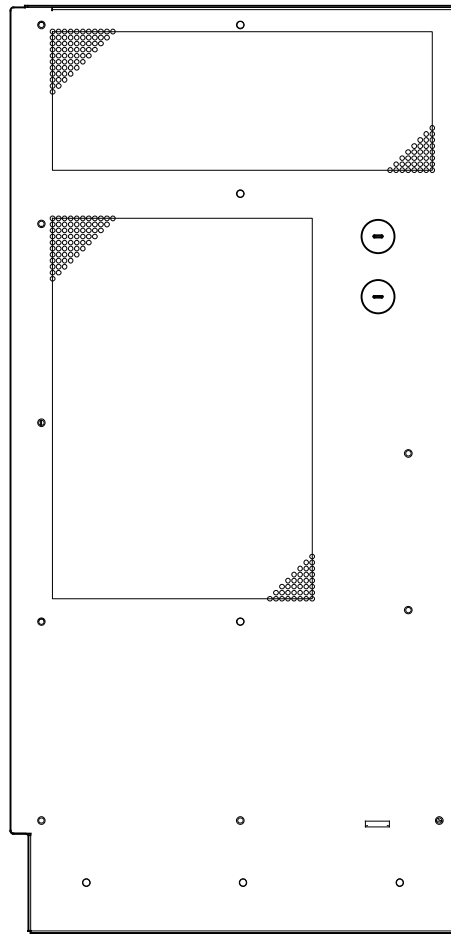
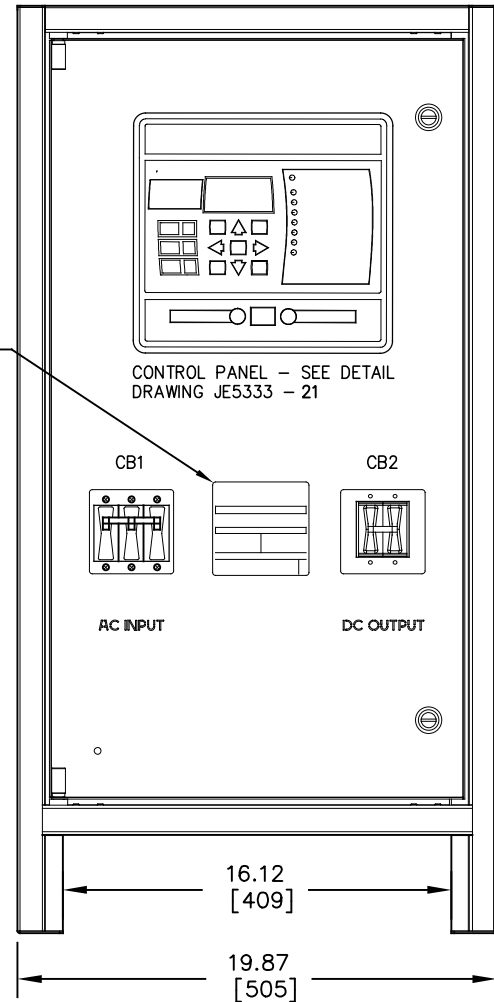


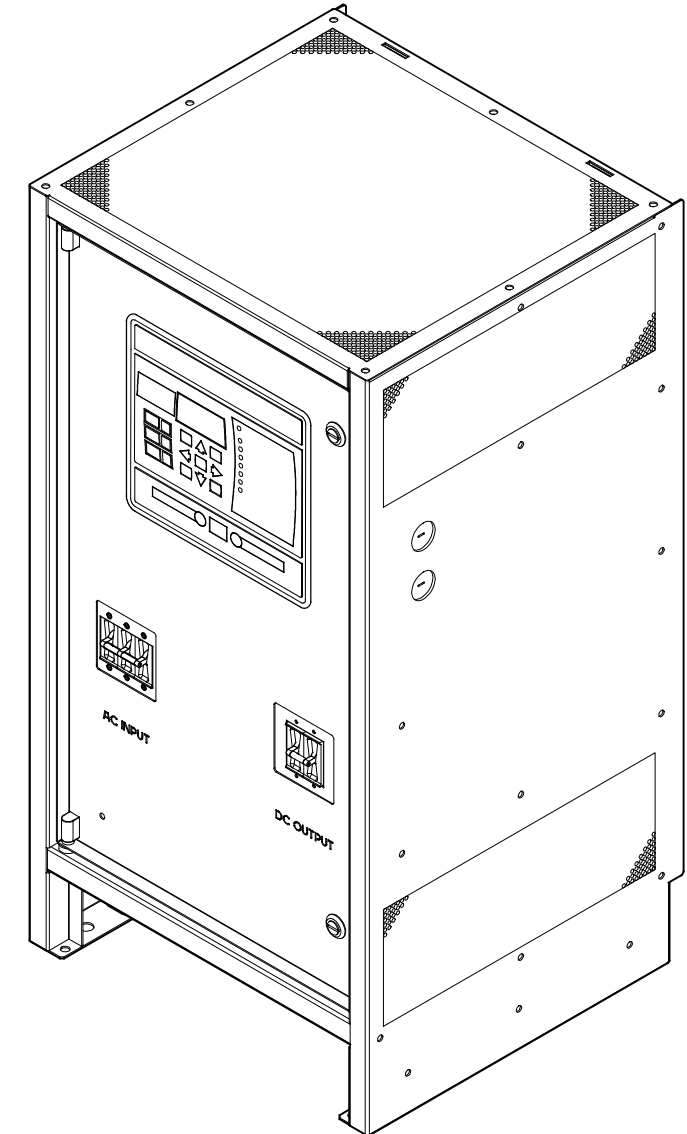
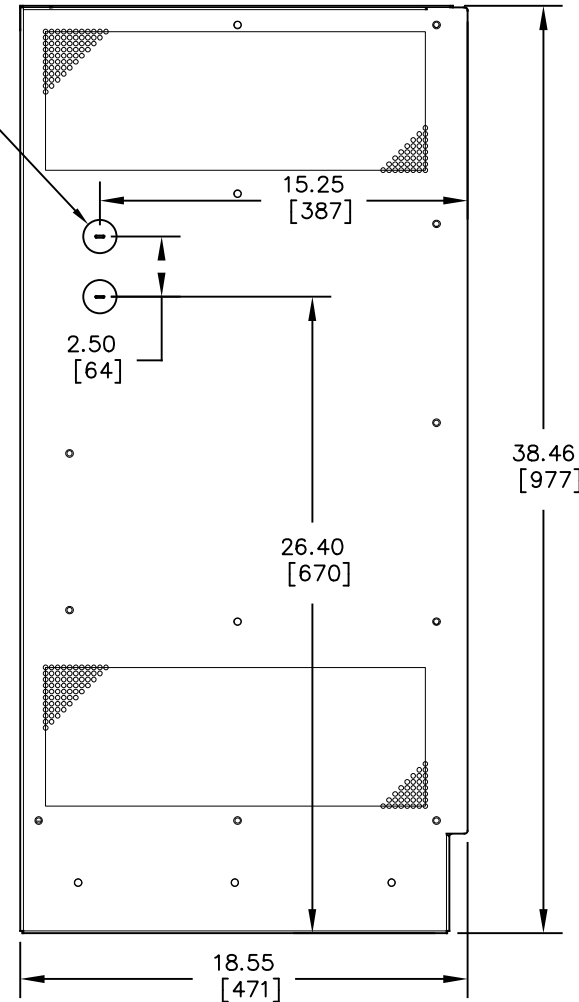
LEFT SIDE VIEW



