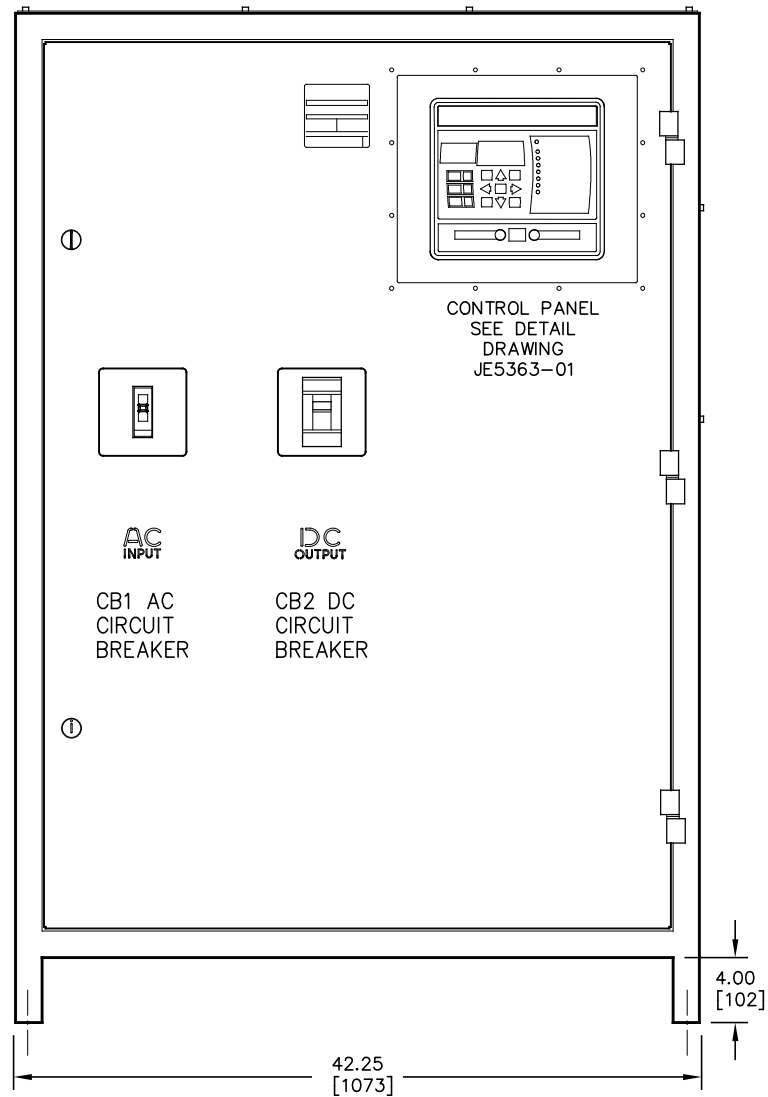
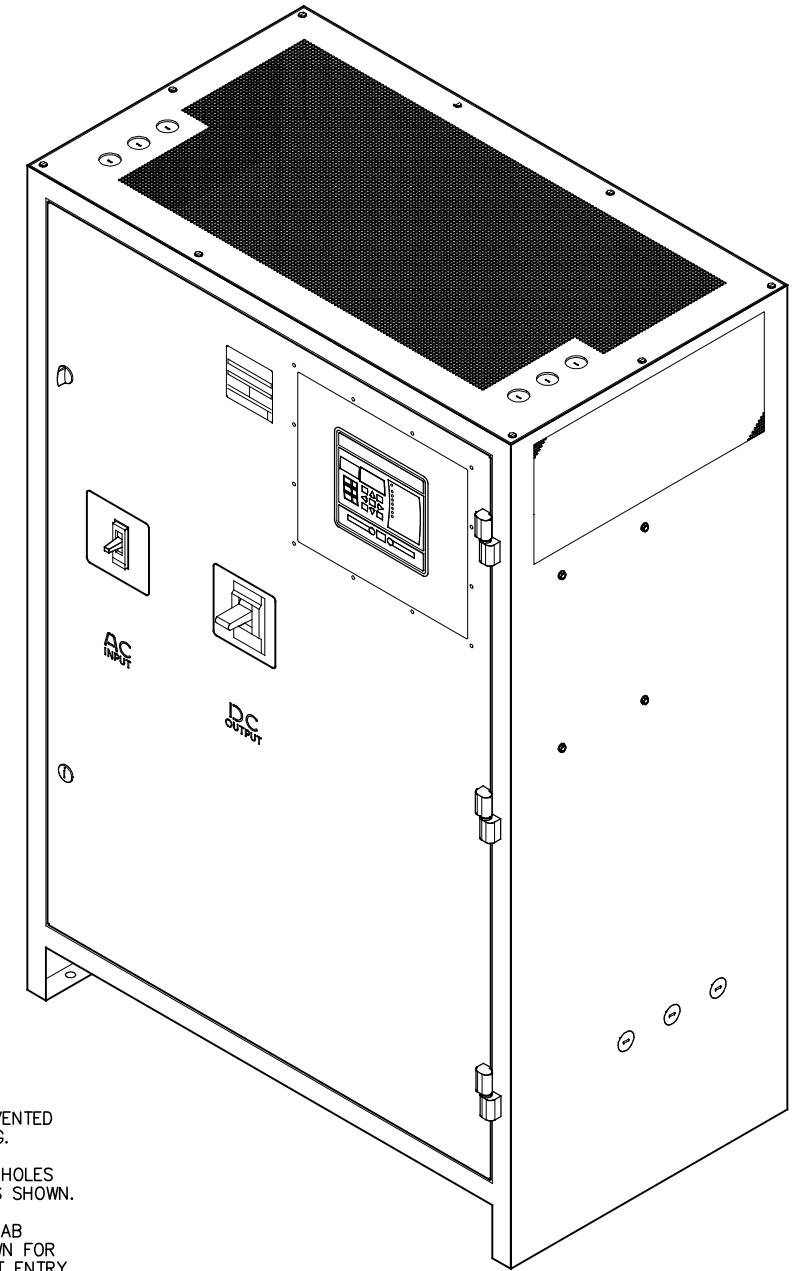
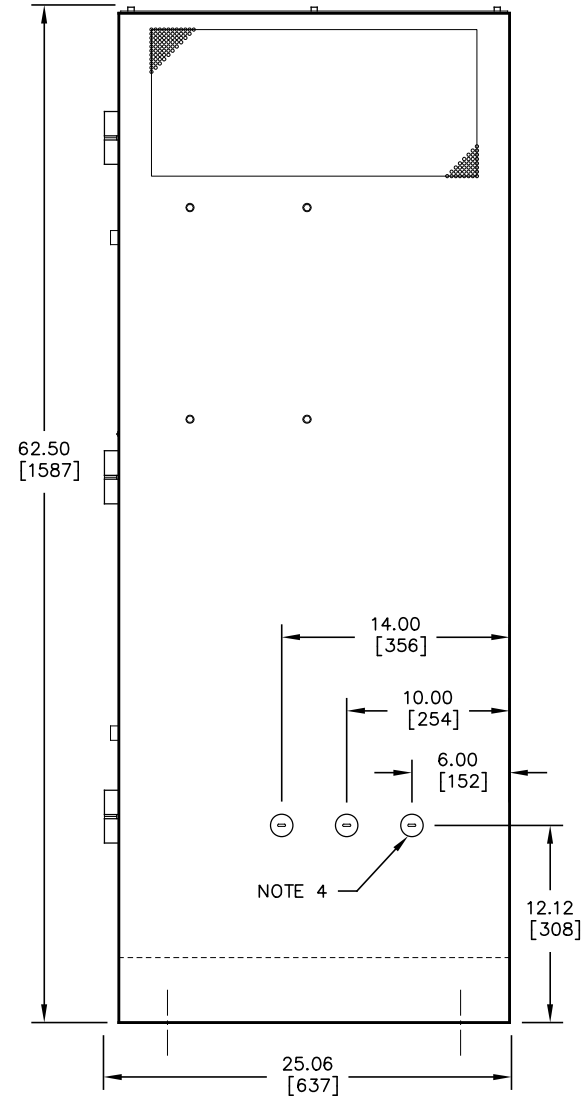


