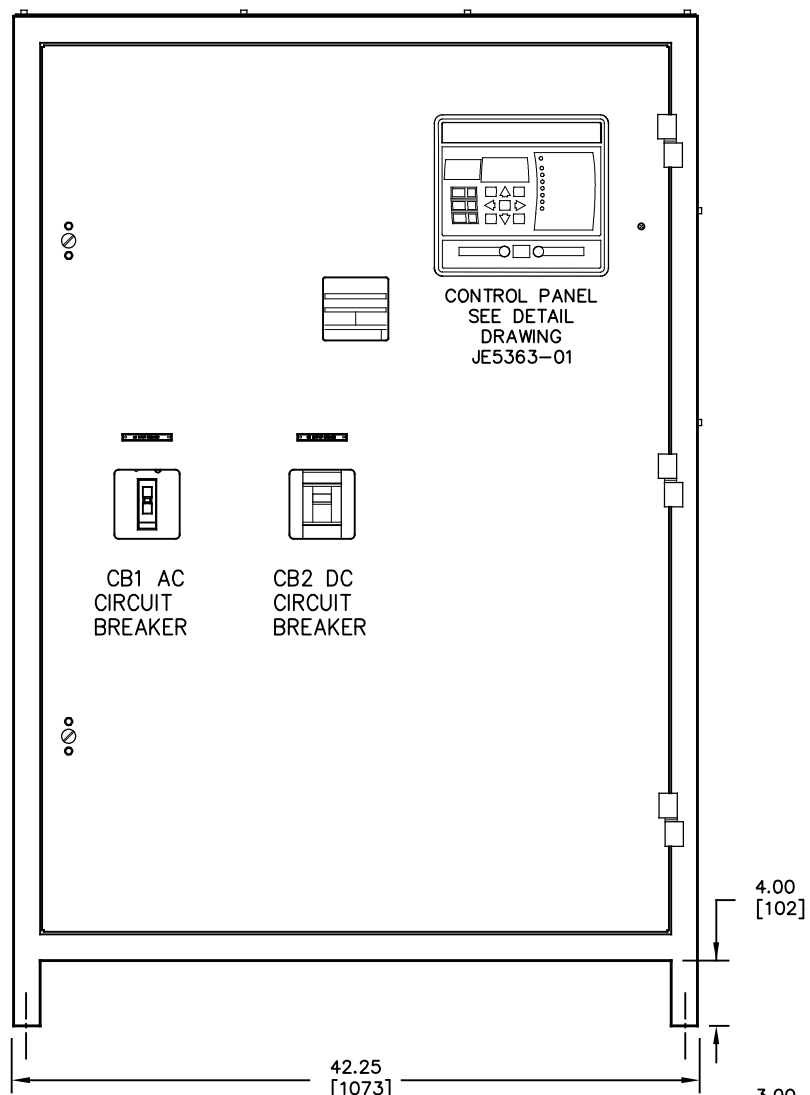
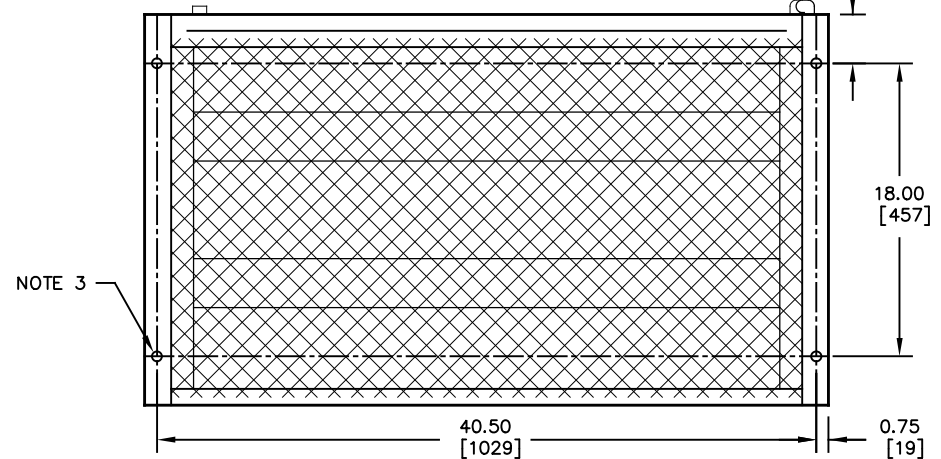
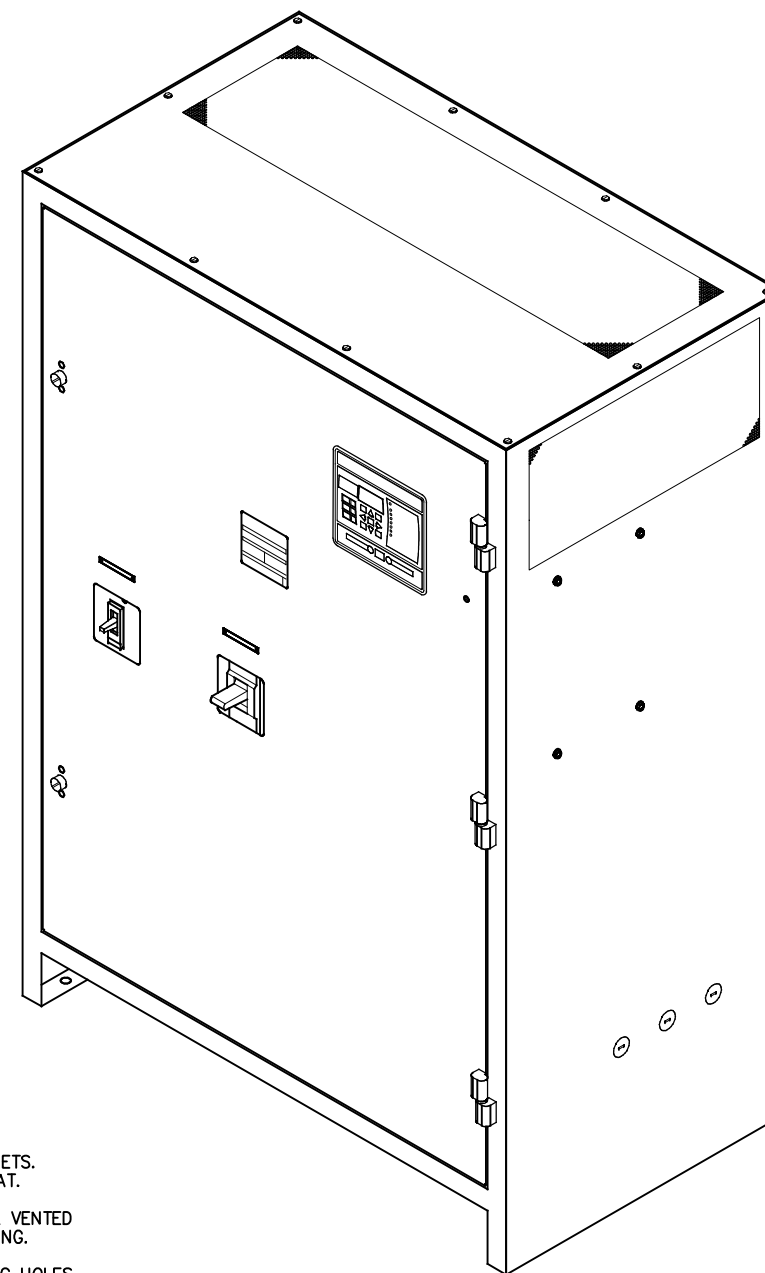
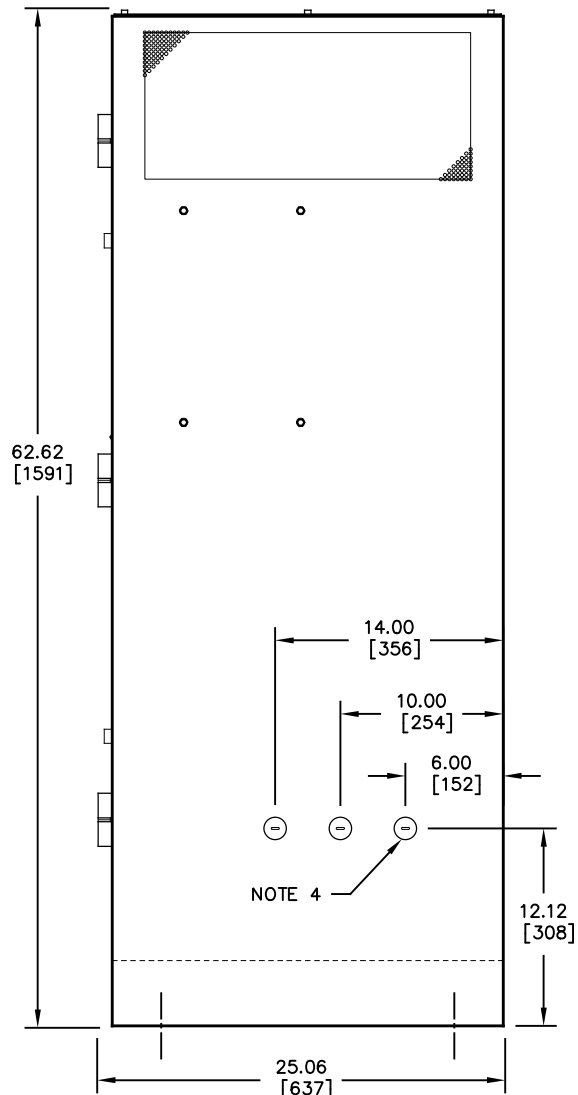