FRONT VIEW

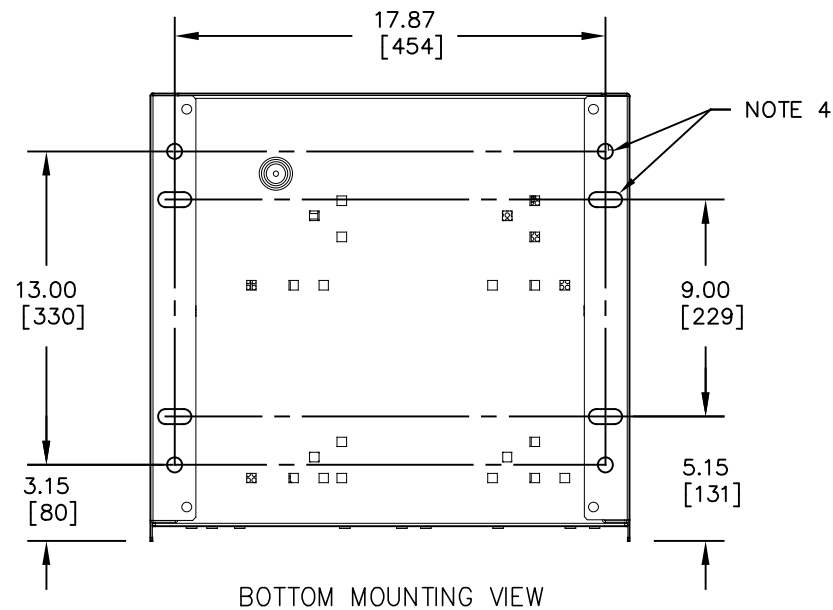


RIGHT SIDE VIEW



NOTES:

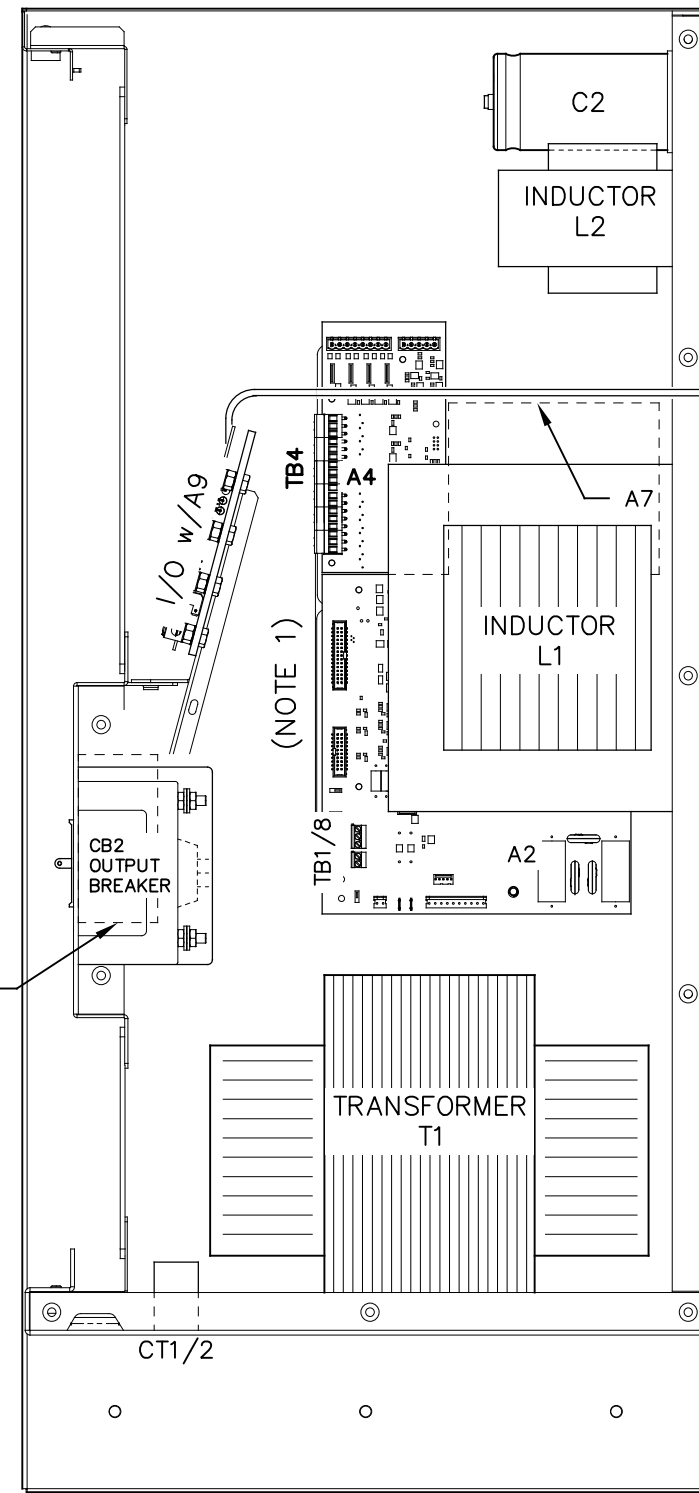
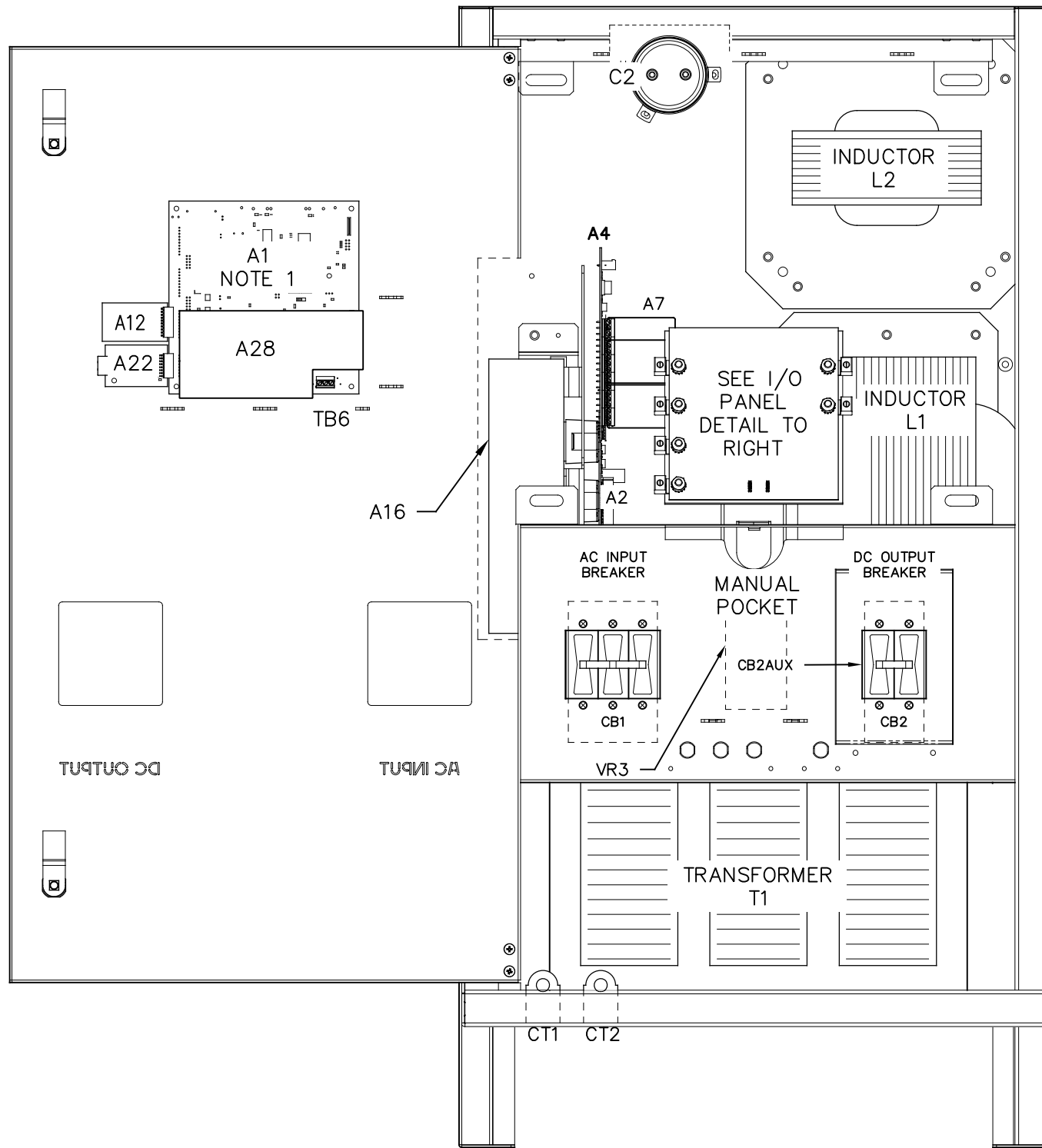
- ENCLOSURE IS A NEMA TYPE 1 / IP20 TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT. MOUNTING BASE IS 12 GA. SIDE PANELS ARE 14 GA. TOP PANEL AND DOOR ARE 16 GA.
- ALLOW 6in / 152mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- DATA NAMEPLATE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



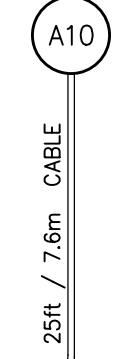
DUAL DIMENSIONS in [mm]

REV. 1	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 1/27/2023	DRN BY KJB	DATE 10/29/2021
DESCRIPTION					CHK BY MCR	DATE 10/29/2021
CORRECTED TITLE OF EACH PAGE SHOWING 16-50A.					APP BY MCR	DATE 10/29/2021
ECN No. N/A						

TITLE				REV	SHEET
ATEVO BATTERY CHARGER OUTLINE: NEMA-1 STYLE-5070 ENCL 3Ø WITH COMMON OPTIONS 16-50A				1	1 OF 1
B	SCALE NTS	DWG No JE5331-21			