FRONT VIEW



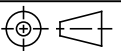
RIGHT SIDE VIEW



NOTES:

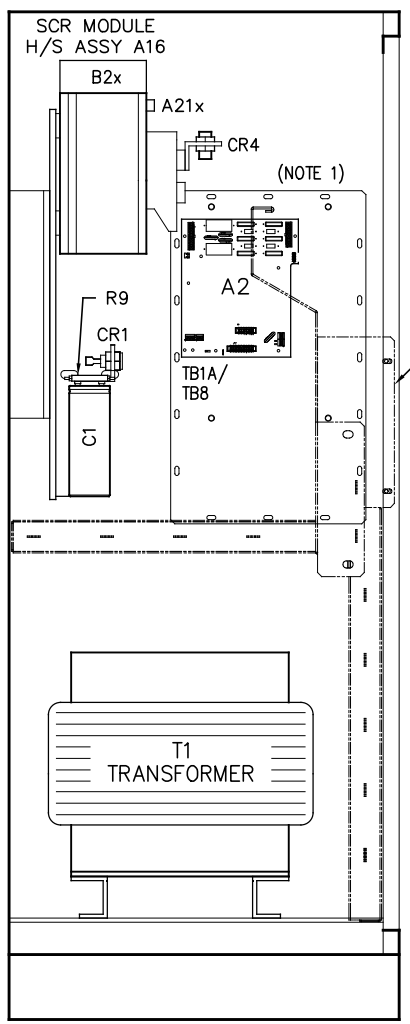
- 1) ENCLOSURE IS A TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT.
- 2) ALLOW 12in / 305mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- 3) FOUR (4) 0.625in / 16mm FLOOR-MOUNTING HOLES ARE PROVIDED ON BOTTOM OF ENCLOSURE AS SHOWN.
- 4) SIX (6) 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

DUAL DIMENSIONS in mm

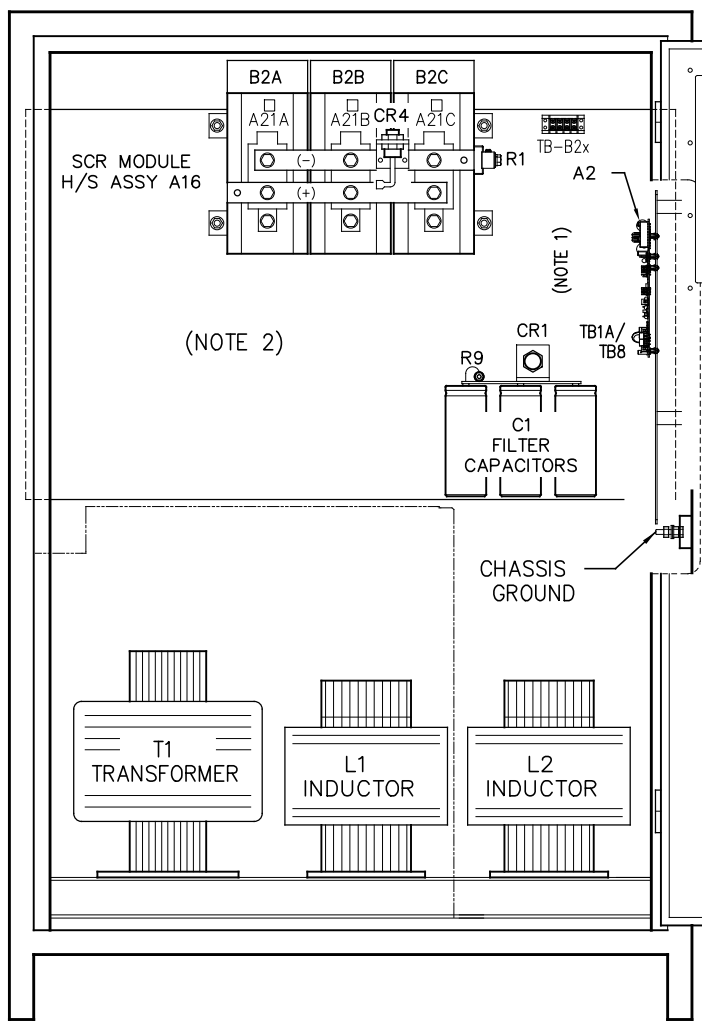
REV: 0	DRN BY: KMW	CHK BY: MCR	APP BY: MCR	DATE: 03232023	DRN BY: KMW	DATE: 03232023	TITLE ATEVO BATTERY CHARGER OUTLINE: NEMA-1 STYLE-163 ENCL 3Ø W/O OPTIONS 150-600A				
DESCRIPTION STANDARD DRAWINGS.					CHK BY: MCR	DATE: 03232023					
ECN NO. N/A					CHK BY: MCR	DATE: 03232023					
							B	SCALE 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	6-PULSE SCR MODULE HEATSINK ASSY
A21x	SCR MODULE (A16) THERMOSTAT
B2x	SCR MODULE (A16) COOLING FAN
C1x	DC OUTPUT FILTER CAPACITOR
CB1	AC INPUT CIRCUIT BREAKER (H+J3)
CB2	DC OUTPUT CIRCUIT BREAKER (LxL3)
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
T1	POWER ISOLATION TRANSFORMER
TB1A	REMOTE SENSE (A2)
TB6	SUMMARY ALARM CONTACTS
TB8	REMOTE BATT TEMP PROBE (A2)
R9	FILTER CAP (C1) BLEED RESISTOR

