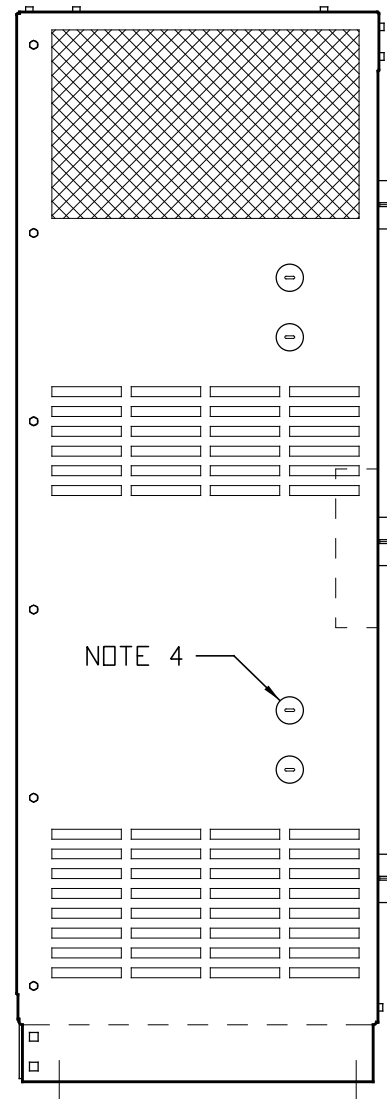
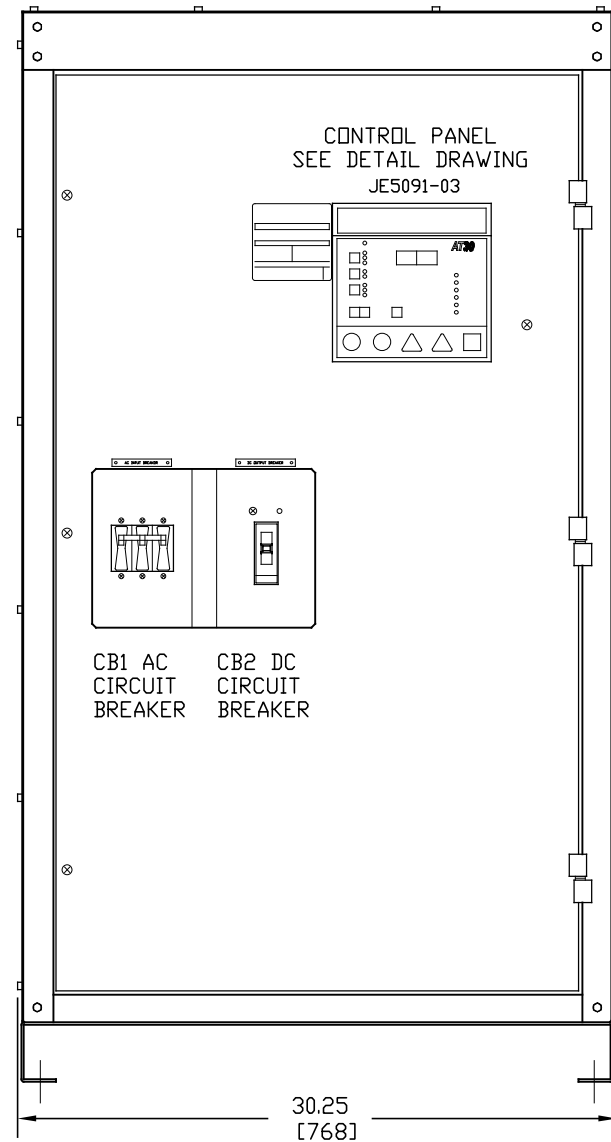


SIDE VIEW

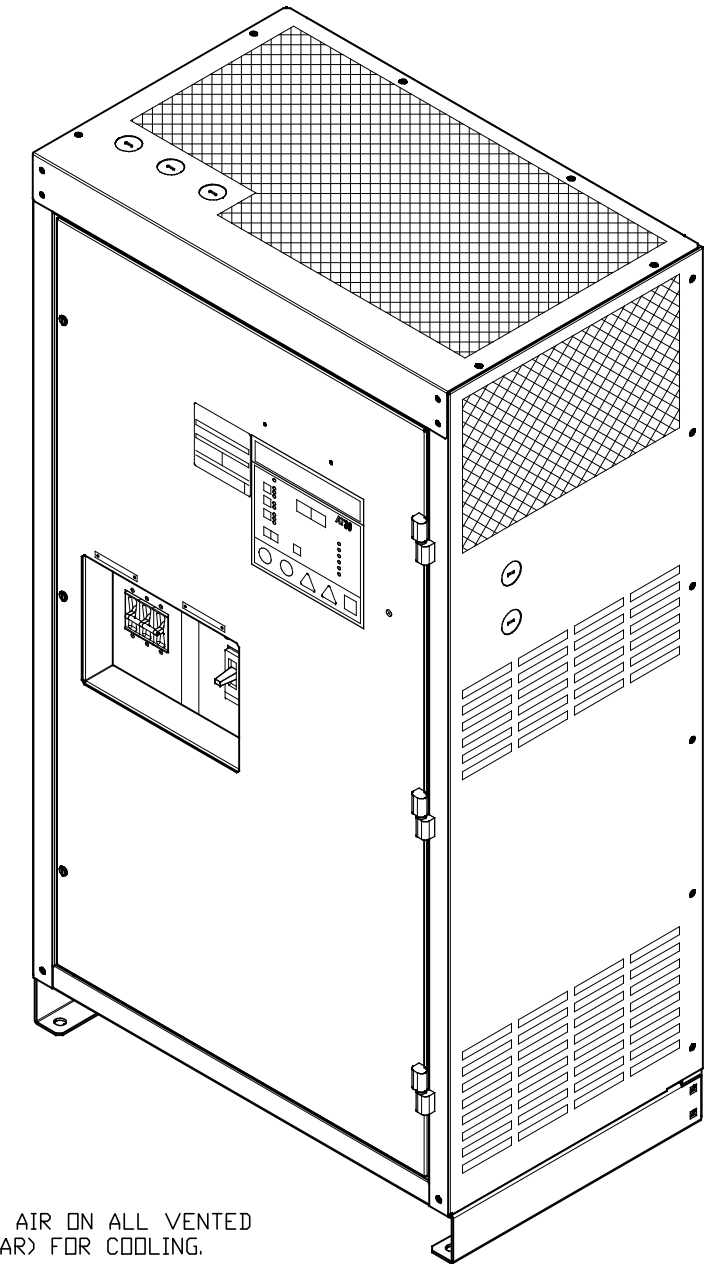
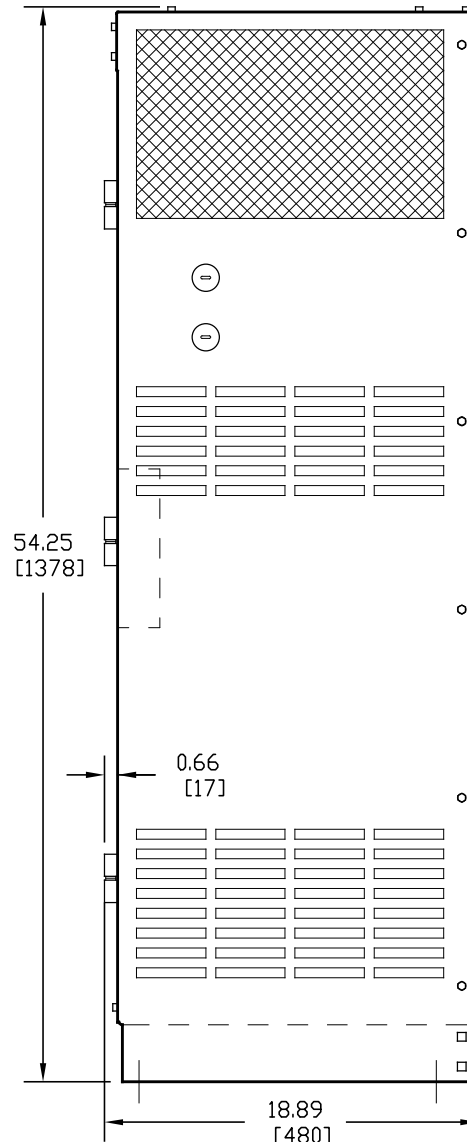