FRONT VIEW



SIDE VIEW



BOTTOM VIEW

NOTES:

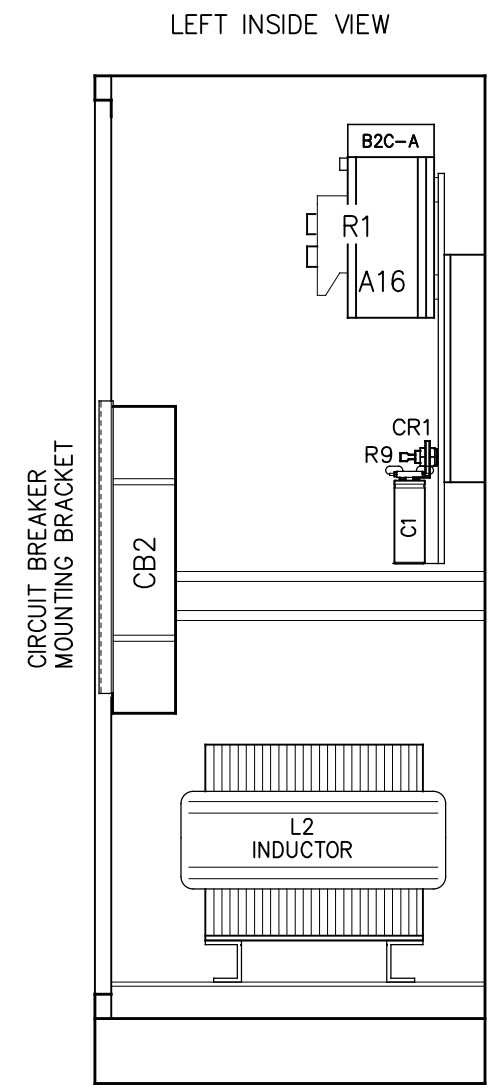
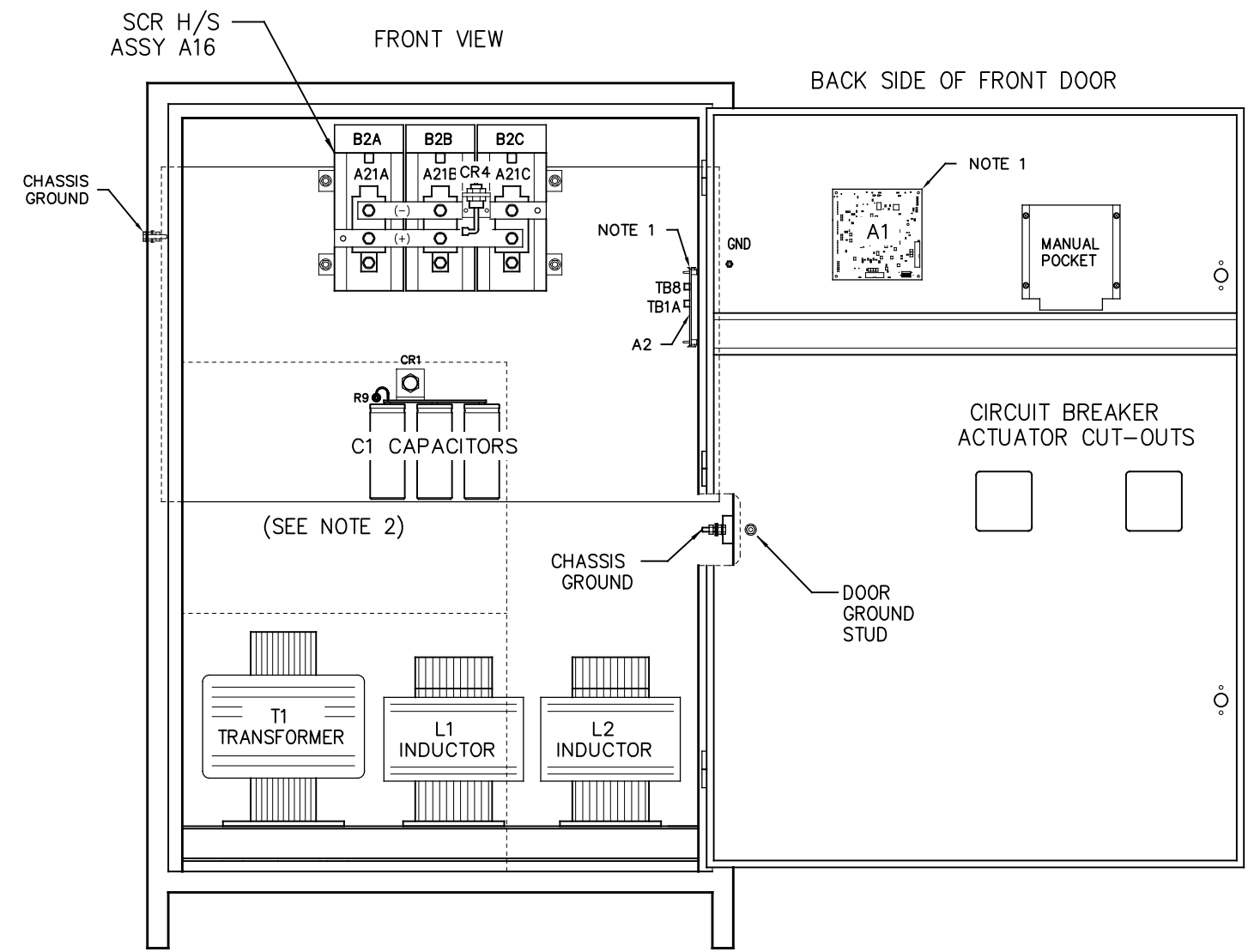
- 1) ENCLOSURE IS A NEMA TYPE 1 / IP20 TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT.
- 2) ALLOW 12in / 305mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- 3) FOUR (4) 0.625in / 16mm FLOOR-MOUNTING HOLES ARE PROVIDED ON BOTTOM OF ENCLOSURE AS SHOWN.
- 4) SIX (6) 1.31in / 33mm DIA STANDARD PRE-FAB CONDUIT KNOCKOUTS ARE PROVIDED AS SHOWN FOR 1in / 25mm CABLE ENTRY. BOTTOM CONDUIT ENTRY IS POSSIBLE THROUGH EXPANDED METAL UNDERSIDE. IF ADDITIONAL CONDUIT ENTRANCES ARE REQUIRED, ENCLOSURE SHOULD BE FIELD-MODIFIED BY INSTALLER.
- 5) BATTERY CHARGER SHIPPING WEIGHT: APPROXIMATELY TBD lb / TBD kg

