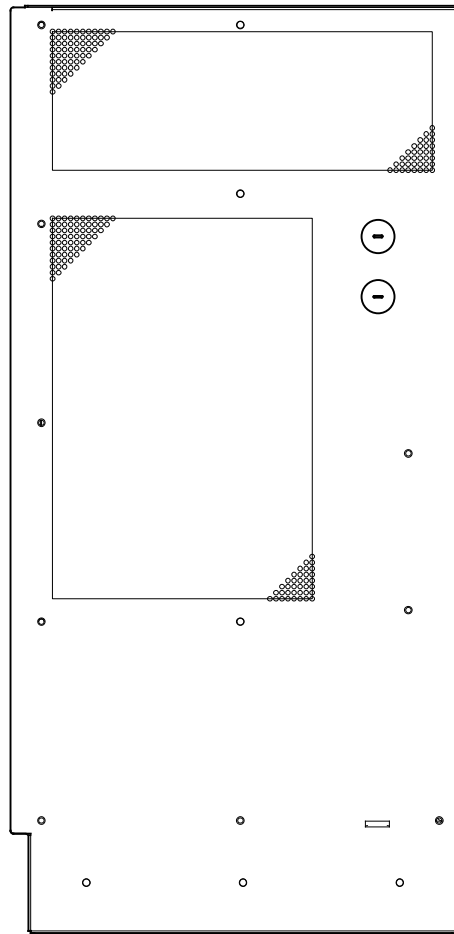
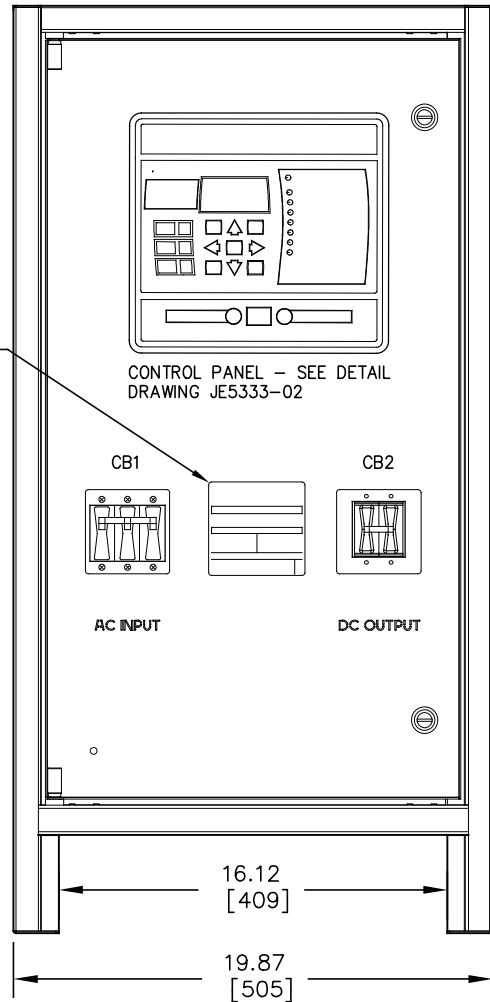


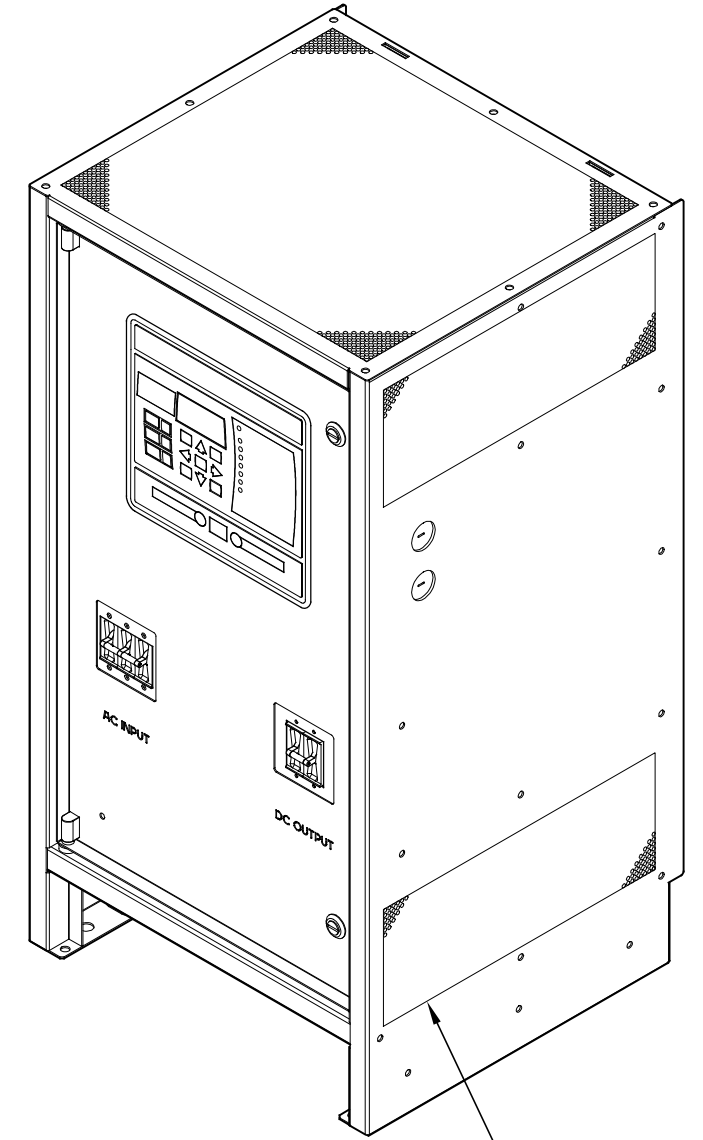
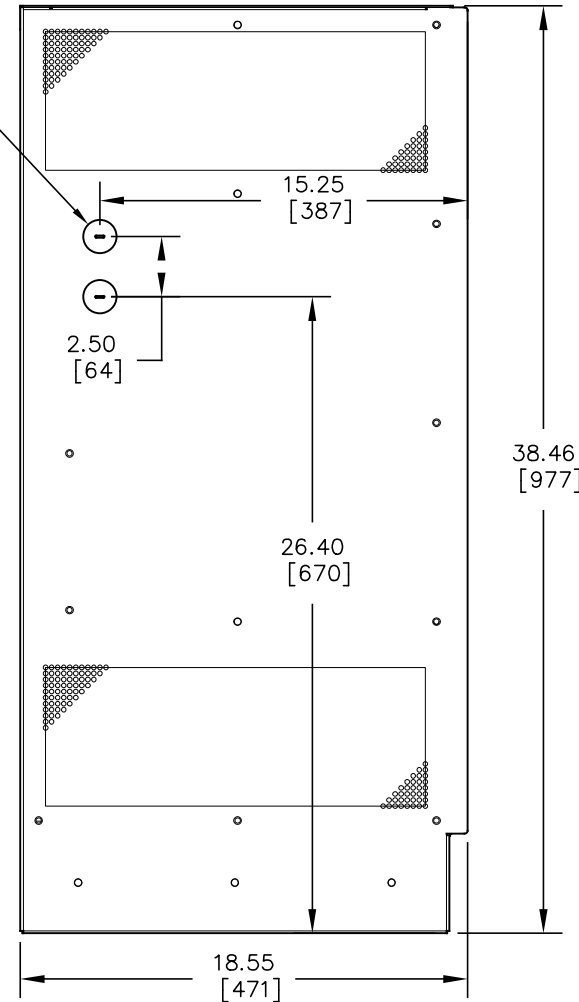
LEFT SIDE VIEW



