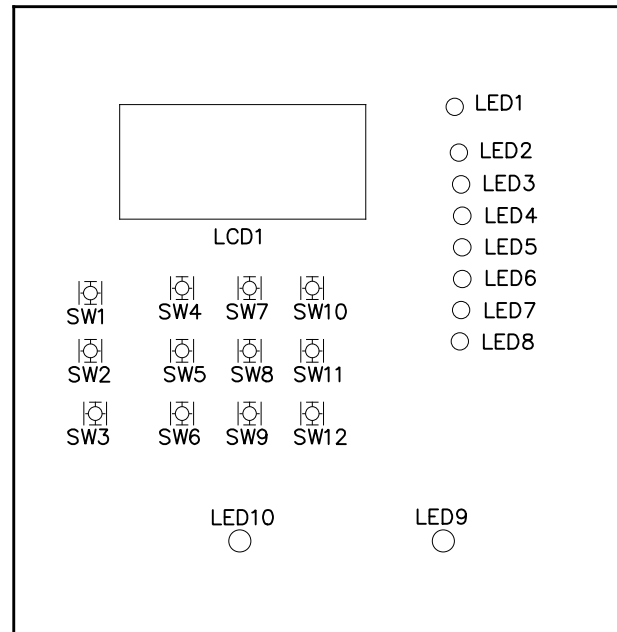
TITLE: ATEVO BATTERY CHARGER  
INTERNAL COMPONENT LAYOUT: STYLE-5070  
40-50ADC 1Ø WITHOUT OPTIONS

**B** SCALE DWG No  
NTS JE5310-10

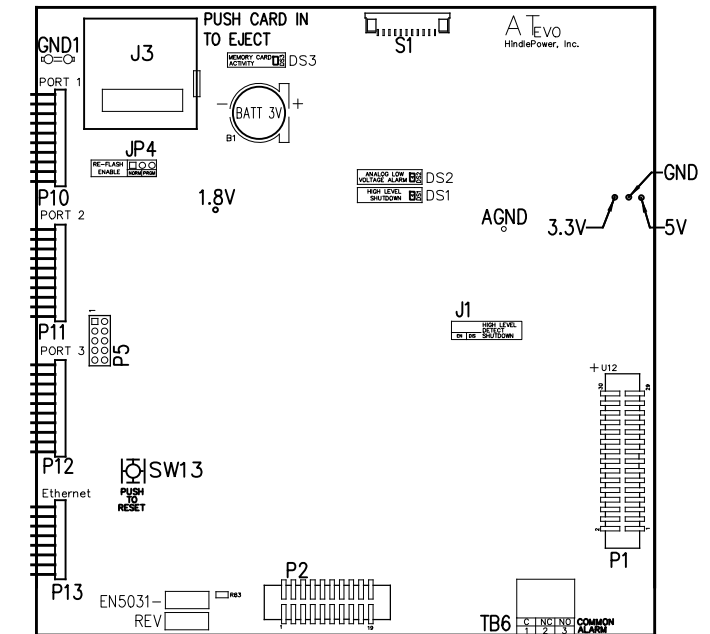
REV SHEET  
B 1 OF 1



**CONTROL PANEL**  
(PART No. FK5047-00)



**MAIN CONTROL PC BOARD (A1)**  
FRONT VIEW - FACING CHARGER DOOR WHEN INSTALLED



**MAIN CONTROL PC BOARD (A1)**  
BACK VIEW - FACING CHARGER COMPONENTS WHEN INSTALLED

NOTE: ALL ALARM CONTACTS ARE ENERGIZED WHEN IN THE NON-ALARM STATE (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS 0.5A @ 125VAC/VDC RESISTIVE.

