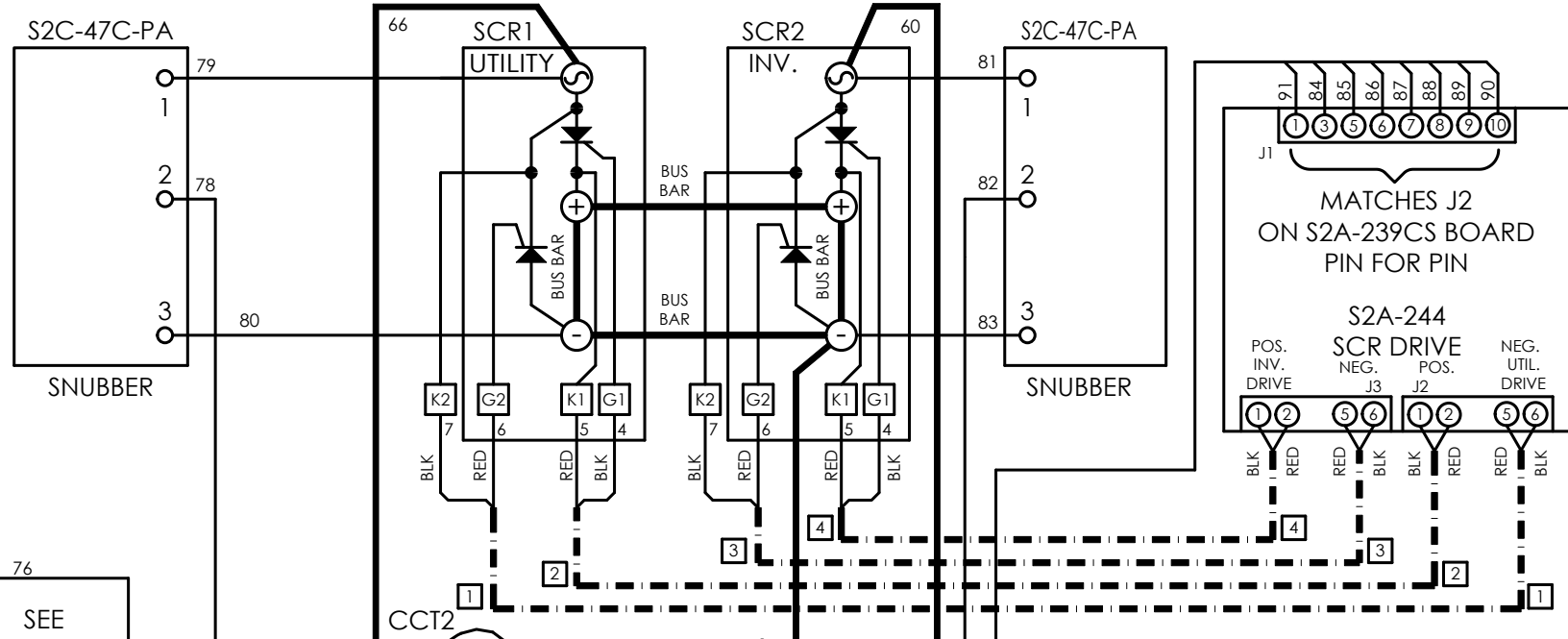


START UP PROCEDURE FOR A31 DC TO AC INVERTER:
 1. MAKE SURE THAT THE AC AND DC BREAKERS AND THE ON-OFF SWITCH ARE OFF.
 2. CHECK POLARITY OF DC INPUT CABLES VERIFY WITH MULTIMETER AND CONNECT THEM.
 3. TURN ON DC SUPPLY BREAKER TO THE INVERTER.
 4. PUSH AND HOLD THE PRECHARGE BUTTON UNTIL THE GREEN "READY" LIGHT IS IN A SOLID ILLUMINATED STATE.
 5. TURN ON THE INVERTER DC BREAKER.
 6. TURN ON THE ON-OFF SWITCH ON THE FRONT OF THE INVERTER.
 7. TURN ON THE AC BREAKER.
 8. MEASURE OUTPUT VOLTAGE OF THE INVERTER AT THE AC LOAD TERMINALS TO MAKE SURE THAT IT AGREES WITH NAMEPLATE.
 NOTE: STEPS 1-5 NEED TO BE PERFORMED ONLY ON INITIAL STARTUP OR IF BATTERY IS DISCONNECTED OR DC BREAKER IS IN THE OFF POSITION.