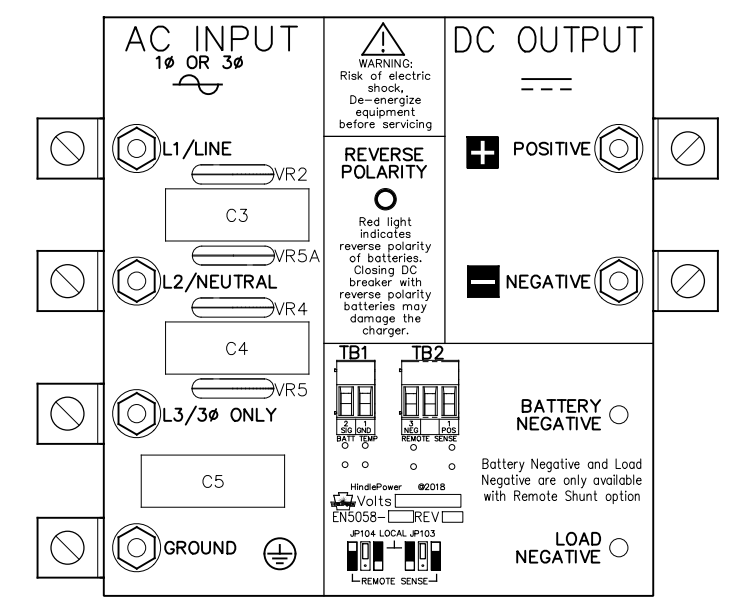
TO BE PLACED NEAR BATTERY CELL



- SYM STANDARD COMPONENT DESCRIPTION
- A1 MAIN CONTROL PC BOARD
  - A2 POWER BOARD
  - A16 RECTIFIER H/S ASSEMBLY
  - A7 FILTER BOARD (C1x/R9)
  - A9 MOV PC BOARD
  - CB1 AC INPUT CIRCUIT BREAKER (CD3)
  - CB2 DC OUTPUT CIRCUIT BREAKER (CD2)
  - CB2AUX DC CKT BKR (CB2) AUXILIARY CONTACTS
  - L1 MAIN INDUCTOR
  - L2 FILTER INDUCTOR
  - T1 POWER TRANSFORMER
- SYM FEATURED OPTION COMP DESCRIPTION
- A4 AUXILIARY I/O PC BOARD
  - A10 TEMPERATURE COMPENSATION PROBE
  - A12 SERIAL COMMUNICATION ADAPTER
  - A22 ETHERNET ADAPTER
  - A28 METER MODULE PC BOARD
  - CTx CURRENT TRANSFORMERS
  - VR3 AC INPUT LIGHTNING ARRESTOR

C2 BATTERY ELIMINATOR FILTER CAP

ST-5070 I/O TERMINAL BOARD DETAIL



MOV PC BOARD (A9)

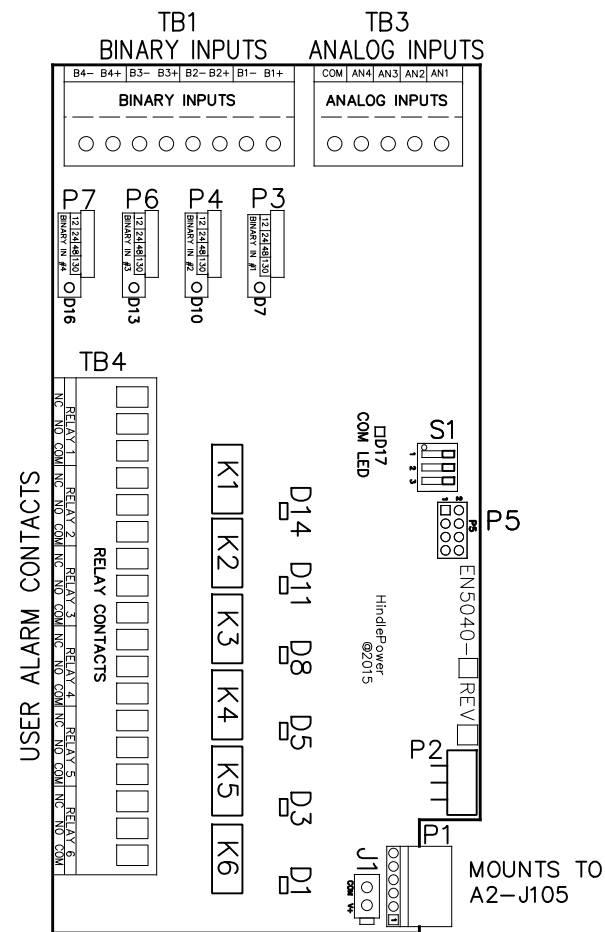
I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
I/O (+/-)	POS/NEG OUTPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
GND LUG	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
I/O (L1/L2)	AC INPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
(A1) TB6	SUMMARY ALARM TERMINAL BLOCK (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
(A4) TB4	AUX I/O RELAY CONTACTS (A4) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG

NOTES:  
1. FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, etc.) SEE DRAWING JE5333 - 21.

REV. DRN BY	CHK BY	APP BY	DATE	DRN BY	DATE:
1	KJB	MCR	1/27/2023	KJB	10/29/2021
DESCRIPTION			CHK BY	DATE:	
CORRECTED TITLE OF EACH PAGE SHOWING 16-50A.			MCR	10/29/2021	
ECN No. N/A			APP BY	DATE:	
			MCR	10/29/2021	

TITLE			
<b>ATEVO BATTERY CHARGER INTERNAL COMPONENT LAYOUT: STYLE-5070 3Ø WITH COMMON OPTIONS 16-50A</b>			
<b>B</b>	SCALE	DWG No	REV
NTS		JE5332-21	1
			SHEET
			1 OF 1





**AUXILIARY I/O BOARD (A4)**

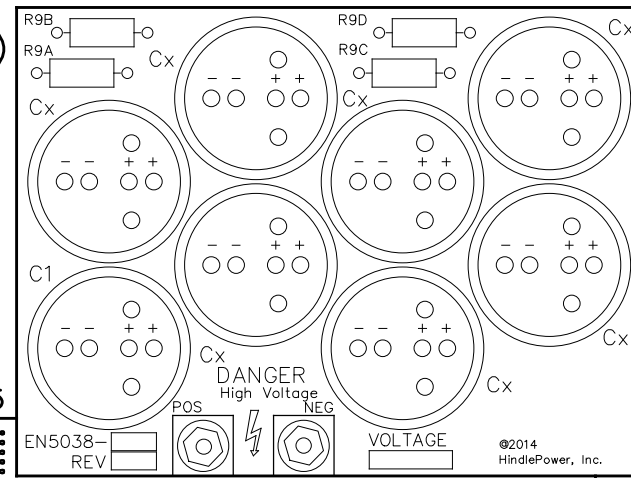
**JUMPERS & CONFIGURATION SWITCHES FOR AUX I/O BOARD (A4)**  
 J1 - AUXILIARY POWER INPUT  
 P1 - POWER BOARD (PRIMARY POWER & COMM SOURCE)  
 P5 - PROGRAMMING HEADER