NOTE 4

FRONT VIEW

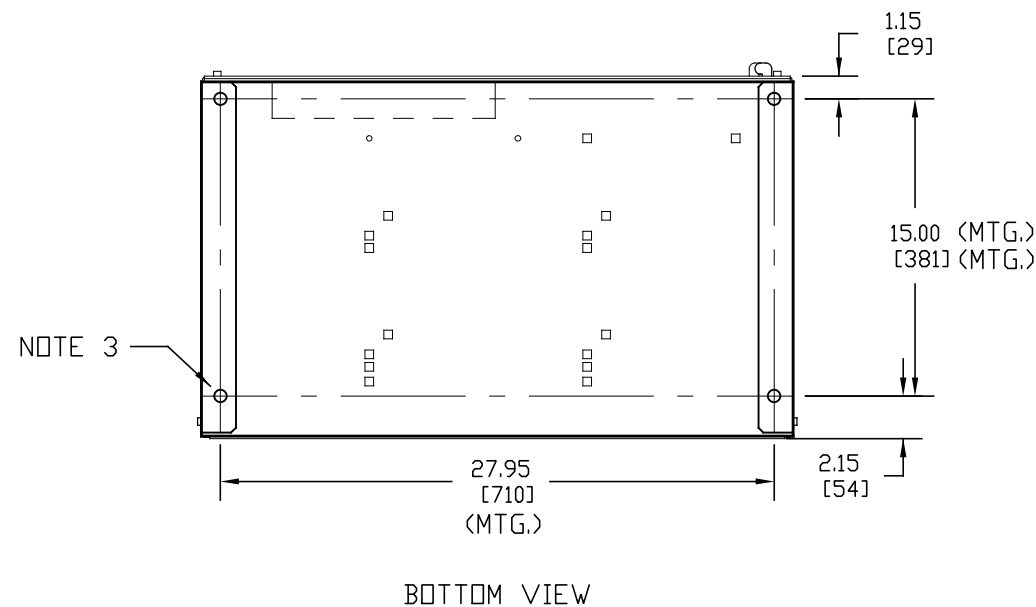


SIDE VIEW



NOTES:

- 2) ALLOW 6in / 152mm 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) 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.
- 5) BATTERY CHARGER SHIPPING WEIGHT: SEE PRODUCT LITERATURE.