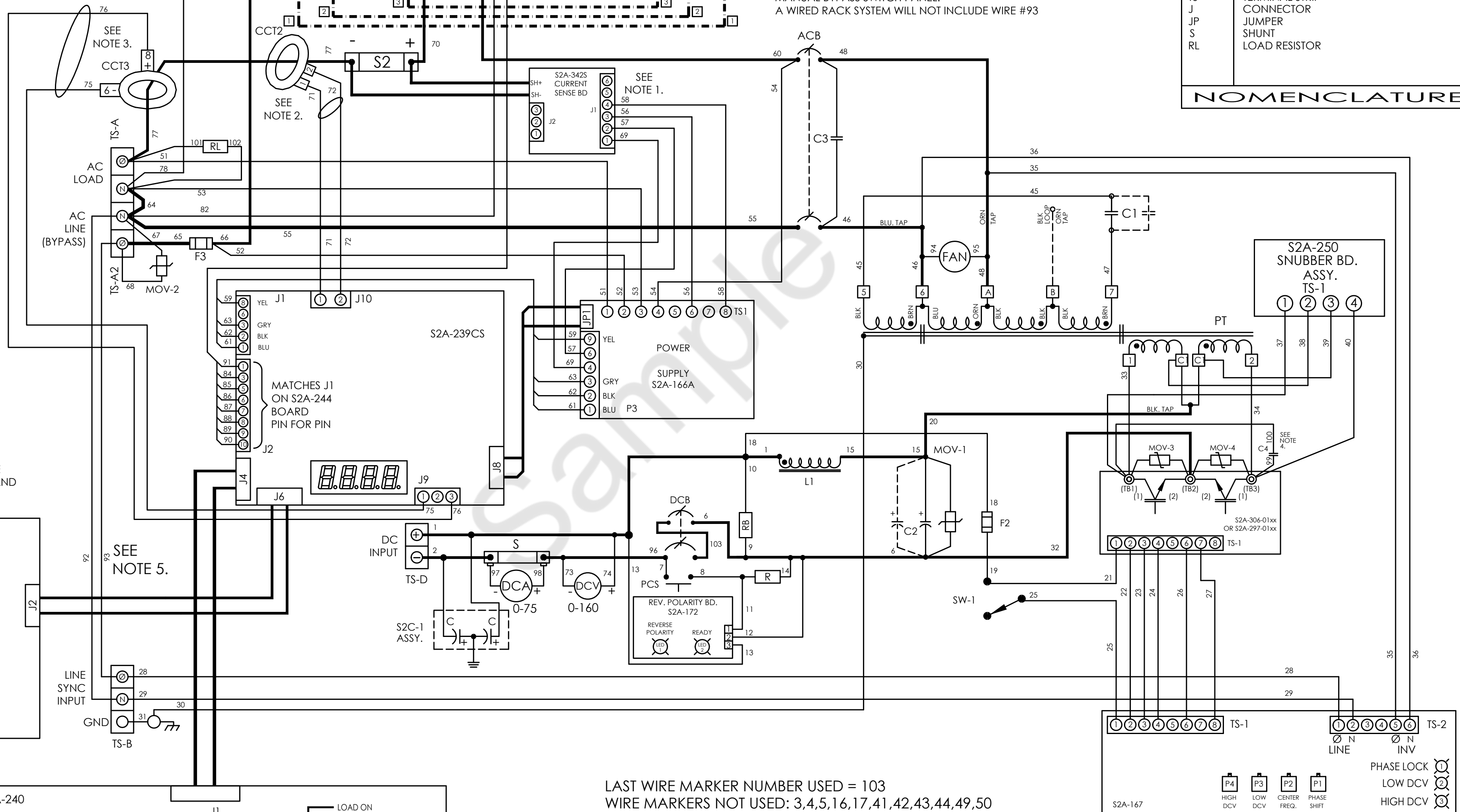


NOTES:

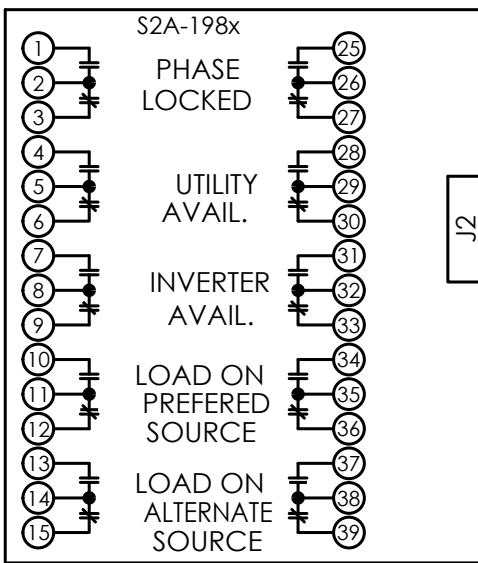
- S2A-342S CIRCUIT BOARD MOUNTS ON SHUNT S2. OBSERVE POLARITY MARKED ON CIRCUIT CARD. SHIELD MUST BE PLACED OVER SHUNT ASSEMBLY.
- CCT2 MUST HAVE 1 TURN OF WIRE THROUGH THE CENTER OF THE TORROID COIL AND WIRES 1 AND 2 MUST BE TWISTED TOGETHER.
- CCT3 SEE BOM FOR NUMBER OF TURNS OF WIRE THROUGH THE CENTER OF THE TORROID COIL AND WIRES X1 AND OTHER MUST BE TWISTED TOGETHER.
- MAKE THE WIRING FROM THE S2A-250 ASSY. TO ITS END POINTS AS SHORT AS POSSIBLE MAKE THE WIRING TO C4 AS SHORT AS POSSIBLE
- PERMANENTLY REMOVE WIRE #93 WHEN UNIT IS CONNECTED TO A MANUAL BYPASS SWITCH PANEL.
A WIRED RACK SYSTEM WILL NOT INCLUDE WIRE #93

