

WIRE LEGEND AND NOTES

CONTROL WIRE GAUGE:
(ALL WIRE MUST BE UL AND VW-1 RATING)

SYMBOL – WIRE GAUGE, VOLTAGE, TYPE

A- #24 AWG, 300V, 105C, 7/32 STRANDING, UL1569
B- #22 AWG, 300V, 105C, 7/30 STRANDING, UL1569
C- #20 AWG, 600V, 105C, 10/30 STRANDING, UL1015
D- #14 AWG 600V, 105C, 41/30 STRANDING, UL1015
E- #10 AWG 600V, 105C, 105/30 STRANDING, UL1015
F- #24 AWG, 300V 80C, 4 CONDUCTOR CABLE, UL2464,
7x32 STRANDING, BLK/WHT/RED/GRN
G- #24 AWG, 600V, 105C, TWISTED PAIR, RED/WHT, 105C, UL1015
H- #16 AWG, 300V, 105C, 26/30 STRANDING, UL1569
I- #14 AWG, 300V, 105C, 41/30 STRANDING, 0.110 NOM ID, UL1569
J- #20 AWG, 300V, 105C, 10/30 STRANDING, UL1569

WIRE REFERENCE NUMBER PREFIX

N - CONTROL/SIGNAL WIRE
H - 10 AWG WIRE
F - FIBER CABLE
C - MULTI-CONDUCTOR CABLE
R - RIBBON CABLE
P - POWER WIRE (#2 AND UP)
FB – FLEXIBUS
HB – HARD BUS

WIRE COLORS, CONTROL WIRE:

1.BRN 2.RED 3.ORN 4.YEL
5.GRN 6.BLU 7.VIO 8.GRY
9.WHT 10.BLK

WIRE COLORS POWER - ALL VOLTAGES

A-BRN B-ORN C- YEL

MTA PLUG COLORS

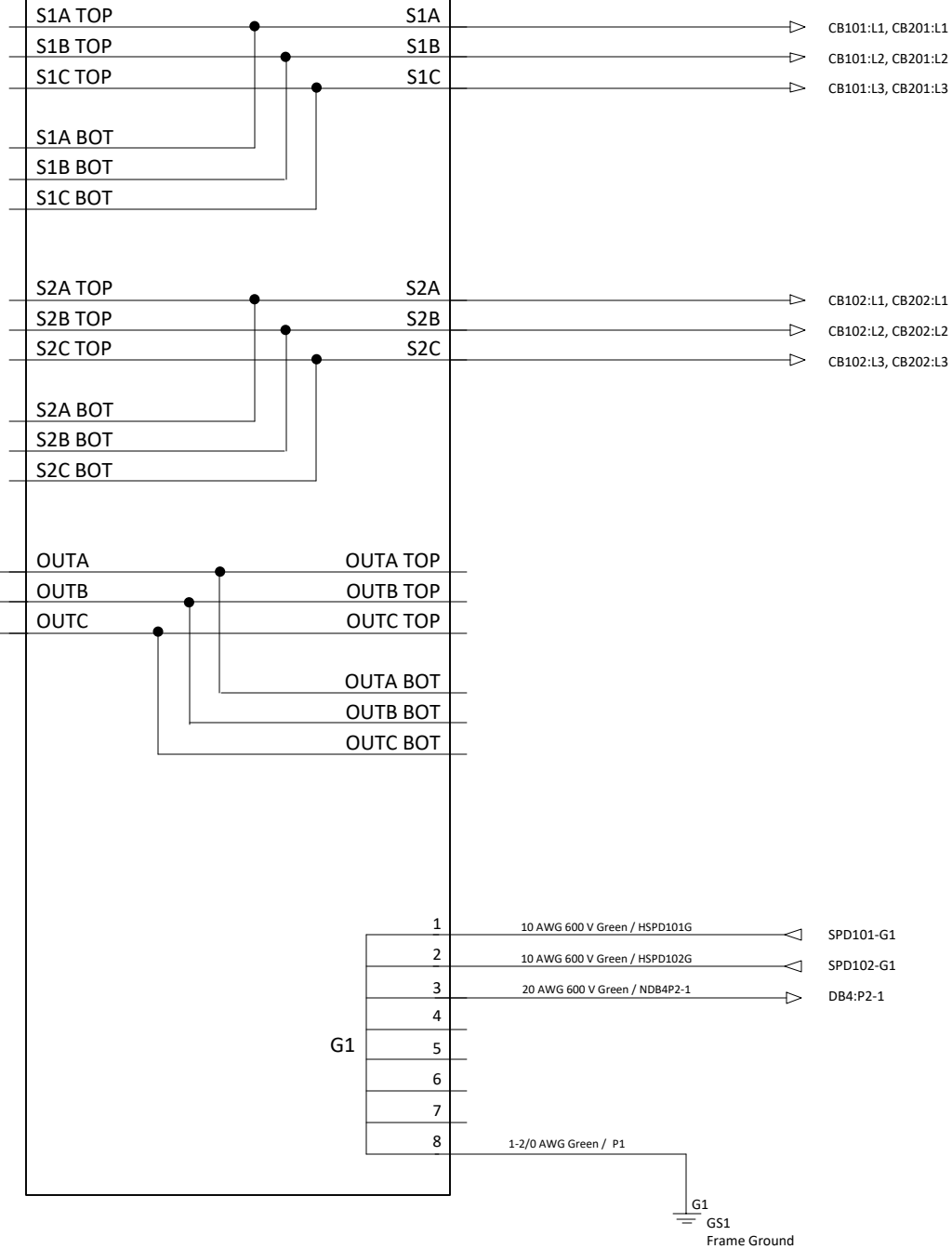
WHITE FOR A WIRE
RED FOR B WIRE
YELLOW FOR J WIRE



PAGE DESCRIPTION
SCHEMATIC, Series 70 eSTS

JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 1 OF 33	

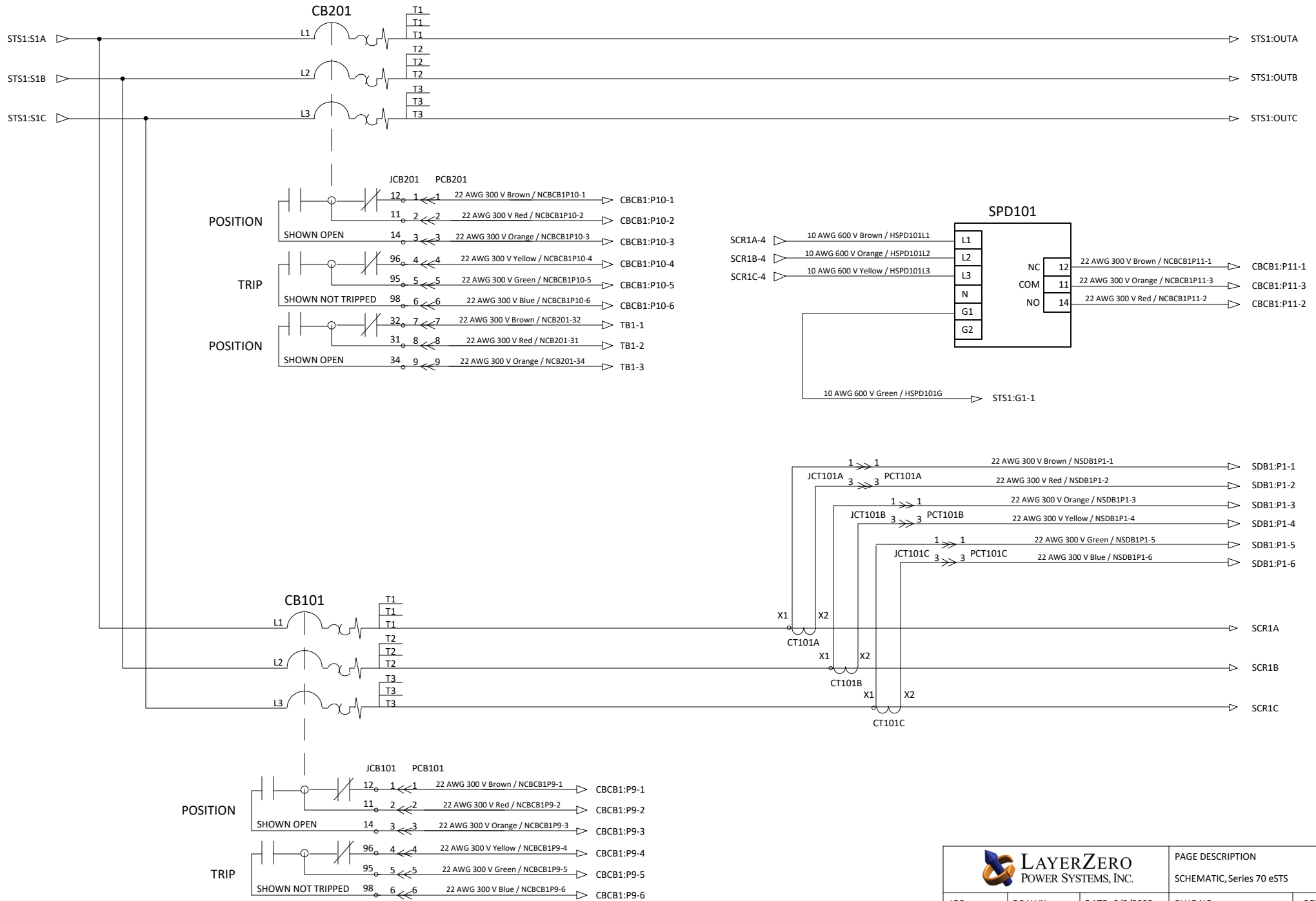
STS1



INPUT VOLTAGE	480V
CURRENT	600A
REDUNDANCY	SMR
NUMBER OF POLES	3-pole
NUMBER OF WIRES	3-wire

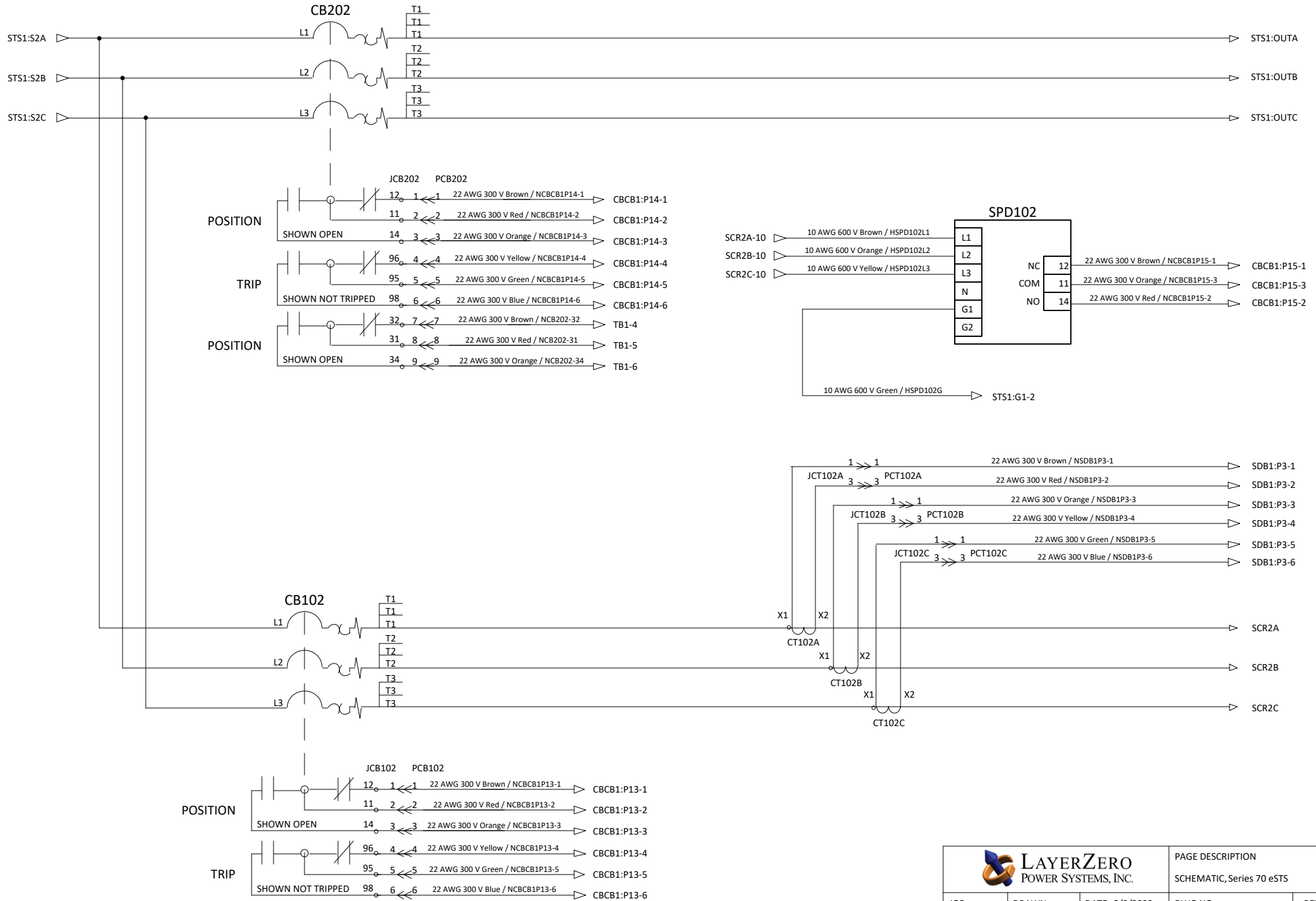
 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 2 OF 33	

