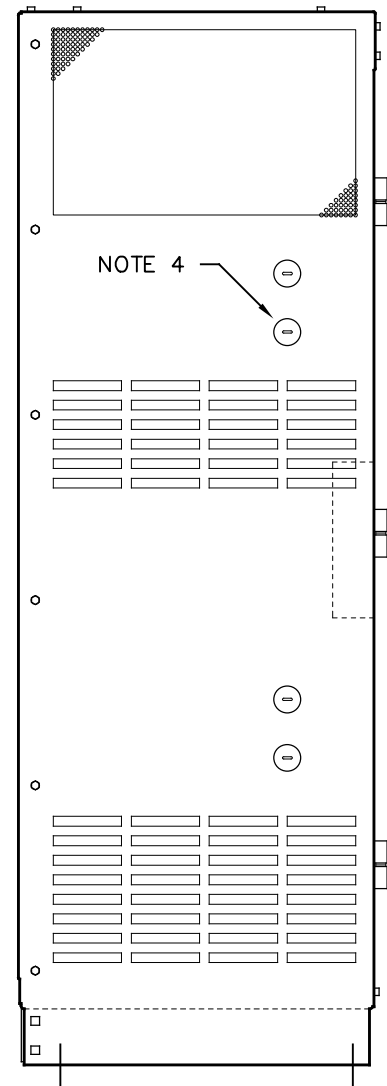
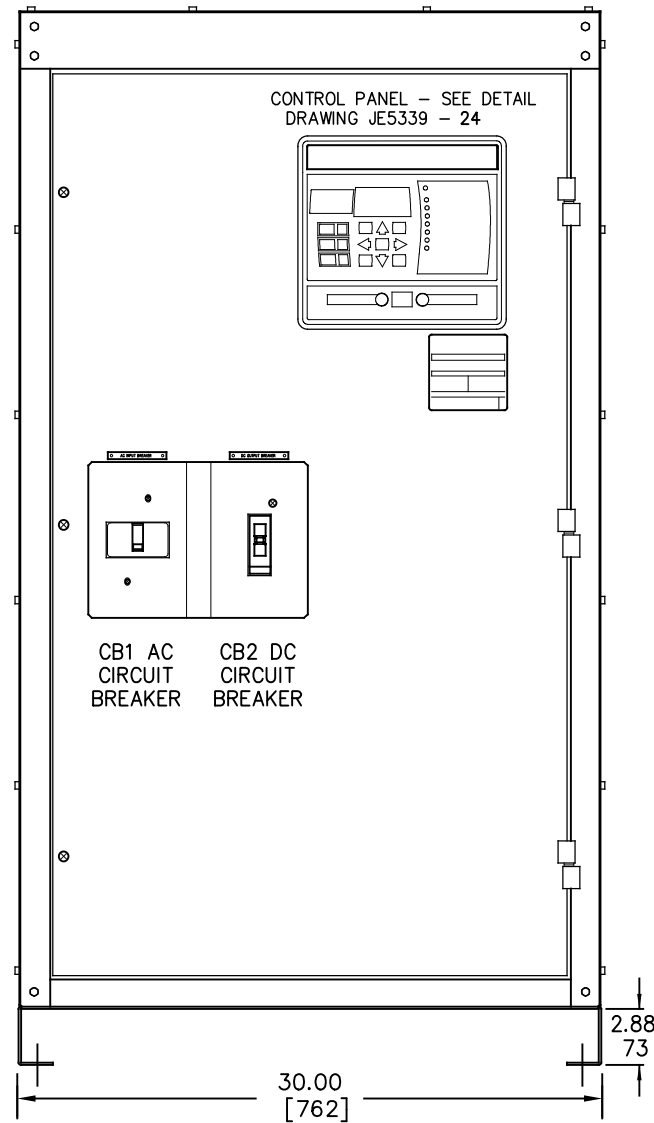


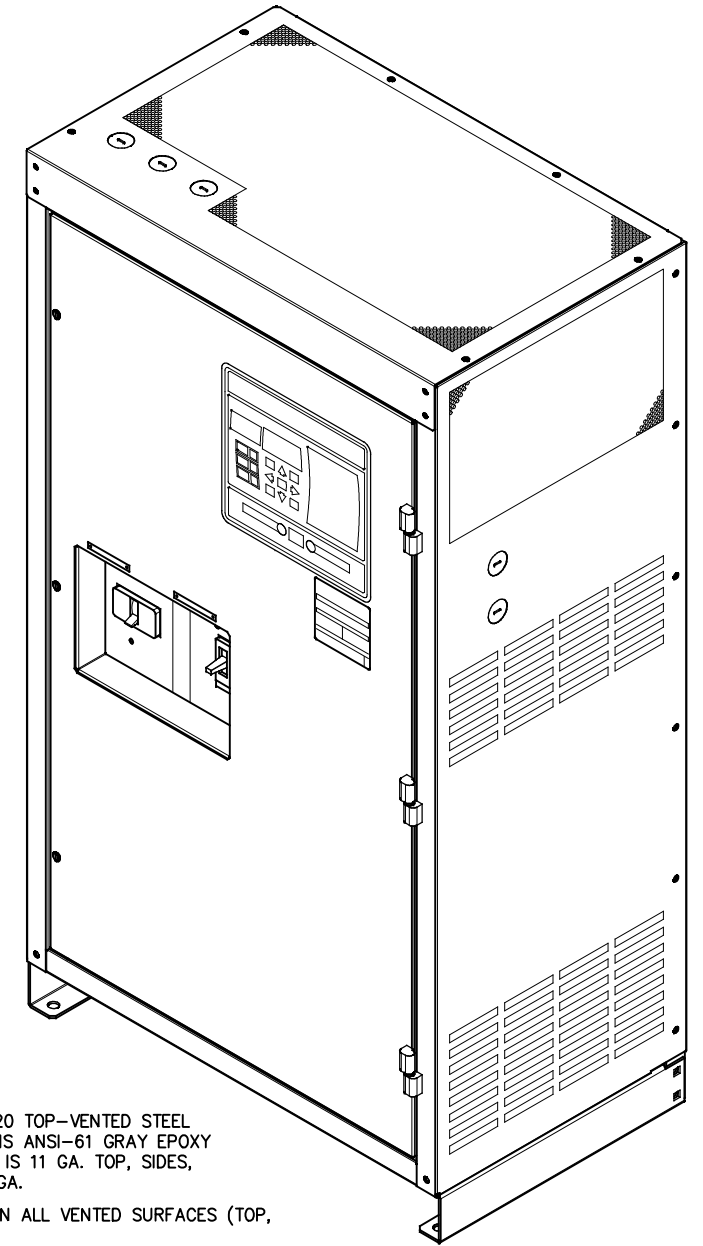
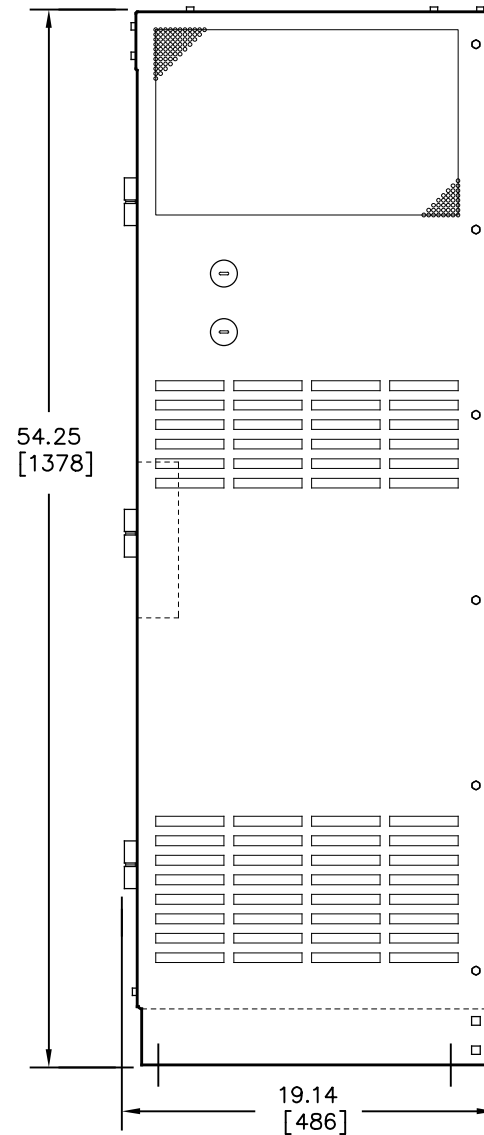
SIDE VIEW