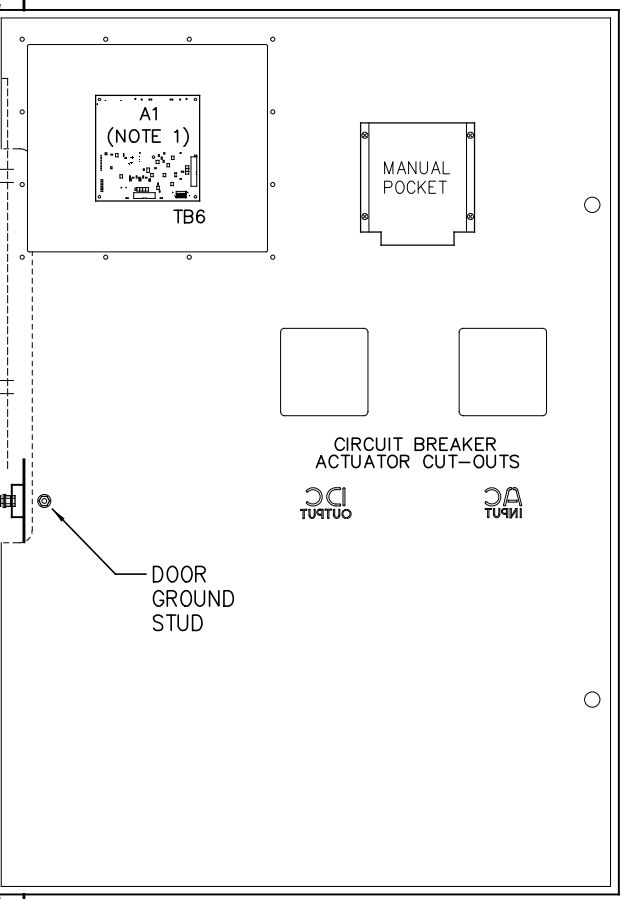
RIGHT SIDE INTERNAL VIEW



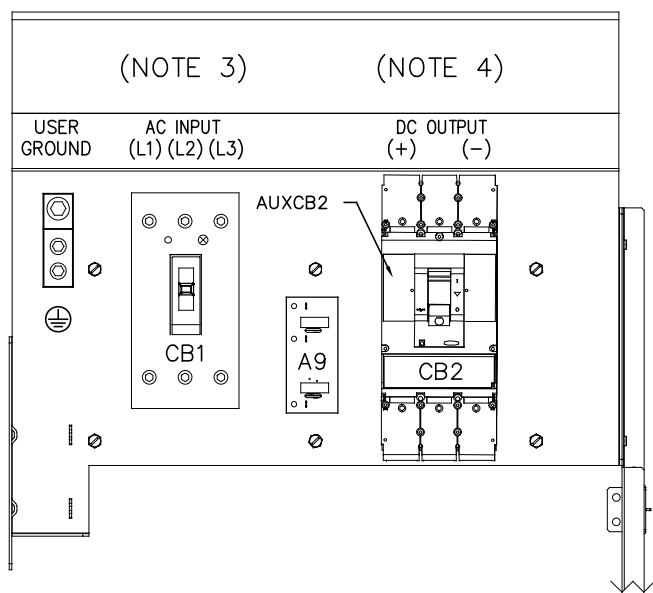
FRONT VIEW



BACK SIDE OF FRONT DOOR

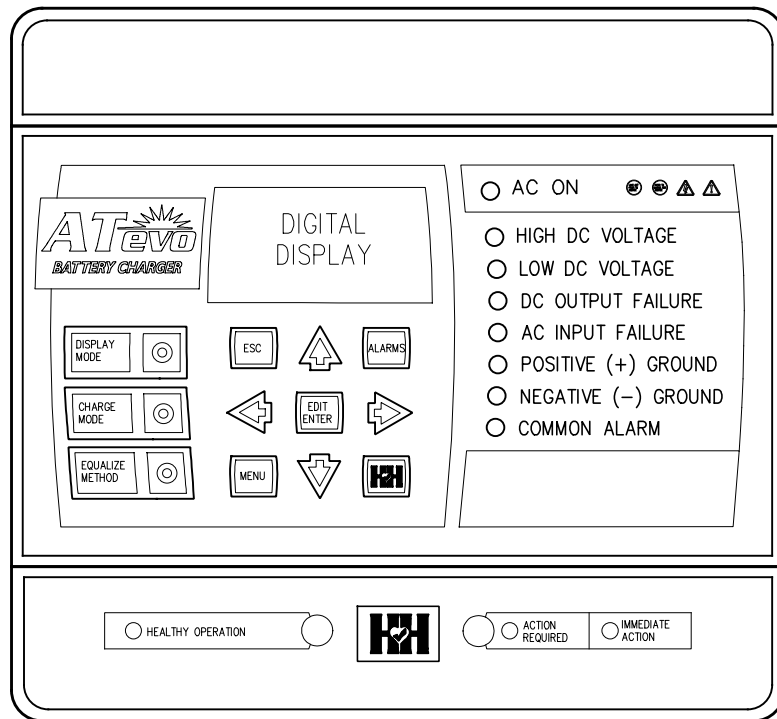


- NOTES:
- FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, etc.) SEE DRAWING JE5363-01.
 - CIRCUIT BREAKER MOUNTING BRACKET NOT FULLY SHOWN. SEE DETAIL TO RIGHT.
 - USER AC INPUT TERMINALS UTILIZES TOP OF AC INPUT BREAKER (CB1).
 - USER DC OUTPUT TERMINALS UTILIZES TOP OF DC OUTPUT BREAKER (CB2).