FRONT VIEW

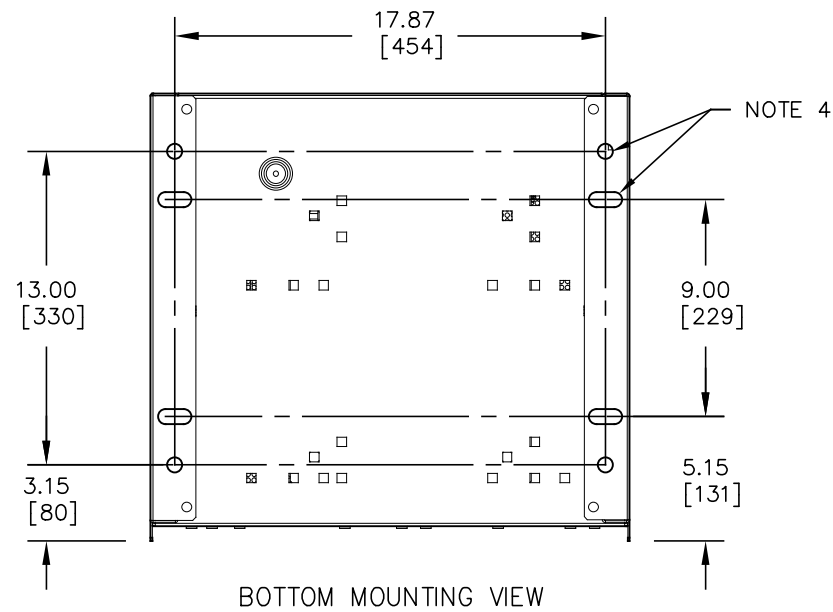


RIGHT SIDE VIEW



NOTES:

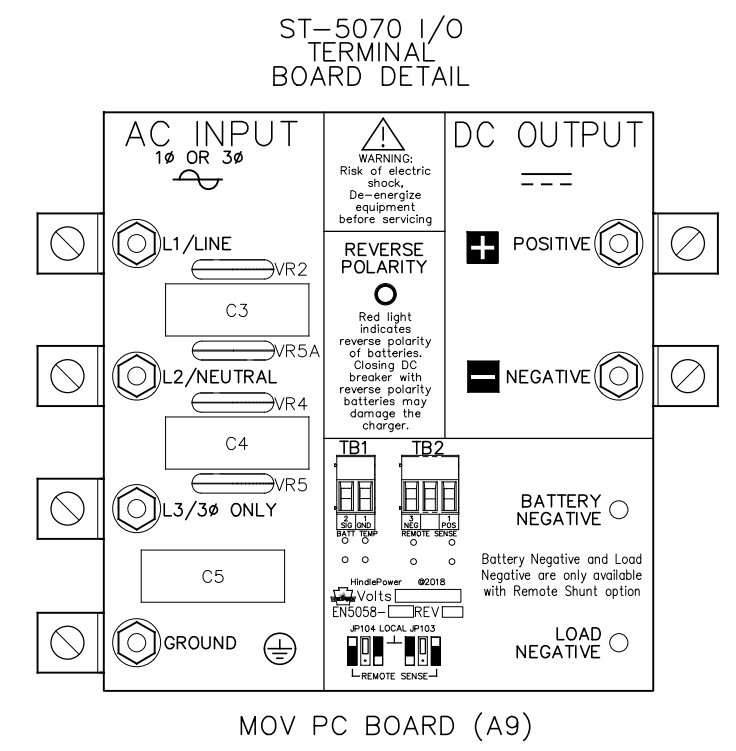
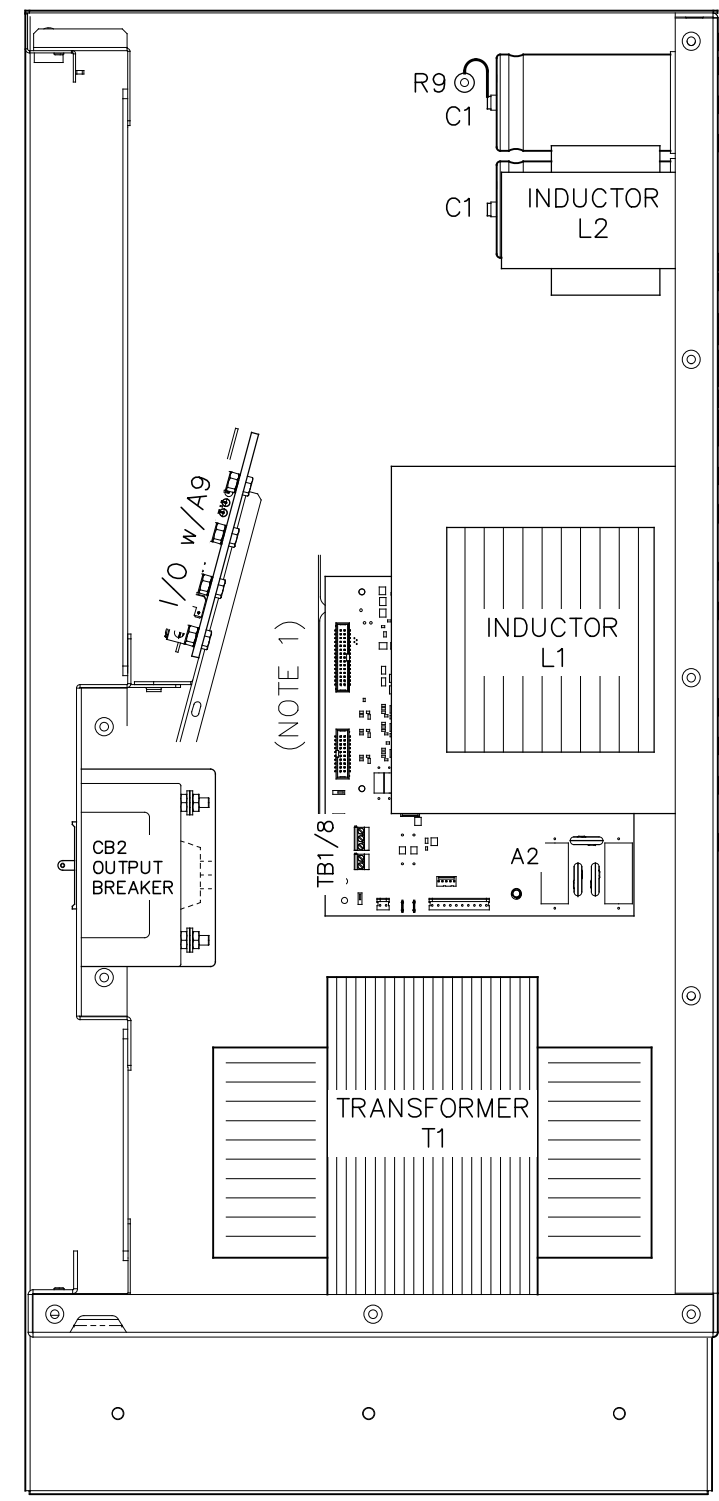
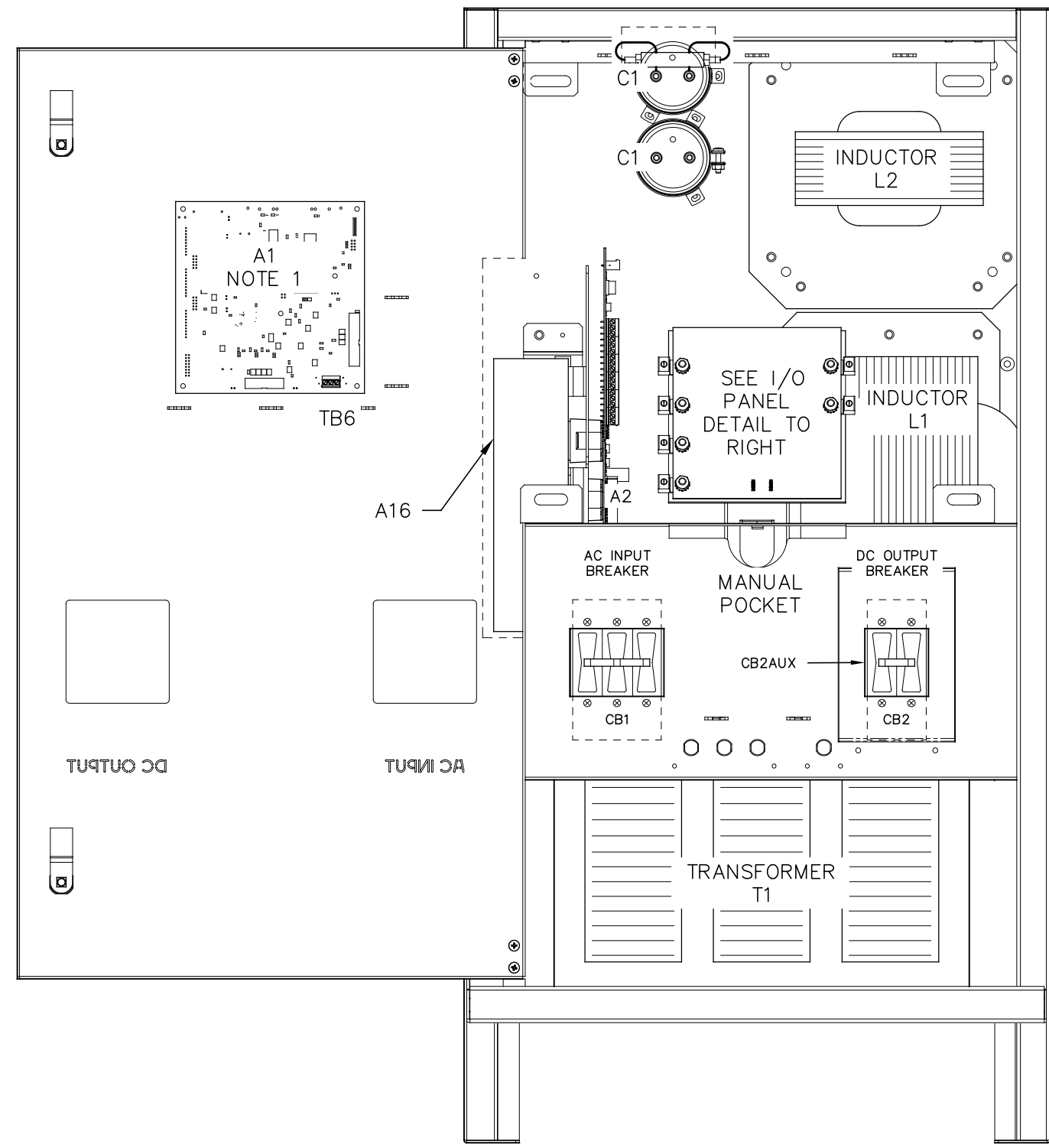
- ENCLOSURE IS A NEMA TYPE 1 / IP20 TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT. MOUNTING BASE IS 12 GA. SIDE PANELS ARE 14 GA. TOP PANEL AND DOOR ARE 16 GA.
- ALLOW 6in / 152mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- DATA NAMEPLATE (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