FRONT VIEW

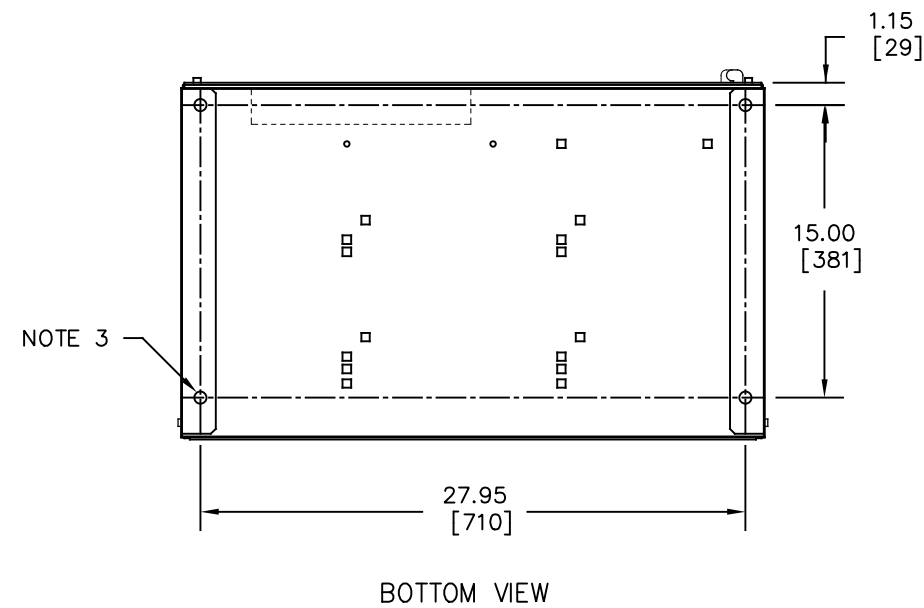


SIDE VIEW



NOTES:

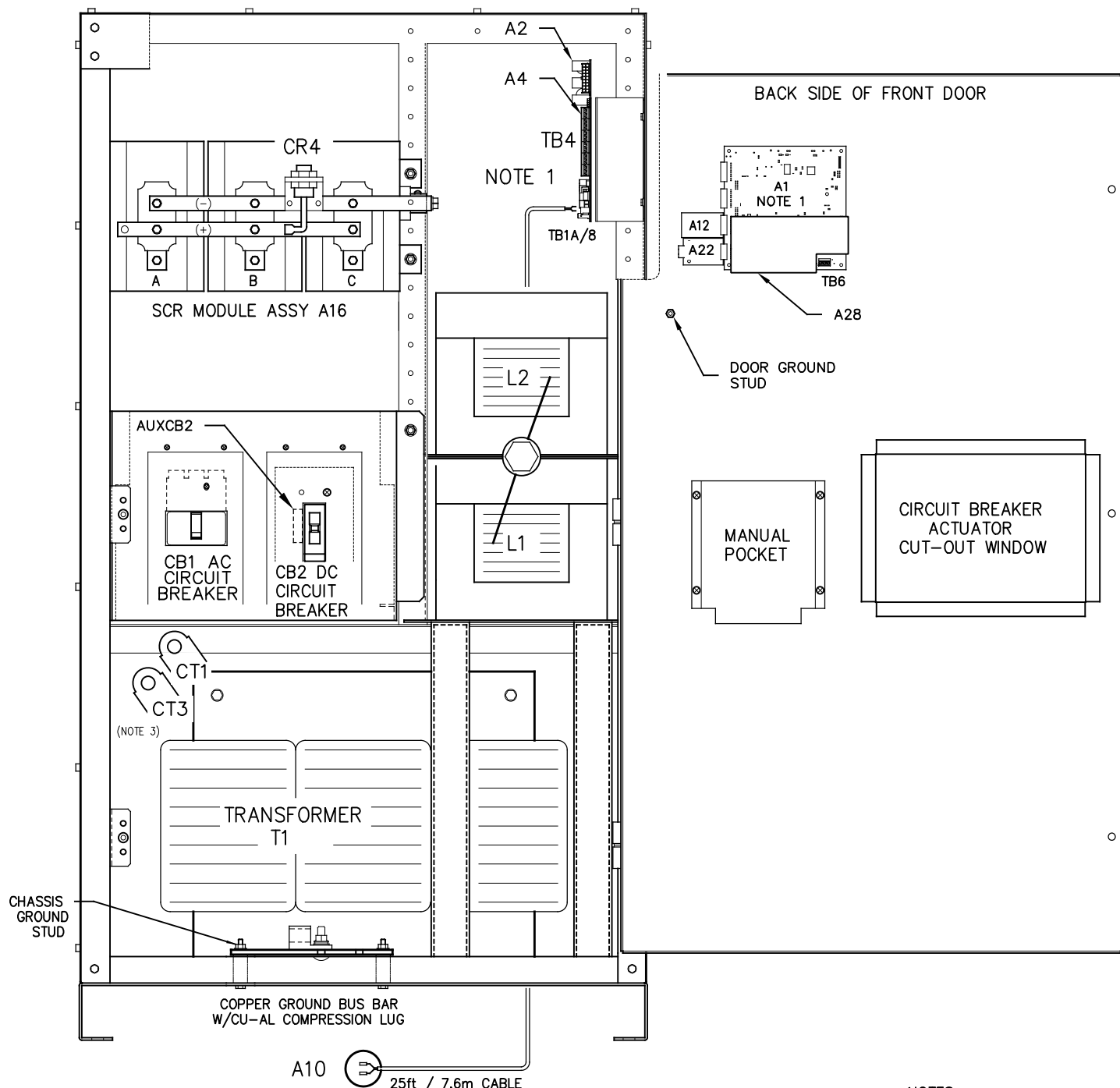
- ENCLOSURE IS A NEMA TYPE 1 / IP20 TOP-VENTED STEEL CABINET WITHOUT GASKETS. FINISH IS ANSI-61 GRAY EPOXY POWDERCOAT. BASE IS 7 GA. FRAME IS 11 GA. TOP, SIDES, AND BACK ARE 16 GA. DOOR IS 14 GA.
- ALLOW 6in / 152mm OF FREE AIR ON ALL VENTED SURFACES (TOP, SIDES & REAR) FOR COOLING.
- FOUR (4) 0.625in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