**MAIN CONTROL PC BOARD (A1)**

**INDICATOR LIGHTS (LEDs):**

- LED1 - GREEN - AC ON
- LED2 - RED - HIGH DC VOLTAGE ALARM
- LED3 - RED - LOW DC VOLTAGE ALARM
- LED4 - RED - DC OUTPUT FAILURE ALARM
- LED5 - RED - AC INPUT FAILURE ALARM
- LED6 - RED - POSITIVE (+) GROUND ALARM
- LED7 - RED - NEGATIVE (-) GROUND ALARM
- LED8 - RED - COMMON ALARM
- LED9 - RED - ACTION REQUIRED ALARM
- LED10 - GREEN - HEALTHY OPERATION
- DS1 - RED - HIGH LEVEL SHUTDOWN (HLD)
- DS2 - RED - ANALOG LOW VOLTAGE ALARM (LLD)
- DS3 - RED - MEMORY CARD ACTIVITY

**JUMPERS:**

- J1 - ANALOG HIGH VOLTAGE SHUTDOWN JUMPER
- J3 - SD CARD PORT
- JP4 - RE-FLASH (FIELD PROGRAMMING) JUMPER
- TERMINAL BLOCKS:
- TB6 - COMMON ALARM RELAY CONTACTS
- TEST POINTS:
- 1.8V - 1.8 VOLTS
- 3.3V - 3.3 VOLTS
- 5V - 5.0 VOLTS
- GND - GROUND
- AGND - ANALOG GROUND
- SDA - MAIN BOARD I2C DATA
- SCL - MAIN BOARD I2C CLOCK

**SWITCHES:**

- S1 - DISPLAY BUTTON
- S2 - CHARGE MODE BUTTON
- S3 - EQUALIZE METHOD BUTTON
- S4 - ESCAPE (ESC) BUTTON
- S5 - LEFT ARROW BUTTON
- S6 - MENU BUTTON
- S7 - UP ARROW BUTTON
- S8 - EDIT / ENTER BUTTON
- S9 - DOWN ARROW BUTTON
- S10 - ALARM BUTTON
- S11 - RIGHT ARROW BUTTON
- S12 - HINDLE HEALTH (HHS) BUTTON
- SW13 - SYSTEM RESET BUTTON (BACK OF BOARD)

**CONNECTORS:**

- P1 - POWER BOARD RIBBON
- P2 - 3 PHASE RECTIFIER RIBBON
- P3 - USB EXPANSION PORT
- P4 - SPI & I2C EXPANSION PORT #1
- P5 - SPI & I2C EXPANSION PORT #2
- P6 - DISPLAY SPI PORT
- P7 - DISPLAY JTAG PORTS
- P10 - SERIAL INTERFACE PORT #1
- P11 - SERIAL INTERFACE PORT #2
- P12 - SERIAL INTERFACE PORT #3
- P13 - ETHERNET INTERFACE PORT
- P17 - GENERAL EXPANSION PORT

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
(A1) TB6	SUMMARY ALARM TERMINAL BLOCK (A1) - SOLDERLESS COMP SCREW	#22-14 AWG

REV. B	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 7/21/2021	DRN BY KJB	DATE: 11/7/19
DESCRIPTION: STANDARD DRAWINGS.					CHK BY MCR	DATE: 11/7/19
ECN NO. N/A					APP BY MCR	DATE: 11/7/19