SOURCE 1

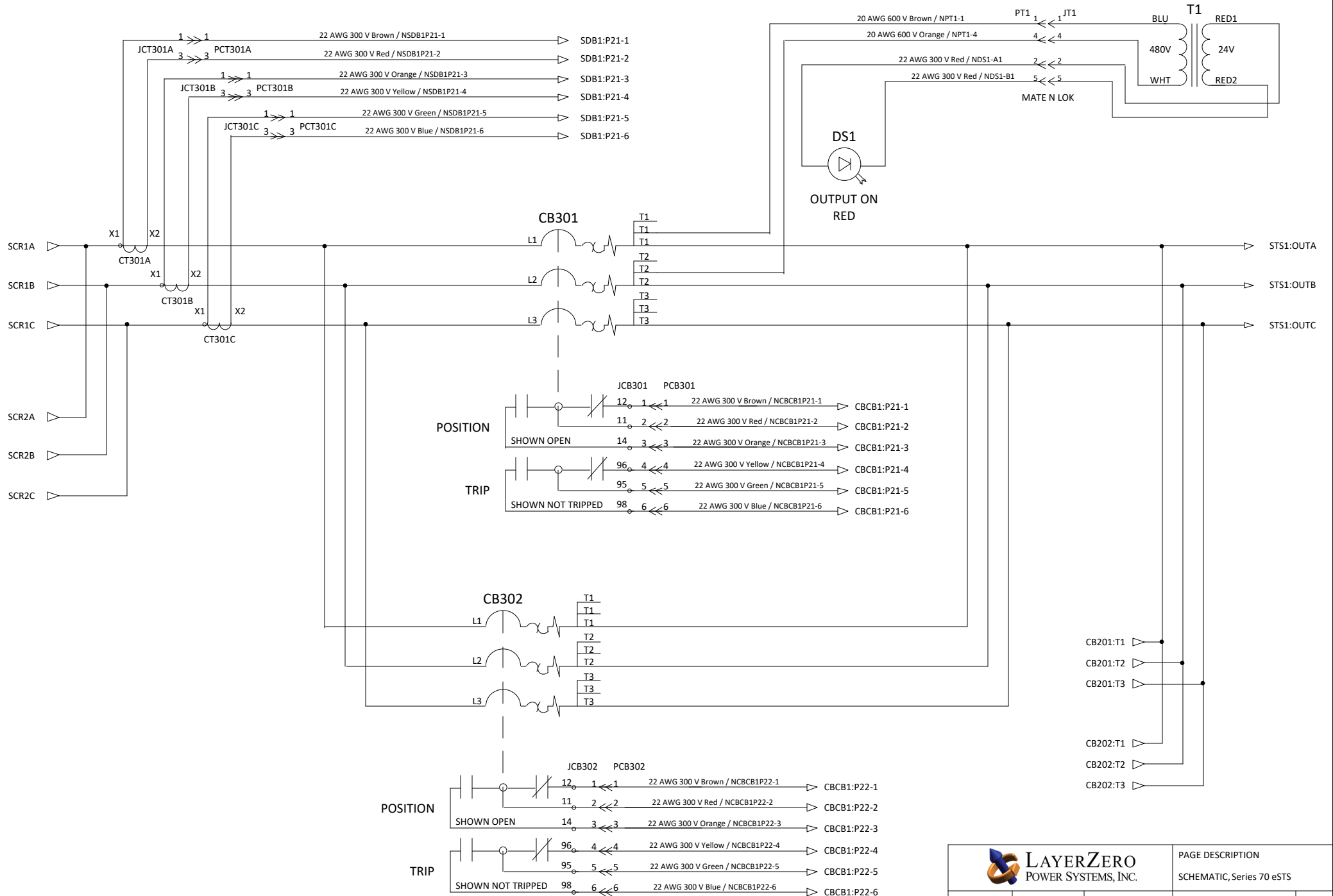


 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 3 OF 33	

SOURCE 2

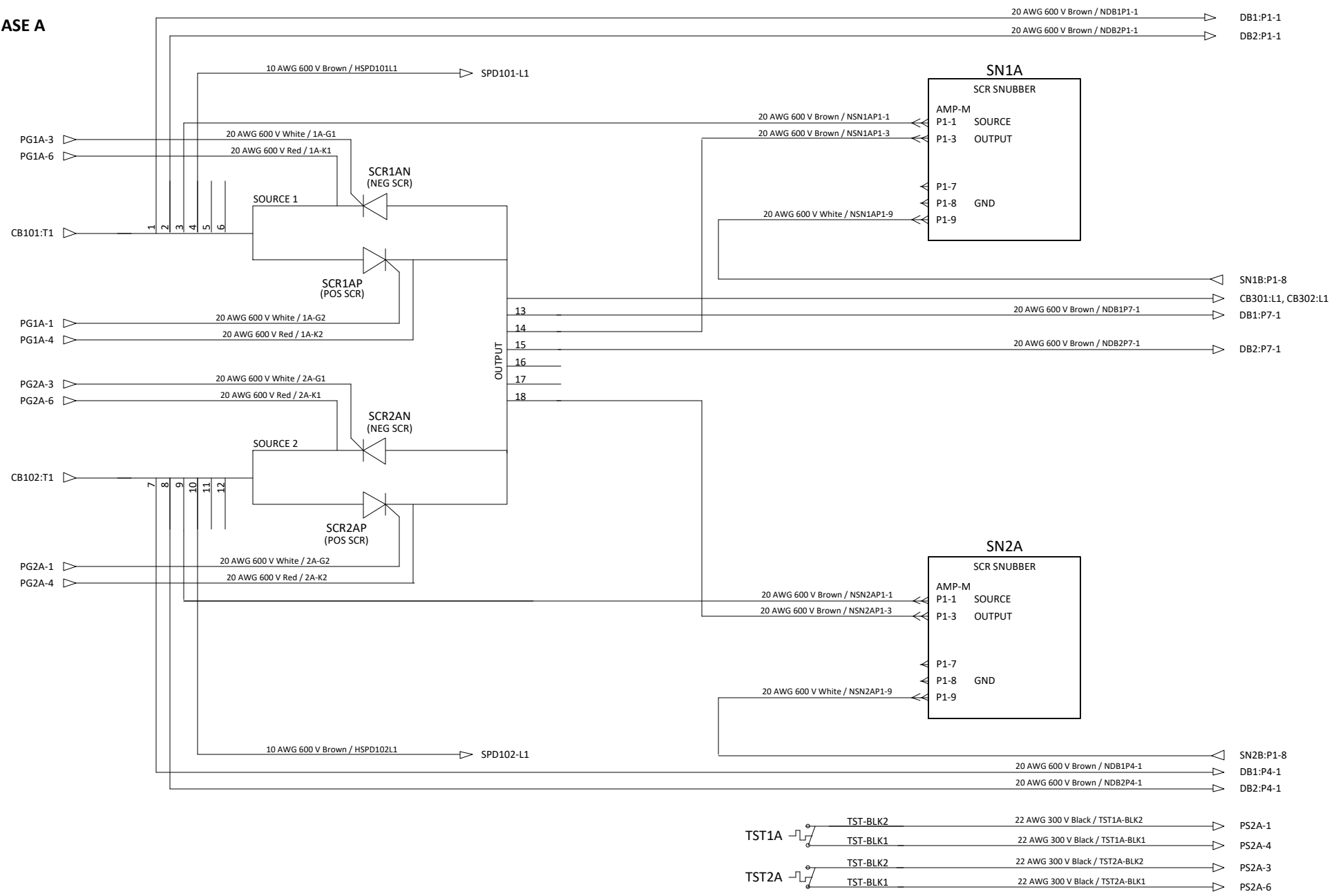


			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS		
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A	SHEET 4 OF 33
	CHK	DATE			
	APPR	DATE			



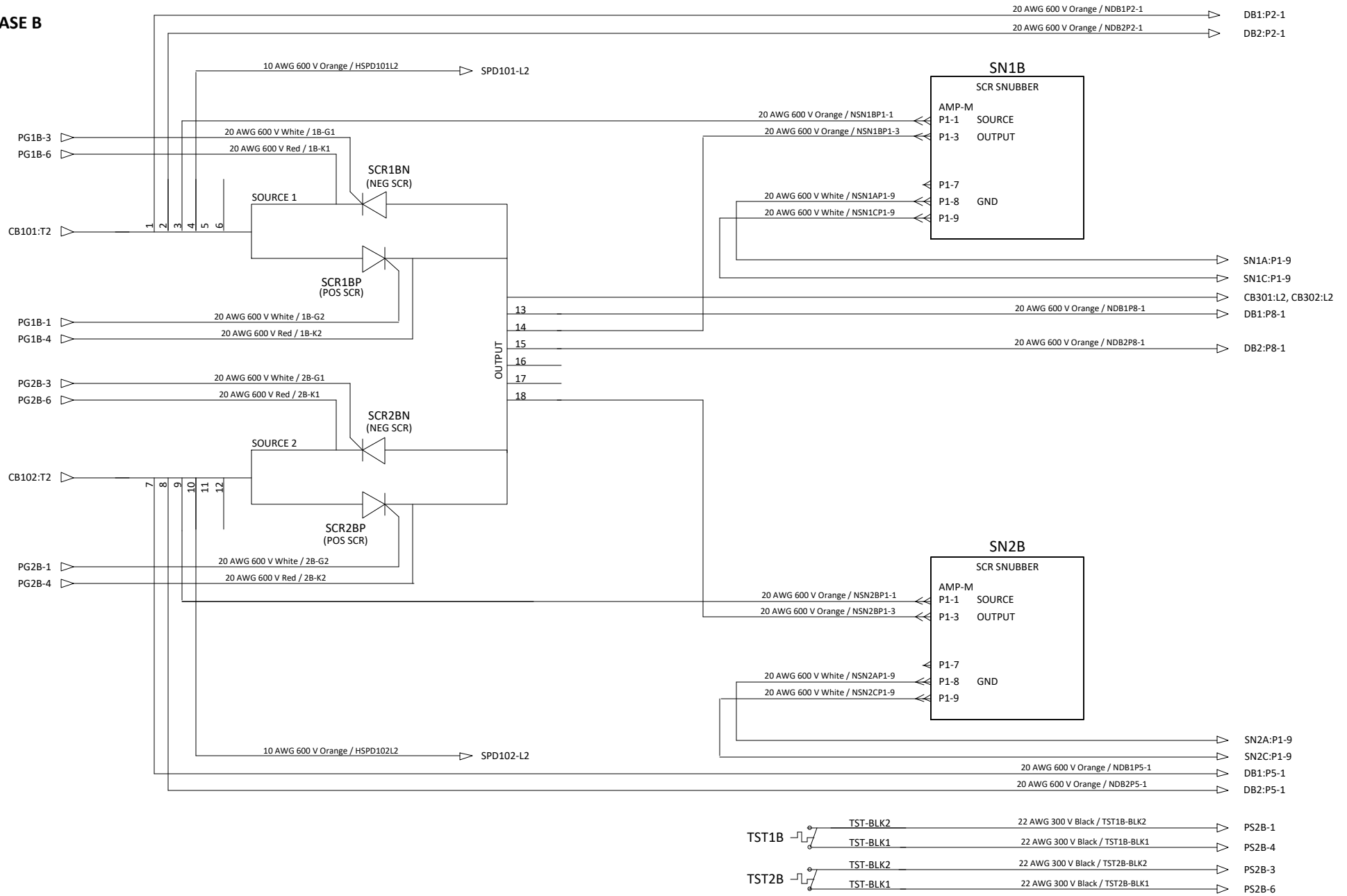
		PAGE DESCRIPTION	
		SCHEMATIC, Series 70 eSTS	
JOB	DRAWN	DATE	DWG NO
LZ-11142	CHK	DATE	94-ES-11142-2
	APPR	DATE	
SHEET 5 OF 33			