DCA	DC AMMETER
ACB	AC CIRCUIT BREAKER
DCV	DC VOLTMETER
C	CAPACITOR
CCT	CURRENT TRANSFORMER
DCB	DC CIRCUIT BREAKER
F	FUSE
L	CHOKE
MOV	METAL OXIDE VARISTOR
P	POTENTIOMETER
PCS	PRECHARGE SWITCH
PT	POWER TRANSFORMER
R	RESISTOR
RB	BLEEDER RESISTOR
SCR	SILICON CONTROLLED RECTIFIER
SW-1	INVERTER ON-OFF SWITCH
T	TRANSISTOR
TS	TERMINAL STRIP
J	CONNECTOR
JP	JUMPER
S	SHUNT
RL	LOAD RESISTOR

NOMENCLATURE

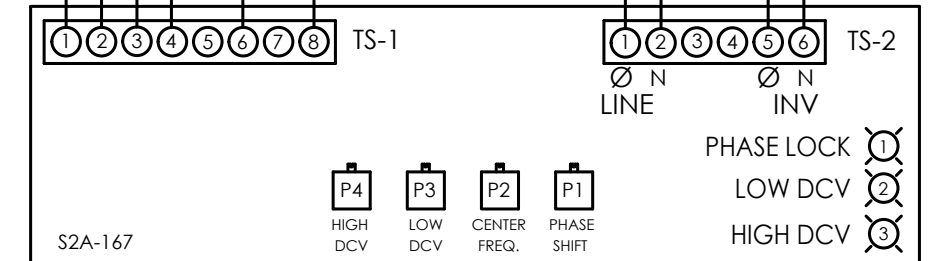
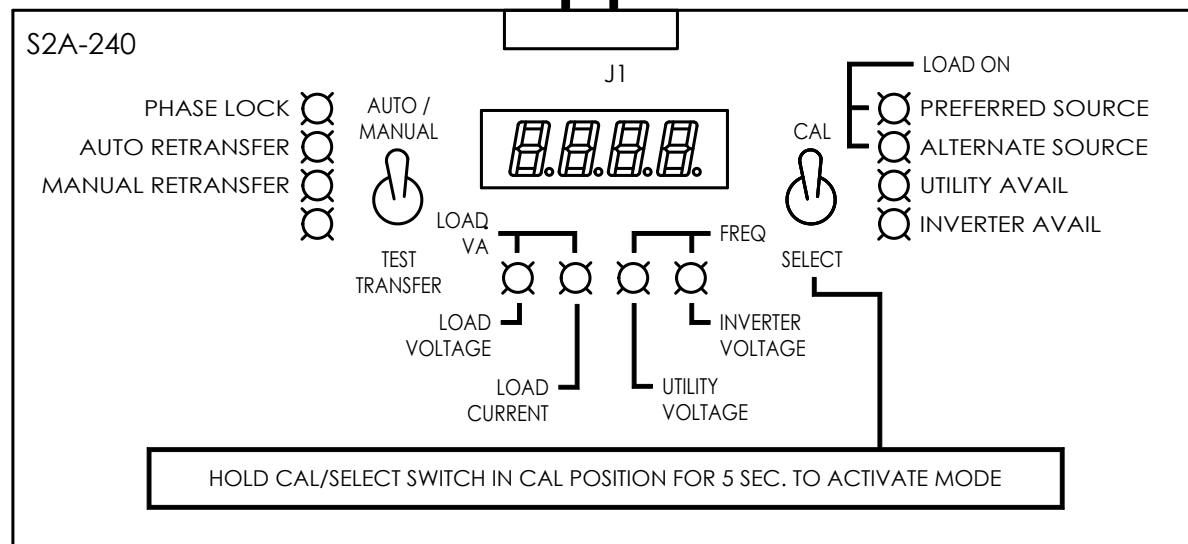


NOTE:
 ALL S2A-198x CONTACTS ARE RATED FOR 60VA / 120VAC AND 30VA / 125VDC.



SEE NOTE 5.

LAST WIRE MARKER NUMBER USED = 103
 WIRE MARKERS NOT USED: 3,4,5,16,17,41,42,43,44,49,50



UPDATED THE WIRE MARKERS ADDED 2-POLE DC BREAKER				JP TK	TK TK	10-14-20 09-11-20	10-14-20 09-11-20	22694 22664	SHEET 1 of 1	SIZE C	DWG No E31-677-10-2
SCHEMATIC WIRING DIAGRAM OF MODEL A31-5K-120V-A6-100N-02672 CPN 141536 5KVA INVERTER 120 VAC 60HZ 120 VDC INPUT											
106 Bradrock Drive Des Plaines, Illinois U.S.A. 60018											
Dwg By MW			App By TK			App By TK					
Dwg Date 10-10-19			Iss Date 02-14-20			Scale NONE					