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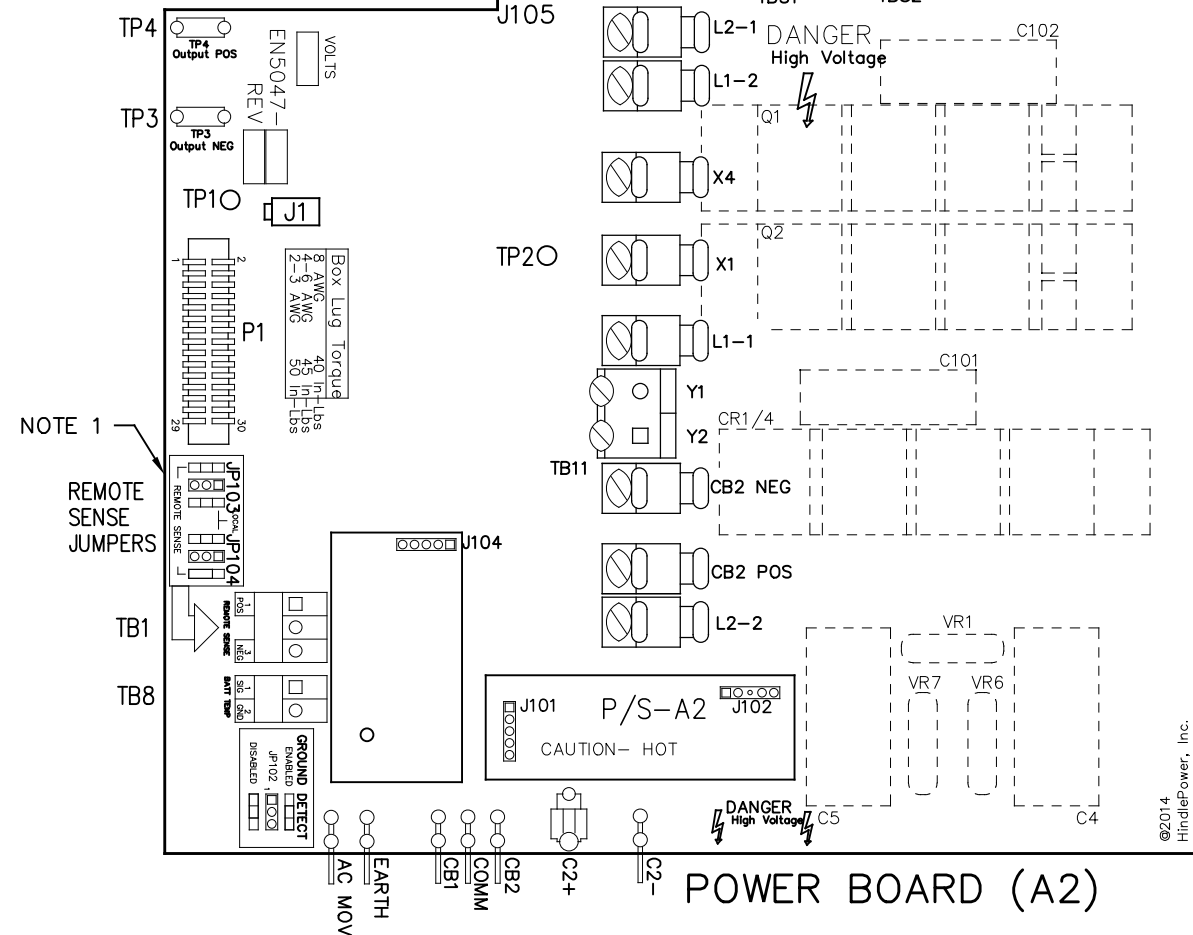
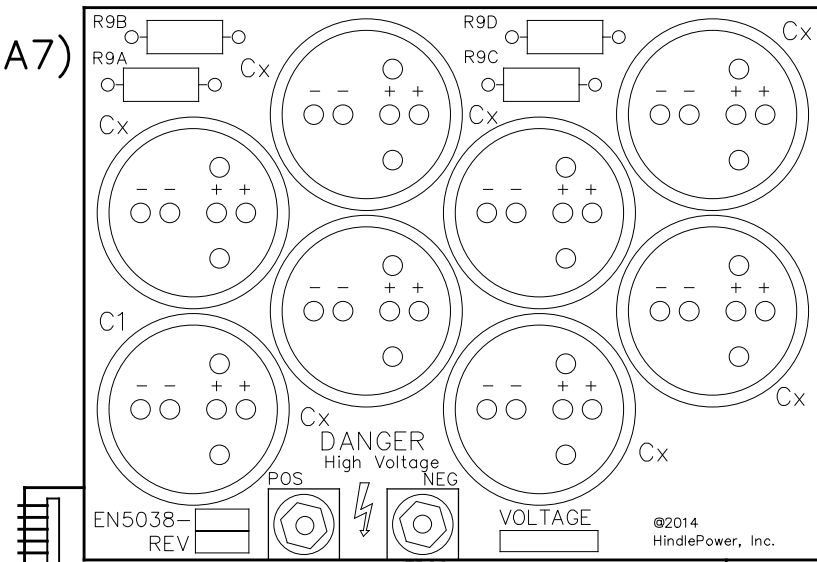
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TITLE  
**ATEVO BATTERY CHARGER  
CONTROL PANEL / PC BOARD DETAIL W/O OPTIONS  
40-50ADC 1Ø WITHOUT OPTIONS**