DUAL DIMENSIONS in [mm]

REV. 1	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 2/24/22	DRN BY KJB	DATE 11/05/19	TITLE ATEVO BATTERY CHARGER OUTLINE: NEMA-1 STYLE-5070 ENCL 3Ø W/O OPTIONS 75-100A	REV 1	SHEET 1 OF 1
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE 11/05/19			
ECN No. N/A					APP BY MCR	DATE 11/05/19			
							SCALE B	DWG No JE5331-02	

SYM	STANDARD COMPONENT DESCRIPTION
A1	MAIN CONTROL PC BOARD
A2	POWER BOARD
A16	RECTIFIER H/S ASSEMBLY
C1	FILTER CAPACITOR
A9	MOV PC BOARD
CB1	AC INPUT CIRCUIT BREAKER (CD3)
CB2	DC OUTPUT CIRCUIT BREAKER (CD2)
AUXCB2	DC CKT BKR (CB2) AUXILIARY CONTACTS
L1	MAIN INDUCTOR
L2	FILTER INDUCTOR
T1	POWER TRANSFORMER

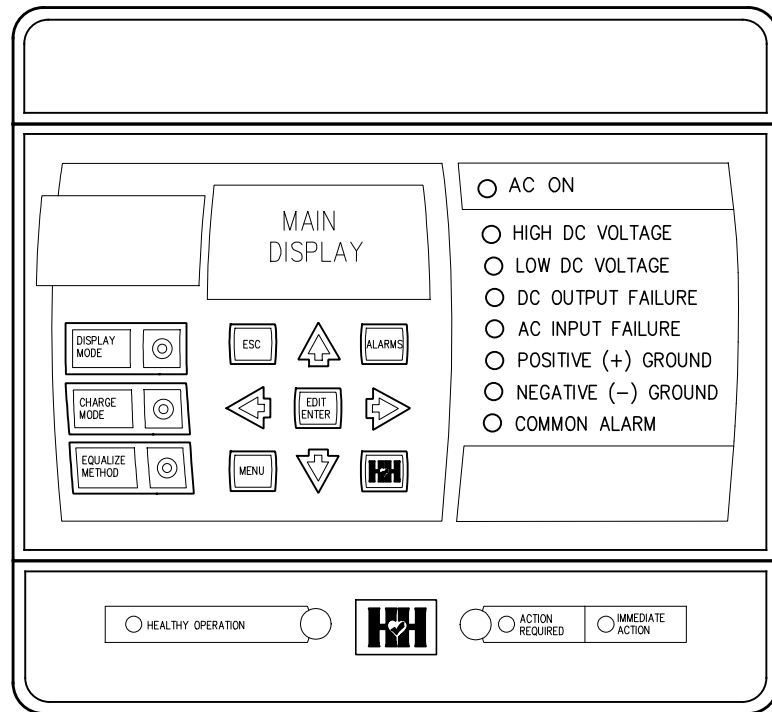


I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
I/O (+/-)	POS/NEG OUTPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
GND LUG	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
I/O (L1/L2)	AC INPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
(A1) TB6	SUMMARY ALARM TERMINAL BLOCK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

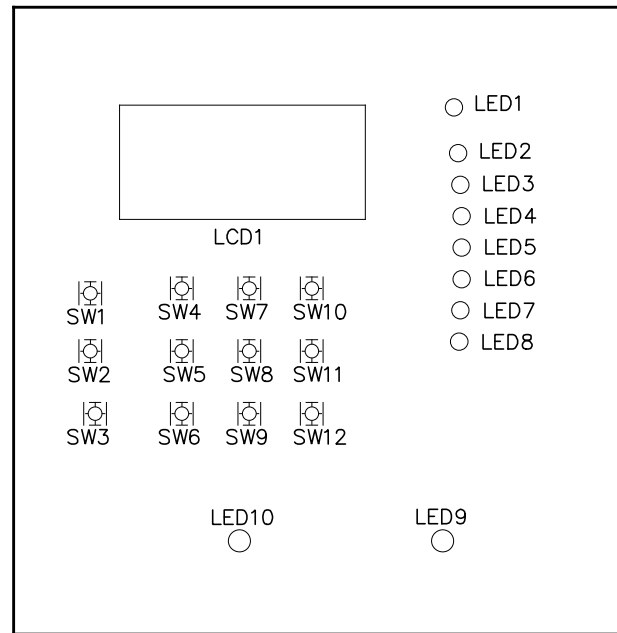
NOTES:  
 1. FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, etc.) SEE DRAWING JE5333-02.