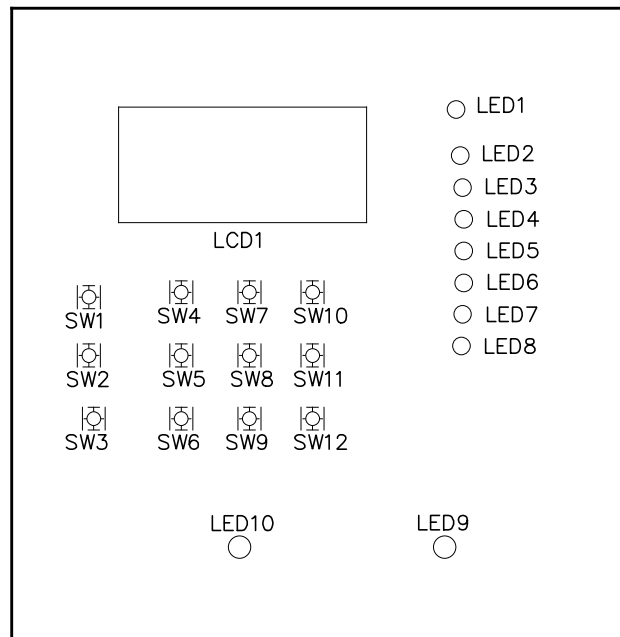
I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
CB2(+)	POSITIVE (+) DC OUTPUT TERMINAL - CU-ALUMINUM COMPRESSION LUG	(2) #2 AWG-500 MCM
CB2(-)	NEGATIVE (-) DC OUTPUT TERMINAL - CU-ALUMINUM COMPRESSION LUG	(2) #2 AWG-500 MCM
TB1-GND	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#6 AWG-350 MCM
CB1-L1/L2/L3	AC INPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14 AWG-3/0 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 1 KJB	CHK BY KMW	APP BY KMW	DATE 6/15/2023	DRN BY KMW	DATE: 03232023	TITLE ATEVO BATTERY CHARGER INTERNAL COMPONENT LAYOUT: STYLE-163 3Ø W/O OPTIONS 150-600A	
DESCRIPTION REVISED TO REMOVE 3 POLE DC BREAKER JUMP.				CHK BY MCR	DATE: 03232023		
ECN NO. N/A				CHK BY MCR	DATE: 03232023		
					SCALE NTS	DWG No JE5362-01	
						REV 1	SHEET 1 OF 1

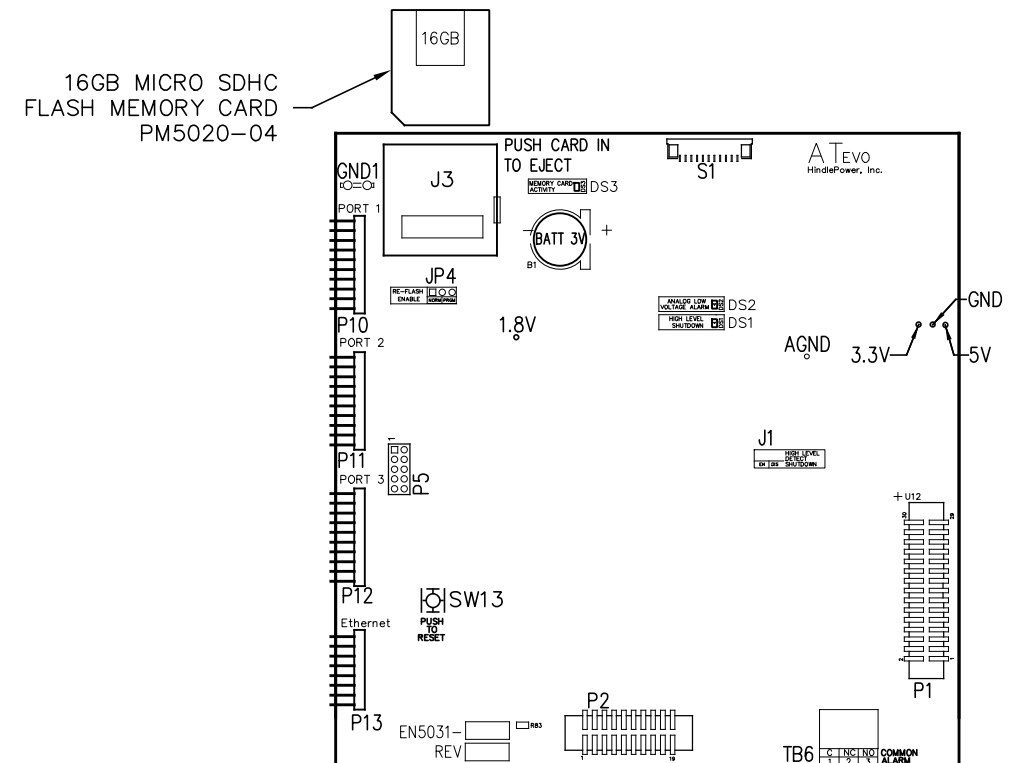


CONTROL PANEL
(PART No. FK5047-00)