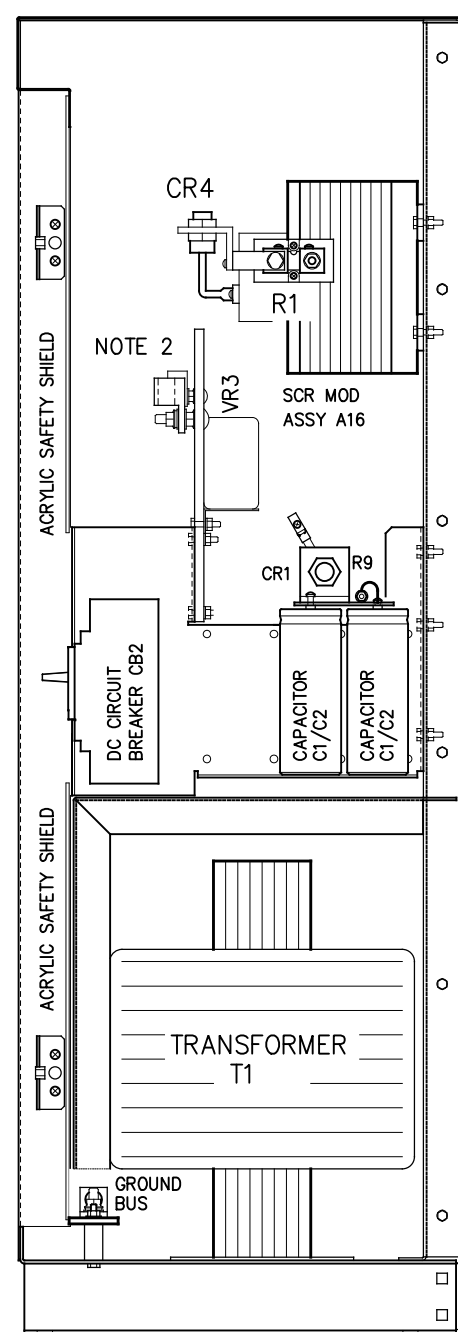
DUAL DIMENSIONS in mm

REV. 0	DRN BY KJB	CHK BY MCR	APP BY MCR	DATE 10/26/2021	DRN BY KJB	DATE 10/26/2021		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	
							ATEVO 3PH BATTERY CHARGER OUTLINE: NEMA-1 STYLE-5030 ENCL 3Ø WITH COMMON OPTIONS 125-300A	
							SCALE: B DWG No: JE5337-24	REV: 0 SHEET: 1 OF 1

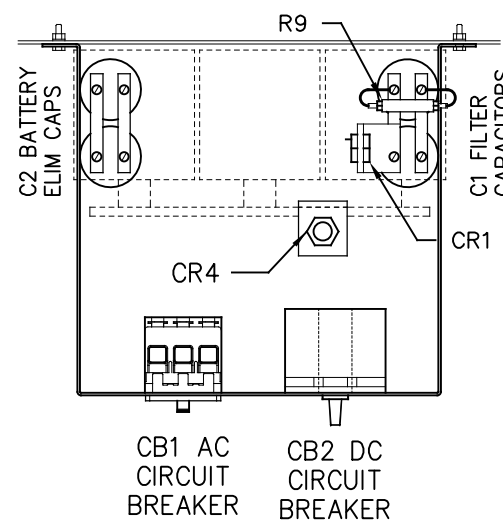
FRONT VIEW



SIDE SECTION



TOP VIEW OF CIRCUIT BREAKER MOUNTING BRACKET



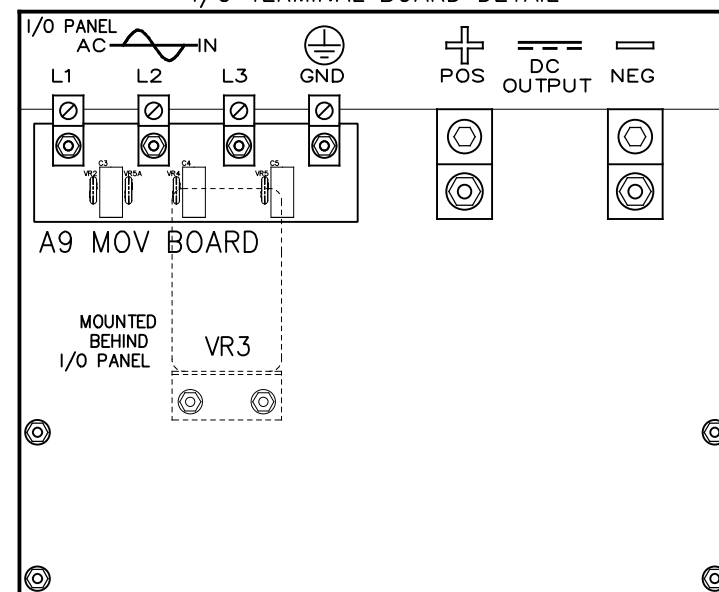
SYM STANDARD COMPONENT DESCRIPTION

- 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 (Bx3)
- CB2 DC OUTPUT CIRCUIT BREAKER (B&2)
- 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

SYM FEATURED OPTION COMP DESCRIPTION

- A4 AUXILIARY I/O PC BOARD
- A10 TEMPERATURE COMPENSATION PROBE
- A12 SERIAL COMMUNICATION ADAPTER
- A22 ETHERNET ADAPTER BOARD
- A28 METER MODULE PC BOARD
- C2 BATTERY ELIMINATOR CAPACITOR
- CT# AC LINE CURRENT XFMR (AFFIXED TO WIRE)
- TB4 AUX ALARM PCB (A4) TERM BLOCK
- VR3 AC INPUT LIGHTNING ARRESTOR

I/O TERMINAL BOARD DETAIL



- NOTES:
- FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A2, A4, A12, A22, etc.) SEE DRAWING JE5339-24
 - I/O PANEL TERMINAL BOARD NOT SHOWN FOR CLARITY OF VIEW. SEE DETAIL TO RIGHT.
 - CURRENT TRANSFORMER AFFIXED TO LINE 1 AND LINE 3 BETWEEN AC INPUT BREAKER (CB1) AND POWER ISOLATION TRANSFORMER (T1). (SEE JA5124-03).