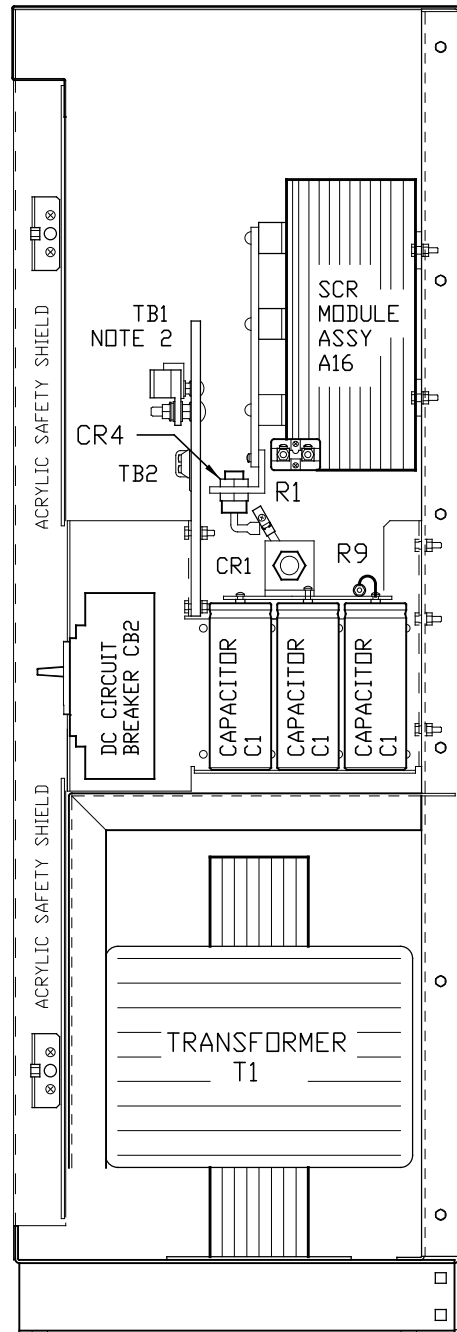


DUAL DIMENSIONS in mm

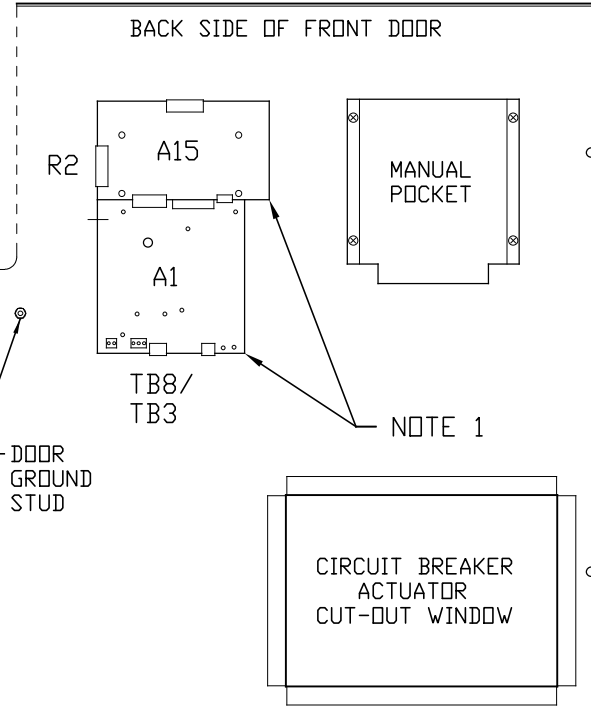
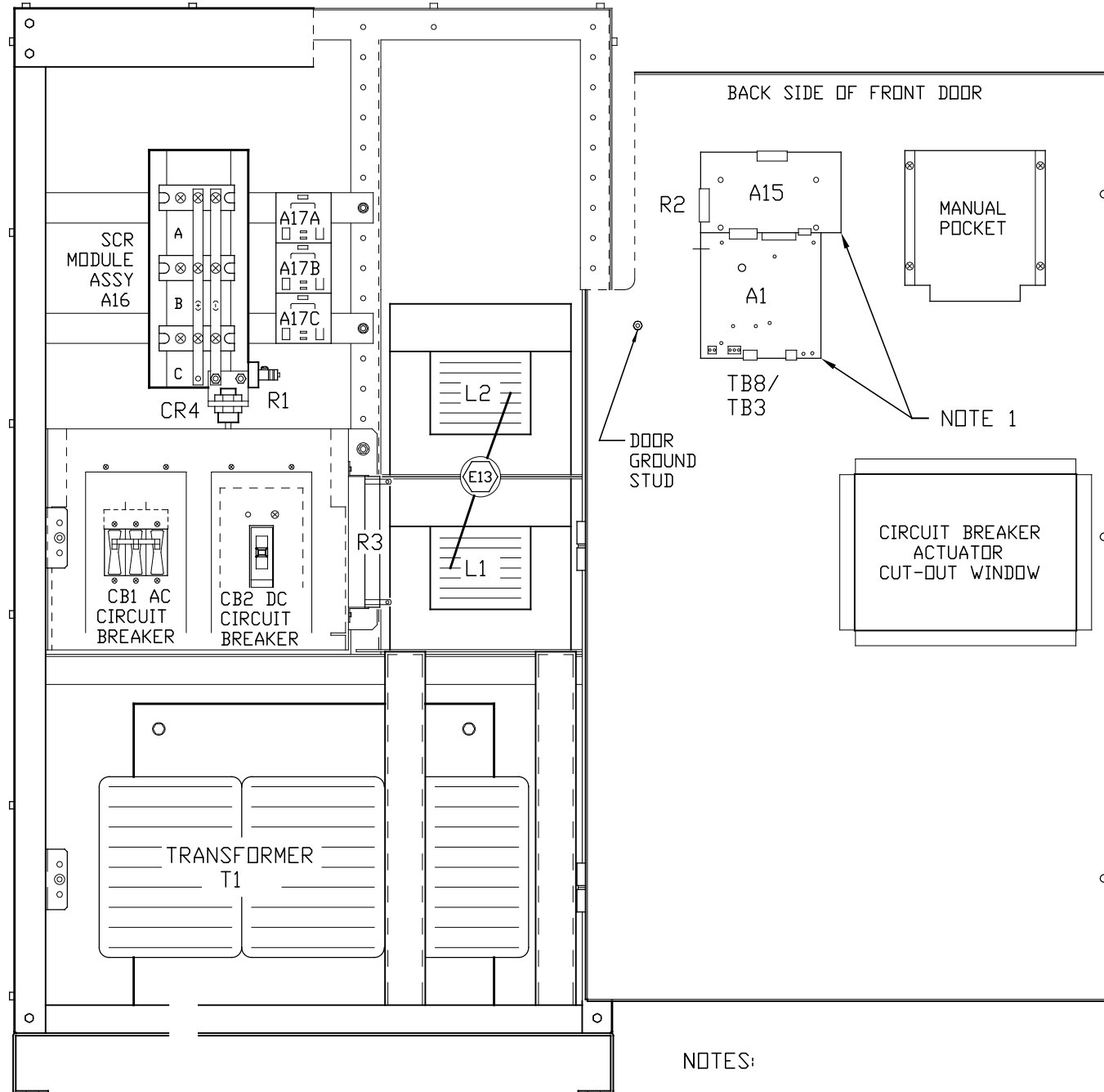
100ADC W/O OPTIONS

			<p>THIRD ANGLE PROJECTION</p>		<p>1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com</p>	
			DRAWN BY KMW 110921		TITLE AT30 SERIES BATTERY CHARGER OUTLINE: NEMA-1 STYLE-5030 ENCLOSURE	
			ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG		DRAWING No JE5086-03 REV 0 B	
0 N/A 110921			UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		SCALE NTS SALES No SHEET 1 OF 1	
REV	ECN No	DATE				