PHASE A

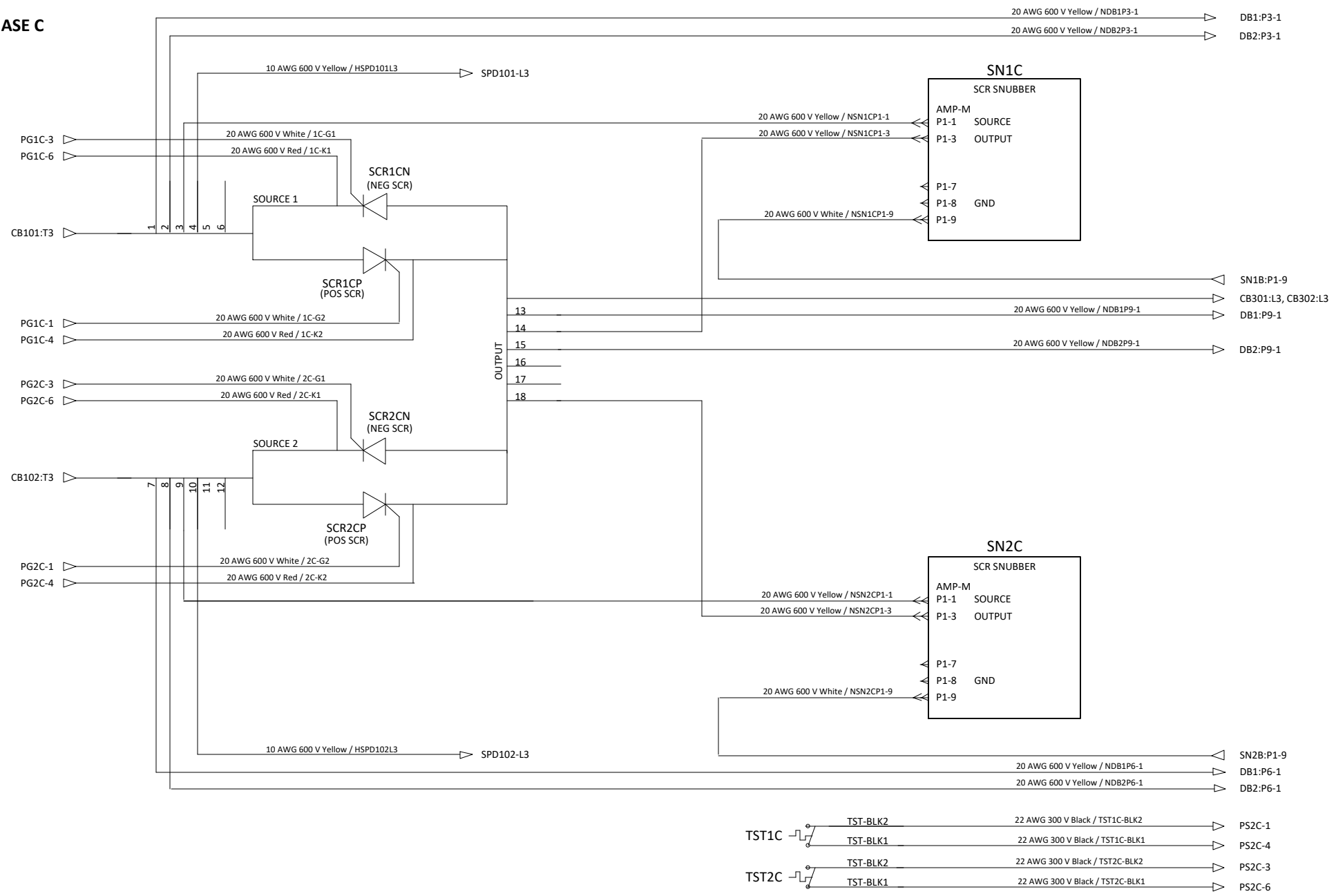


 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE		
			SHEET 6 OF 33	

PHASE B



PHASE C



 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE		
			SHEET 8 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 9 OF 33	

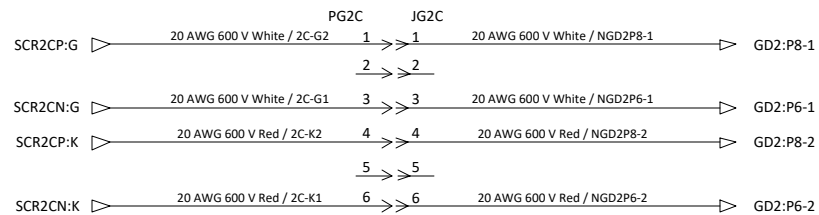
SHELL HOUSING
PIN TERMINALS

PLUG HOUSING
SOCKET TERMINALS



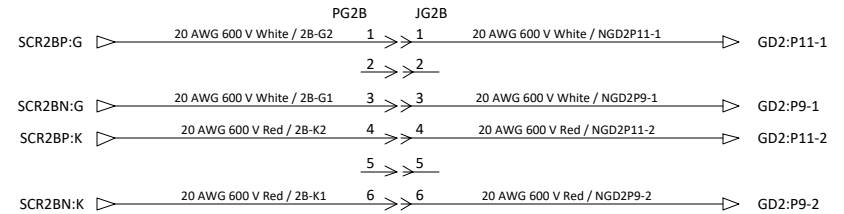
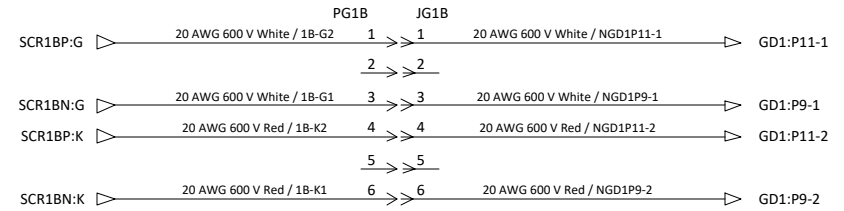
SHELL HOUSING
PIN TERMINALS