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
I/O(+/-)	POS/NEG DC OUTPUT TERMS - CU-ALUMINUM COMPRESSION LUG	#6 AWG-350 MCM
(2) I/O-GND	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	#14 AWG-350 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
(A4) TB4	AUX I/O RELAY CONTACTS (A4) - SOLDERLESS COMPRESSION SCREW	#22-14 AWG

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

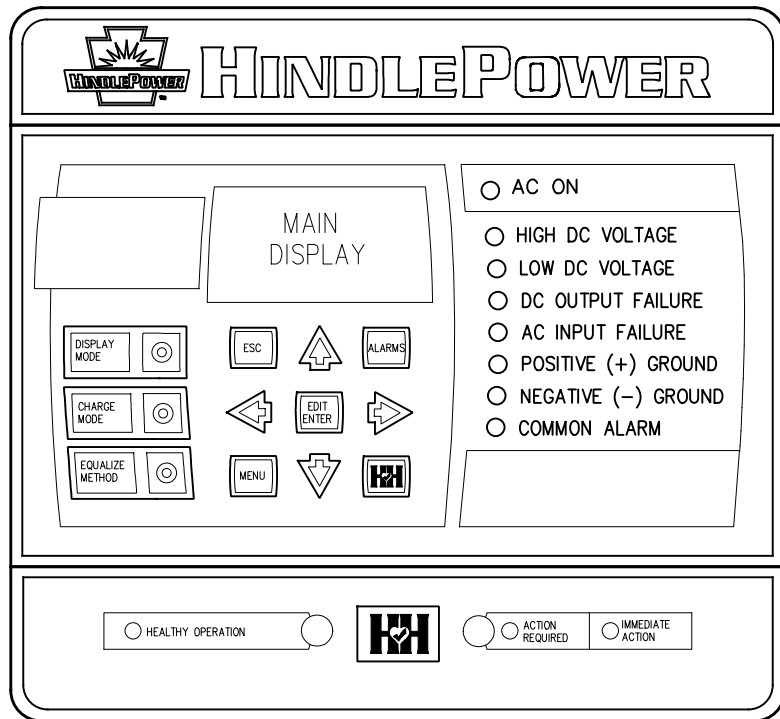
1075 Saint John Street
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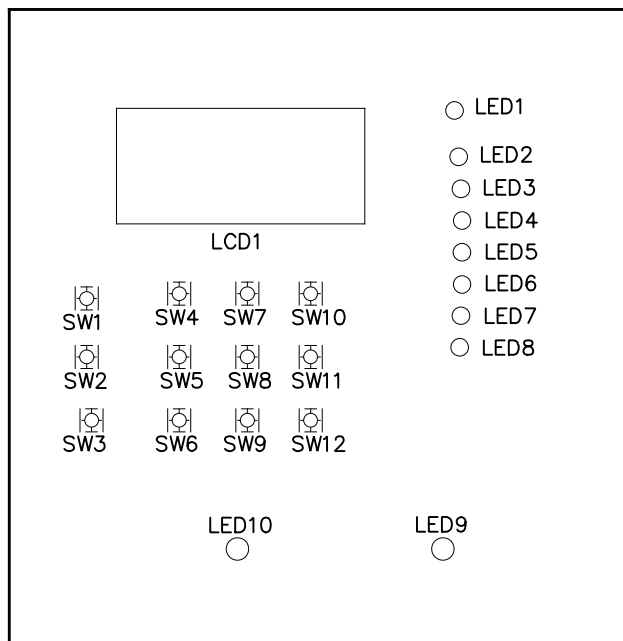
ATEVO 3PH BATTERY CHARGER
INTERNAL COMPONENT LAYOUT: STYLE-5030
3Ø WITH COMMON OPTIONS 125-300A

B SCALE: NTS DWG No: JE5338-24

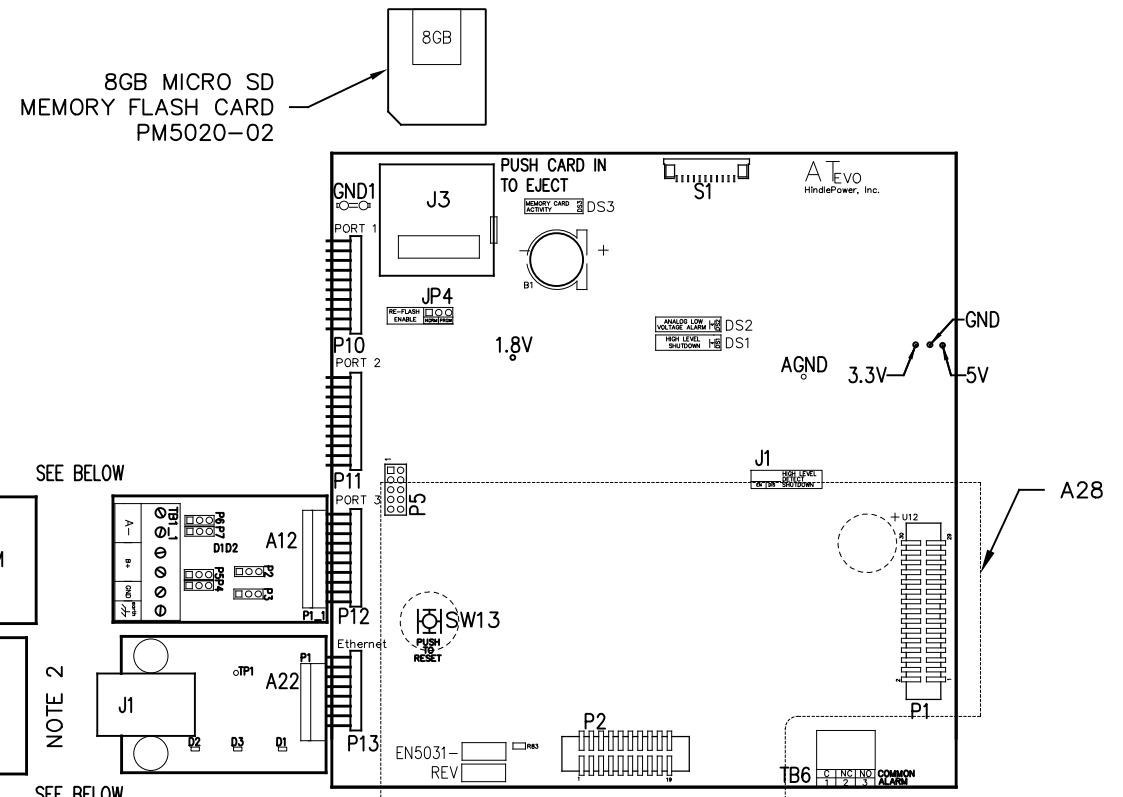
REV 0 SHEET 1 OF 1



CONTROL PANEL
(PART No. FK5047-00)



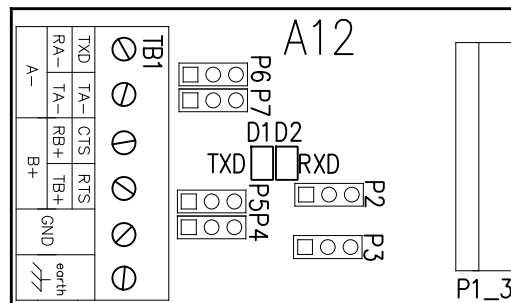
MAIN CONTROL PC BOARD (A1)
FRONT VIEW - FACING CHARGER DOOR WHEN INSTALLED



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.