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

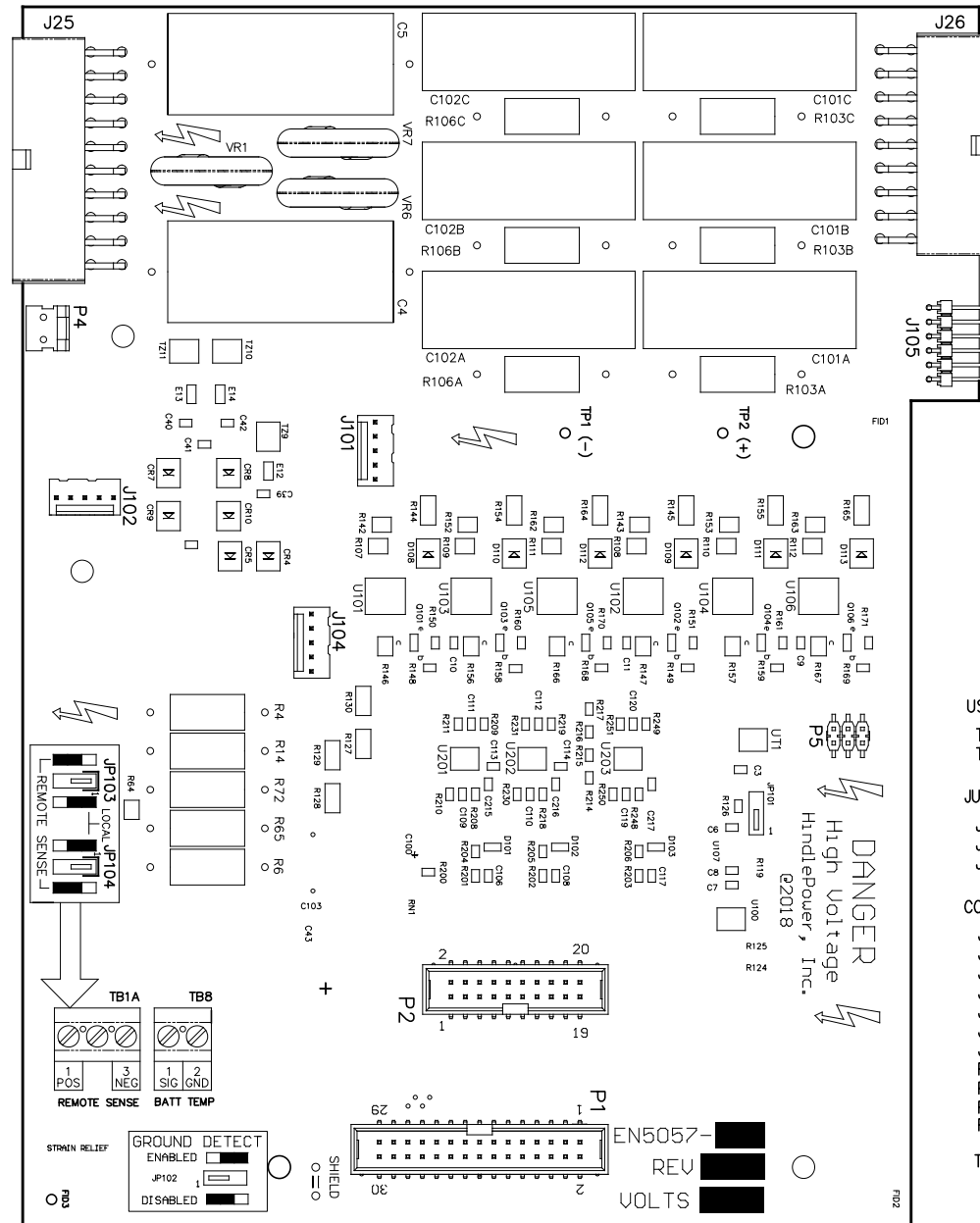


MAIN CONTROL PC BOARD (A1)
BACK VIEW - FACING CHARGER COMPONENTS WHEN INSTALLED

MAIN CONTROL PC BOARD (A1)			
INDICATOR LIGHTS (LEDs):	JUMPERS:	SWITCHES:	CONNECTORS:
LED1 - GREEN - AC ON	J1 - ANALOG HIGH VOLTAGE SHUTDOWN JUMPER	SW1 - DISPLAY BUTTON	P1 - POWER BOARD RIBBON
LED2 - RED - HIGH DC VOLTAGE ALARM	J3 - SD CARD PORT	SW2 - CHARGE MODE BUTTON	P2 - 3 PHASE RECTIFIER RIBBON
LED3 - RED - LOW DC VOLTAGE ALARM	JP4 - RE-FLASH (FIELD PROGRAMMING) JUMPER	SW3 - EQUALIZE METHOD BUTTON	P3 - USB EXPANSION PORT
LED4 - RED - DC OUTPUT FAILURE ALARM	TERMINAL BLOCKS:	SW4 - ESCAPE (ESC) BUTTON	P4 - SPI & I2C EXPANSION PORT #1
LED5 - RED - AC INPUT FAILURE ALARM	TB6 - COMMON ALARM RELAY CONTACTS	SW5 - LEFT ARROW BUTTON	P5 - SPI & I2C EXPANSION PORT #2
LED6 - RED - POSITIVE (+) GROUND ALARM	TEST POINTS:	SW6 - MENU BUTTON	P6 - DISPLAY SPI PORT
LED7 - RED - NEGATIVE (-) GROUND ALARM	1.8V - 1.8 VOLTS	SW7 - UP ARROW BUTTON	P7 - DISPLAY JTAG PORTS
LED8 - RED - COMMON ALARM	3.3V - 3.3 VOLTS	SW8 - EDIT / ENTER BUTTON	P10 - SERIAL INTERFACE PORT #1
LED9 - RED - ACTION REQUIRED ALARM	5V - 5.0 VOLTS	SW9 - DOWN ARROW BUTTON	P11 - SERIAL INTERFACE PORT #2
LED10 - GREEN - HEALTHY OPERATION	GND - GROUND	SW10 - ALARM BUTTON	P12 - SERIAL INTERFACE PORT #3
DS1 - RED - HIGH LEVEL SHUTDOWN (HLD)	AGND - ANALOG GROUND	SW11 - RIGHT ARROW BUTTON	P13 - ETHERNET INTERFACE PORT
DS2 - RED - ANALOG LOW VOLTAGE ALARM (LLD)	SDA - MAIN BOARD I2C DATA	SW12 - 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)	

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

REV.	DRN BY	CHK BY	APP BY	DATE	DRN BY	DATE:	TITLE		REV	SHEET			
0	KMW	MCR	MCR	03232023	KMW	03232023	ATEVO BATTERY CHARGER CONTROL PANEL / PC BOARD DETAIL 3Ø W/O OPTIONS 150-600A		0	1 OF 2			
DESCRIPTION						CHK BY			DATE:	SCALE	DWG No	REV	SHEET
STANDARD DRAWINGS.						MCR			03232023				
ECN NO. N/A						CHK BY	DATE:						
						MCR	03232023						

