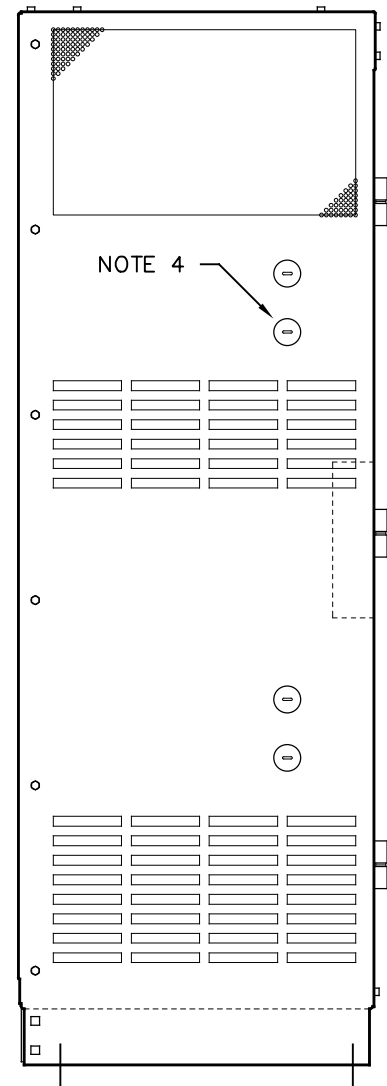
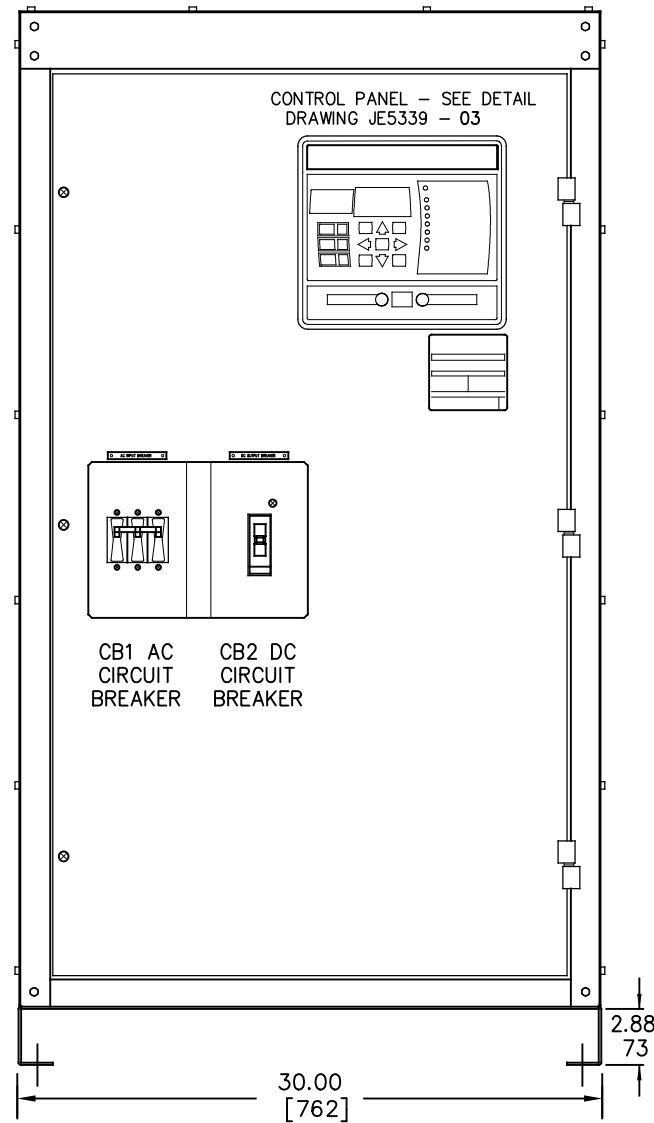