SERIAL COMMUNICATION ADAPTER (A12)



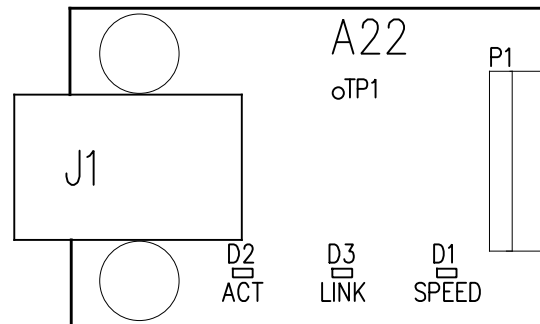
CONNECTORS (A12):
P1 - MAIN CONTROL BOARD

JUMPERS & CONFIGURATION SWITCHES (A12):
P2 - RECEIVER ENABLE CONTROL SELECTION
P3 - MEDIA CONTROL SELECTION (RS-234 OR RS-485)
P4 - RS-485 TERMINATION RESISTOR ENABLE (RECEIVE)
P5 - RS-485 TERMINATION RESISTOR ENABLE (TRANSMIT)
P6 - RS-485 INTERFACE 2 WIRE/4 WIRE SELECTION (A)
P7 - RS-485 INTERFACE 2 WIRE/4 WIRE SELECTION (B)

TERMINAL BLOCKS (A12):
TB1 - USER CONNECTIONS TO SERIAL INTERFACE

INDICATOR LIGHTS (A12):
TXD (D1) - SERIAL DATA BEING SENT
RXD (D2) - SERIAL DATA BEING RECEIVED

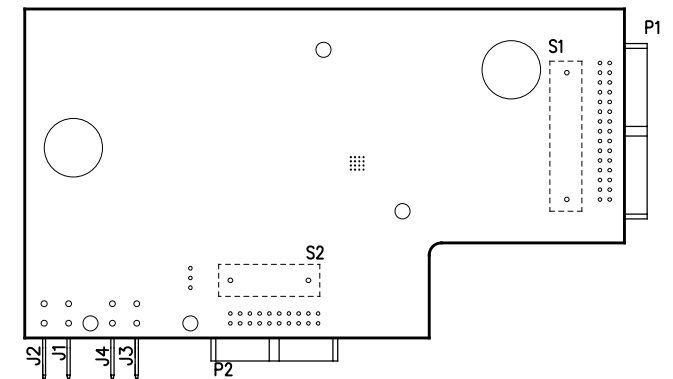
ETHERNET ADAPTER (A22)



NOTE 2

2. ETHERNET ADAPTER (A22) SUPPORTS MULTIPLE PROTOCOLS (DNP3 AND MODBUS) SIMULTANEOUSLY. SEE JA0102-54.

METER MODULE PC BOARD (A28)
MOUNTED ON MAIN CONTROL PC BOARD



CONNECTORS (A5):
P1 - MAIN CONTROL BOARD
J1 - RJ-45 ETHERNET USER CONNECTION

INDICATOR LIGHTS (A5 LEDs):
D1 - ORANGE - ETHERNET SPEED INDICATION 10/100 MBPS
D2 - YELLOW - ETHERNET ACTIVITY (FLASHING)
D3 - RED - ETHERNET LINK

TEST POINTS (A5):
TP1 - CLOCK OUT

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:

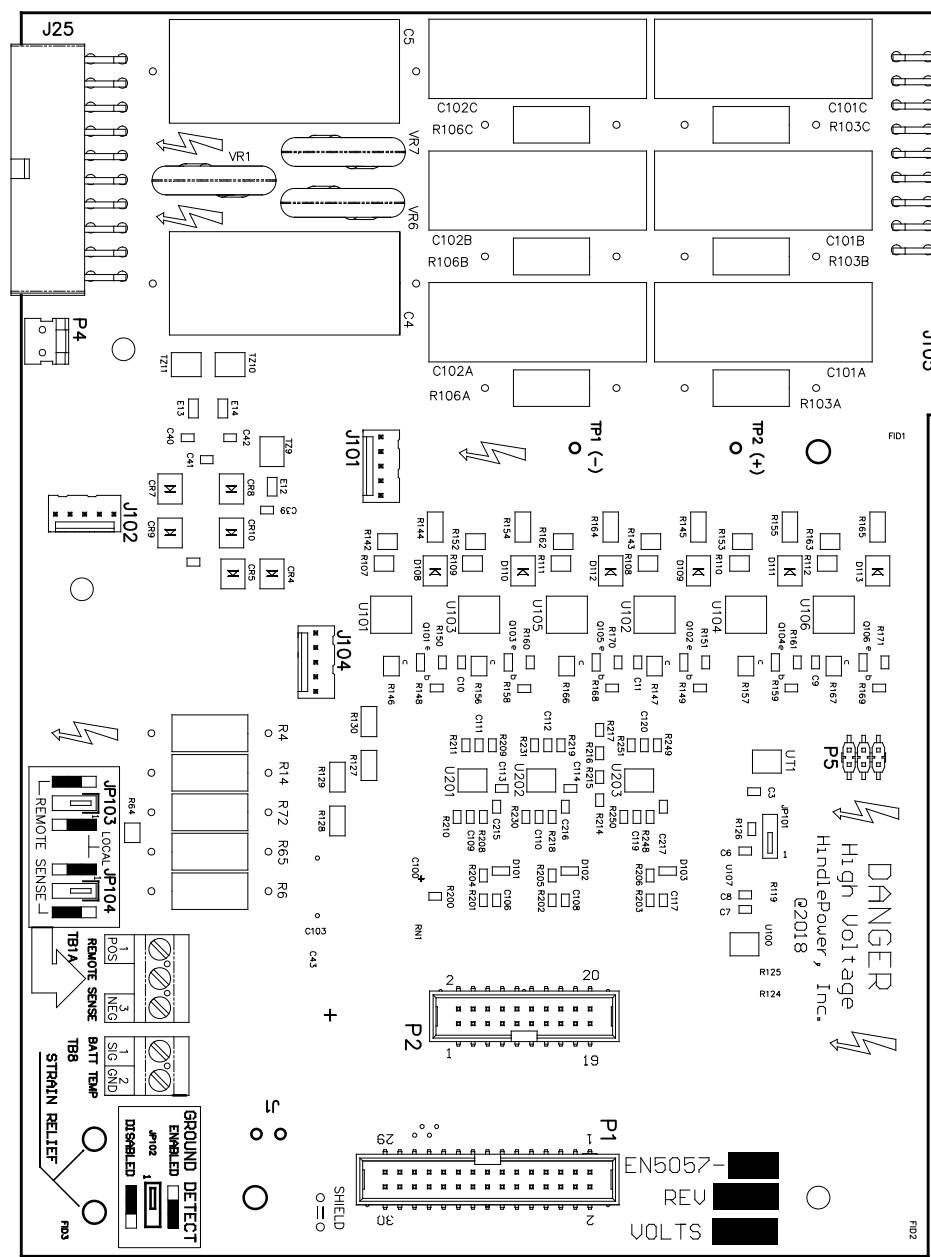
- S1 - DISPLAY BUTTON
- S2 - CHARGE MODE BUTTON
- S3 - EQUALIZE METHOD BUTTON
- S4 - ESCAPE (ESC) BUTTON
- S5 - LEFT ARROW BUTTON
- S6 - MENU BUTTON
- S7 - UP ARROW BUTTON
- S8 - EDIT / ENTER BUTTON
- S9 - DOWN ARROW BUTTON
- S10 - ALARM BUTTON
- S11 - RIGHT ARROW BUTTON
- S12 - HINDLE HEALTH (HHS) BUTTON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

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
(A1) TB6	SUMMARY ALARM TERMINAL BLOCK (A1) - SOLDERLESS COMP SCREW	#22-14 AWG
(A12) TB1	RS-232 / RS-485 USER CONNECTIONS - SOLDERLESS COMP SCREW	#22-14 AWG
(A22) J1	ETHERNET CONNECTION - RJ45 PLUG	CATS