NOTE 3

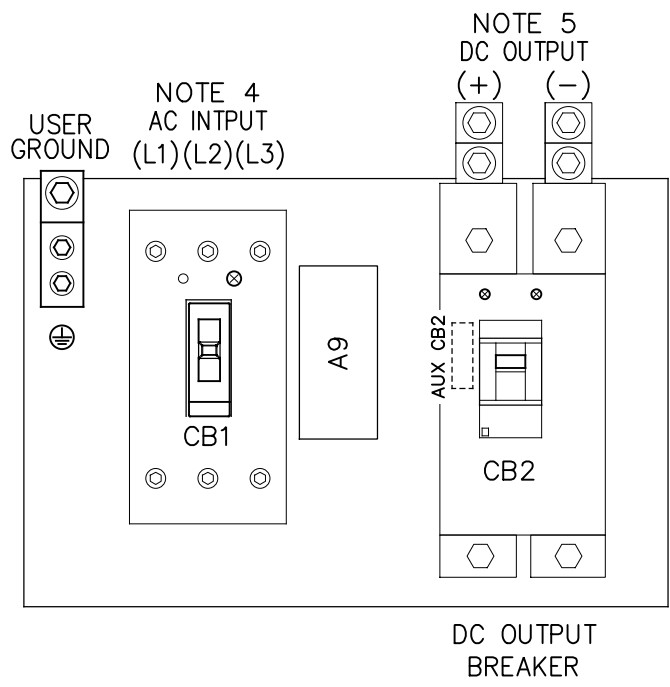
DUAL DIMENSIONS in mm

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DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/29/2021				
ECN NO. #ECN#				CHK BY MCR	DATE 10/29/2021	TITLE ATEVO BATTERY CHARGER OUTLINE: NEMA-1 STYLE-163 ENCL 3Ø W/O OPTIONS 150-600A	SCALE NTS		
							DWG No JE5361-01	REV 0	SHEET 1 OF 1

SYM	STANDARD COMPONENT DESCRIPTION
A1	MAIN CONTROL PC BOARD
A2	POWER BOARD
A9	MOV PC BOARD
A16	3PH SCR MODULE ASSY (1x6 Q1-Q6)
B2x	SCR MODULE (A16) COOLING FAN
C1x	DC OUTPUT FILTER CAPACITOR
CB1	AC INPUT CIRCUIT BREAKER (HJ3)
CB2	DC OUTPUT CIRCUIT BREAKER (LGL#)
CR1	POLARITY DIODE
CR4	FREE-WHEELING DIODE
L1	MAIN INDUCTOR
L2	FILTER INDUCTOR
R1	MAIN DC SHUNT, NEG(-) BUS
T1	POWER ISOLATION TRANSFORMER
TB1	INPUT TERMINAL BOARD
TB6	SUMMARY ALARM CONTACTS
TB8	OPT. TEMPCO PROBE TERM BLOCK
R9	FILTER CAP (C1) BLEED RESISTOR
A21x	SCR MODULE (A16) THERMOSTAT