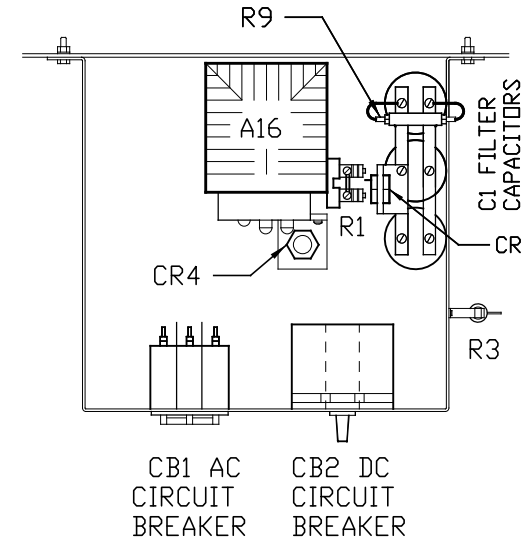
SIDE SECTION



FRONT VIEW



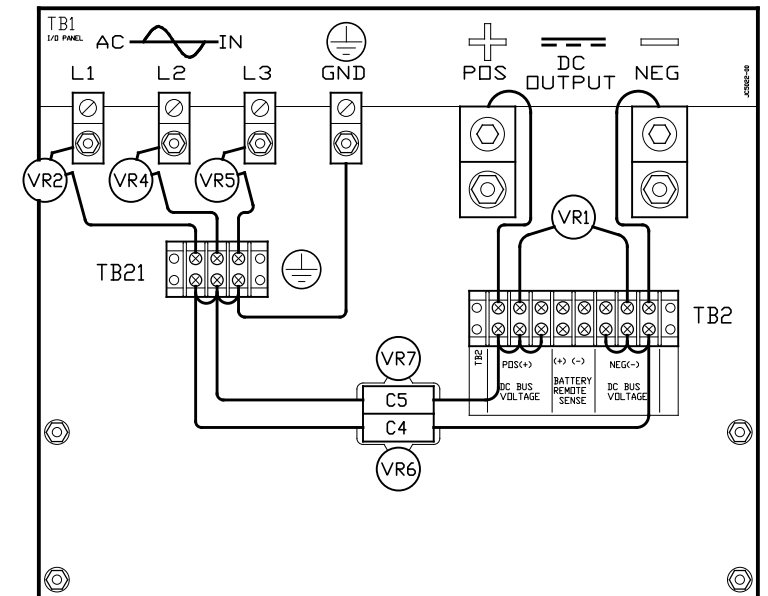
TOP VIEW OF CIRCUIT BREAKER MOUNTING BRACKET



SYM	STANDARD COMPONENT DESCRIPTION
A1	MAIN CONTROL PC BOARD
A15	THREE PHASE GATE DRIVER PCB
A16	6-PULSE SCR MODULE HEATSINK ASSY
A17x	SCR SNUBBER PC BOARD - QTY. (3)
C4	EMI OUTPUT FILTER CAP (NEG-GND)
C5	EMI OUTPUT FILTER CAP (POS-GND)
CB1	AC INPUT CIRCUIT BREAKER (CD3)
CB2	DC OUTPUT CIRCUIT BREAKER (Hx2)
CR4	FREE-WHEELING DIODE
L1	MAIN INDUCTOR
R1	MAIN DC SHUNT, NEG(-) BUS
R2	CURRENT RATING RESISTOR
R3	PWR SUPPLY BALLAST RES (130VDC)
T1	POWER ISOLATION TRANSFORMER
TB1	I/O TERMINAL BOARD
TB2	INT DC VOLTAGE (+/-) CONTACTS
TB3	SUMMARY ALARM CONTACTS
TB8	TEMPCO PROBE TERMINAL BLOCK
TB21	INTERNAL GROUND (≡) CONTACTS
VR1	OUTPUT SURGE SUPPRESSOR (+TO-)
VR2	INPUT SURGE SUPPRESSOR (LINE 1)
VR4	INPUT SURGE SUPPRESSOR (LINE 2)
VR5	INPUT SURGE SUPPRESSOR (LINE 3)
VR6	OUTPUT SURGE SUPPRESSOR (-)
VR7	OUTPUT SURGE SUPPRESSOR (+)

SYM	FEATURED OPTION COMP DESCRIPTION
C1x	DC OUTPUT FILTER CAPACITOR
CR1	POLARITY DIODE
E13	INDUCTOR INTER-CONNECT POINT
L2	FILTER INDUCTOR
R9	FILTER CAP (C1) BLEED RESISTOR

I/O TERMINAL BOARD (TB1) DETAIL



NOTES:

- 1) FOR DETAIL VIEWS OF ALL PC BOARDS (A1, A5, A15, A17, etc.) SEE DRAWING JE5091-03.
- 2) I/O PANEL TERMINAL BOARD (TB1) NOT SHOWN FOR CLARITY OF VIEW. SEE DETAIL TO RIGHT.

I/O TERMINAL	DESCRIPTION - TYPE	CONNECTION
TB1(+/-)	POS/NEG DC OUTPUT TERMS - CU-ALUMINUM COMPRESSION LUG	#6 AWG-350 MCM
REM SENSE(+/-)	POS/NEG REMOTE SENSE TERMINALS - 6-32 COMP SCREW	#16-14 AWG
TB1-GND	USER GROUND TERMINAL - CU-ALUMINUM COMPRESSION LUG	
TB1-L1/L2/L3	AC INPUT TERMINALS - CU-ALUMINUM COMPRESSION LUG	#14-1/0 AWG
TB3	SUMMARY ALARM TERMINAL BLOCK - SOLDERLESS COMP SCREW	#22-14 AWG
TB8	TEMPCO PROBE (A10) INTERCONNECTION TERMINAL BLOCK	#22-14 AWG

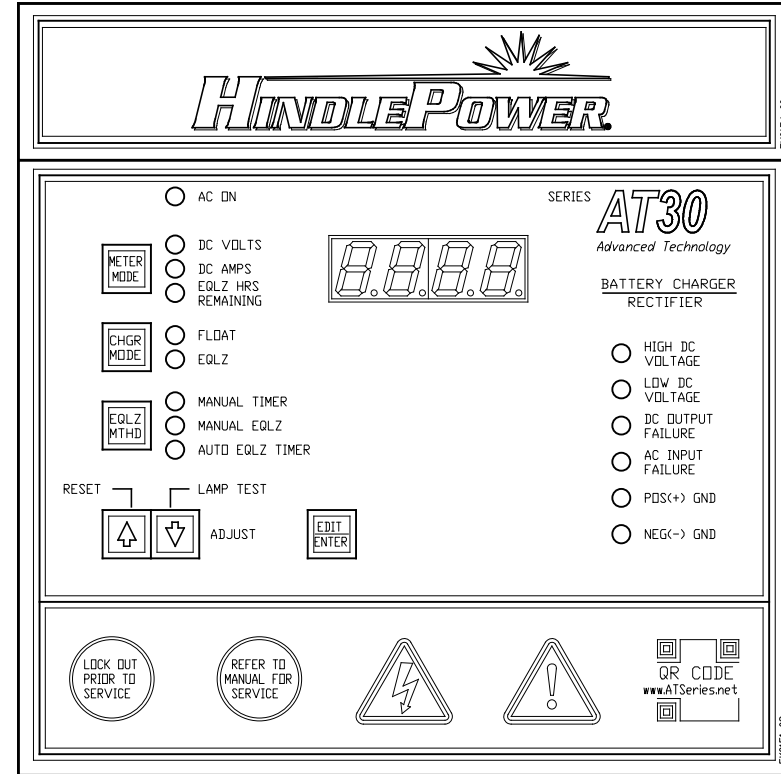
100ADC W/D OPTIONS

			 THIRD ANGLE PROJECTION		 1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com	
			DRAWN BY KMW 110921	TITLE AT30 SERIES BATTERY CHARGER INTERNAL COMPONENT LAYOUT: STYLE-5030		
			ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG		DRAWING No JE5089-03 REV 0 B	
			UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		SCALE NTS SALES No SHEET 1 OF 1	