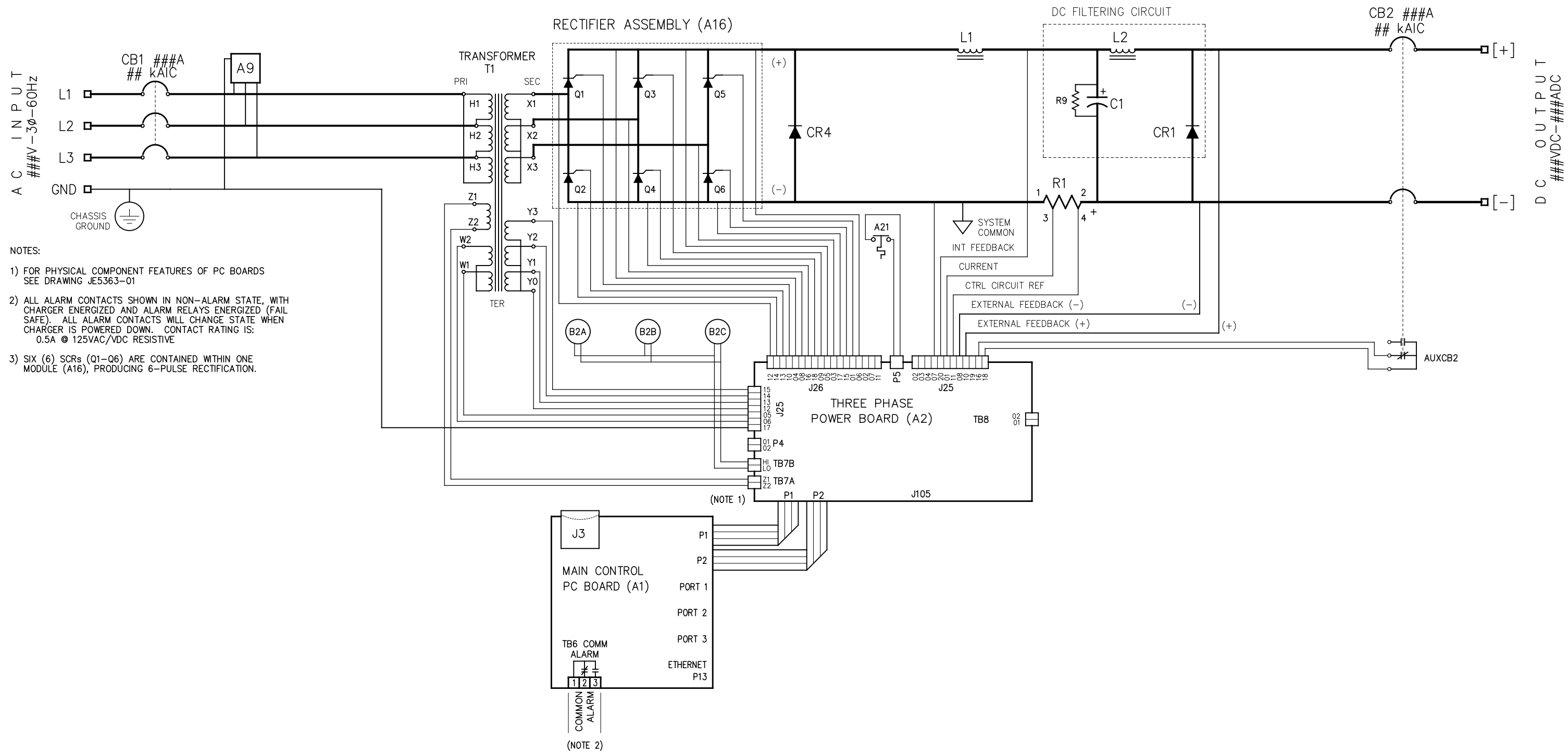


- USER TERMINALS ON POWER BOARD (A2):
 TB1 - REMOTE VOLTAGE SENSE
 TB8 - BATTERY TEMPERATURE COMPENSATION
- JUMPERS ON POWER BOARD (A2):
 JP102 - GROUND DETECT CIRCUIT ENABLE / DISABLE
 JP103 - REMOTE OR LOCAL SENSE SELECTOR (+)
 JP104 - REMOTE OR LOCAL SENSE SELECTOR (-)
- CONNECTORS ON POWER BOARD (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
- TEST POINTS ON POWER BOARD (A2):
 TP1 - PRE-FILTERED DC BUS (-)
 TP2 - PRE-FILTERED DC BUS (+)

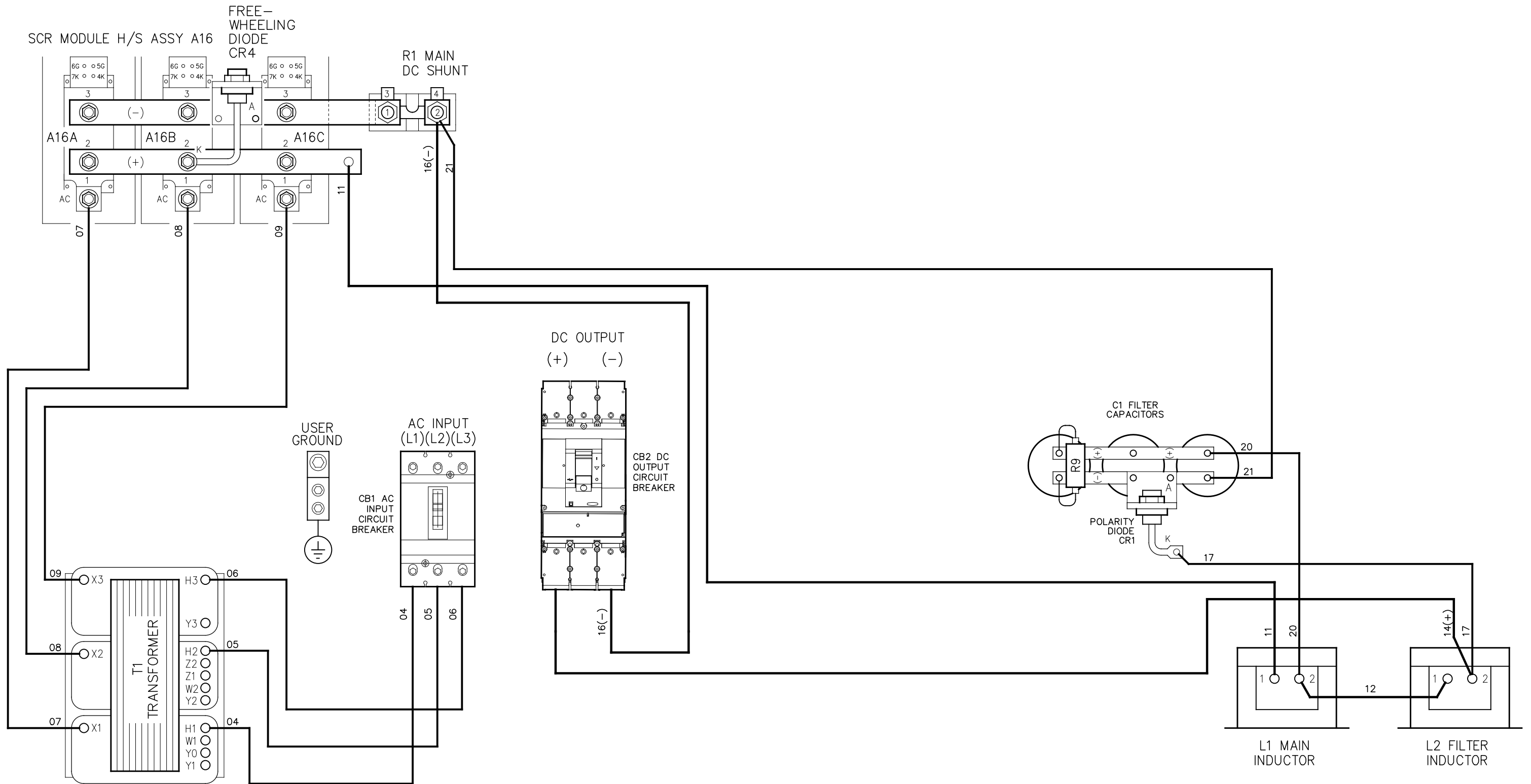
POWER BOARD (A2)