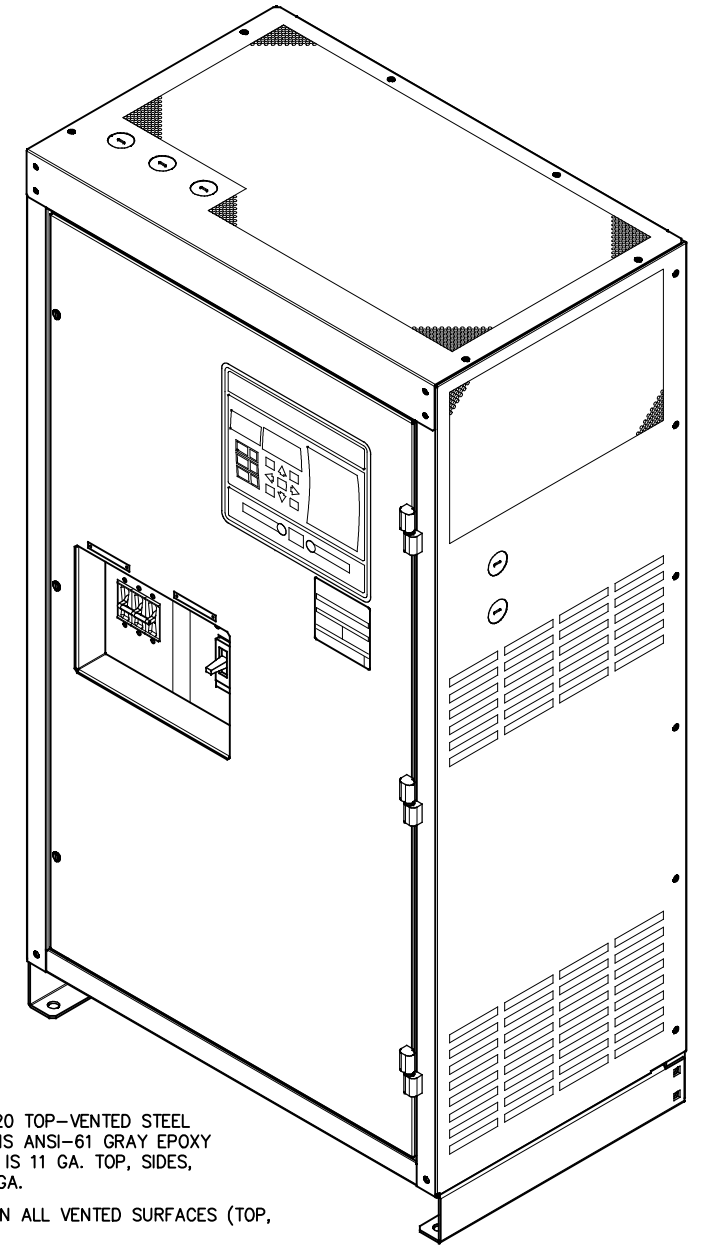
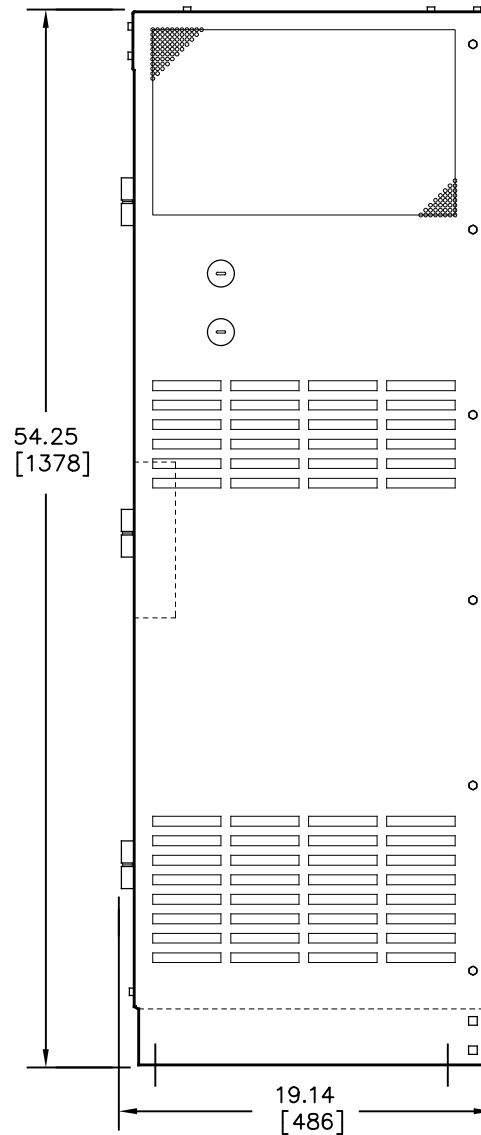
SIDE VIEW



FRONT VIEW

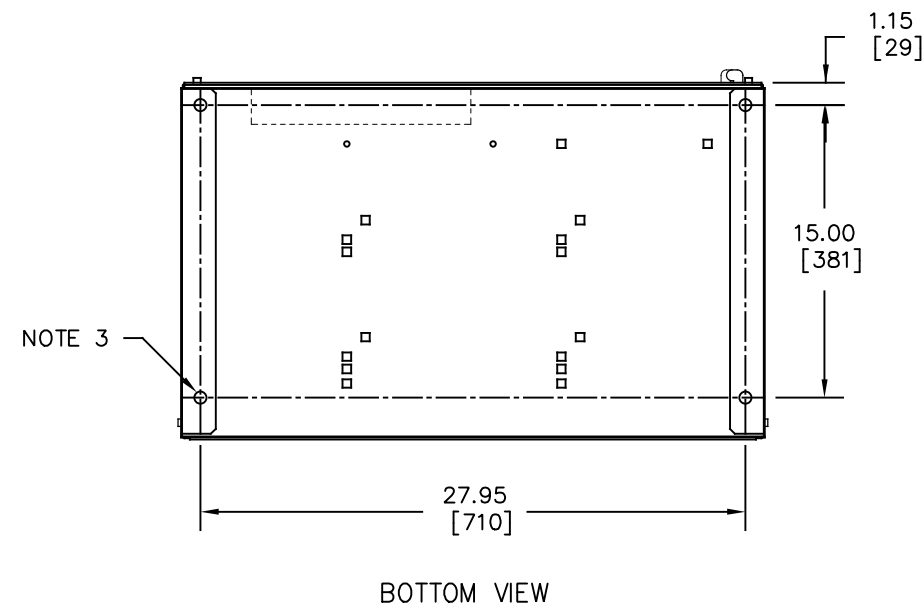


SIDE VIEW



NOTES:

- ENCLOSURE IS A NEMA TYPE 1 / IP20 TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT. BASE IS 7 GA. FRAME IS 11 GA. TOP, SIDES, AND BACK ARE 16 GA. DOOR IS 14 GA.
- ALLOW 6in / 152mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- FOUR (4) 0.625in / 16mm FLOOR-MOUNTING HOLES ARE PROVIDED ON BOTTOM OF ENCLOSURE AS SHOWN.
- NINE (9) 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



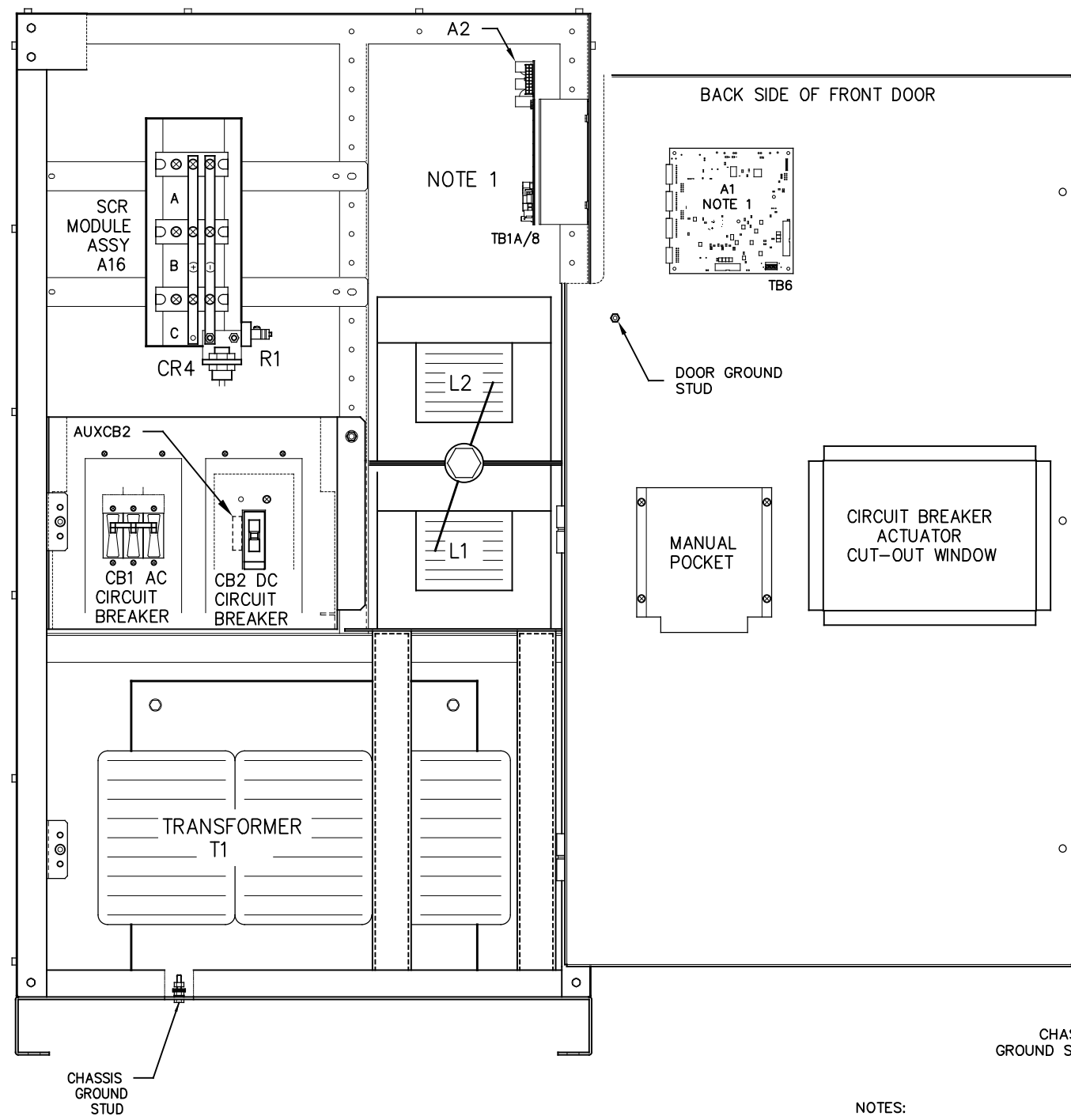
DUAL DIMENSIONS in mm

REV. 0	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 10/26/2021	DRN BY KJB	DATE 10/26/2021	<b>HINDLEPOWER</b> 1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE 10/26/2021	
ECN NO. N/A					CHK BY MCR	DATE 10/26/2021	TITLE <b>ATEVO 3PH BATTERY CHARGER                  OUTLINE: NEMA-1 STYLE-5030 ENCL                  3Ø W/O OPTIONS 50-100A</b>
						<b>B</b>	SCALE NTS DWG No JE5337-03 REV 0 SHEET 1 OF 1