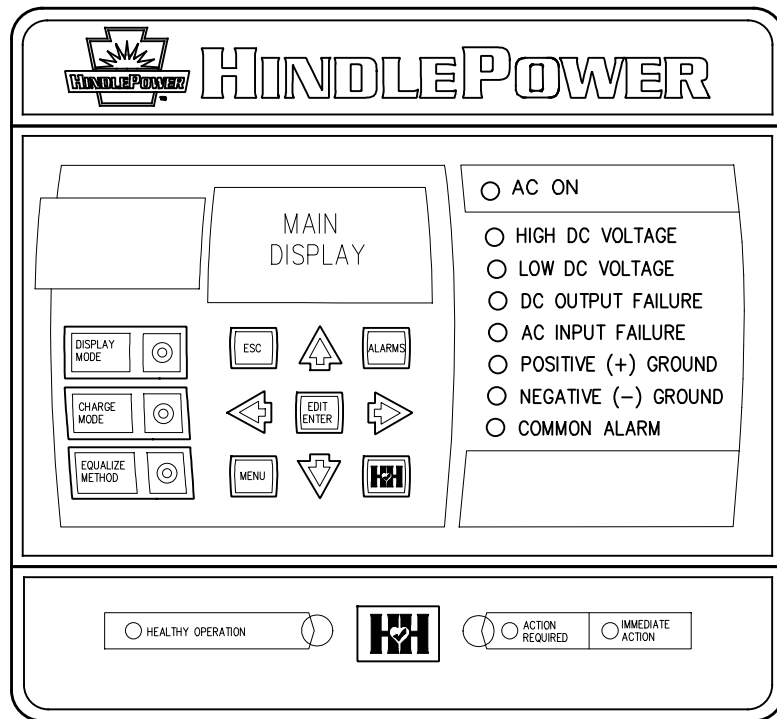


- NOTES:**
- FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, etc.) SEE DRAWING JE5363-01.
  - CIRCUIT BREAKER(S) MOUNTED ON SIDE BRACKET, NOT FULLY SHOWN FOR CLARITY.
  - USER AC INPUT TERMINALS:
    - UTILIZES TOP OF AC OUTPUT BREAKER (CB1)
    - THREE (3) ALUMINUM COMPRESSION LUGS
    - TOTAL OF THREE (3) #14-3/0 AWG WIRES
  - USER DC OUTPUT TERMINALS:
    - UTILIZES TOP OF DC OUTPUT BREAKER (CB2)
    - FOUR (4) REMOVABLE ALUMINUM COMPRESSION LUGS
    - TWO (1) LUG PER POLE (+/-)
    - TWO (2) USER CONNECTIONS PER LUG
    - TOTAL OF FOUR (4) 2/0-500 MCM WIRES



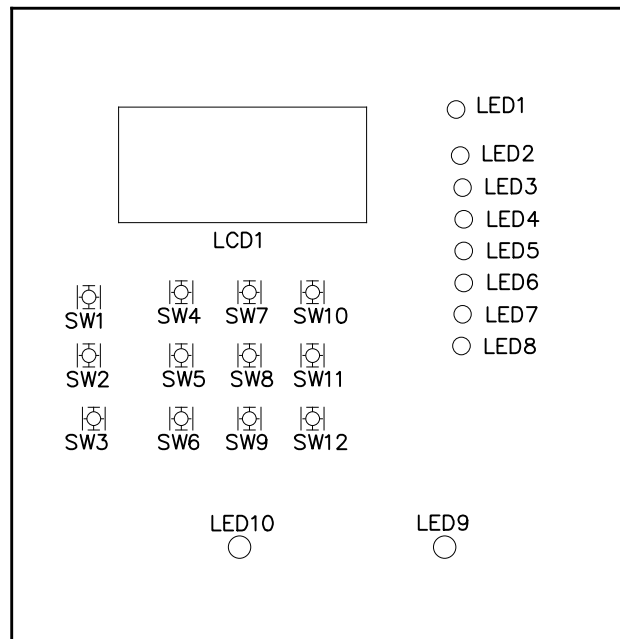
I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
TB1-GND	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#6 AWG-350 MCM
(A1) TB6	SUMMARY ALARM TERMINAL BLOCK (A1) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG
(A2) TB1	POS/NEG REMOTE SENSE TERMS (A2) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG
(A2) TB8	TEMPCO PROBE (A10) TERM BLK - SOLDERLESS COMPRESSION SCREW	#22-14 AWG

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DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/29/2021		
ECN NO. #ECN#				CHK BY MCR	DATE 10/29/2021	<b>TITLE</b> <b>ATEVO BATTERY CHARGER</b> <b>INTERNAL COMPONENT LAYOUT: STYLE-163</b> <b>3Ø W/O OPTIONS 150-600A</b>	
				<b>B</b> SCALE DWG No NTS JE5362-01		REV 0	SHEET 1 OF 1