**USER TERMINALS ON RELAY BOARD (A4):**  
 D1 - RED - RELAY #6 IN ALARM STATE  
 D3 - RED - RELAY #5 IN ALARM STATE  
 D5 - RED - RELAY #4 IN ALARM STATE  
 D7 - YELLOW - BINARY INPUT #1 IS ABOVE THRESHOLD  
 D8 - RED - RELAY #3 IN ALARM STATE  
 D10 - YELLOW - BINARY INPUT #2 IS ABOVE THRESHOLD  
 D11 - RED - RELAY #2 IN ALARM STATE  
 D13 - YELLOW - BINARY INPUT #3 IS ABOVE THRESHOLD  
 D14 - RED - RELAY #1 IN ALARM STATE  
 D16 - YELLOW - BINARY INPUT #4 IS ABOVE THRESHOLD  
 D17 - GREEN - COMMUNICATION TO MAIN BOARD (FLASHING)

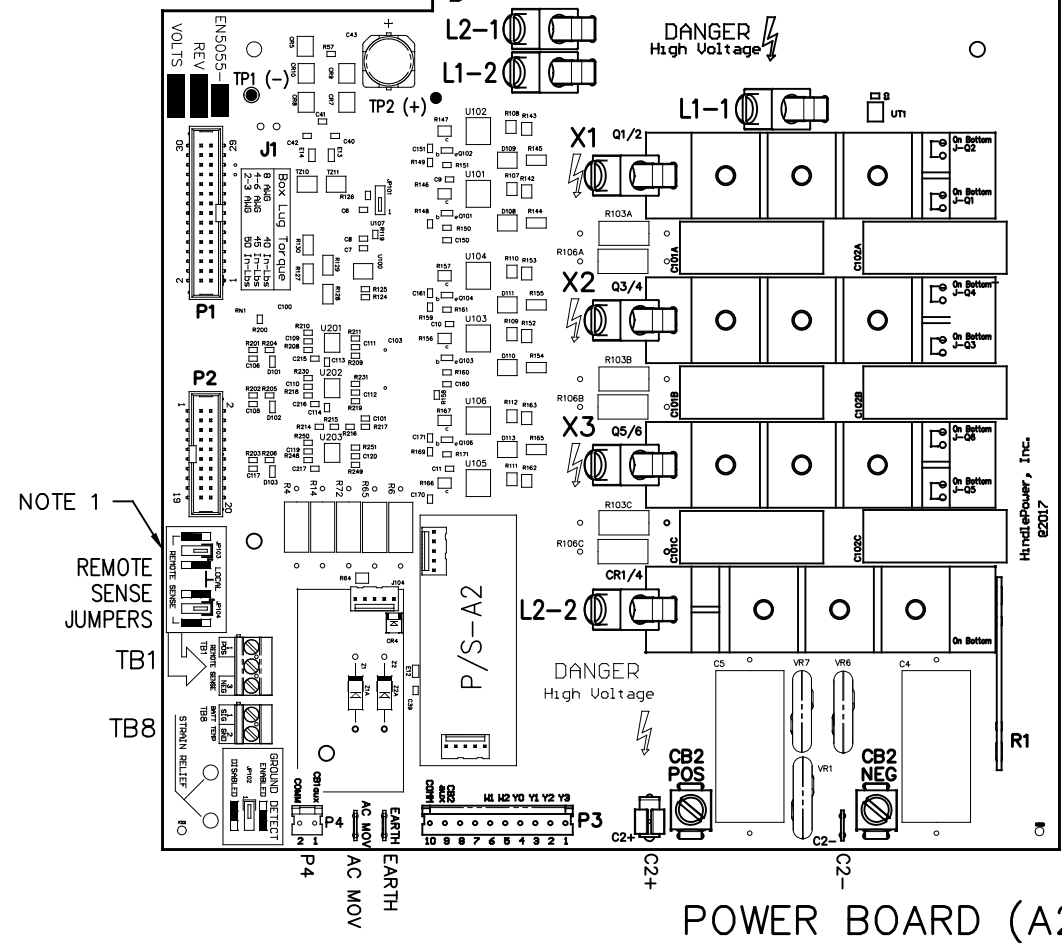
**USER TERMINALS ON RELAY BOARD (A4):**  
 TB1 - BINARY INPUTS  
 TB2 - SERIAL INTERFACE  
 TB3 - ANALOG INPUTS  
 TB4 - AUXILIARY I/O RELAY CONTACTS

**JUMPERS & CONFIGURATION SWITCHES**  
 P3, 4, 6, 7 - BINARY INPUT VOLTAGE CONFIGURATION JUMPERS  
 S1 - BOARD ADDRESS DIPSWITCH

**FILTER BOARD (A7)**



MOUNTS TO A4-P1



NOTE 1  
 REMOTE SENSE JUMPERS  
 TB1  
 TB8

TB1 - REMOTE VOLTAGE SENSE  
 TB8 - BATTERY TEMPERATURE COMPENSATION

JP102 - GROUND DETECT CIRCUIT ENABLE / DISABLE  
 JP103 - REMOTE OR LOCAL SENSE SELECTOR (+)  
 JP104 - REMOTE OR LOCAL SENSE SELECTOR (-)

J1 - POWER OUT  
 J101 - DC POWER SUPPLY  
 J102 - DC POWER SUPPLY  
 J105 - AUXILIARY I/O BOARD  
 P1 - MAIN CONTROL BOARD RIBBON  
 P2 - MAIN CONTROL BOARD RIBBON (3 PHASE)  
 P3 - TRANSFORMER AND CB2 AUX RIBBON  
 P4 - CB2 AUX SWITCH CONTACTS