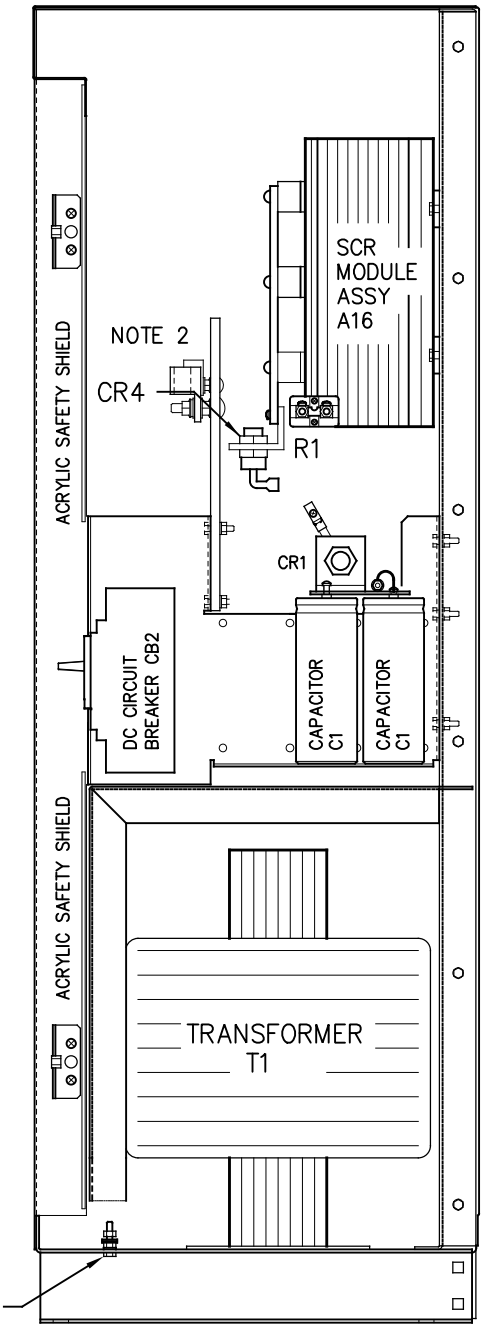
SYM STANDARD COMPONENT DESCRIPTION

- A1 MAIN CONTROL PC BOARD
- A2 THREE PHASE POWER BOARD
- A9 MOV PC BOARD
- A16 6-PULSE SCR MODULE HEATSINK ASSY
- C1x DC OUTPUT FILTER CAPACITOR
- CB1 AC INPUT CIRCUIT BREAKER (CD3)
- CB2 DC OUTPUT CIRCUIT BREAKER (Hx2)
- AUXCB2 DC CKT BKR (CB2) AUXILIARY CONTACTS
- CR1 POLARITY DIODE
- CR4 FREE-WHEELING DIODE
- L1 MAIN INDUCTOR
- L2 FILTER INDUCTOR
- R1 MAIN DC SHUNT, NEG(-) BUS
- R9 FILTER CAP (C1) BLEED RESISTOR
- T1 POWER ISOLATION TRANSFORMER
- TB1A REMOTE SENSE (A2)
- TB6 SUMMARY ALARM CONTACTS
- TB8 TEMPCO PROBE TERMINAL BLOCK

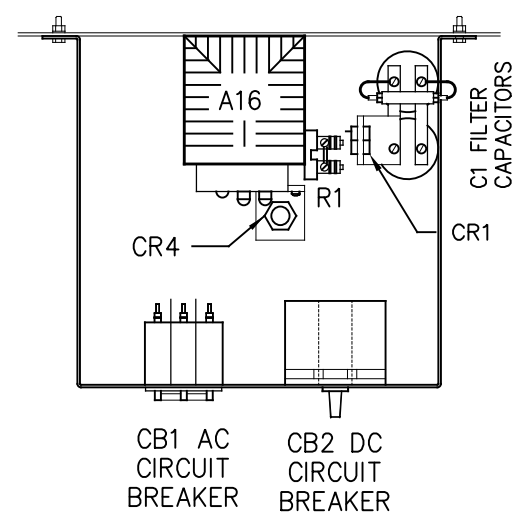
FRONT VIEW



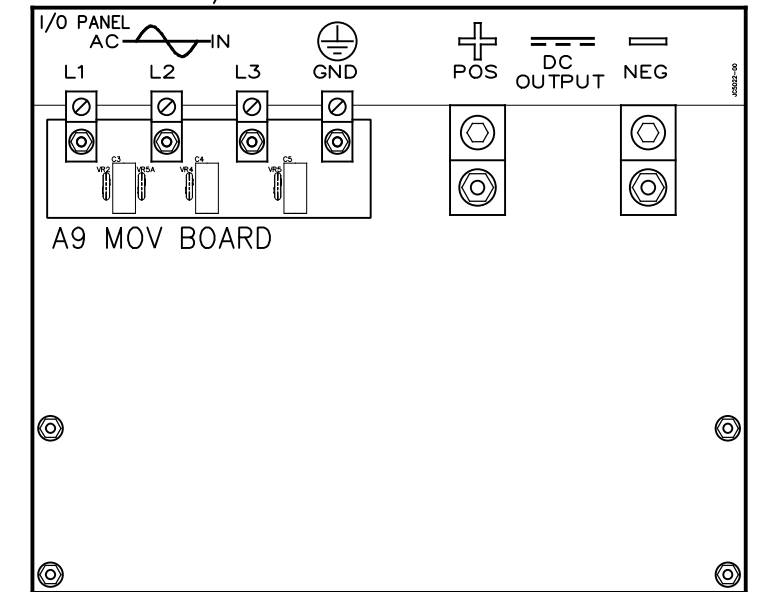
SIDE SECTION



TOP VIEW OF CIRCUIT BREAKER MOUNTING BRACKET



I/O TERMINAL BOARD DETAIL



NOTES:

1. FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, A4, A12, A22, etc.) SEE DRAWING JE5339-03
2. I/O PANEL TERMINAL BOARD NOT SHOWN FOR CLARITY OF VIEW. SEE DETAIL TO RIGHT.

