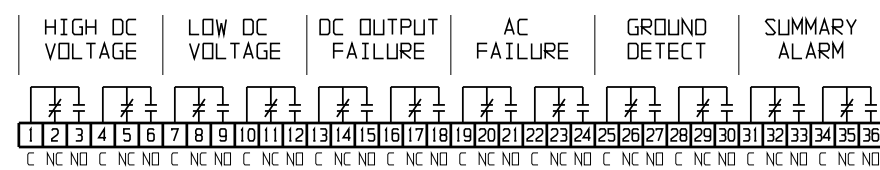


- NOTES:
- 1) FOR PHYSICAL COMPONENT FEATURES OF PC BOARDS (A1, A15, A17, etc.) SEE DRAWING JE5091-##.
 - 2) ALL ALARM CONTACTS SHOWN IN NON-ALARM STATE, WITH CHARGER ENERGIZED AND ALARM RELAYS ENERGIZED (FAIL SAFE). ALL ALARM CONTACTS WILL CHANGE STATE WHEN CHARGER IS POWERED DOWN. CONTACT RATING IS: 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.
 - 6) SEE D&SI SECTION 1.9 FOR REMOTE SENSE DETAILS.

- NOTES:
- 8) DC OUTPUT (TB1+/-) IS PARALLELED WITH SECOND UNIT OF IDENTICAL RATING. A1-J4 IS INTERCONNECTED WITH SECOND UNIT FOR OUTPUT CONTROL. FOR FORCED LOAD SHARING DETAILS, SEE DRAWING JE5154-00.



AUXILIARY ALARM TERMINAL BLOCK TB4 (NOTE 2)

SUMMARY ALARM TERMINAL BLOCK TB3 (NOTE 2)

- 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
 - CB2 DC OUTPUT 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 TEMPCO 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

- SUPPLIED 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
 - C2 BATTERY ELIMINATOR FILTER CAPACITOR
- F1A AC INPUT FUSE (LINE 1)
 - F1B AC INPUT FUSE (LINE 2)
 - F1C AC INPUT FUSE (LINE 3)
 - F3 DC OUTPUT FUSE (+)
 - F4 DC OUTPUT FUSE (-)
 - VR3 AC INPUT LIGHTNING ARRESTOR
 - N/A FORCED LOAD SHARING FEATURE (NOTE 8)

- SUPPLIED AT30 OPTION COMPONENTS:
- A5 AUXILIARY ALARM RELAY PC BOARD (NOTE 1)
 - TB4 AUXILIARY ALARM (A5) TERMINAL BLOCK (NOTE 2)
 - A10 EXTERNAL TEMPERATURE COMPENSATION PROBE
 - R13 TEMPCO PROBE (A10) RESISTOR SEE
 - T TEMPCO PROBE (A10) THERMISTOR JD5003-00
 - A12 COMMUNICATIONS MODULE PC BOARD (NOTE 1)

3	-N/A-	081621		THIRD ANGLE PROJECTION
2	23258	071312	DRAWN BY	MCR 051706
1	20530	013007	ELECTRONIC APPROVAL SIGNATURES MAINTAINED BY MFG ECN LOG	
0	20211	051706	UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:	
REV	ECN No	DATE		
			TITLE	AT30 SERIES BATTERY CHARGER SCHEMATIC: 25-1000 Adc - W/COMMON OPTIONS
			DRAWING No	JE5092-99
			SCALE	NTS
			PART No	JE5092-99
			SHEET	1 OF 1
			REV	3
				B