**DISCRETE TERMINALS:**

AC MOV - CHASSIS EARTH GROUND  
 EARTH - CHASSIS EARTH GROUND (DOOR)  
 CB2 POS - DCBREAHER POSITIVE  
 CB2 NEG - DC BREAKER NEGATIVE  
 C2+ - ELIMINATOR FILTER CAPACITOR (+)  
 C2 - ELIMINATOR FILTER CAPACITOR (-)  
 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 (-)

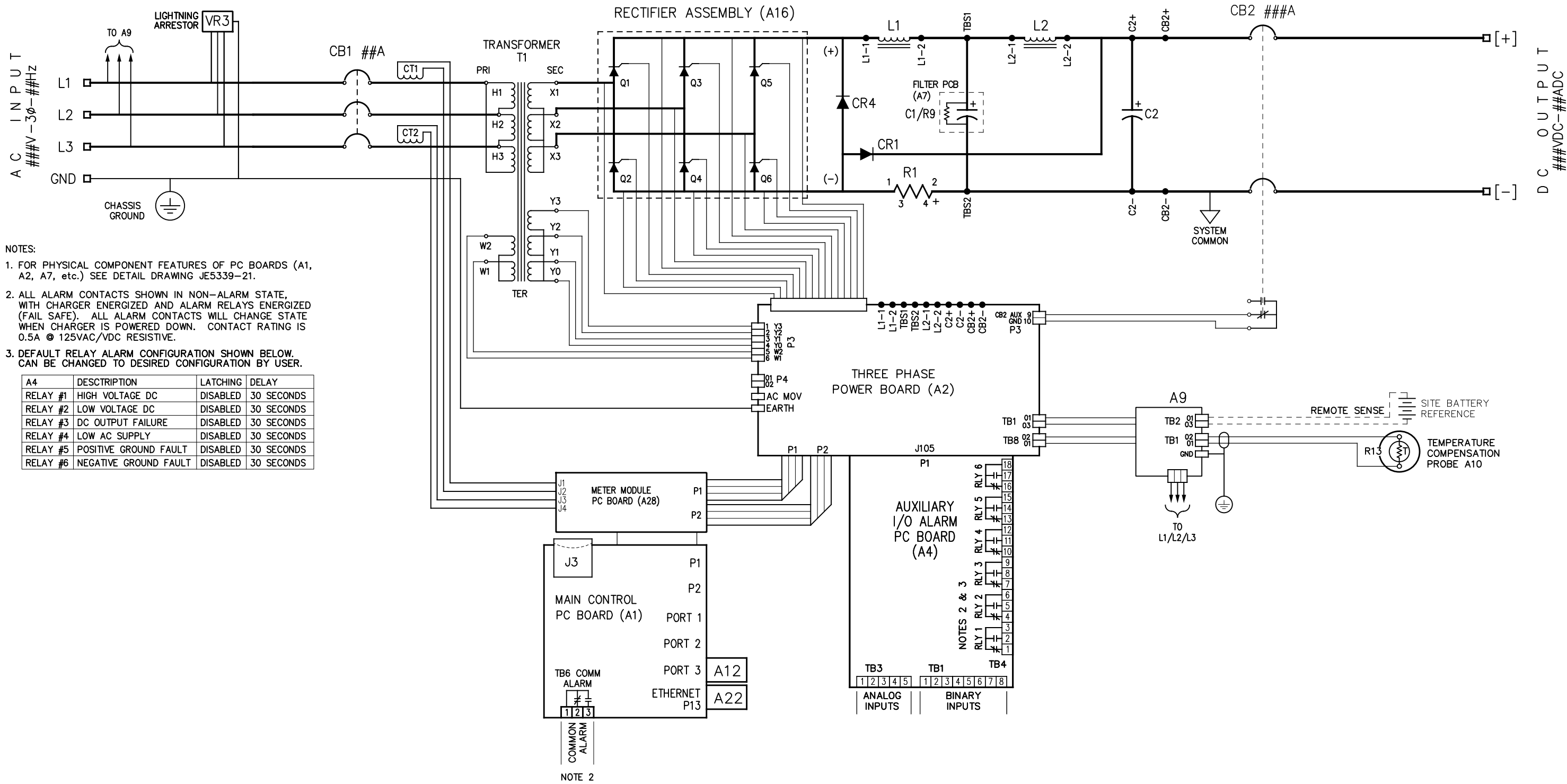
**TEST POINTS ON POWER BOARD (A2):**  
 TP1 - PRE-FILTERED DC BUS (-)  
 TP2 - PRE-FILTERED DC BUS (+)

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
(A4) TB1	AUX I/O BINARY INPUTS (A4) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG
(A4) TB2	AUX I/O RELAY CONTACTS (A4) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG
(A4) TB3	AUX I/O ANALOG INPUTS (A4) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG
(A4) TB4	AUX I/O RELAY CONTACTS (A4) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG