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
I/O(+/-)	POS/NEG DC OUTPUT TERMS - CU-ALUMINUM COMPRESSION LUG	#6 AWG-350 MCM
I/O-GND	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#14-AWG-550 MCM
I/O-L1/L2/L3	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

REV. DRN BY 0 KJB	CHK BY MCR	APP BY MCR	DATE 10/26/2021	DRN BY KJB	DATE 10/26/2021
DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/26/2021
ECN NO. N/A				CHK BY MCR	DATE 10/26/2021

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**TITLE**

**ATEVO 3PH BATTERY CHARGER**  
**INTERNAL COMPONENT LAYOUT: STYLE-5030**  
**3Ø W/O OPTIONS 50-100A**

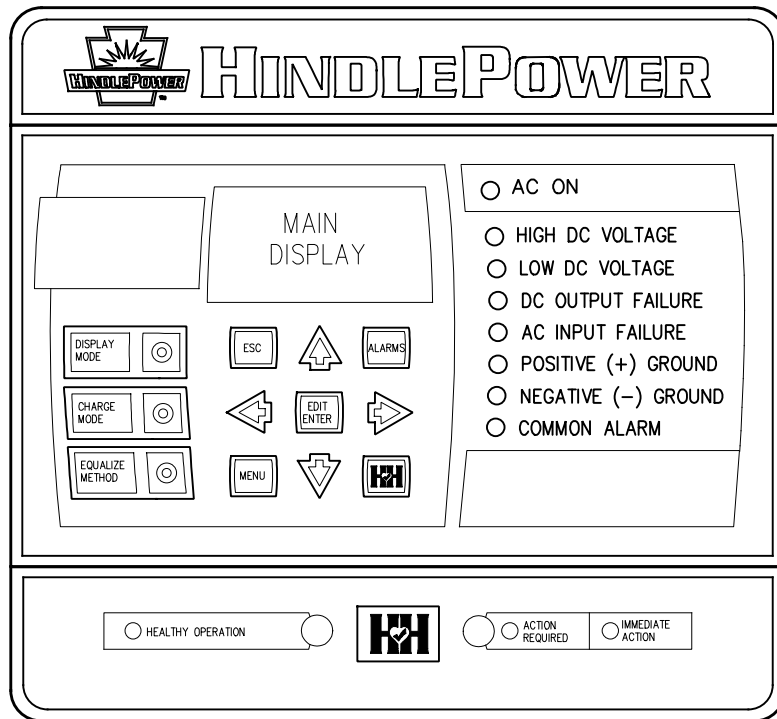
**B**

SCALE  
NTS

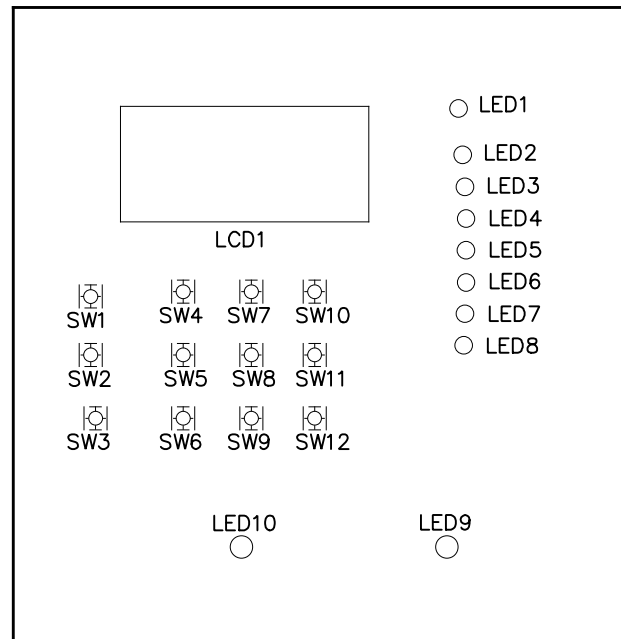
DWG No  
**JE5338-03**

REV  
0

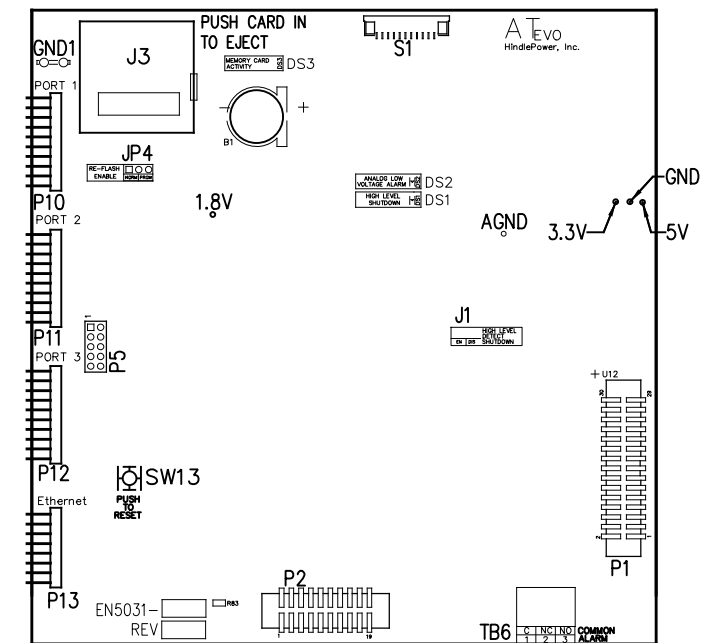
SHEET  
1 OF 1



**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 12C DATA
- SCL – MAIN BOARD 12C 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
- S13 – 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