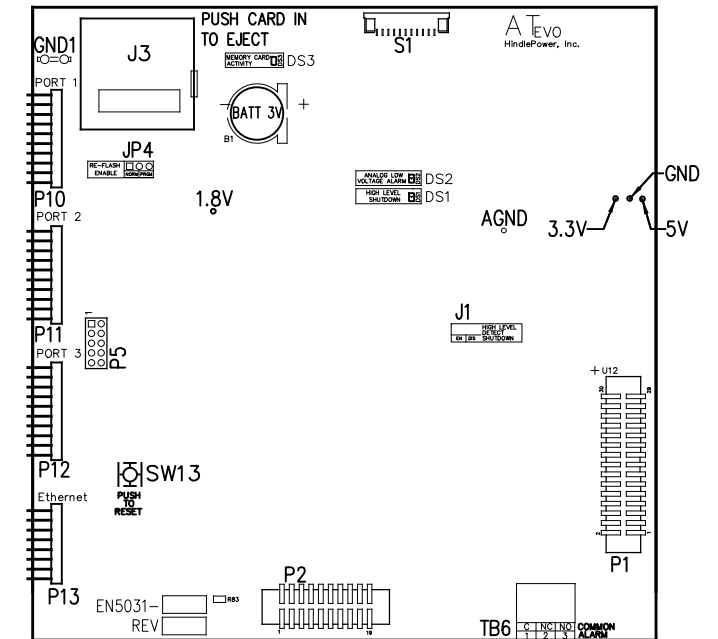


**CONTROL PANEL**  
(PART No. FK5047-00)

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)**  
FRONT VIEW - FACING CHARGER DOOR WHEN INSTALLED

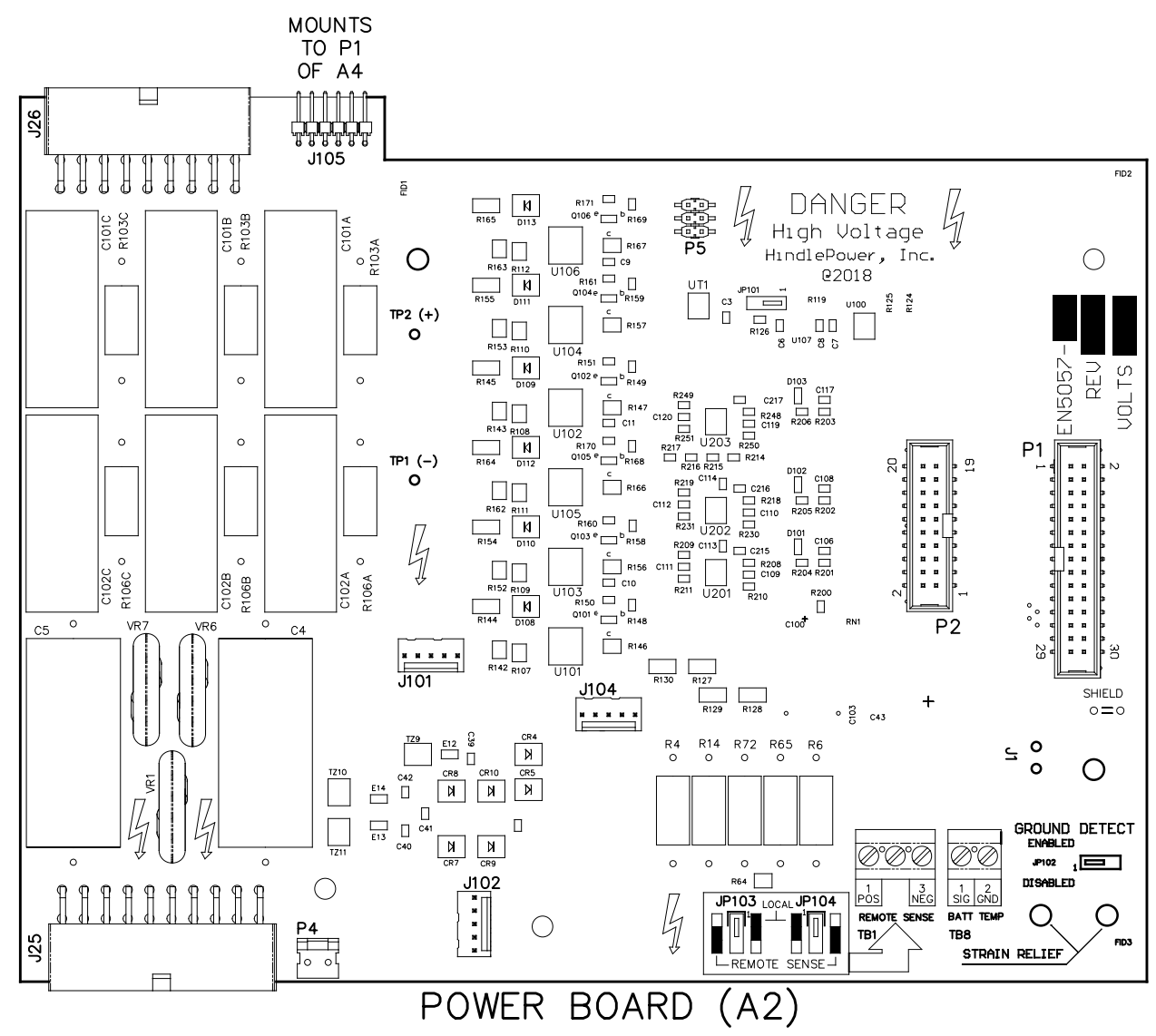


**MAIN CONTROL PC BOARD (A1)**  
BACK VIEW - FACING CHARGER COMPONENTS WHEN INSTALLED

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

MAIN CONTROL PC BOARD (A1)			
<b>INDICATOR LIGHTS (LEDs):</b>	<b>JUMPERS:</b>	<b>SWITCHES:</b>	<b>CONNECTORS:</b>
LED1 - GREEN - AC ON	J1 - ANALOG HIGH VOLTAGE SHUTDOWN JUMPER	S1 - DISPLAY BUTTON	P1 - POWER BOARD RIBBON
LED2 - RED - HIGH DC VOLTAGE ALARM	J3 - SD CARD PORT	S2 - CHARGE MODE BUTTON	P2 - 3 PHASE RECTIFIER RIBBON
LED3 - RED - LOW DC VOLTAGE ALARM	JP4 - RE-FLASH (FIELD PROGRAMMING) JUMPER	S3 - EQUALIZE METHOD BUTTON	P3 - USB EXPANSION PORT
LED4 - RED - DC OUTPUT FAILURE ALARM	<b>TERMINAL BLOCKS:</b>	S4 - ESCAPE (ESC) BUTTON	P4 - SPI & I2C EXPANSION PORT #1
LED5 - RED - AC INPUT FAILURE ALARM	TB6 - COMMON ALARM RELAY CONTACTS	S5 - LEFT ARROW BUTTON	P5 - SPI & I2C EXPANSION PORT #2
LED6 - RED - POSITIVE (+) GROUND ALARM	<b>TEST POINTS:</b>	S6 - MENU BUTTON	P6 - DISPLAY SPI PORT
LED7 - RED - NEGATIVE (-) GROUND ALARM	1.8V - 1.8 VOLTS	S7 - UP ARROW BUTTON	P7 - DISPLAY JTAG PORTS
LED8 - RED - COMMON ALARM	3.3V - 3.3 VOLTS	S8 - EDIT / ENTER BUTTON	P10 - SERIAL INTERFACE PORT #1
LED9 - RED - ACTION REQUIRED ALARM	5V - 5.0 VOLTS	S9 - DOWN ARROW BUTTON	P11 - SERIAL INTERFACE PORT #2
LED10 - GREEN - HEALTHY OPERATION	GND - GROUND	S10 - ALARM BUTTON	P12 - SERIAL INTERFACE PORT #3
DS1 - RED - HIGH LEVEL SHUTDOWN (HLD)	AGND - ANALOG GROUND	S11 - RIGHT ARROW BUTTON	P13 - ETHERNET INTERFACE PORT
DS2 - RED - ANALOG LOW VOLTAGE ALARM (LLD)	SDA - MAIN BOARD I2C DATA	S12 - HINDLE HEALTH (HHS) BUTTON	P17 - GENERAL EXPANSION PORT
DS3 - RED - MEMORY CARD ACTIVITY	SCL - MAIN BOARD I2C CLOCK	SW13 - SYSTEM RESET BUTTON (BACK OF BOARD)	

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DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/29/2021				
ECN NO. #ECN#				CHK BY MCR	DATE 10/29/2021	<b>TITLE</b> ATEVO BATTERY CHARGER INSTRUMENT PANEL / PC BOARD DETAIL 3φ W/O OPTIONS 150-600A			
				<b>B</b>		SCALE NTS	DWG No <b>JE5363-01</b>	REV 0	SHEET 1 OF 2