REV.	DRN BY	CHK BY	APP BY	DATE	DRN BY	DATE:
1	KJB	MCR	MCR	11/05/19	KJB	11/05/19
DESCRIPTION				CHK BY	DATE:	
STANDARD DRAWINGS.				MCR	11/05/19	
ECN No. N/A				APP BY	DATE:	
				MCR	11/05/19	

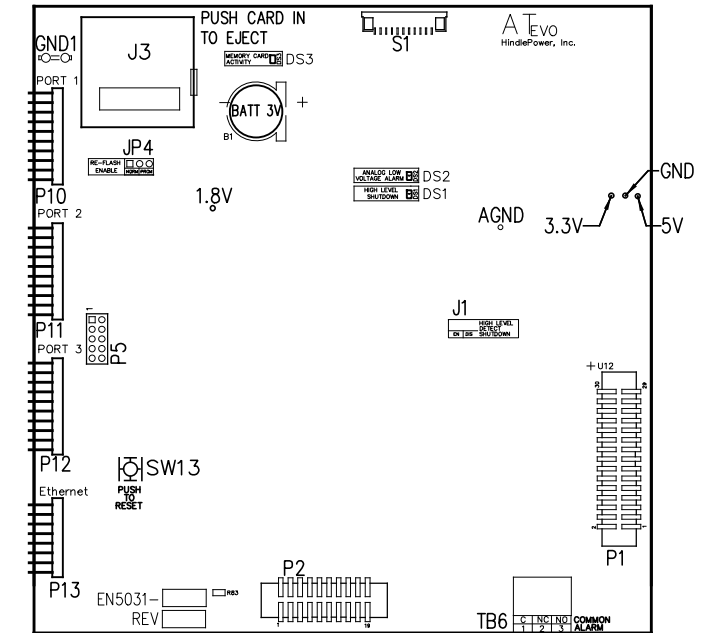
TITLE			
ATEVO BATTERY CHARGER			
INTERNAL COMPONENT LAYOUT: STYLE-5070			
3Ø W/O OPTIONS 75-100A			
<b>B</b>	SCALE	DWG No	REV SHEET
NTS		JE5332-02	1 1 OF 1



**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.

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

**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:**

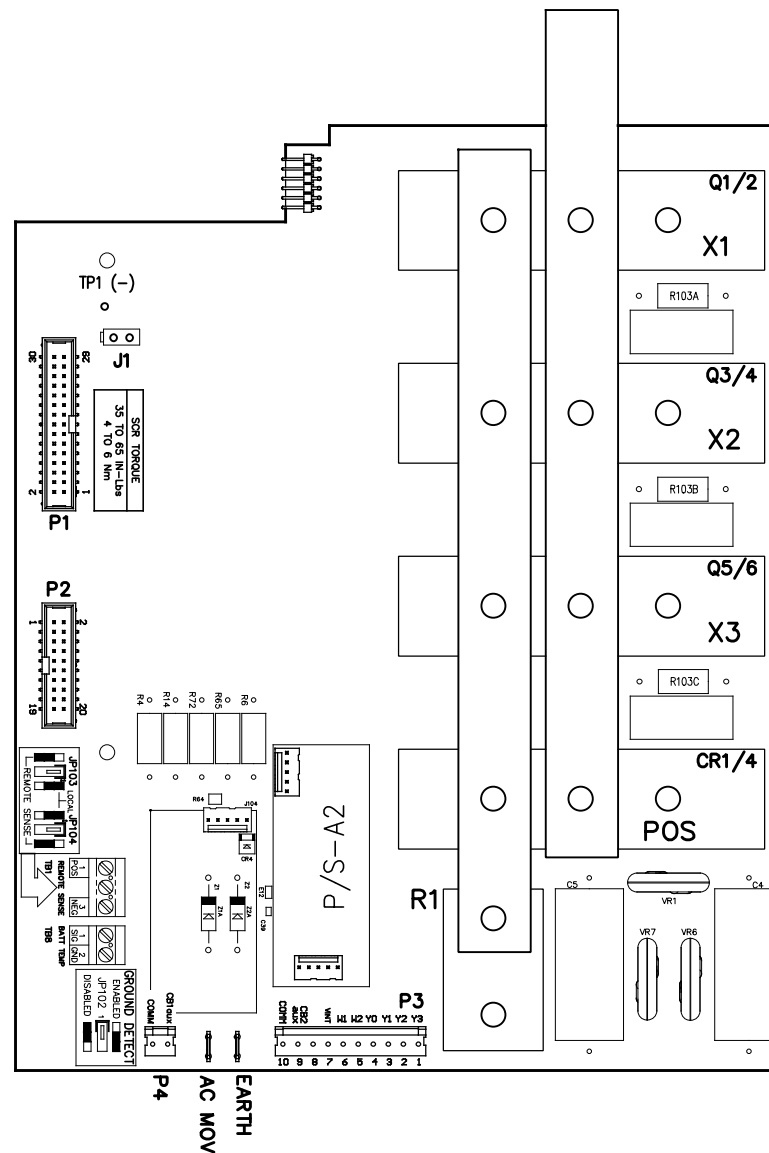
- S1 – DISPLAY BUTTON
- S2 – CHARGE MODE BUTTON
- S3 – EQUALIZE METHOD BUTTON
- S4 – ESCAPE (ESC) BUTTON
- S5 – LEFT ARROW BUTTON
- S6 – MENU BUTTON
- S7 – UP ARROW BUTTON
- S8 – EDIT / ENTER BUTTON
- S9 – DOWN ARROW BUTTON
- S10 – ALARM BUTTON
- S11 – RIGHT ARROW BUTTON
- S12 – HINDLE HEALTH (HHS) BUTTON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