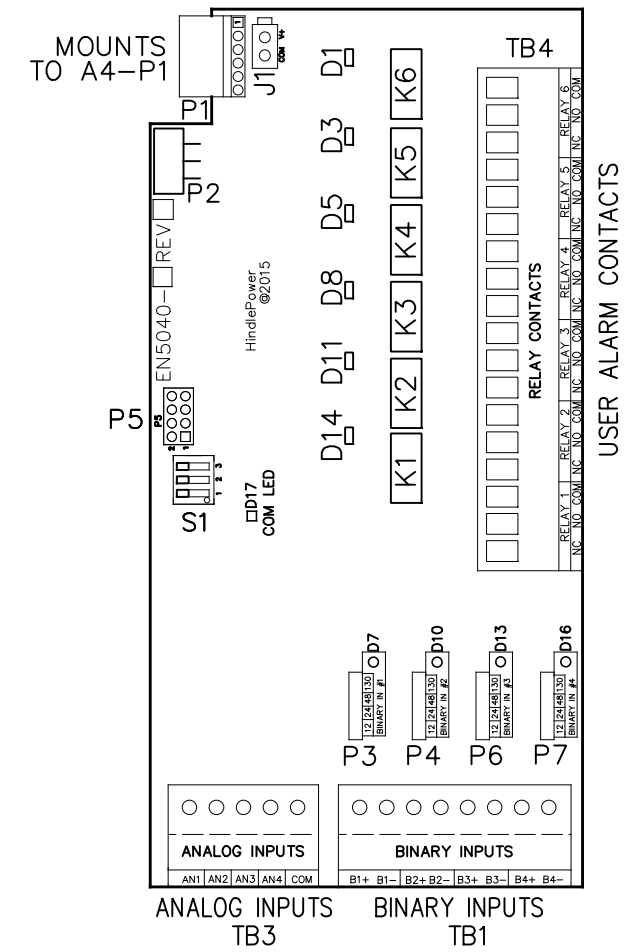
REV. DRN BY 0 KJB	CHK BY MCR	APP BY MCR	DATE 10/26/2021	DRN BY KJB	DATE 10/26/2021	<p>HINDLEPOWER</p> <p>1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com</p>			
DESCRIPTION STANDARD DRAWINGS.				CHK BY MCR	DATE 10/26/2021				
ECN NO. N/A				CHK BY MCR	DATE 10/26/2021				
<p>TITLE</p> <p>ATEVO 3PH BATTERY CHARGER CONTROL PANEL / PC BOARD DETAIL 3Ø WITH COMMON OPTIONS 125-300A</p>						<p>SCALE NTS</p>	<p>DWG No JE5339-24</p>	<p>REV 0</p>	<p>SHEET 1 OF 2</p>



MOUNTS TO A2-J105

- 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)

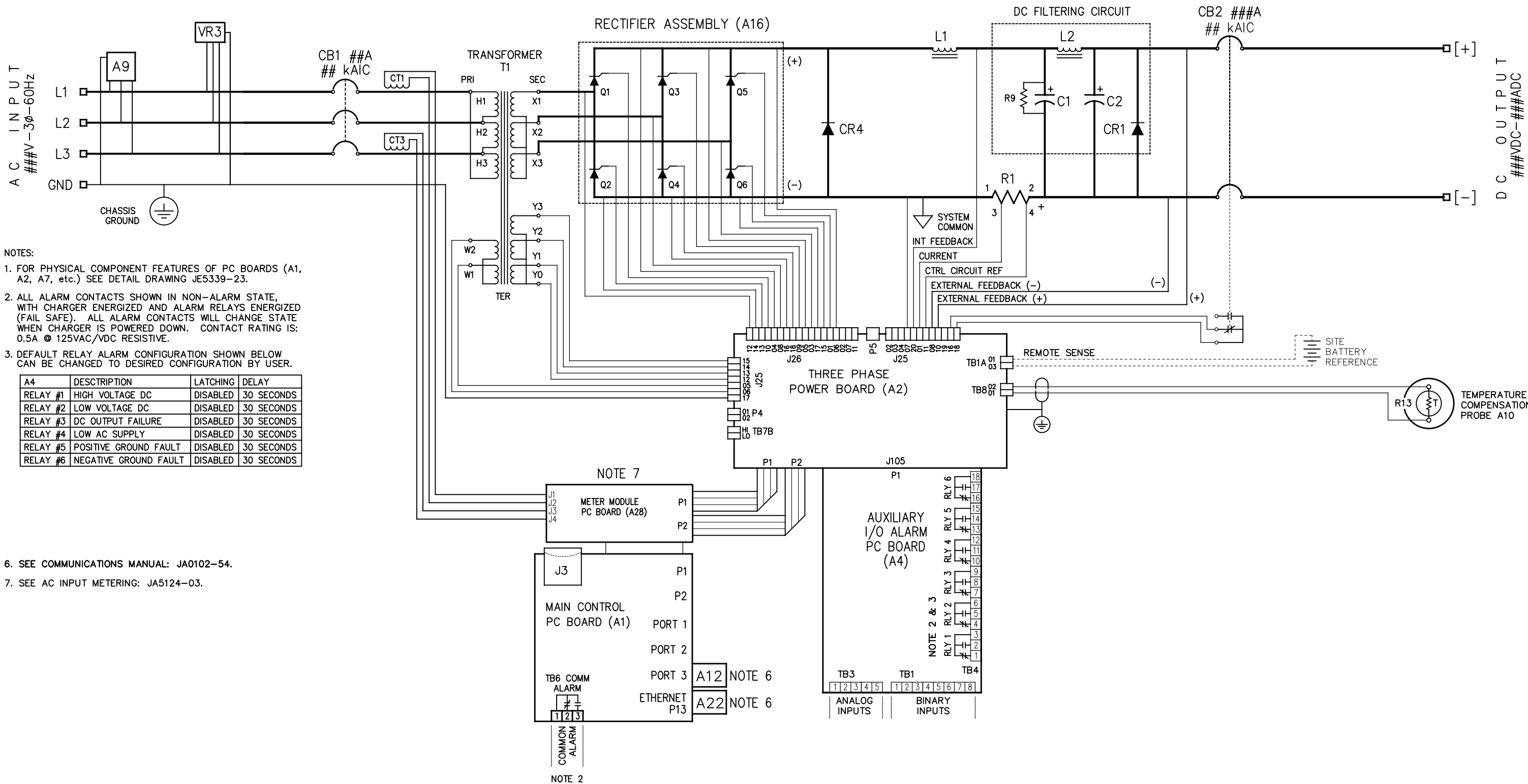


AUXILIARY I/O BOARD (A4)

- 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

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
(A4) TB1	AUX I/O BINARY INPUTS (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

DRN BY KJB	DATE: 10/26/2021		1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com
CHK BY MCR	DATE: 10/26/2021		
CHK BY MCR	DATE: 10/26/2021		
TITLE		ATEVO BATTERY CHARGER CONTROL PANEL / PC BOARD DETAIL 3Ø WITH COMMON OPTIONS 125-300A	
		B SCALE NTS	DWG No JE5339-24
		REV 0	SHEET 2 OF 2