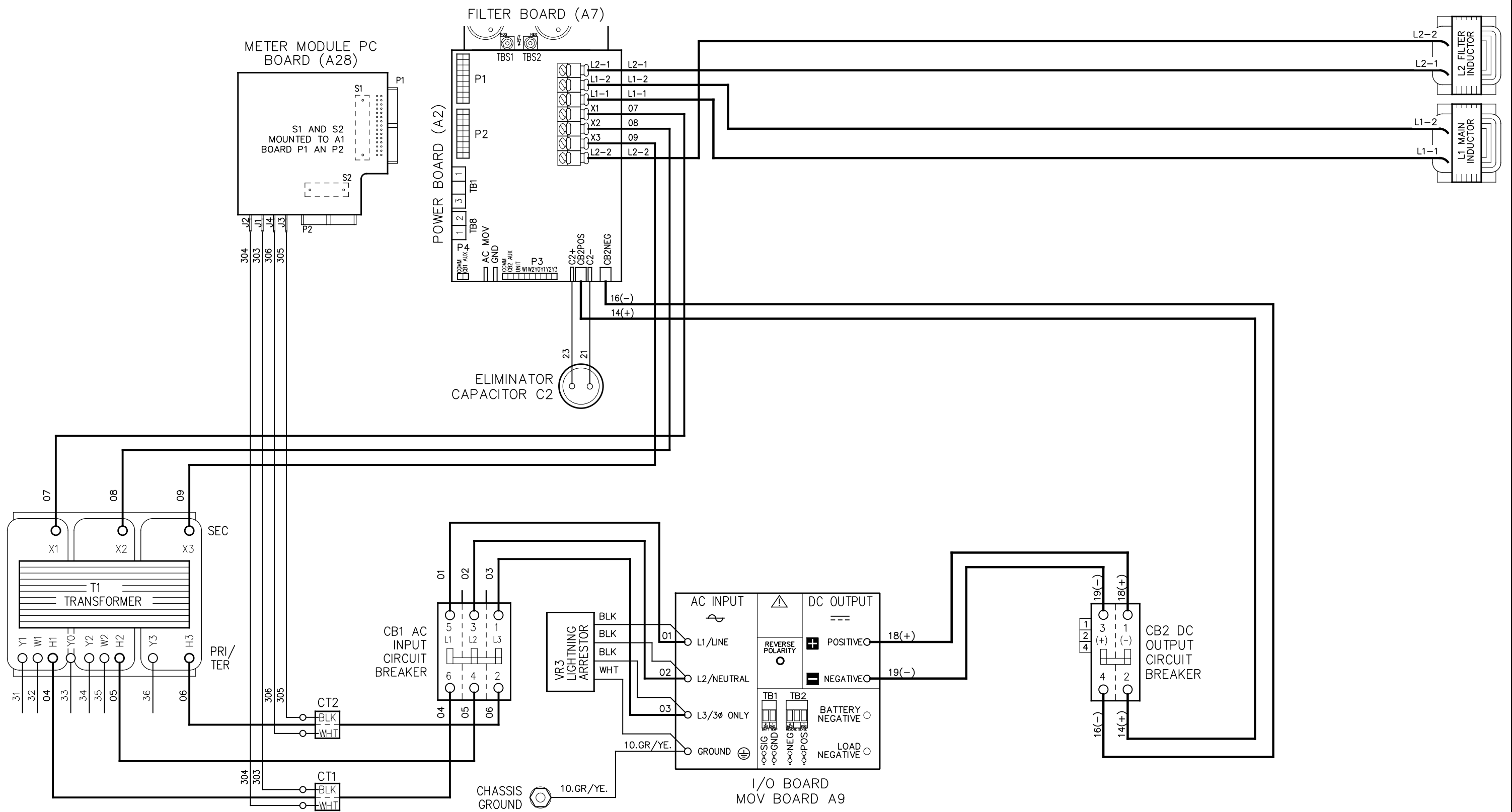
REV. 1	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 1/27/2023	DRN BY KJB	DATE: 10/29/2021
DESCRIPTION: CORRECTED TITLE OF EACH PAGE SHOWING 16-50A.					CHK BY MCR	DATE: 10/29/2021
ECN No. N/A					APP BY MCR	DATE: 10/29/2021
<b>TITLE</b> <b>ATEVO BATTERY CHARGER</b> <b>CONTROL PANEL / PC BOARD DETAIL</b> <b>3Ø WITH COMMON OPTIONS 16-50A</b>						<b>B</b> SCALE NTS DWG No JE5333-21 REV 1 SHEET 2 OF 2



- NOTES:
- FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A2, A7, etc.) SEE DETAIL DRAWING JE5339-21.
  - 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.
  - DEFAULT RELAY ALARM CONFIGURATION SHOWN BELOW. CAN BE CHANGED TO DESIRED CONFIGURATION BY USER.

A4	DESCRIPTION	LATCHING	DELAY
RELAY #1	HIGH VOLTAGE DC	DISABLED	30 SECONDS
RELAY #2	LOW VOLTAGE DC	DISABLED	30 SECONDS
RELAY #3	DC OUTPUT FAILURE	DISABLED	30 SECONDS
RELAY #4	LOW AC SUPPLY	DISABLED	30 SECONDS
RELAY #5	POSITIVE GROUND FAULT	DISABLED	30 SECONDS
RELAY #6	NEGATIVE GROUND FAULT	DISABLED	30 SECONDS