REV.	DRN BY	CHK BY	APP BY	DATE	DRN BY	DATE:
1	KJB	MCR	MCR	11/05/19	KJB	11/05/19
DESCRIPTION				CHK BY	DATE:	
STANDARD DRAWINGS.				MCR	11/05/19	
ECN No. N/A				APP BY	DATE:	
				MCR	11/05/19	

TITLE		SCALE	DWG No	REV	SHEET
ATEVO BATTERY CHARGER CONTROL PANEL / PC BOARD DETAIL 3Ø W/O OPTIONS 75-100A		B	JE5333-02	1	1 OF 2



USER TERMINALS ON POWER BOARD (A2):

- TB1 - REMOTE VOLTAGE SENSE
- TB8 - BATTERY TEMPERATURE COMPENSATION

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
- J104 - BATTERY SHUNT
- J105 - AUXILIARY I/O BOARD
- P1 - MAIN CONTROL BOARD RIBBON 1
- P2 - MAIN CONTROL BOARD RIBBON 2
- P3 - Wx, Yx, CB2-AUX, VINT
- P4 - CB1-AUX

DISCRETE TERMINALS:

- AC MOV - CHASSIS EARTH GROUND
- EARTH - CHASSIS EARTH GROUND (DOOR)
- POS - POSITIVE CONNECTION POINT
- NEG - NEGATIVE CONNECTION POINT
- COMM - BREAKER AUX SWITCH COMMON
- X1 - TRANSFORMER SECONDARY WINDING
- X2 - TRANSFORMER SECONDARY WINDING
- X3 - TRANSFORMER SECONDARY WINDING
- L1-1 - FILTER INDUCTOR #1 (TERMINAL #1)
- L1-2 - FILTER INDUCTOR #1 (TERMINAL #2)

TEST POINTS ON POWER BOARD (A2):

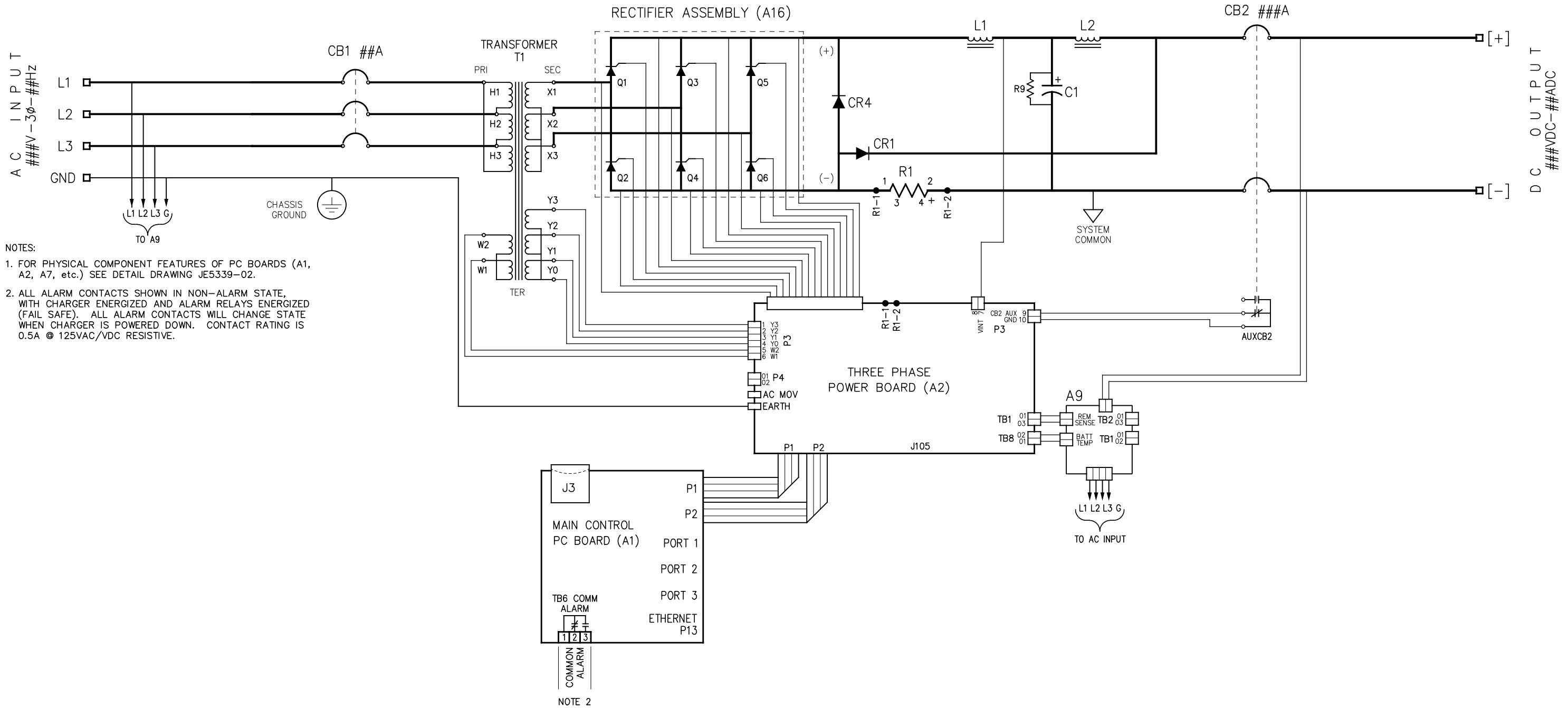
- TP1 - PRE-FILTERED DC BUS (-)
- TP2 - PRE-FILTERED DC BUS (+)
- TP3 - DC BUS (-)
- TP4 - DC BUS (+)

NOTE:

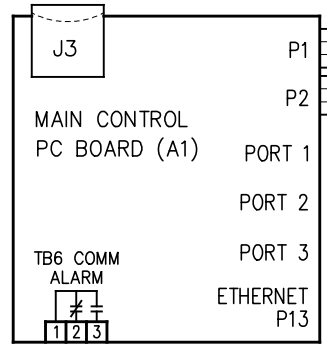
1. REMOTE SENSE JUMPERS (JP103, JP104) MUST BE IN REMOTE SENSE POSITION IN STYLE-5070 ENCLOSURE.