PLUG HOUSING
SOCKET TERMINALS



SHELL HOUSING
PIN TERMINALS

PLUG HOUSING
SOCKET TERMINALS

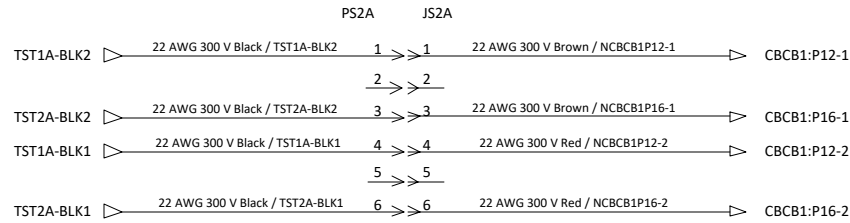


PAGE DESCRIPTION
SCHEMATIC, Series 70 eSTS

JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 10 OF 33	

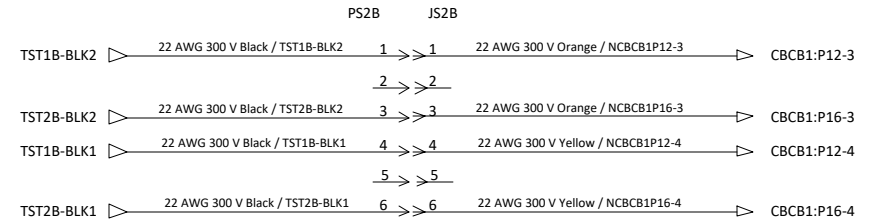
SHELL HOUSING
PIN TERMINALS

PLUG HOUSING
SOCKET TERMINALS



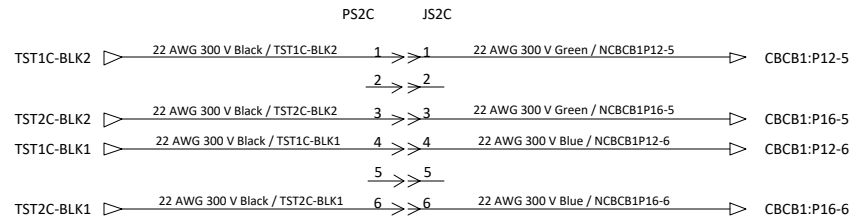
SHELL HOUSING
PIN TERMINALS

PLUG HOUSING
SOCKET TERMINALS



SHELL HOUSING
PIN TERMINALS

PLUG HOUSING
SOCKET TERMINALS



PAGE DESCRIPTION
SCHEMATIC, Series 70 eSTS

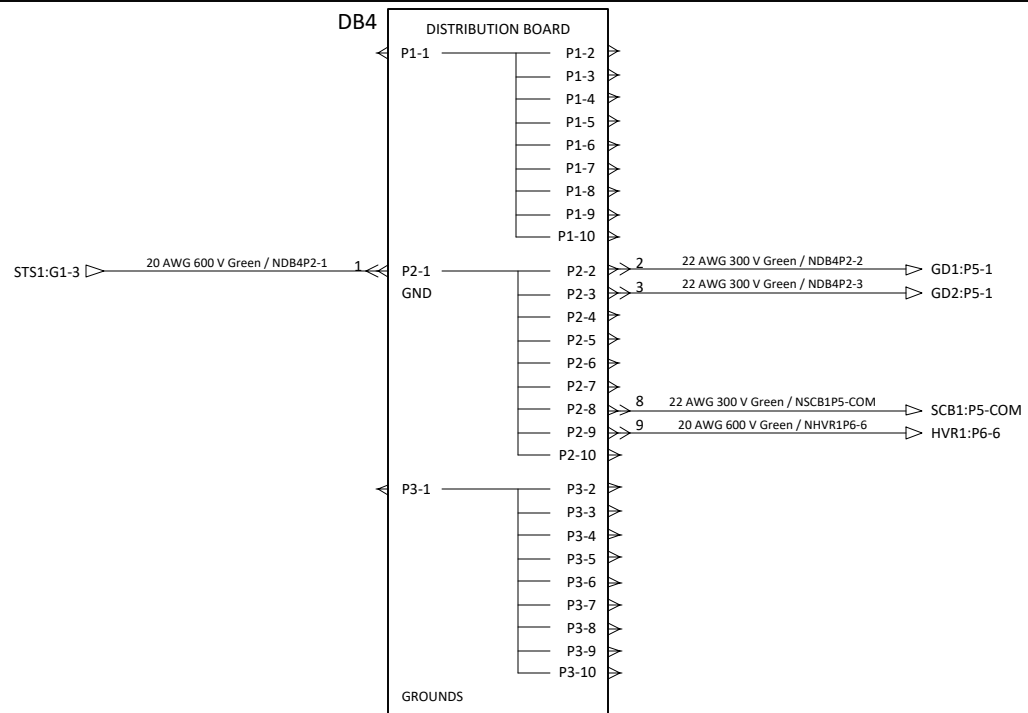
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 11 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 12 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 13 OF 33	

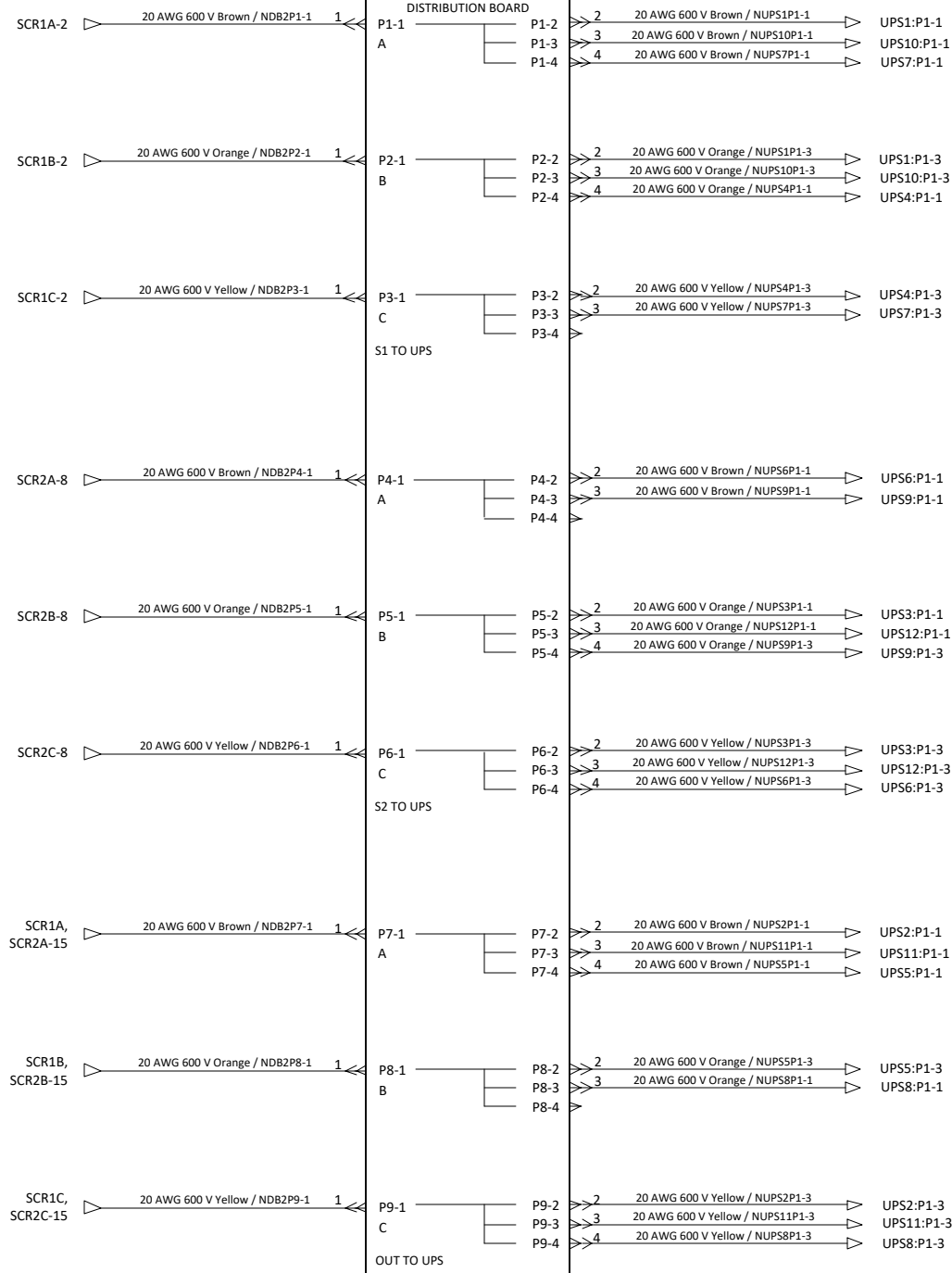
 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 15 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 16 OF 33	