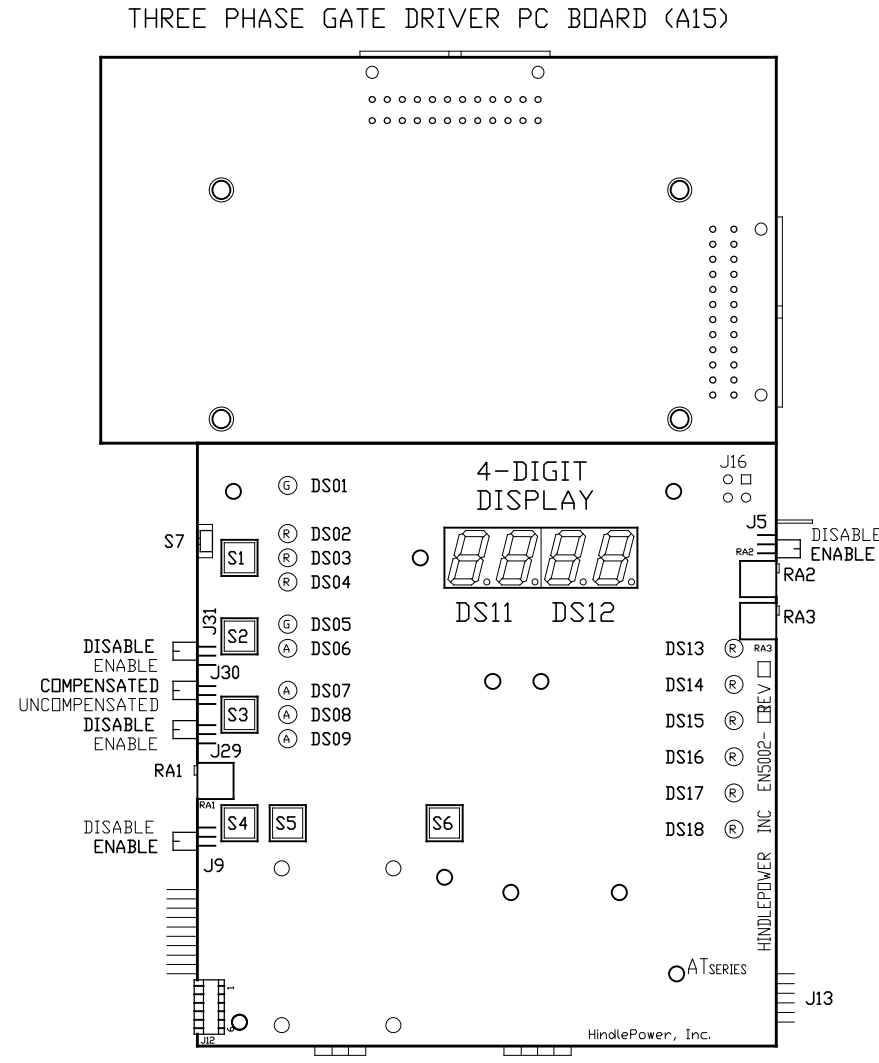
INDICATOR LIGHTS (LEDs):

- DS01 - GREEN - AC ON
- DS02 - RED - DC VOLTS
- DS03 - RED - DC AMPERES
- DS04 - RED - EQUALIZE HRS REMAINING
- DS05 - GREEN - FLOAT
- DS06 - AMBER - EQUALIZE
- DS07 - AMBER - MANUAL TIMER
- DS08 - AMBER - MANUAL EQUALIZE
- DS09 - AMBER - AUTO EQUALIZE TIMER

- DS10 - RED - LOW LEVEL DETECT
- DS11 - RED - (METER DISPLAY)
- DS12 - RED - (METER DISPLAY)
- DS13 - RED - HIGH DC VOLTAGE
- DS14 - RED - LOW DC VOLTAGE
- DS15 - RED - DC OUTPUT FAILURE
- DS16 - RED - AC INPUT FAILURE
- DS17 - RED - POS(+) GROUND FAULT
- DS18 - RED - NEG(-) GROUND FAULT