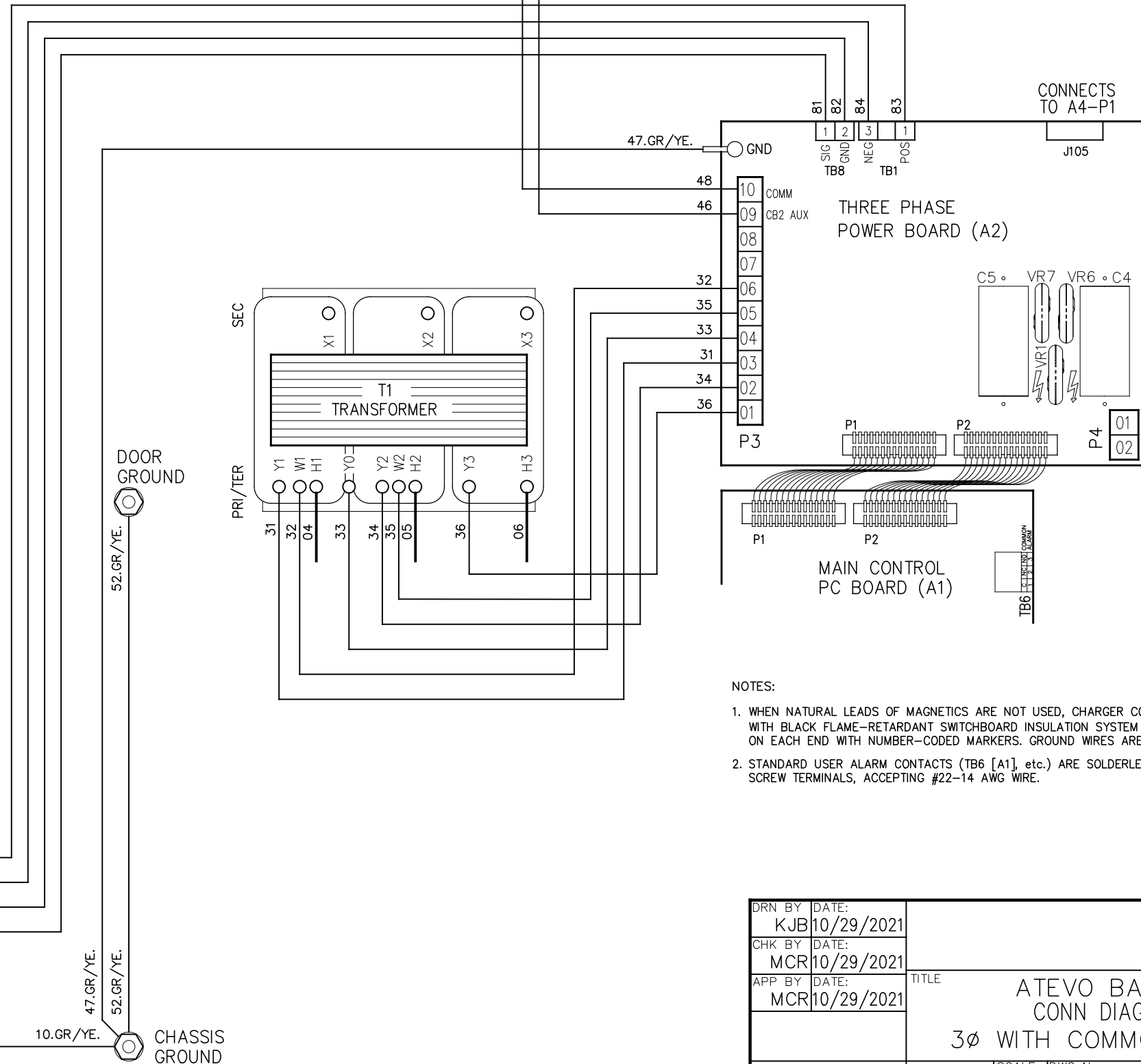
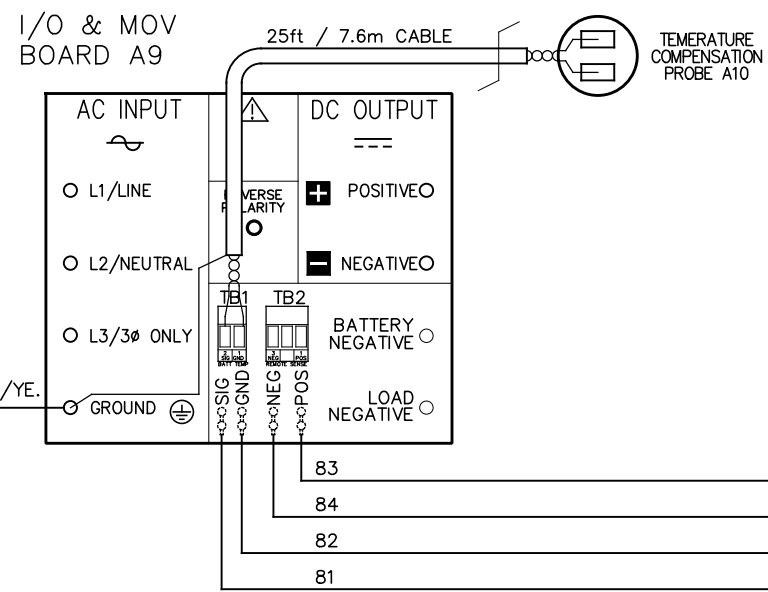
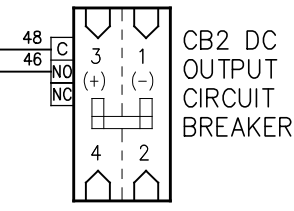
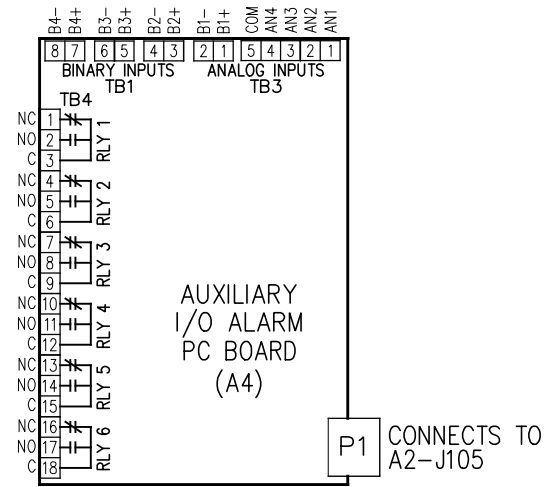
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DESCRIPTION				CORRECTED TITLE OF EACH PAGE SHOWING 16-50A.	CHK BY MCR	DATE 10/29/2021
ECN No. N/A				APP BY MCR	DATE 10/29/2021	TITLE
				ATEVO BATTERY CHARGER SCHEMATIC: STYLE 5070 3Ø WITH COMMON OPTIONS 16-50A		
SCALE B		DWG No. JE5334-21		REV. 1	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 1/27/2023	DRN BY KJB	DATE: 10/29/2021	TITLE <b>ATEVO BATTERY CHARGER</b> <b>CONN DIAGRAM: STYLE 5070</b> <b>3Ø WITH COMMON OPTIONS 16-50A</b>		
DESCRIPTION CORRECTED TITLE OF EACH PAGE SHOWING 16-50A.					CHK BY MCR	DATE: 10/29/2021			
ECN No. N/A					APP BY MCR	DATE: 10/29/2021			
						<b>B</b> SCALE NTS	DWG No <b>JE5335-21</b>	REV 1	SHEET 1 OF 2



- 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 KJB	DATE: 10/29/2021	TITLE <b>ATEVO BATTERY CHARGER CONN DIAGRAM: STYLE 5070 3Ø WITH COMMON OPTIONS 16-50A</b>	SCALE NTS	DWG No <b>JE5335-21</b>	REV 1	SHEET 2 OF 2
CHK BY MCR	DATE: 10/29/2021					
APP BY MCR	DATE: 10/29/2021					