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: KMW	DATE: 03232023	TITLE	ATEVO BATTERY CHARGER CONTROL PANEL / PC BOARD DETAIL 3Ø W/O OPTIONS 150-600A	SCALE	DWG No	REV	SHEET
CHK BY: MCR	DATE: 03232023						
CHK BY: MCR	DATE: 03232023						
		B	JE5363-01	0A	2 OF 2		

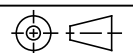


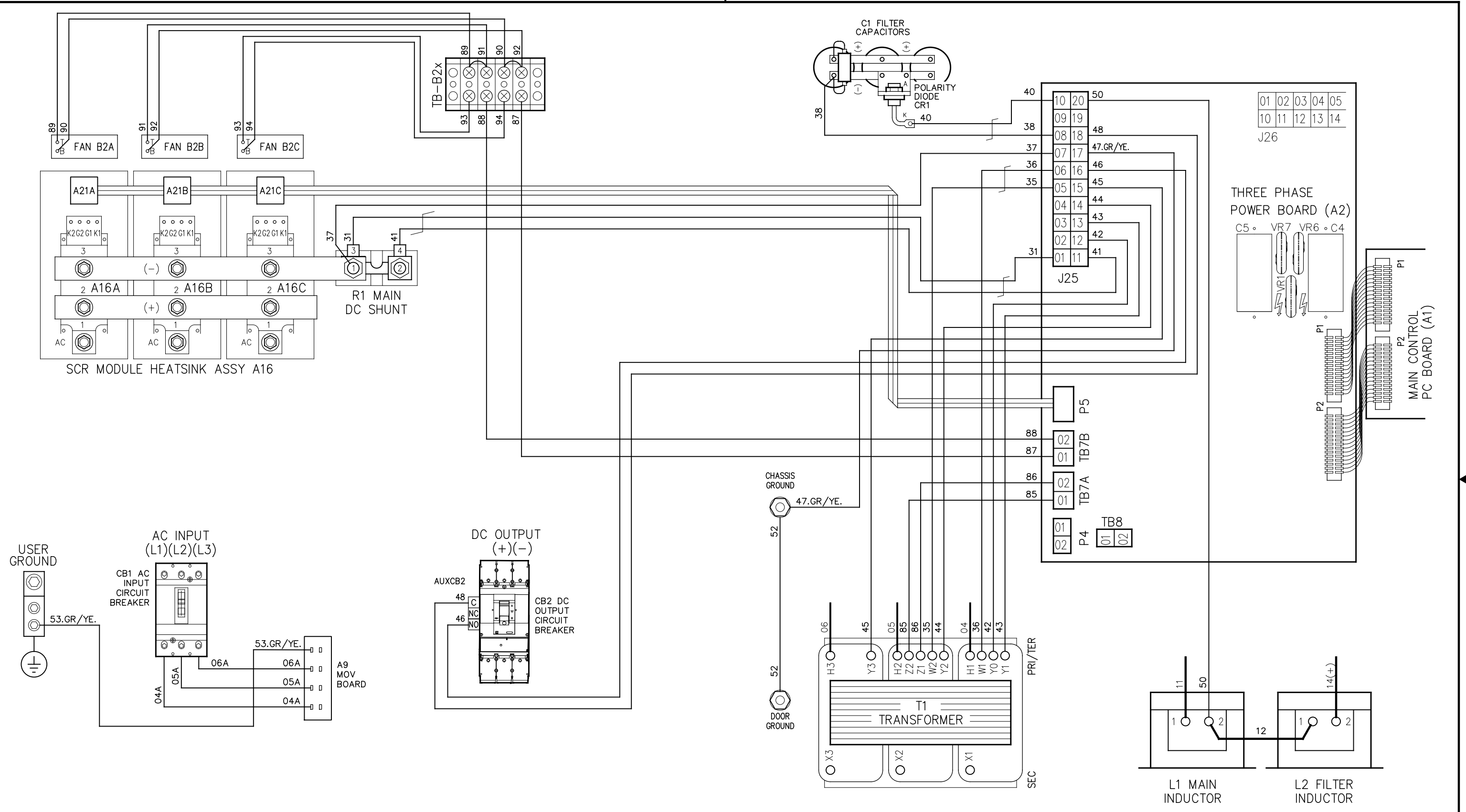
REV. 1	DRN BY KJB	CHK BY KMW	APP BY KMW	DATE 6/15/2023	DRN BY KMW	DATE: 03232023	TITLE ATEVO BATTERY CHARGER SCHEMATIC: STYLE-163 3Ø W/O OPTIONS 150-600A			
DESCRIPTION REVISED TO REMOVE 3 POLE DC BREAKER JUMP.					CHK BY MCR	DATE: 03232023				
ECN NO. N/A					CHK BY MCR	DATE: 03232023				
							SCALE NTS	DWG No. JE5364-01	REV 1	SHEET 1 OF 1