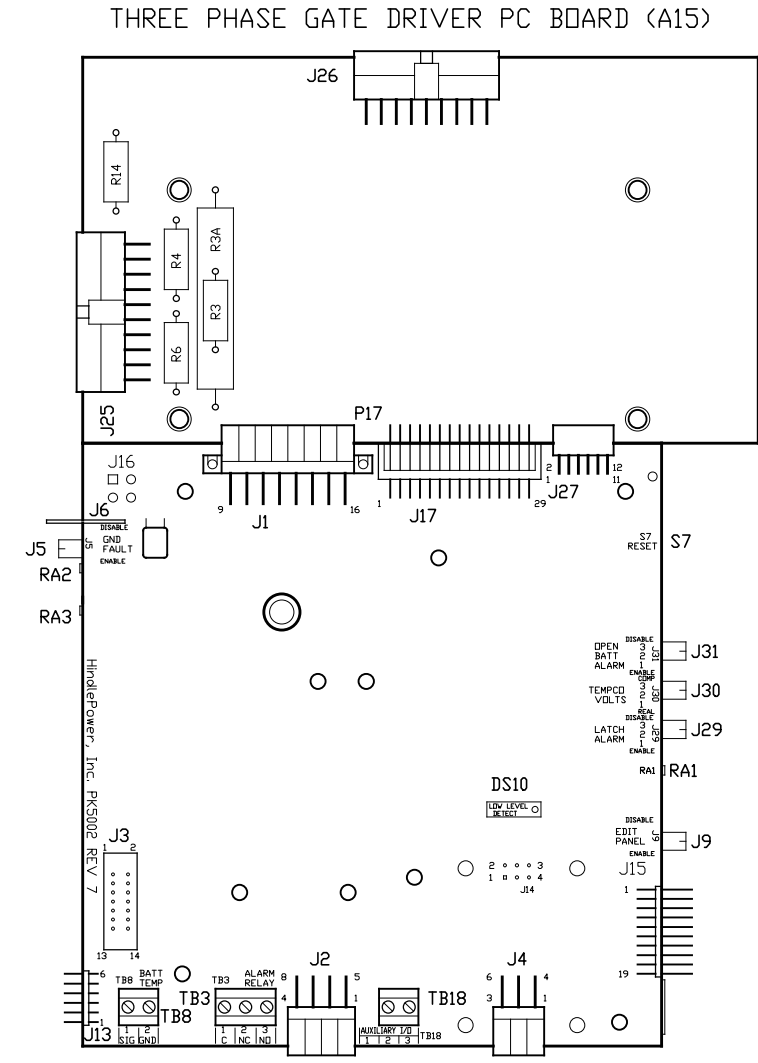


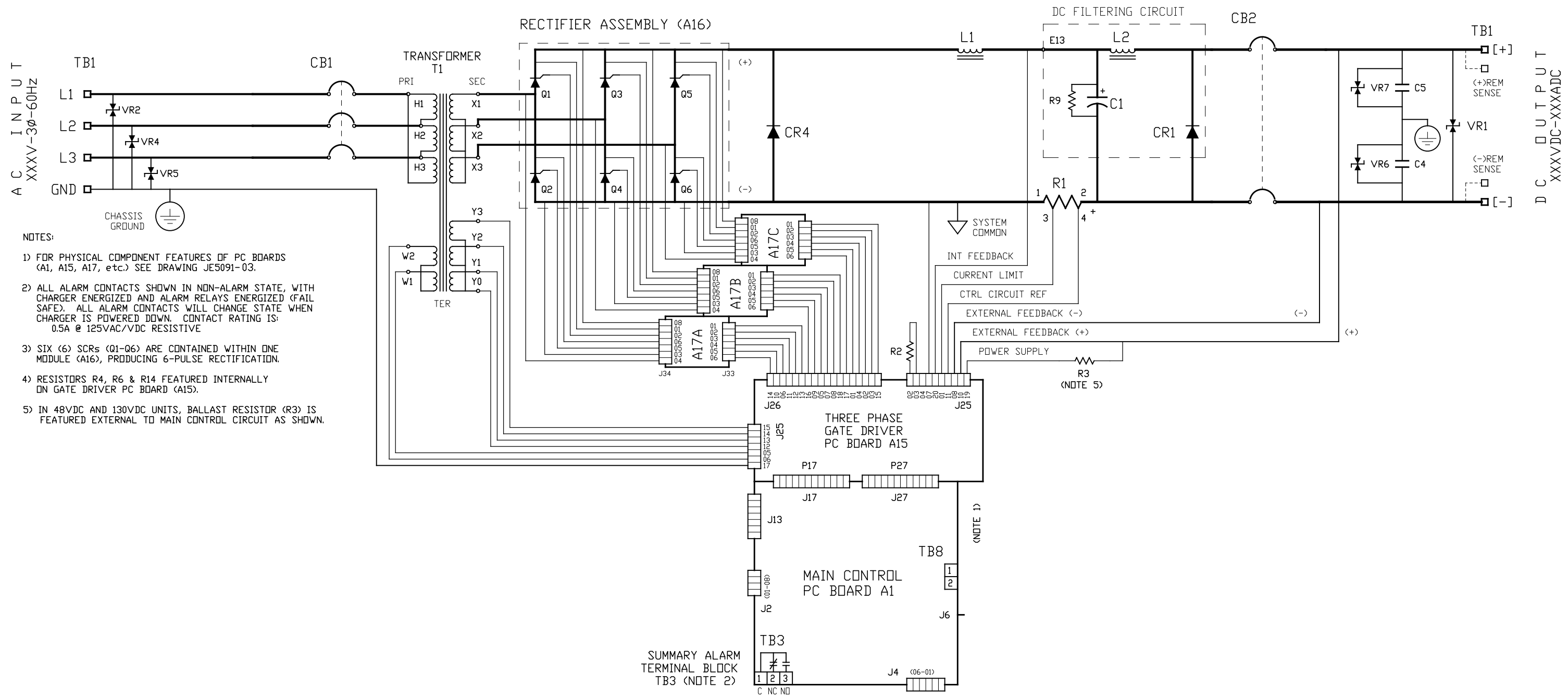
CONTROL PANEL
(PART No. FK0151-02)



MAIN CONTROL PC BOARD (A1)

FRONT VIEW - FACING CHARGER DOOR WHEN INSTALLED





- NOTES:
- 1) FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A15, A17, etc.) SEE DRAWING JE5091-03.
 - 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
 - 3) SIX (6) SCRS (Q1-Q6) ARE CONTAINED WITHIN ONE MODULE (A16), PRODUCING 6-PULSE RECTIFICATION.
 - 4) RESISTORS R4, R6 & R14 FEATURED INTERNALLY ON GATE DRIVER PC BOARD (A15).
 - 5) IN 48VDC AND 130VDC UNITS, BALLAST RESISTOR (R3) IS FEATURED EXTERNAL TO MAIN CONTROL CIRCUIT AS SHOWN.

STANDARD AT30 COMPONENTS:

- A1 MAIN CONTROL PC BOARD (NOTE 1)
- A15 THREE PHASE GATE DRIVER PC BOARD (NOTE 1)
- A16 6-PULSE SCR (Q1-Q6) MODULE (NOTE 3)
- A17A SCR SNUBBER ASSY PC BOARD (NOTE 1)
- A17B SCR SNUBBER ASSY PC BOARD (NOTE 1)
- A17C SCR SNUBBER ASSY PC BOARD (NOTE 1)
- C4 DC OUTPUT EMI FILTER CAPACITOR (-) TO GROUND
- C5 DC OUTPUT EMI FILTER CAPACITOR (+) TO GROUND
- CB1 AC INPUT CIRCUIT BREAKER
- CR4 FREE-WHEELING DIODE
- L1 MAIN INDUCTOR
- Q1 SILICON-CONTROLLED RECTIFIER (A16A) (NOTE 3)
- Q2 SILICON-CONTROLLED RECTIFIER (A16A) (NOTE 3)
- Q3 SILICON-CONTROLLED RECTIFIER (A16B) (NOTE 3)
- Q4 SILICON-CONTROLLED RECTIFIER (A16B) (NOTE 3)
- Q5 SILICON-CONTROLLED RECTIFIER (A16C) (NOTE 3)
- Q6 SILICON-CONTROLLED RECTIFIER (A16C) (NOTE 3)