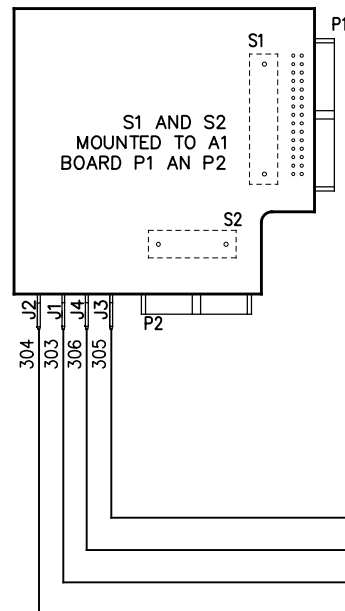
- NOTES:
- FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A2, A7, etc.) SEE DETAIL DRAWING JE5339-23.
 - ALL ALARM CONTACTS SHOWN IN NON-ALARM STATE, WITH CHARGER ENERGIZED AND ALARM RELAYS ENERGIZED (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS: 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

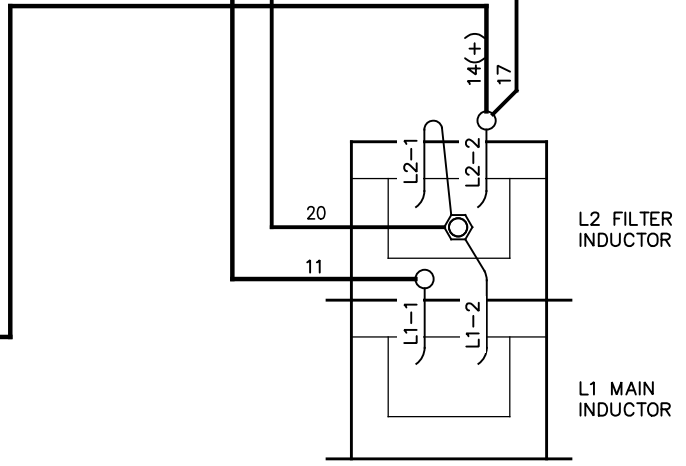
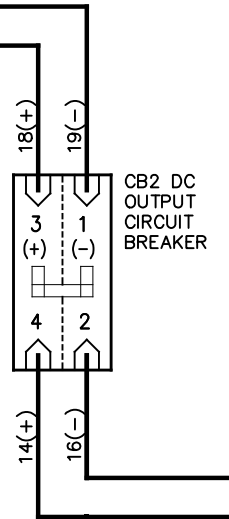
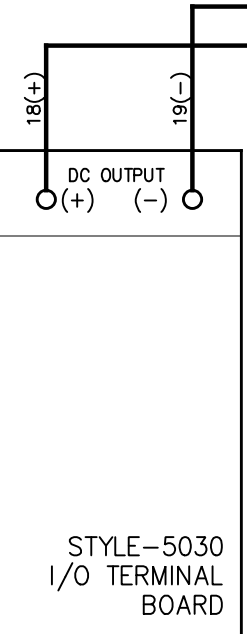
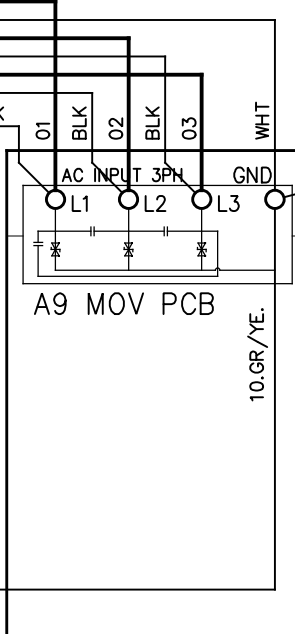
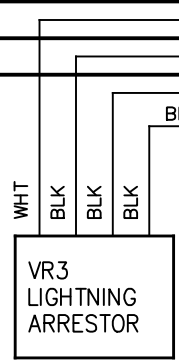
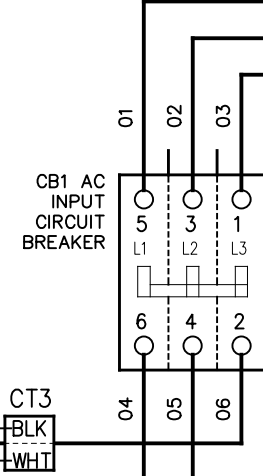
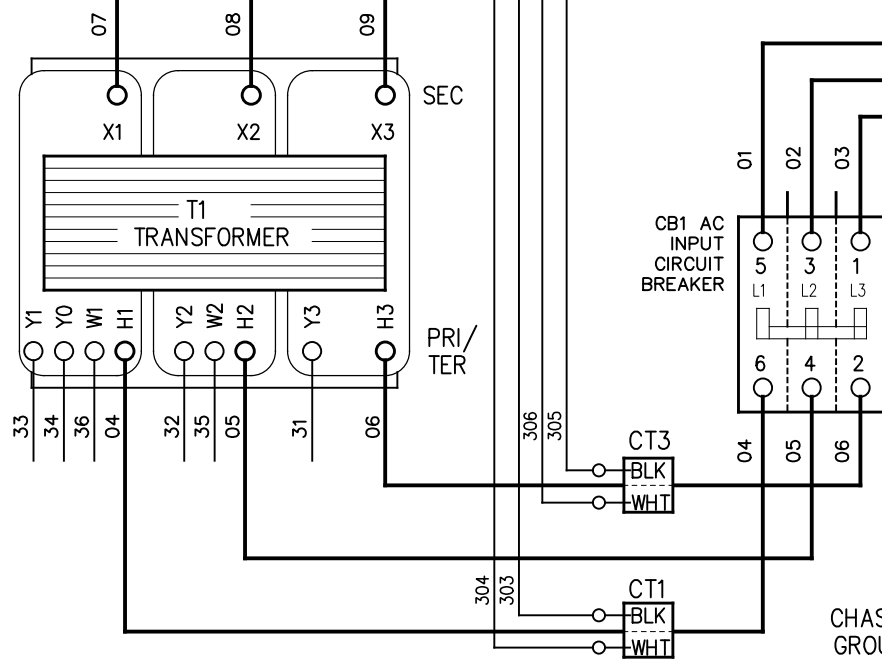
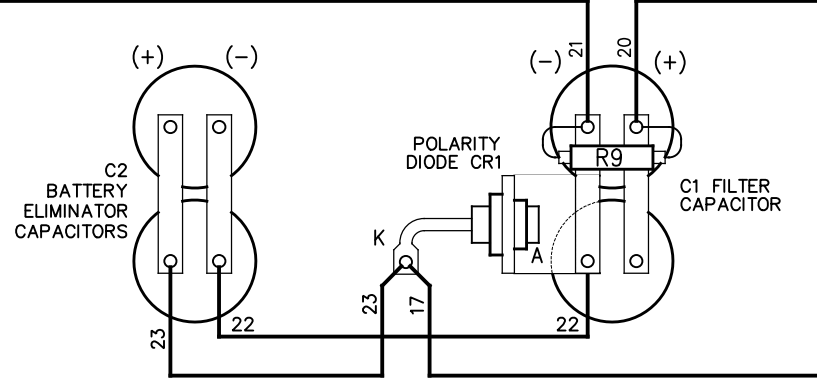
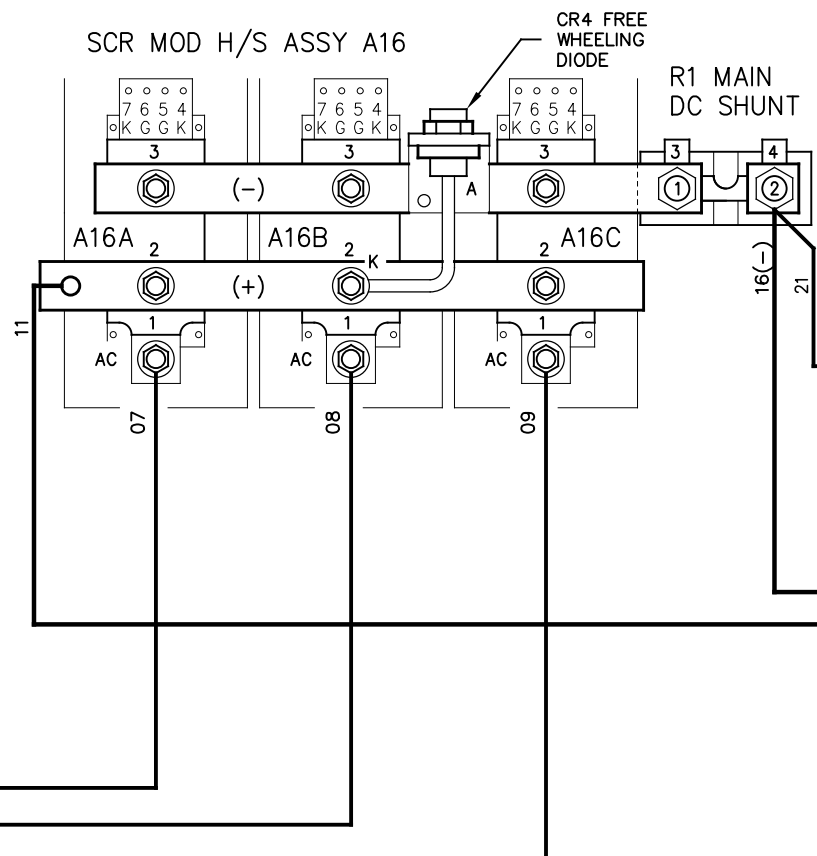
- SEE COMMUNICATIONS MANUAL: JA0102-54.
- SEE AC INPUT METERING: JA5124-03.