NOTES:

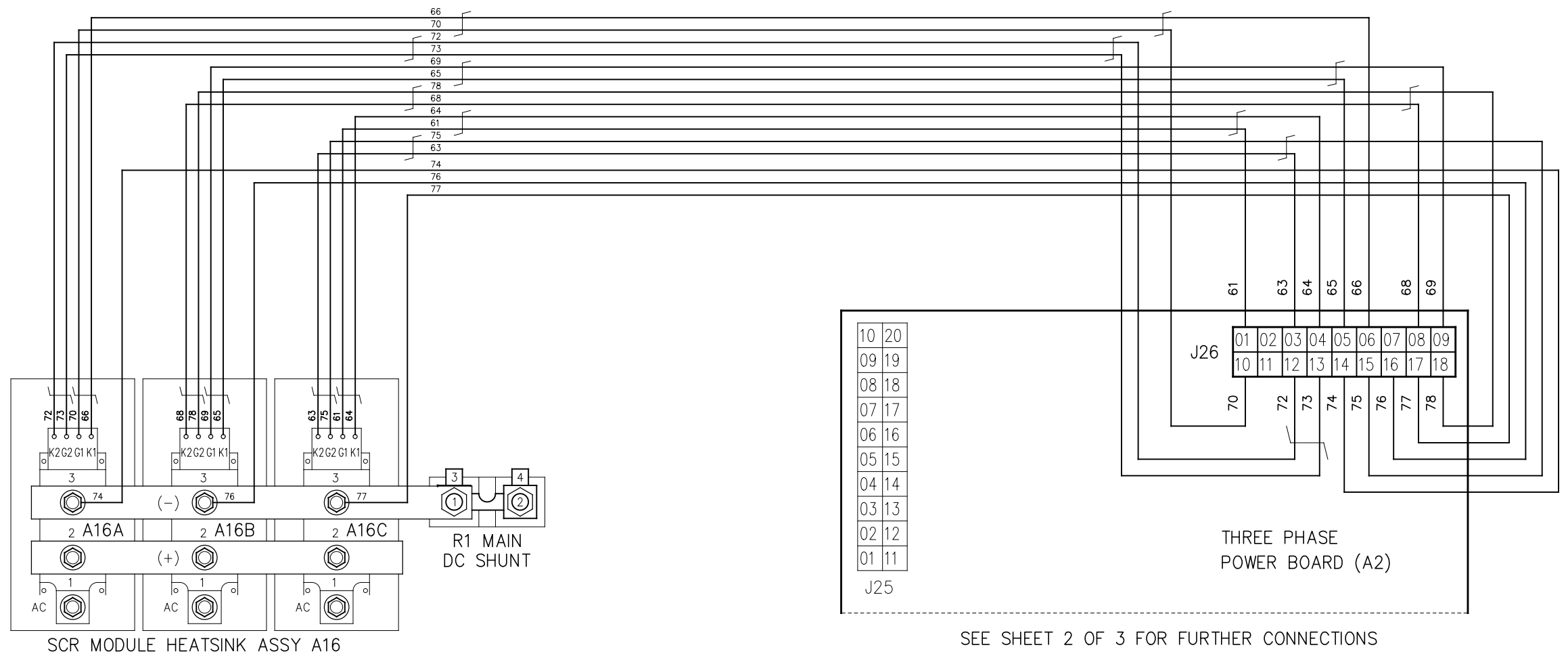
- CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRE #10 IS GREEN WITH YELLOW STRIPE.
- THIS DRAWING (SHEET 1 OF 3) SHOWS MAINFRAME POWER WIRING. SEE SUBSEQUENT SHEETS FOR:
 - SHEET 2 OF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

REV. 1	DRN BY KJB	CHK BY KMW	APP BY KMW	DATE 6/15/2023	DRN BY KMW	DATE: 03232023	TITLE ATEVO BATTERY CHARGER CONNECTION DIAGRAM: STYLE-163 3Ø W/O OPTIONS 150-600A
DESCRIPTION REVISED TO REMOVE 3 POLE DC BREAKER JUMP.					CHK BY MCR	DATE: 03232023	
ECN NO. N/A					CHK BY MCR	DATE: 03232023	
							B SCALE NTS DWG No. JE5365-01 REV 1 SHEET 1 OF 3



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 2 OF 3) SHOWS SENSE SIGNAL WIRING.
SEE:
- SHEET 1 OF 3 - MAINFRAME POWER WIRING
- SHEET 3 OF 3 - SCR (A16x) TRIGGER WIRING

DRN BY KMW	DATE: 03232023	TITLE ATEVO BATTERY CHARGER CONNECTION DIAGRAM: STYLE-163 3Ø W/O OPTIONS 150-600A	SCALE NTS	DWG No JE5365-01	REV 1	SHEET 2 OF 3
CHK BY MCR	DATE: 03232023					
CHK BY MCR	DATE: 03232023					



10	20
09	19
08	18
07	17
06	16
05	15
04	14
03	13
02	12
01	11
J25	

J26								
01	02	03	04	05	06	07	08	09
10	11	12	13	14	15	16	17	18
70	72	73	74	75	76	77	78	

SEE SHEET 2 OF 3 FOR FURTHER CONNECTIONS

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 3 OF 3) SHOWS SCR (A16x) TRIGGER WIRING. SEE:
 - SHEET 1 OF 3 - MAINFRAME POWER WIRING
 - SHEET 2 OF 3 - SENSE (SIGNAL) WIRING.

DRN BY KMW	DATE: 03232023	TITLE ATEVO BATTERY CHARGER CONNECTION DIAGRAM: STYLE-163 3Ø W/O OPTIONS 150-600A	SCALE NTS	DWG No JE5365-01	REV 1	SHEET 3 OF 3
CHK BY MCR	DATE: 03232023					
CHK BY MCR	DATE: 03232023					
		B				