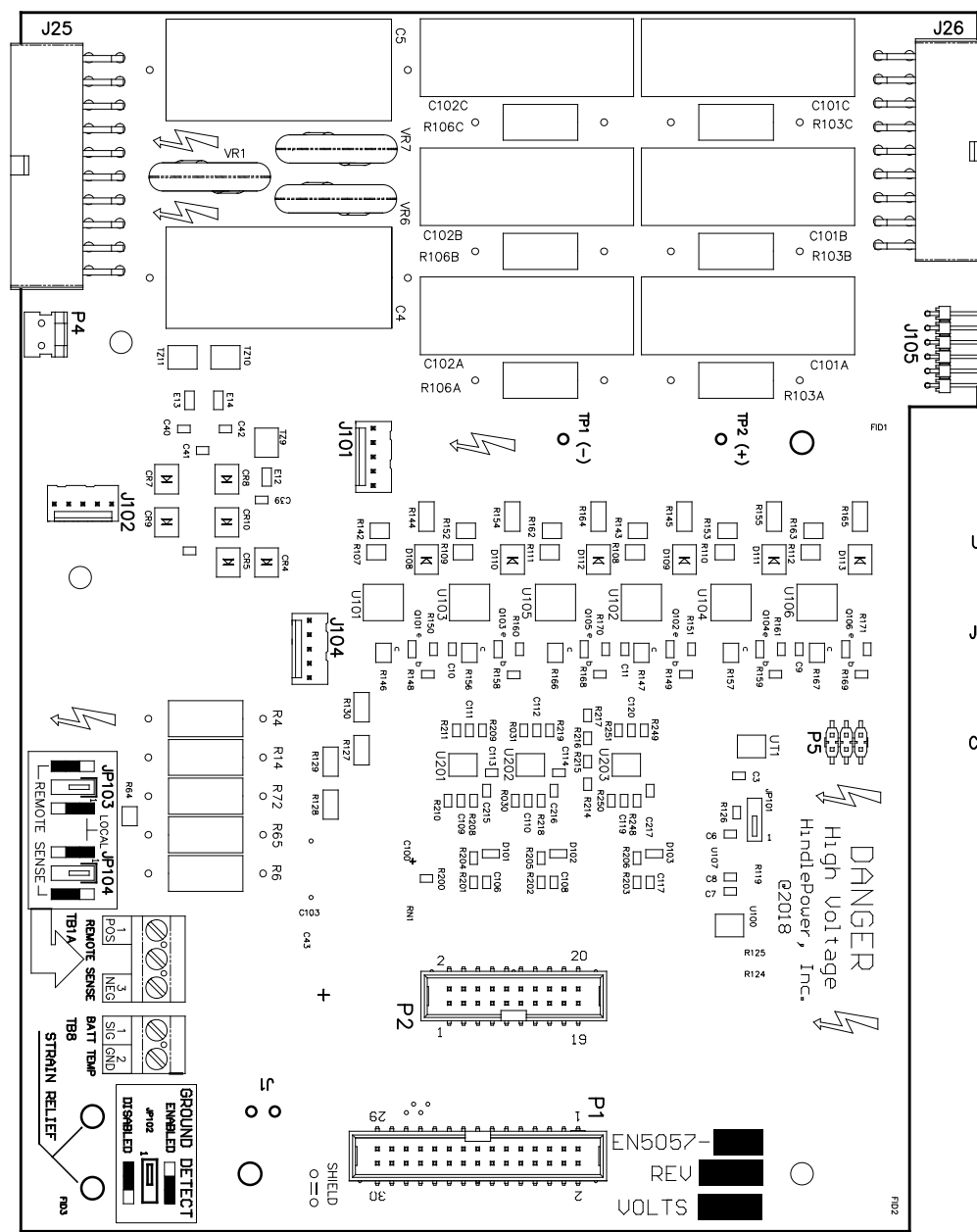
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DESCRIPTION				STANDARD DRAWINGS.	CHK BY:	MCR
ECN NO. N/A				DATE:	10/26/2021	
				CHK BY:	MCR	10/26/2021

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**ATEVO 3PH BATTERY CHARGER  
CONTROL PANEL / PC BOARD DETAIL  
3Ø W/O OPTIONS 50-100A**