 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 17 OF 33	

DB2

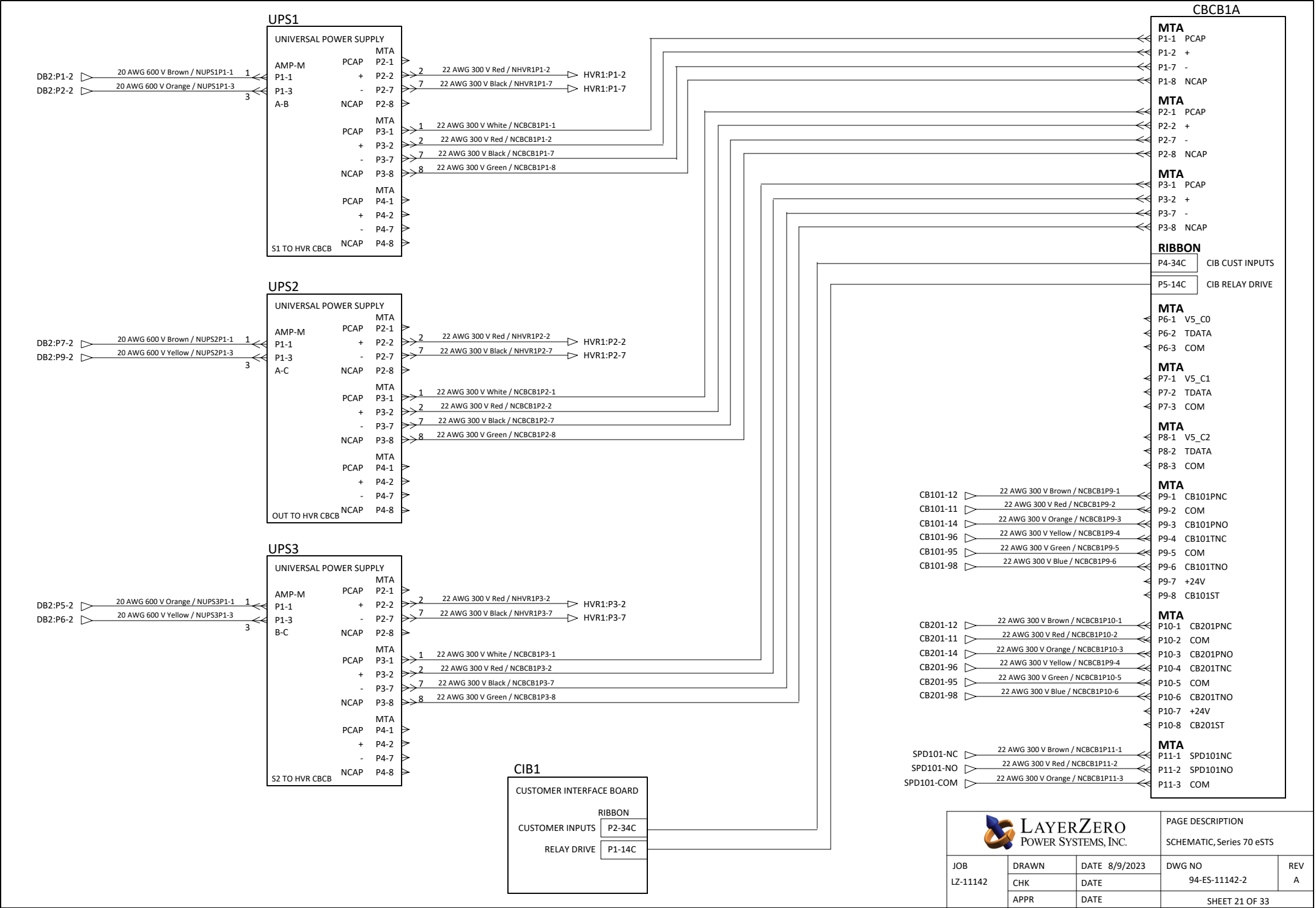


PAGE DESCRIPTION
SCHEMATIC, Series 70 eSTS

JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 18 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 19 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 20 OF 33	



PAGE DESCRIPTION				
SCHEMATIC, Series 70 eSTS				
JOB	DRAWN	DATE	DWG NO	REV
LZ-11142	CHK	DATE	94-ES-11142-2	A
	APPR	DATE	SHEET 21 OF 33	