SCALE DWG No  
**B NTS JE5313-10**

REV B SHEET 1 OF 2

# FILTER BOARD (A7)




- USER TERMINALS ON POWER BOARD (A2):**  
 TB1 - REMOTE VOLTAGE SENSE  
 TB8 - BATTERY TEMPERATURE COMPENSATION  
 TB11 - 'Y' CONTROL WINDINGS
- JUMPERS ON POWER BOARD (A2):**  
 JP102 - GROUND DETECT CIRCUIT ENABLE / DISABLE  
 JP103 - REMOTE OR LOCAL SENSE SELECTOR (+)  
 JP104 - REMOTE OR LOCAL SENSE SELECTOR (-)
- CONNECTORS ON POWER BOARD (A2):**  
 J1 - POWER OUT  
 J101 - DC POWER SUPPLY  
 J102 - DC POWER SUPPLY  
 J105 - AUXILIARY I/O BOARD  
 P1 - MAIN CONTROL BOARD RIBBON
- DISCRETE TERMINALS:**  
 AC MOV - CHASSIS EARTH GROUND  
 EARTH - CHASSIS EARTH GROUND (DOOR)  
 CB1 - AC BREAKER AUX SWITCH CONTACT  
 CB2 - DC BREAKER AUX SWITCH CONTACT  
 CB2 POS - DCBREAKER POSITIVE  
 CB2 NEG - DC BREAKER NEGATIVE  
 COMM - BREAKER AUX SWITCH COMMON  
 C2+ - ELIMINATOR FILTER CAPACITOR (+)  
 C2 - ELIMINATOR FILTER CAPACITOR (-)  
 X1 - TRANSFORMER SECONDARY WINDING  
 X4 - TRANSFORMER SECONDARY WINDING  
 L1-1 - FILTER INDUCTOR #1 (TERMINAL #1)  
 L1-2 - FILTER INDUCTOR #1 (TERMINAL #2)  
 L2-1 - FILTER INDUCTOR #2 (TERMINAL #1)  
 L2-2 - FILTER INDUCTOR #2 (TERMINAL #2)  
 TBS1 - FILTER CAPACITOR BOARD (+)  
 TBS2 - FILTER CAPACITOR BOARD (-)
- TEST POINTS ON POWER BOARD (A2):**  
 TP1 - PRE-FILTERED DC BUS (-)  
 TP2 - PRE-FILTERED DC BUS (+)  
 TP3 - DC BUS (-)  
 TP4 - DC BUS (+)

NOTE 1  
 REMOTE SENSE JUMPERS

NOTE:  
 1. REMOTE SENSE JUMPERS (JP103, JP104) MUST BE IN REMOTE SENSE POSITION IN STYLE-5070 ENCLOSURE.

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
(A2) TB1	POS/NEG REMOTE SENSE TERMS (A2) - SOLDERLESS COMP SCREW	#22-14 AWG
(A2) TB8	TEMPCO PROBE (A10) TERM BLK - SOLDERLESS COMP SCREW	#22-14 AWG