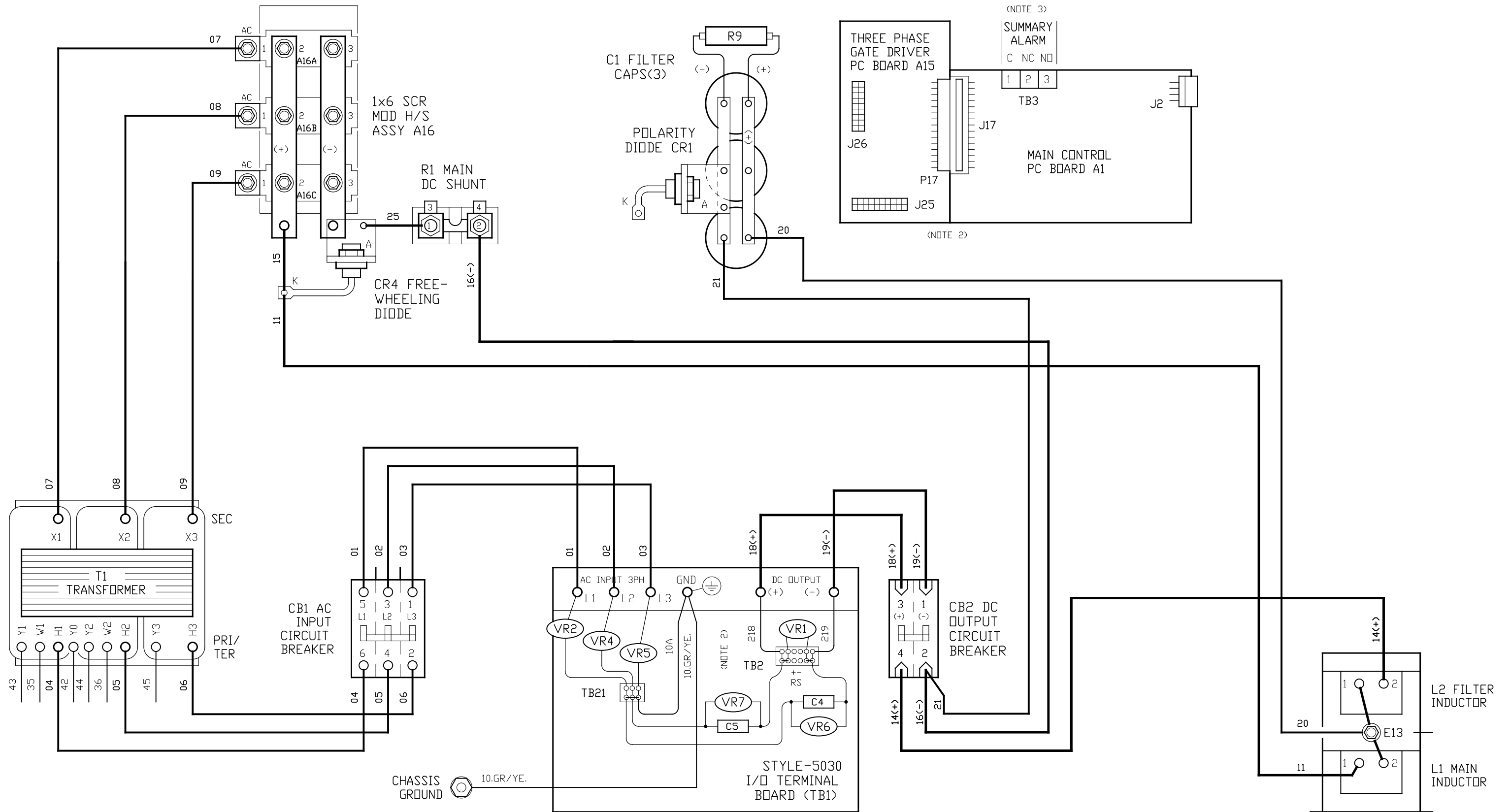
STANDARD AT30 COMPONENTS:

- R1 MAIN DC SHUNT, NEG(-) BUS
- R2 CURRENT RATING RESISTOR
- R3 POWER SUPPLY BALLAST RESISTOR (NOTE 5)
- R4 EXTERNAL SCALING RESISTOR (+) (NOTE 4)
- R6 INTERNAL SCALING RESISTOR (NOTE 4)
- R14 EXTERNAL SCALING RESISTOR (-) (NOTE 4)
- T1 POWER ISOLATION TRANSFORMER (+10/-12%)
- TB1 INPUT/OUTPUT TERMINAL BLOCK
- TB3 SUMMARY ALARM TERMINAL BLOCK (NOTE 2)
- TB8 OPTIONAL TEMPDO PROBE (A10) INTERCONNECTOR
- VR1 DC OUTPUT SURGE SUPPRESSOR (-) TO (+)
- VR2 AC INPUT SURGE SUPPRESSOR (LINE 1)
- VR4 AC INPUT SURGE SUPPRESSOR (LINE 2)
- VR5 AC INPUT SURGE SUPPRESSOR (LINE 3)
- VR6 DC OUTPUT SURGE SUPPRESSOR (-) TO GROUND
- VR7 DC OUTPUT SURGE SUPPRESSOR (+) TO GROUND

FEATURED AT30 OPTION COMPONENTS:

- DC FILTERING ASSEMBLY:
- C1 DC OUTPUT FILTERING CAPACITOR
 - CR1 POLARITY DIODE
 - E13 INDUCTOR INTERCONNECTION POINT
 - L2 FILTERING INDUCTOR
 - R9 FILTER CIRCUIT BLEED RESISTOR

			 THIRD ANGLE PROJECTION		 1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com		
			DRAWN BY KMW	110921		TITLE BATTERY CHARGER SCHEMATIC: 100ADC W/O OPTIONS	
			ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG		DRAWING No JE5092-03		REV 0
			UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		SCALE NTS		SHEET 1 OF 1
0	N/A	110921	REV	ECN No	DATE	SALES No	B