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

REV. 1	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 11/05/19	DRN BY KJB	DATE: 11/05/19	TITLE ATEVO BATTERY CHARGER CONTROL PANEL / PC BOARD DETAIL 3Ø W/O OPTIONS 75-100A
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE: 11/05/19	
ECN No. N/A					APP BY MCR	DATE: 11/05/19	
							<b>B</b> SCALE NTS DWG No. JE5333-02
							REV 1 SHEET 2 OF 2

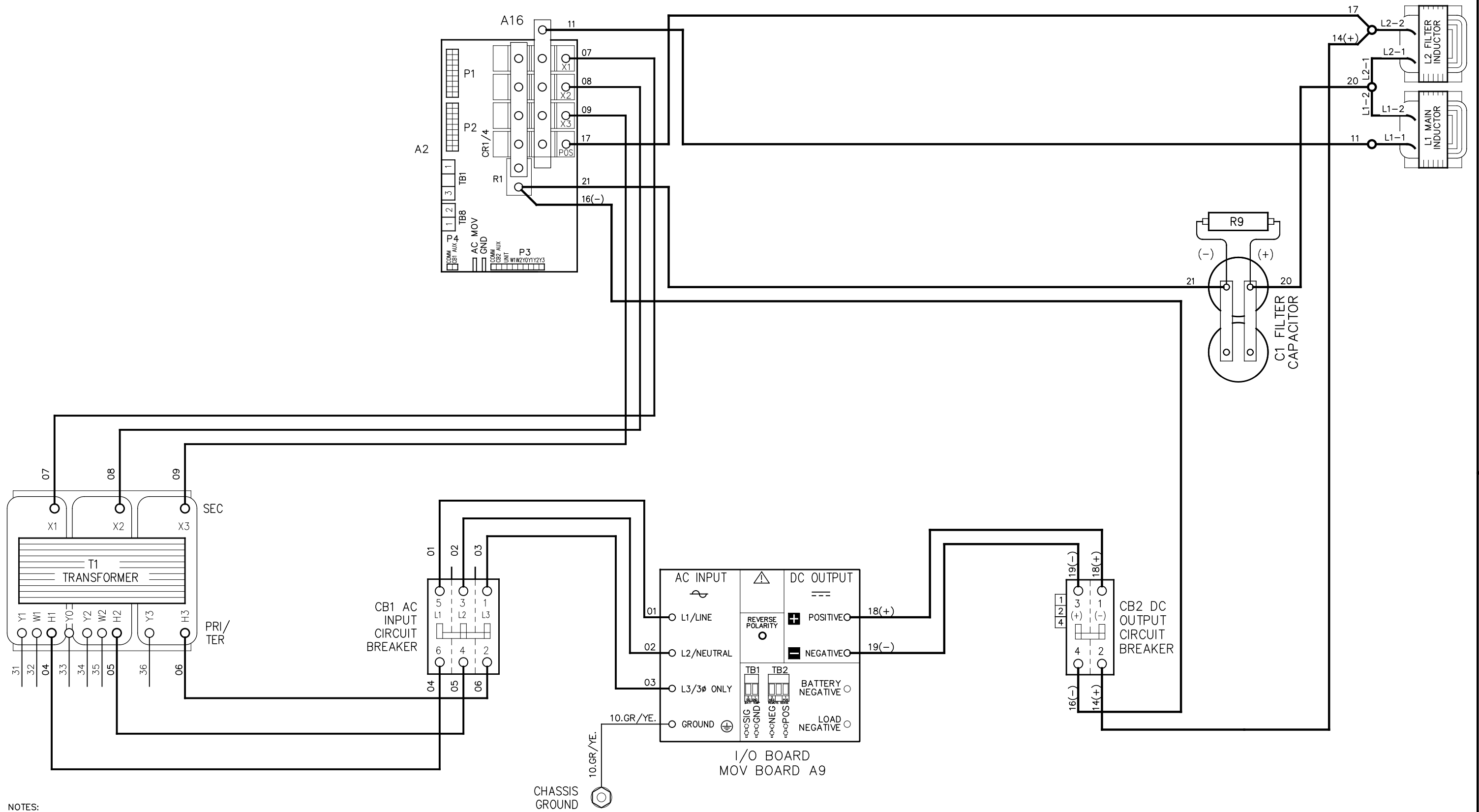


- NOTES:
1. FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A2, A7, etc.) SEE DETAIL DRAWING JE5339-02.
  2. ALL ALARM CONTACTS SHOWN IN NON-ALARM STATE, WITH CHARGER ENERGIZED AND ALARM RELAYS ENERGIZED (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS 0.5A @ 125VAC/VDC RESISTIVE.