**B** SCALE NTS DWG No **JE5339-03** REV 0 SHEET 1 OF 2

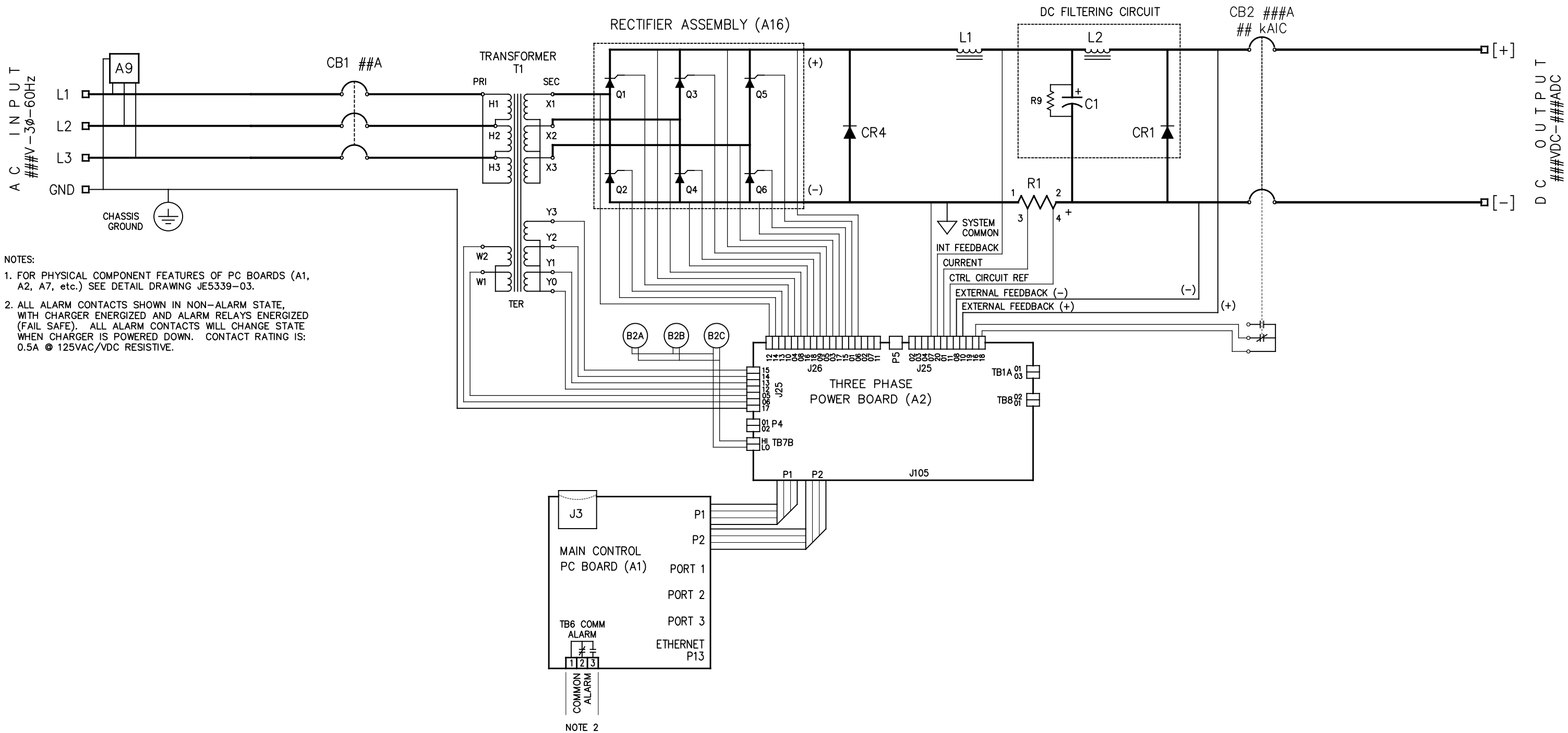


POWER BOARD (A2)

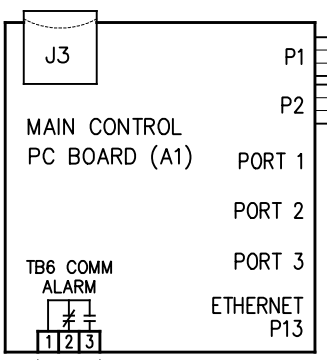
- USER TERMINALS ON POWER BOARD (A2):  
 TB1 - REMOTE VOLTAGE SENSE  
 TB8 - BATTERY TEMPERATURE COMPENSATION
- JUMPERS ON POWER BOARD (A2):  
 JP102 - GROUND DETECT CIRCUIT ENABLE / DISABLE  
 JP103 - REMOTE OR LOCAL SENSE SELECTOR (+)  
 JP104 - REMOTE OR LOCAL SENSE SELECTOR (-)
- CONNECTORS ON POWER BOARD (A2):  
 J1 - POWER OUT  
 J25 - MAIN CONTROL SIGNAL HARNESS  
 J26 - SCR FIRING CONTROL HARNESS  
 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  
 P4 - CB1 AUX  
 P5 - RECTIFIER TEMP SENSOR INTERFACE
- TEST POINTS ON POWER BOARD (A2):  
 TP1 - PRE-FILTERED DC BUS (-)  
 TP2 - PRE-FILTERED DC BUS (+)

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
(A2) TB1A	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

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CHK BY MCR	DATE: 10/26/2021		<b>ATEVO BATTERY CHARGER</b> <b>CONTROL PANEL / PC BOARD DETAIL</b> <b>3Ø W/O OPTIONS 50-100A</b>			
CHK BY MCR	DATE: 10/26/2021					
		<b>B</b>	SCALE NTS	DWG No JE5339-03	REV 0	SHEET 2 OF 2