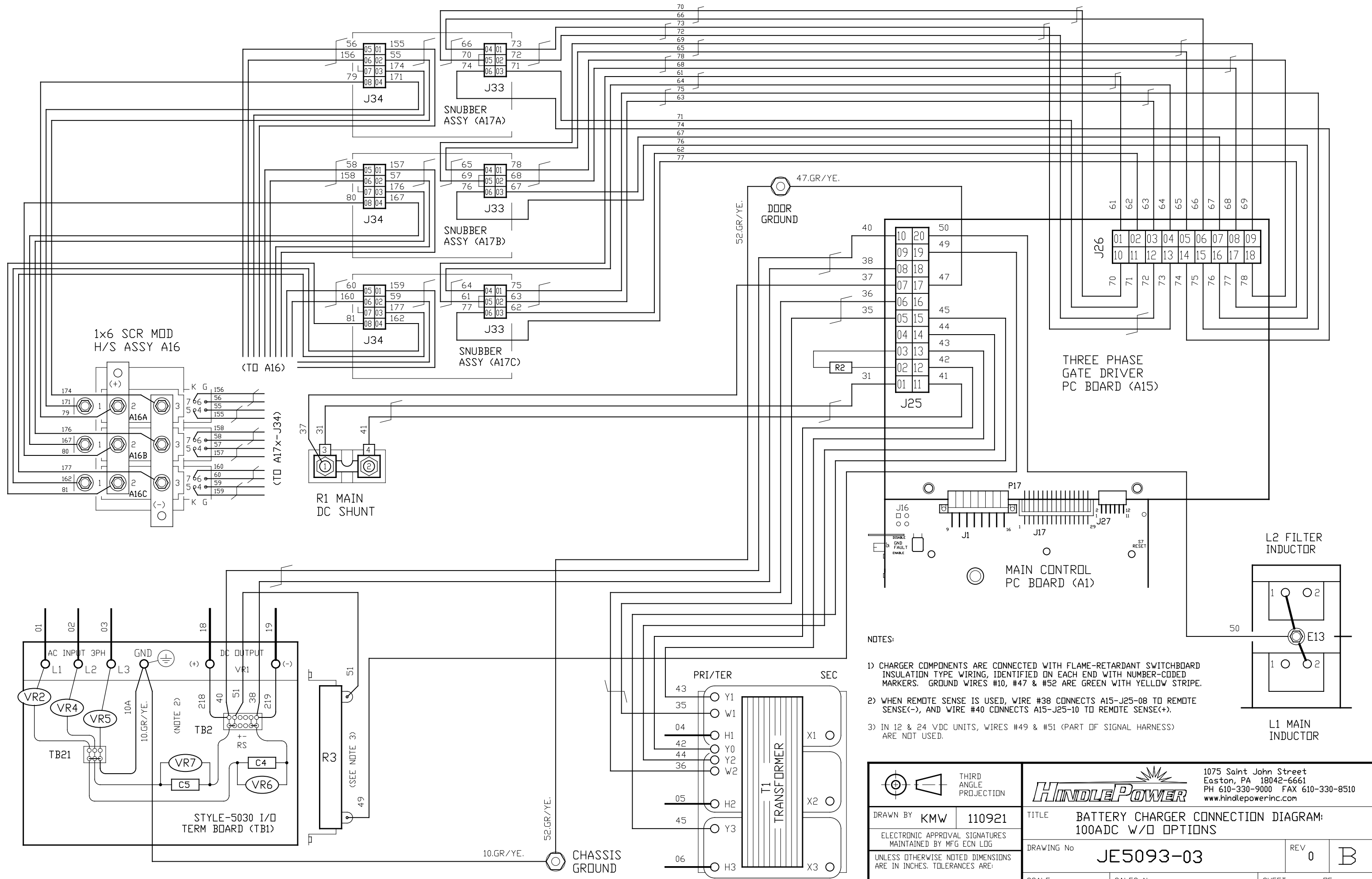
NOTES:

- 1) CHARGER COMPONENTS ARE CONNECTED WITH BLACK FLAME-RETARDANT SWITCHBOARD INSULATION SYSTEM (SIS) TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED WIRE MARKERS. GROUND WIRES ARE GREEN WITH YELLOW STRIPE. DIODES (CR1 & CR4) ARE ANODE-MOUNTED TYPE, WIRE TO CATHODE.
- 2) THIS DRAWING (SHEET 1) SHOWS THE MAINFRAME POWER WIRING AND USER CONNECTION CONTACTS TO CONTROL PC BOARDS (A1 & A5). SEE SHEET 2 FOR ALL CONTROL (SIGNAL) WIRING, INCLUDING REMOTE SENSE MODIFICATIONS, IF APPLICABLE.
- 3) STANDARD USER ALARM CONTACTS (TB3, TB4, etc.) ARE SOLDERLESS COMPRESSION SCREW TERMINALS, ACCEPTING #22-14 AWG WIRE.

FEATURED OPTIONS:

- STD DC OUTPUT FILTERING
- AC INPUT CIRCUIT BREAKER
- DC OUTPUT CIRCUIT BREAKER

			THIRD ANGLE PROJECTION		1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com			
DRAWN BY			KMW	110921		TITLE	BATTERY CHARGER CONNECTION DIAGRAM: 100ADC W/O OPTIONS	
ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG					DRAWING No		JE5093-03	
UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:					REV		0 B	
0	N/A	110921			SCALE		NTS	
REV	ECN No	DATE			SALES No		SHEET 1 OF 2	



- NOTES:
- 1) CHARGER COMPONENTS ARE CONNECTED WITH FLAME-RETARDANT SWITCHBOARD INSULATION TYPE WIRING, IDENTIFIED ON EACH END WITH NUMBER-CODED MARKERS. GROUND WIRES #10, #47 & #52 ARE GREEN WITH YELLOW STRIPE.
 - 2) WHEN REMOTE SENSE IS USED, WIRE #38 CONNECTS A15-J25-08 TO REMOTE SENSE(-), AND WIRE #40 CONNECTS A15-J25-10 TO REMOTE SENSE(+).
 - 3) IN 12 & 24 VDC UNITS, WIRES #49 & #51 (PART OF SIGNAL HARNESS) ARE NOT USED.

THIRD ANGLE PROJECTION				1075 Saint John Street Easton, PA 18042-6661 PH 610-330-9000 FAX 610-330-8510 www.hindlepowerinc.com	
DRAWN BY KMW 110921		TITLE BATTERY CHARGER CONNECTION DIAGRAM: 100ADC W/O OPTIONS			
ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG		DRAWING No JE5093-03		REV 0 B	
UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		SCALE NTS		SALES No _____ SHEET 2 OF 2	