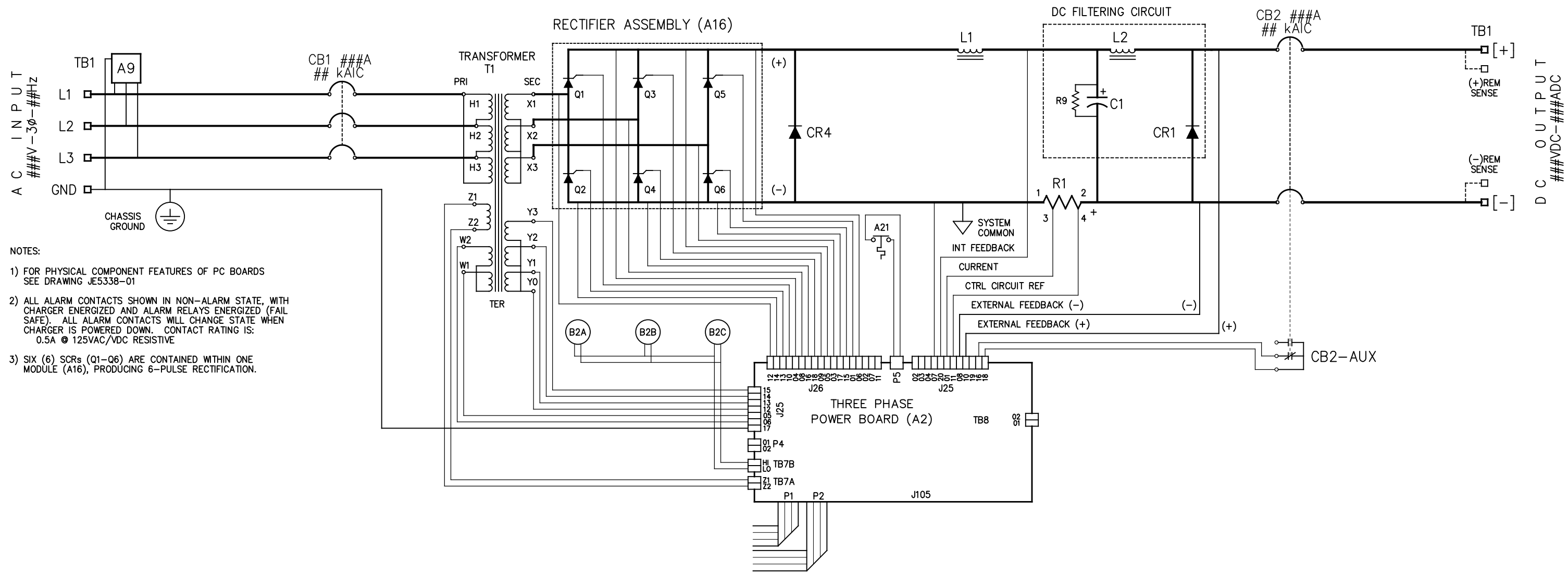


- USER TERMINALS ON POWER BOARD (A2):  
 TB1 – REMOTE VOLTAGE SENSE  
 TB8 – BATTERY TEMPERATURE COMPENSATION
- JUMPERS ON POWER BOARD (A2):  
 JP102 – GROUND DETECT CIRCUIT ENABLE / DISABLE  
 JP103 – REMOTE OR LOCAL SENSE SELECTOR (+)  
 JP104 – REMOTE OR LOCAL SENSE SELECTOR (-)
- CONNECTORS ON POWER BOARD (A2):  
 J1 – POWER OUT  
 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 (+)

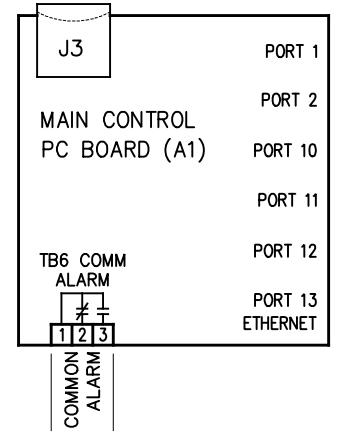
POWER BOARD (A2)

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

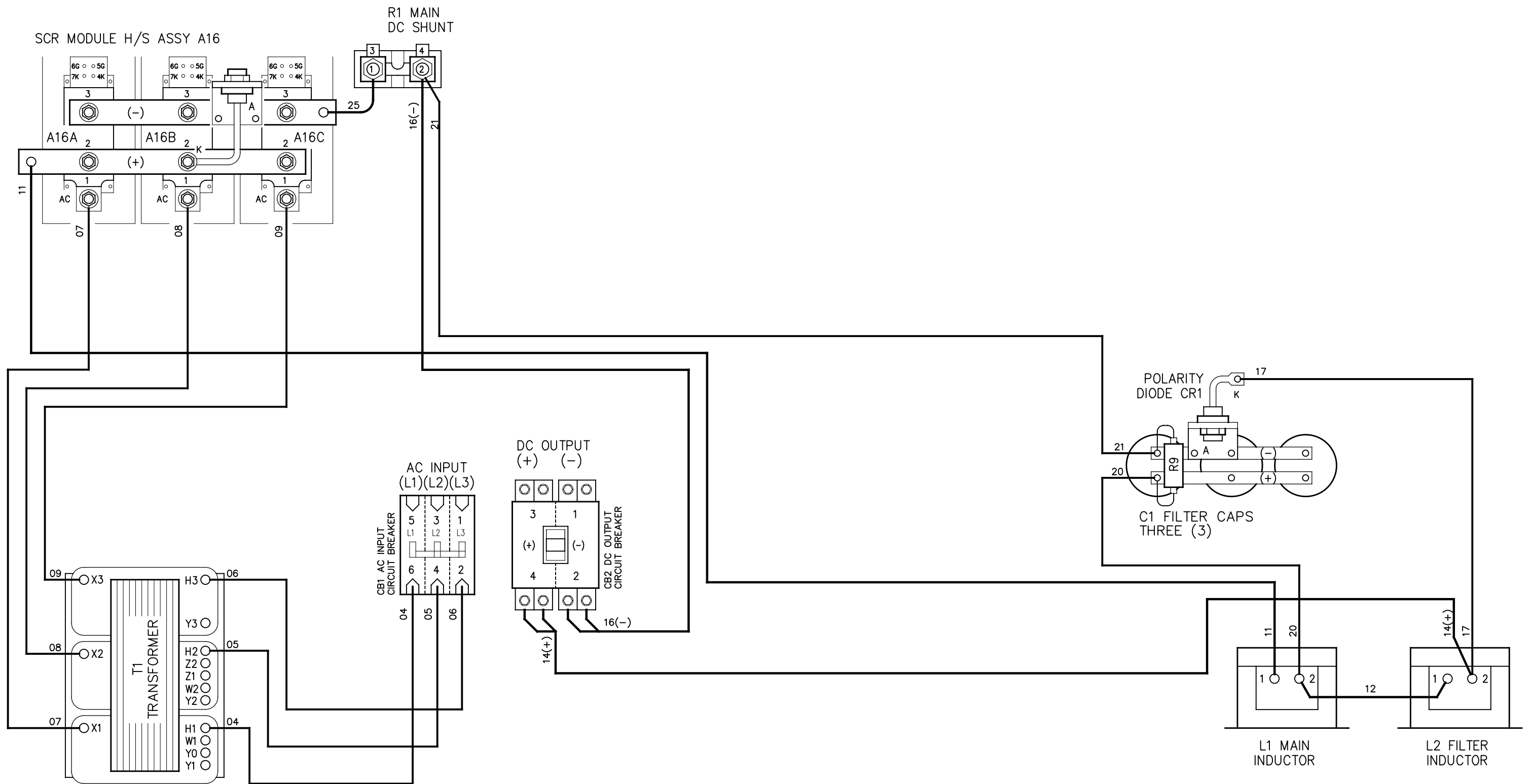
DRN BY KJB	DATE: 10/29/2021		1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com			
CHK BY MCR	DATE: 10/29/2021		<b>TITLE</b> ATEVO BATTERY CHARGER INSTRUMENT PANEL / PC BOARD DETAIL 3ø W/O OPTIONS 150-600A			
CHK BY MCR	DATE: 10/29/2021					
		<b>B</b>	SCALE NTS	DWG No JE5363-01	REV 0	SHEET 2 OF 2