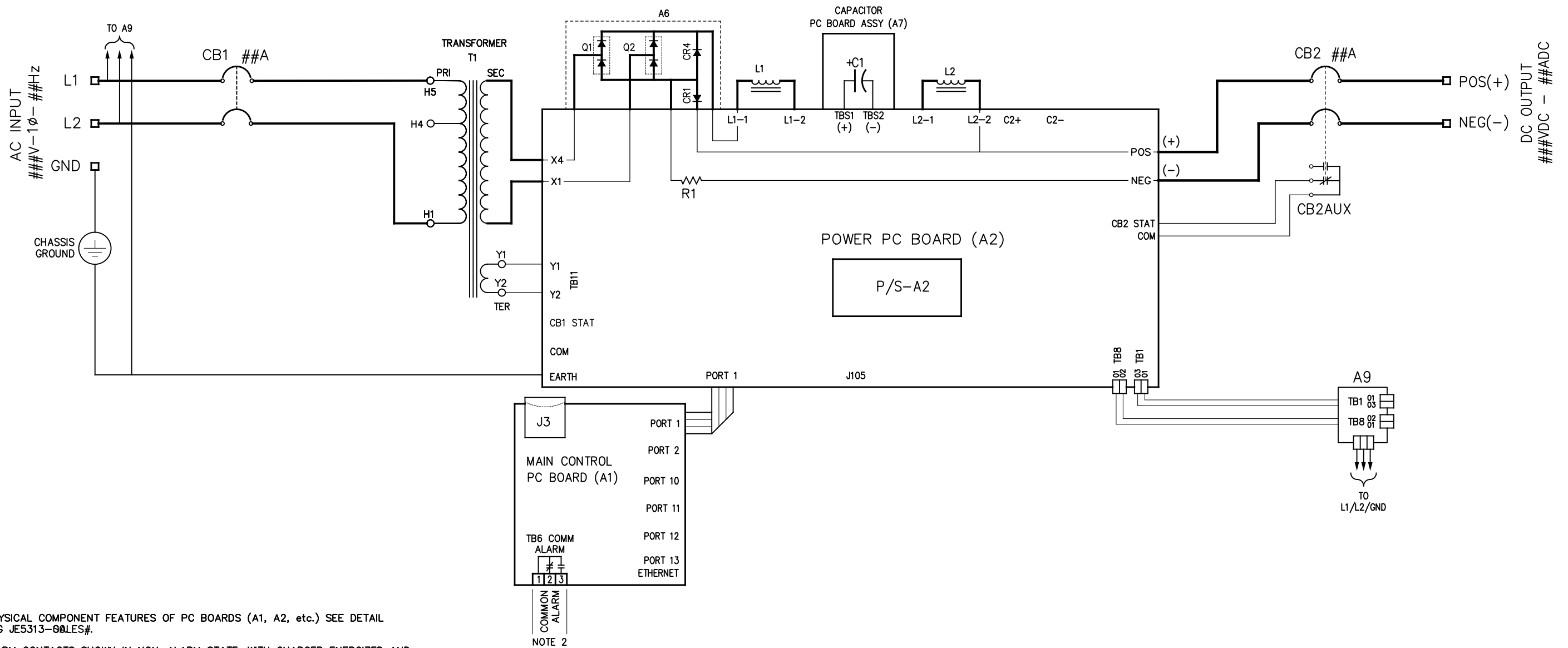


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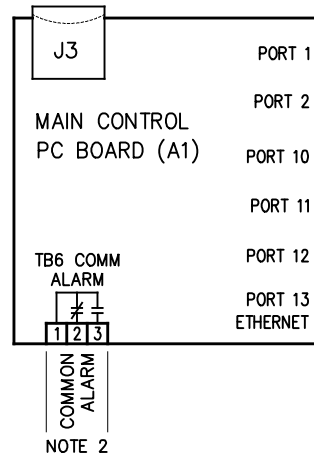
TITLE: ATEVO BATTERY CHARGER  
 CONTROL PANEL / PC BOARD DETAIL W/O OPTIONS  
 40-50ADC 1Ø WITHOUT OPTIONS