NOTE 2

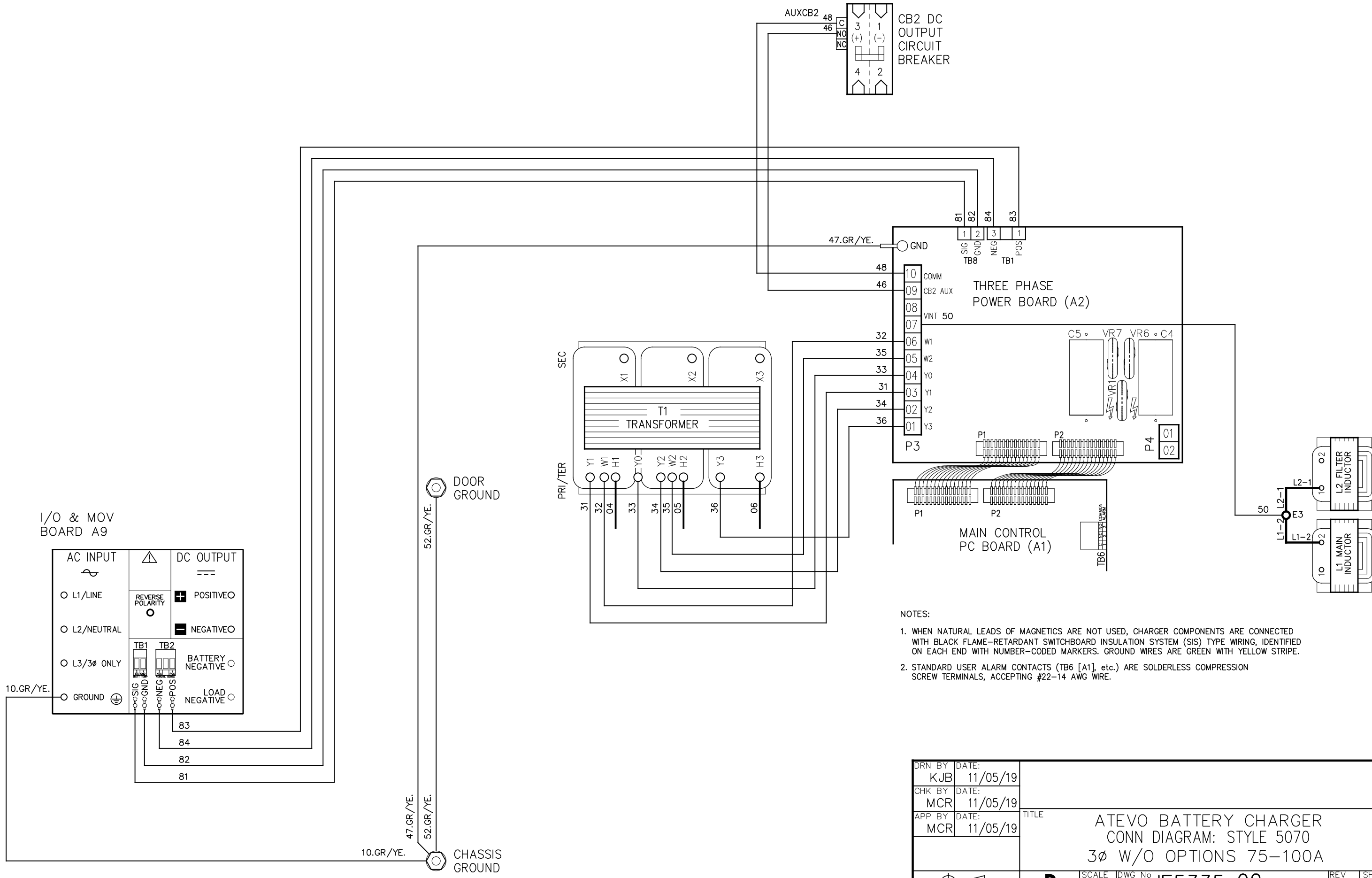
REV. 2	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 1/27/2023	DRN BY KJB	DATE: 11/05/19	TITLE <b>ATEVO BATTERY CHARGER</b> <b>SCHEMATIC: STYLE 5070</b> <b>3Ø W/O OPTIONS 75-100A</b>
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE: 11/05/19	
ECN No. N/A					APP BY MCR	DATE: 11/05/19	
						<b>B</b> SCALE NTS	DWG No. <b>JE5334-02</b>
							REV 2 SHEET 1 OF 1



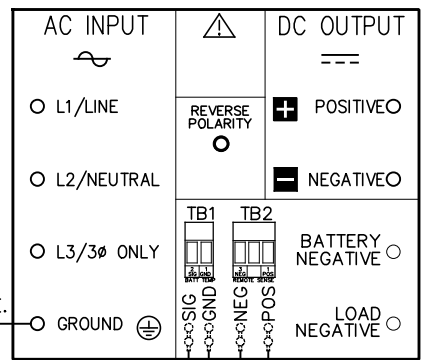
NOTES:

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.
2. THIS DRAWING (SHEET 1) SHOWS THE MAINFRAME POWER WIRING AND USER CONNECTION CONTACTS TO CONTROL PC BOARDS (A1 & A2). SEE SHEET 2 FOR ALL CONTROL (SIGNAL) WIRING.

REV. 1	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 9/11/2023	DRN BY KJB	DATE: 11/05/19	TITLE ATEVO BATTERY CHARGER CONN DIAGRAM: STYLE 5070 3φ W/O OPTIONS 75-100A		
DESCRIPTION REVISED T1 SINGAL WIRING ORDER.					CHK BY MCR	DATE: 11/05/19			
ECN No. N/A					APP BY MCR	DATE: 11/05/19			
						SCALE NTS	DWG No. JE5335-02	REV 1	SHEET 1 OF 2



I/O & MOV BOARD A9

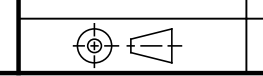


NOTES:

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.
2. STANDARD USER ALARM CONTACTS (TB6 [A1], etc.) ARE SOLDERLESS COMPRESSION SCREW TERMINALS, ACCEPTING #22-14 AWG WIRE.

DRN BY	DATE:
KJB	11/05/19
CHK BY	DATE:
MCR	11/05/19
APP BY	DATE:
MCR	11/05/19

TITLE  
**ATEVO BATTERY CHARGER**  
**CONN DIAGRAM: STYLE 5070**  
**3φ W/O OPTIONS 75-100A**



**B**

SCALE DWG No  
 NTS **JE5335-02**

REV SHEET  
 1 2 OF 2