- NOTES:
- 1) FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS SEE DRAWING JE5338-01
  - 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
  - 3) SIX (6) SCRs (Q1-Q6) ARE CONTAINED WITHIN ONE MODULE (A16), PRODUCING 6-PULSE RECTIFICATION.



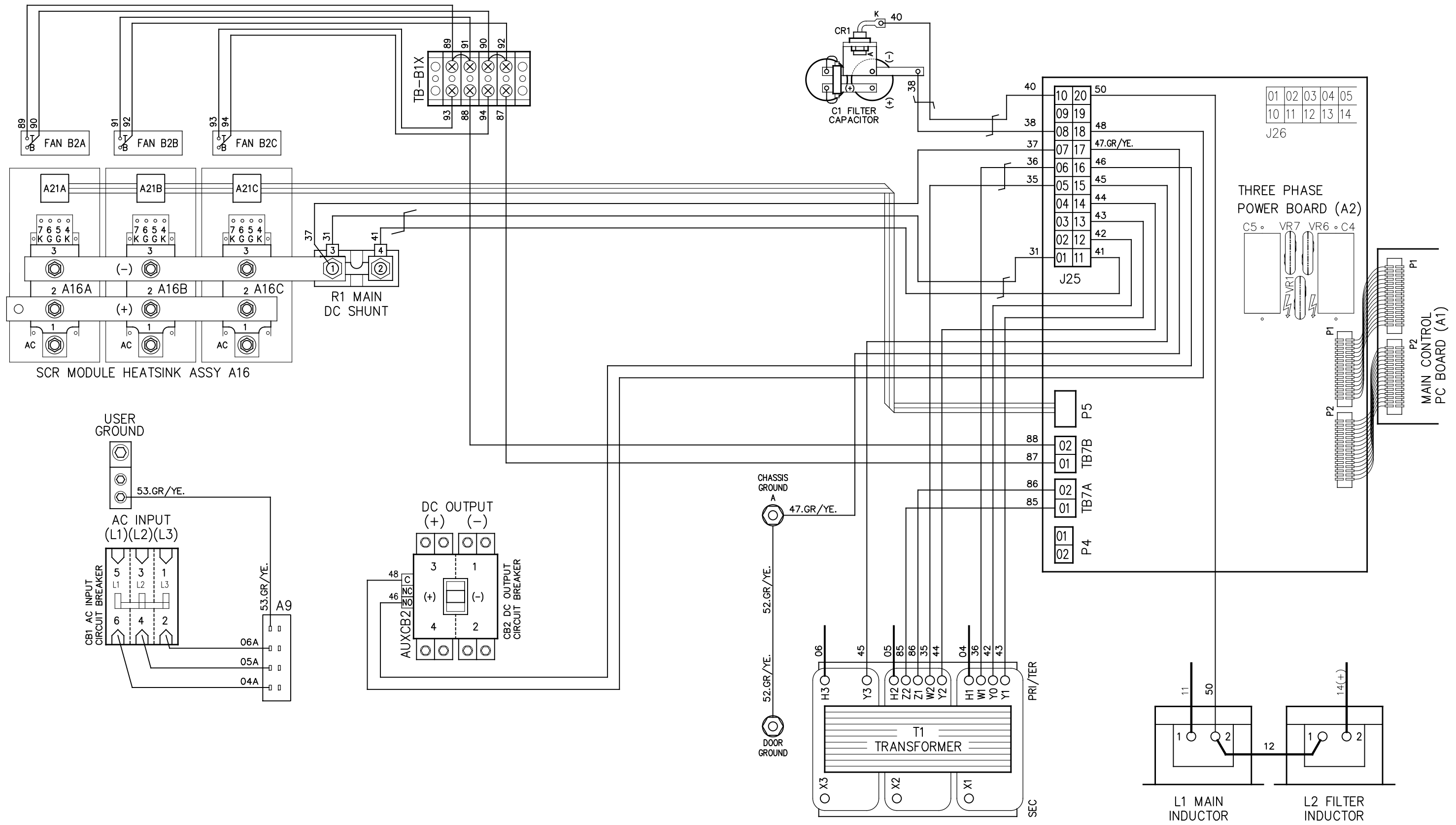
REV. DRN BY 0 KJB	CHK BY MCR	APP BY MCR	DATE 10/29/2021	DRN BY KJB	DATE 10/29/2021	<b>HINDLEPOWER</b> 1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com			
DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/29/2021				
ECN NO. #ECN#				CHK BY MCR	DATE 10/29/2021				
TITLE <b>ATEVO BATTERY CHARGER SCHEMATIC: STYLE 163 3φ W/O OPTIONS 150-600A</b>						SCALE NTS	DWG No JE5364-01	REV 0	SHEET 1 OF 1