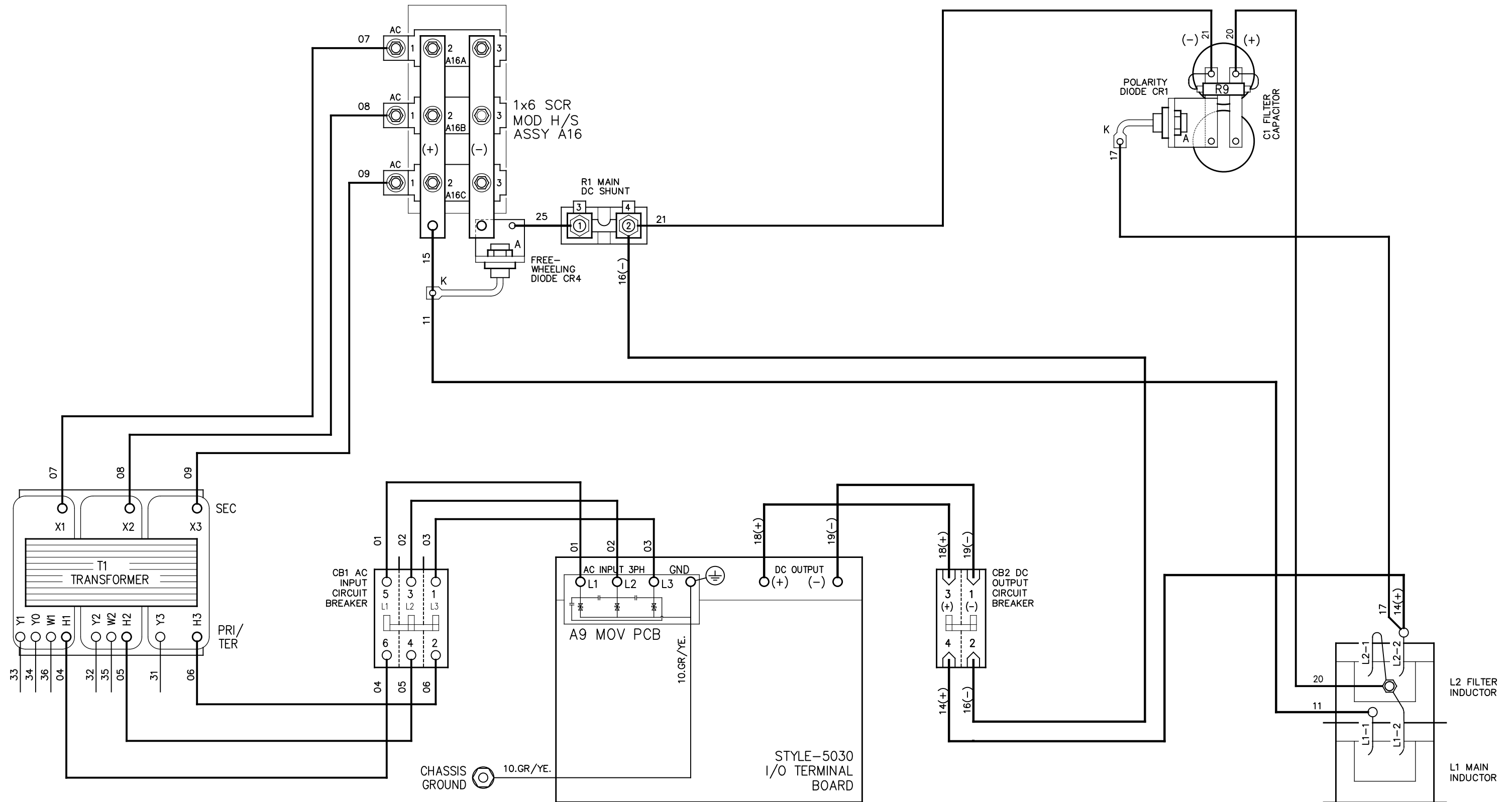


- NOTES:
1. FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A2, A7, etc.) SEE DETAIL DRAWING JE5339-03.
  2. ALL ALARM CONTACTS SHOWN IN NON-ALARM STATE, WITH CHARGER ENERGIZED AND ALARM RELAYS ENERGIZED (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS: 0.5A @ 125VAC/VDC RESISTIVE.



NOTE 2

REV. DRN BY 0 KJB	CHK BY MCR	APP BY MCR	DATE 10/26/2021	DRN BY KJB	DATE 10/26/2021	<b>HINDLEPOWER</b> 1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com			
DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/26/2021				
ECN NO. N/A				CHK BY MCR	DATE 10/26/2021				
TITLE <b>BATTERY CHARGER</b> <b>SCHEMATIC: STYLE 5030</b> <b>3Ø W/O OPTIONS 50-100A</b>						SCALE NTS	DWG No <b>JE5340-03</b>	REV 0	SHEET 1 OF 1



NOTES:

1. 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. 0	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 10/26/2021	DRN BY KJB	DATE 10/26/2021
DESCRIPTION STANDARD DRAWINGS.					CHK BY MCR	DATE 10/26/2021
ECN NO. N/A					CHK BY MCR	DATE 10/26/2021

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		<b>BATTERY CHARGER</b> <b>CONNECTION DIAGRAM: STYLE 5030</b> <b>3Ø W/O OPTIONS 50-100A</b>	
<b>B</b>	SCALE NTS	DWG No JE5341-03	REV 0 SHEET 1 OF 2