B	SCALE	DWG No	REV	SHEET
	NTS	JE5313-10	B	2 OF 2



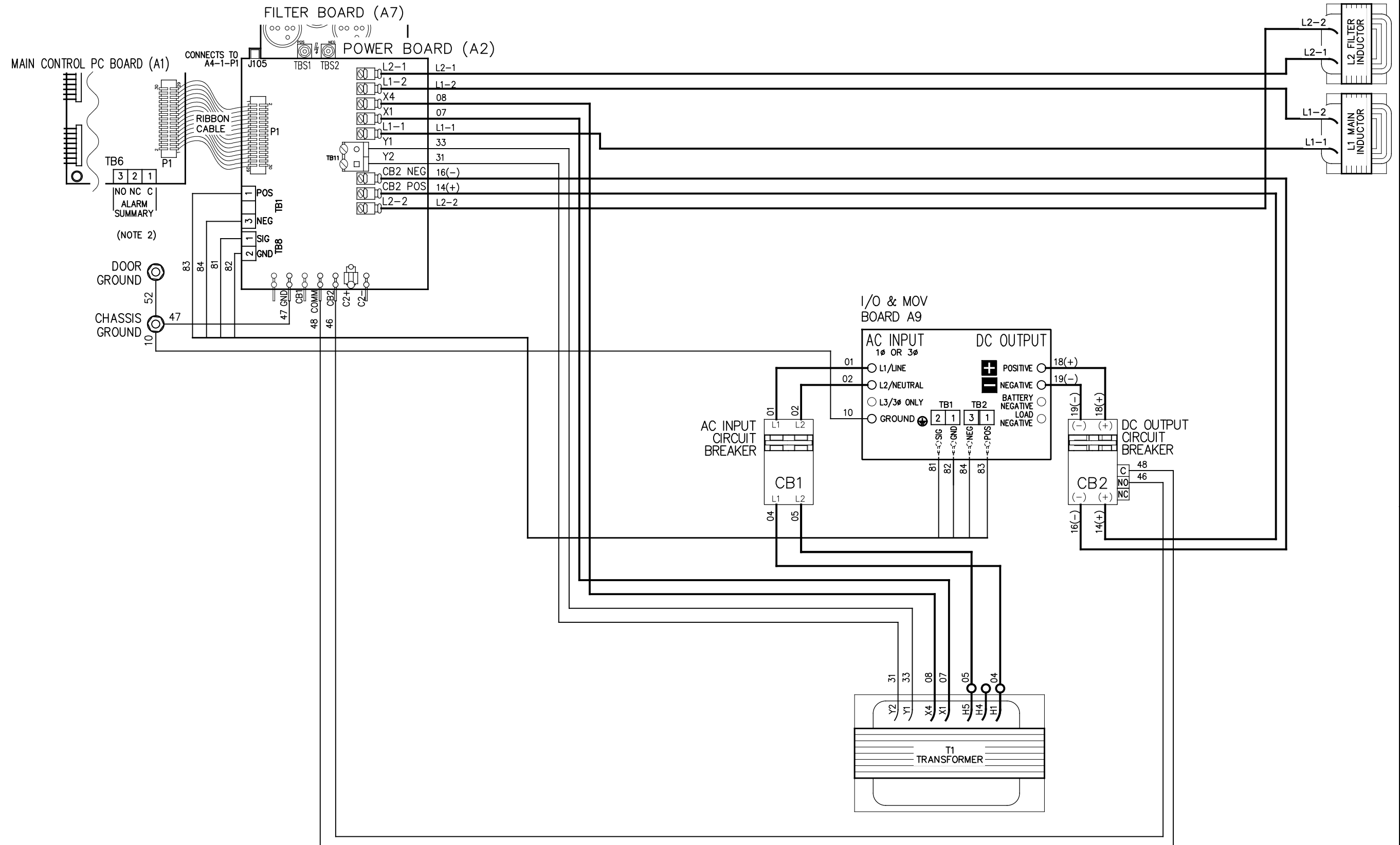
NOTES:

1. FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A2, etc.) SEE DETAIL DRAWING JE5313-90LES#.
2. ALL ALARM CONTACTS SHOWN IN NON-ALARM STATE, WITH CHARGER ENERGIZED AND ALARM RELAYS ENERGIZED (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS: 0.5A @ 125VAC/VDC RESISTIVE.



REV. B	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 9/21/2020	DRN BY KJB	DATE 12/10/19
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE 12/10/19
					APP BY MCR	DATE 12/10/19

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<b>TITLE</b> ATEVO BATTERY CHARGER 1Ø STYLE 5070 SCHEMATIC: WITHOUT OPTIONS 40-50ADC 1Ø WITHOUT OPTIONS			
<b>B</b>	SCALE NTS	DWG No JE5311-10	REV B SHEET 1 OF 1



NOTES:

1. WHEN NATURAL LEADS OF MAGNETICS ARE NOT USED, CHARGER COMPONENTS ARE CONNECTED WITH BLACK FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRES ARE GREEN WITH YELLOW STRIPE.

REV. C	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 4/7/2021	DRN BY KJB	DATE: 1/21/2020	<p><b>HINDLEPOWER</b></p> <p>1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com</p>
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE: 1/21/2020	
					APP BY MCR	DATE: 1/21/2020	
TITLE ATEVO BATTERY CHARGER CONN DIAGRAM: 1Ø STYLE 5070 W/O OPTIONS 40-50ADC 1Ø WITHOUT OPTIONS							SCALE DWG No <b>B</b> NTS JE5312-10
							REV C SHEET 1 OF 1