NOTES:

- CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRE #10 IS GREEN WITH YELLOW STRIPE.
- THIS DRAWING (SHEET 1 OF 3) SHOWS MAINFRAME POWER WIRING. SEE SUBSEQUENT SHEETS FOR:
  - SHEET 2 OF 3 - SENSE (SIGNAL) WIRING.
  - SHEET 3 OF 3 - SCR (A16x) TRIGGER WIRING

REV. 0	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 10/29/2021	DRN BY KJB	DATE: 10/29/2021	<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: 10/29/2021	
ECN NO. #ECN#					CHK BY MCR	DATE: 10/29/2021	TITLE <b>ATEVO BATTERY CHARGER          CONNECTION DIAGRAM: STYLE 163          3Ø W/O OPTIONS 150-600A</b>
						<b>B</b>	SCALE DWG No NTS JE5365-01
							REV SHEET 0 1 OF 3



NOTES:

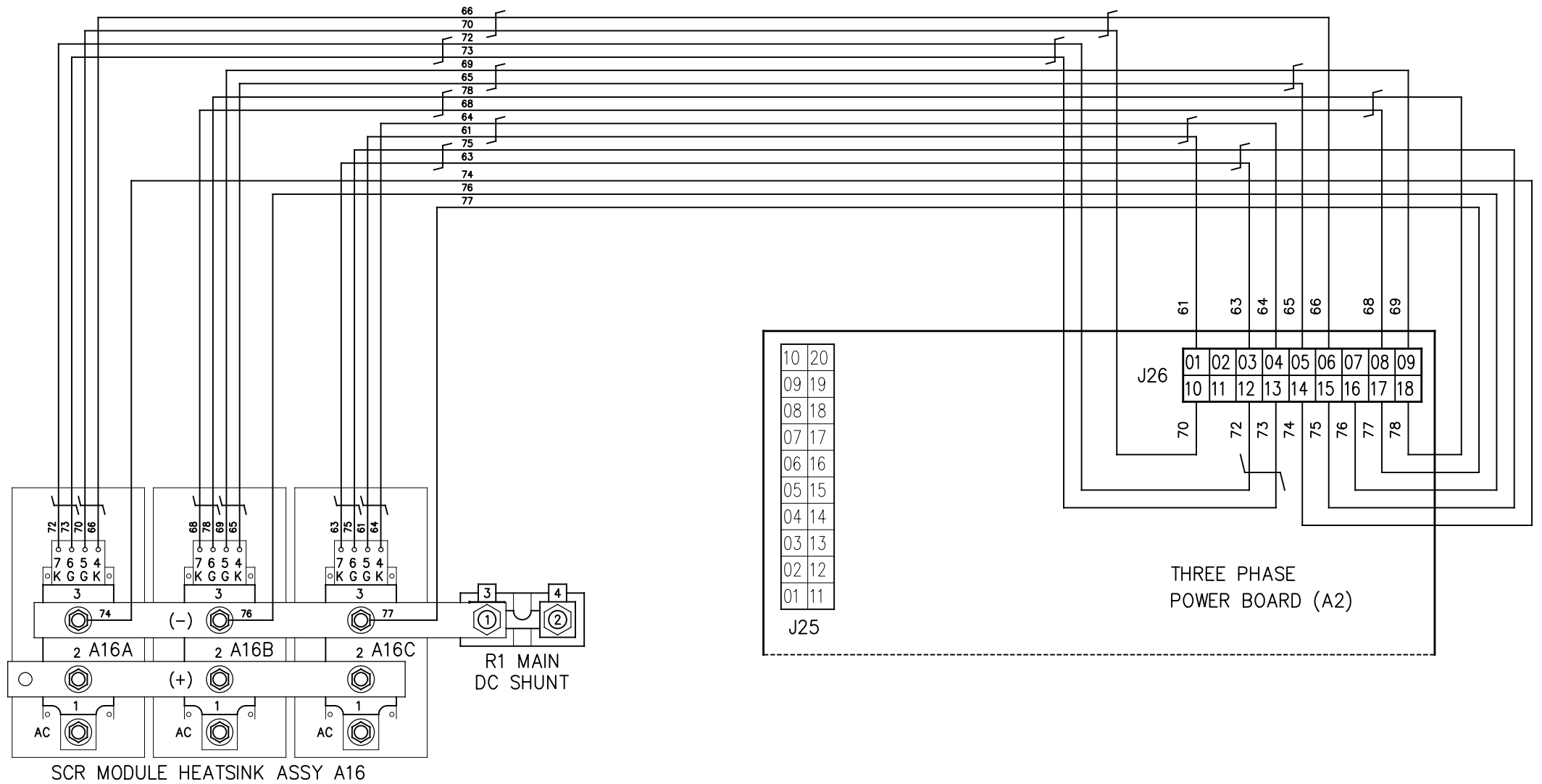
1. CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRE #10 IS GREEN WITH YELLOW STRIPE.
2. THIS DRAWING (SHEET 1 OF 3) SHOWS MAINFRAME POWER WIRING. SEE SUBSEQUENT SHEETS FOR:
  - SHEET 1 OF 3 - MAINFRAME POWER WIRING
  - SHEET 3 OF 3 - SCR (A16x) TRIGGER WIRING

DRN BY KJB	DATE: 10/29/2021
CHK BY MCR	DATE: 10/29/2021
CHK BY MCR	DATE: 10/29/2021

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TITLE  
**ATEVO BATTERY CHARGER  
CONNECTION DIAGRAM: STYLE 163  
3Ø W/O OPTIONS 150-600A**

	<b>B</b>	SCALE	DWG No	REV	SHEET
		NTS	JE5365-01	0	2 OF 3



NOTES:

1. CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRE #10 IS GREEN WITH YELLOW STRIPE.
2. THIS DRAWING (SHEET 1 OF 3) SHOWS MAINFRAME POWER WIRING. SEE SUBSEQUENT SHEETS FOR:
  - SHEET 1 OF 3 - MAINFRAME POWER WIRING
  - SHEET 2 OF 4 - SENSE (SIGNAL) WIRING.

DRN BY KJB	DATE: 10/29/2021	 <b>HINDLEPOWER</b>	1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com			
CHK BY MCR	DATE: 10/29/2021		<b>ATEVO BATTERY CHARGER CONNECTION DIAGRAM: STYLE 163 3φ W/O OPTIONS 150-600A</b>			
CHK BY MCR	DATE: 10/29/2021					
		<b>B</b>	SCALE NTS	DWG No JE5365-01	REV 0	SHEET 2 OF 3