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
			TITLE BATTERY CHARGER SCHEMATIC: STYLE 5030 3φ WITH COMMON OPTIONS 125-300A		
SCALE NTS		DWG No JE5340-24		REV 0	SHEET 1 OF 1

METER MODULE PC BOARD (A28)



SCR MOD H/S ASSY A16



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.

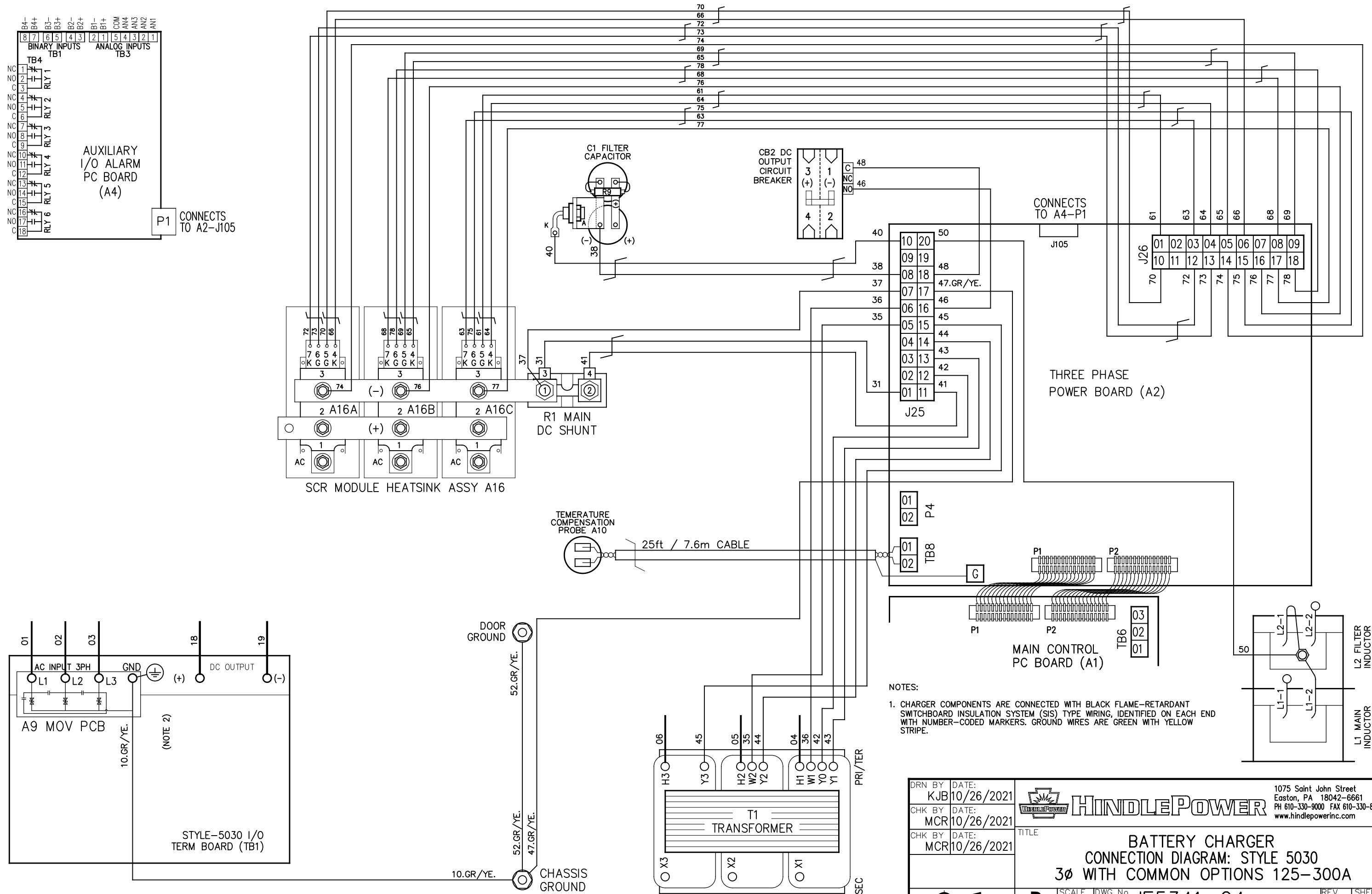
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1	KJB	MCR	MCR	10/26/2021	KJB	10/26/2021
DESCRIPTION				Updated cap wiring.		
CHK BY				MCR 10/26/2021		
DATE				10/26/2021		
ECN NO.				N/A		
CHK BY				MCR 10/26/2021		
DATE				10/26/2021		

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**BATTERY CHARGER
CONNECTION DIAGRAM: STYLE 5030
3φ WITH COMMON OPTIONS 125-300A**

B SCALE DWG No **JE5341-24** REV SHEET
NTS 1 1 OF 2

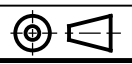


- NOTES:
1. CHARGER COMPONENTS ARE CONNECTED WITH BLACK FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRES ARE GREEN WITH YELLOW STRIPE.

DRN BY	DATE:
KJB	10/26/2021
CHK BY	DATE:
MCR	10/26/2021
CHK BY	DATE:
MCR	10/26/2021


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BATTERY CHARGER
CONNECTION DIAGRAM: STYLE 5030
3φ WITH COMMON OPTIONS 125-300A

	B	SCALE	DWG No	REV	SHEET
		NTS	JE5341-24	1	2 OF 2