CBCB1B

JS2A-1	22 AWG 300 V Brown / NCBCB1P12-1	MTA	P12-1	TST101A
JS2A-4	22 AWG 300 V Red / NCBCB1P12-2	MTA	P12-2	COM
JS2B-1	22 AWG 300 V Orange / NCBCB1P12-3	MTA	P12-3	TST101B
JS2B-4	22 AWG 300 V Yellow / NCBCB1P12-4	MTA	P12-4	COM
JS2C-1	22 AWG 300 V Green / NCBCB1P12-5	MTA	P12-5	TST101C
JS2C-4	22 AWG 300 V Blue / NCBCB1P12-6	MTA	P12-6	COM
		MTA	P12-7	TST101N
		MTA	P12-8	COM
CB102-12	22 AWG 300 V Brown / NCBCB1P13-1	MTA	P13-1	CB102PNC
CB102-11	22 AWG 300 V Red / NCBCB1P13-2	MTA	P13-2	COM
CB102-14	22 AWG 300 V Orange / NCBCB1P13-3	MTA	P13-3	CB102PNO
CB102-96	22 AWG 300 V Yellow / NCBCB1P13-4	MTA	P13-4	CB102TNC
CB102-95	22 AWG 300 V Green / NCBCB1P13-5	MTA	P13-5	COM
CB102-98	22 AWG 300 V Blue / NCBCB1P13-6	MTA	P13-6	CB102TNO
		MTA	P13-7	+24V
		MTA	P13-8	CB102ST
CB202-12	22 AWG 300 V Brown / NCBCB1P14-1	MTA	P14-1	CB202PNC
CB202-11	22 AWG 300 V Red / NCBCB1P14-2	MTA	P14-2	COM
CB202-14	22 AWG 300 V Orange / NCBCB1P14-3	MTA	P14-3	CB202PNO
CB202-96	22 AWG 300 V Yellow / NCBCB1P14-4	MTA	P14-4	CB202TNC
CB202-95	22 AWG 300 V Green / NCBCB1P14-5	MTA	P14-5	COM
CB202-98	22 AWG 300 V Blue / NCBCB1P14-6	MTA	P14-6	CB202TNO
		MTA	P14-7	+24V
		MTA	P14-8	CB202ST
SPD102-NC	22 AWG 300 V Brown / NCBCB1P15-1	MTA	P15-1	SPD102NC
SPD102-NO	22 AWG 300 V Red / NCBCB1P15-2	MTA	P15-2	SPD102NO
SPD102-COM	22 AWG 300 V Orange / NCBCB1P15-3	MTA	P15-3	COM
JS2A-3	22 AWG 300 V Brown / NCBCB1P16-1	MTA	P16-1	TST102A
JS2A-6	22 AWG 300 V Red / NCBCB1P16-2	MTA	P16-2	COM
JS2B-3	22 AWG 300 V Orange / NCBCB1P16-3	MTA	P16-3	TST102B
JS2B-6	22 AWG 300 V Yellow / NCBCB1P16-4	MTA	P16-4	COM
JS2C-3	22 AWG 300 V Green / NCBCB1P16-5	MTA	P16-5	TST102C
JS2C-6	22 AWG 300 V Blue / NCBCB1P16-6	MTA	P16-6	COM
		MTA	P16-7	TST102N
		MTA	P16-8	COM
		MTA	P17-1	CB103PNC
		MTA	P17-2	COM
		MTA	P17-3	CB103PNO
		MTA	P17-4	CB103TNC
		MTA	P17-5	COM
		MTA	P17-6	CB103TNO
		MTA	P17-7	+24V
		MTA	P17-8	CB103ST
		MTA	P18-1	CB203PNC
		MTA	P18-2	COM
		MTA	P18-3	CB203PNO
		MTA	P18-4	CB203TNC
		MTA	P18-5	COM
		MTA	P18-6	CB203TNO
		MTA	P18-7	+24V
		MTA	P18-8	CB203ST
		MTA	P19-1	SPD103NC
		MTA	P19-2	SPD103NO
		MTA	P19-3	COM

CBCB1C

CB301-12	22 AWG 300 V Brown / NCBCB1P21-1	MTA	P21-1	CB301PNC
CB301-11	22 AWG 300 V Red / NCBCB1P21-2	MTA	P21-2	COM
CB301-14	22 AWG 300 V Orange / NCBCB1P21-3	MTA	P21-3	CB301PNO
CB301-96	22 AWG 300 V Yellow / NCBCB1P21-4	MTA	P21-4	CB301TNC
CB301-95	22 AWG 300 V Green / NCBCB1P21-5	MTA	P21-5	COM
CB301-98	22 AWG 300 V Blue / NCBCB1P21-6	MTA	P21-6	CB301TNO
CB302-12	22 AWG 300 V Brown / NCBCB1P22-1	MTA	P22-1	CB302PNC
CB302-11	22 AWG 300 V Red / NCBCB1P22-2	MTA	P22-2	COM
CB302-14	22 AWG 300 V Orange / NCBCB1P22-3	MTA	P22-3	CB302PNO
CB302-96	22 AWG 300 V Yellow / NCBCB1P22-4	MTA	P22-4	CB302TNC
CB302-95	22 AWG 300 V Green / NCBCB1P22-5	MTA	P22-5	COM
CB302-98	22 AWG 300 V Blue / NCBCB1P22-6	MTA	P22-6	CB302TNO
		MTA	P23-1	CBSP1PNC
		MTA	P23-2	COM
		MTA	P23-3	CBSP1PNO
		MTA	P23-4	CBSP1TNC
		MTA	P23-5	COM
		MTA	P23-6	CBSP1TNO
		MTA	P23-7	+24V
		MTA	P23-8	CBSP1ST
		MTA	P24-1	CBSP2PNC
		MTA	P24-2	COM
		MTA	P24-3	CBSP2PNO
		MTA	P24-4	CBSP2TNC
		MTA	P24-5	COM
		MTA	P24-6	CBSP2TNO
		MTA	P24-7	+24V
		MTA	P24-8	CBSP2ST
		MTA	P48-1	+12V
		MTA	P48-2	COM
		MTA	P49-1	FSS1-NO
		MTA	P49-2	COM
		MTA	P49-3	FSS1-NC
		MTA	P49-4	COM
		MTA	P50-1	+12V
		MTA	P50-2	COM
		MTA	P51-1	FSS2-NO
		MTA	P51-2	COM
		MTA	P51-3	FSS2-NC
		MTA	P51-4	COM
		MTA	P52-1	+12V
		MTA	P52-2	COM
		MTA	P53-1	FSS3-NO
		MTA	P53-2	COM
		MTA	P53-3	FSS3-NC
		MTA	P53-4	COM

CBCB1D

P54-1	+12V	MTA	P54-1	+12V
P54-2	COM	MTA	P55-1	FSS4NO
		MTA	P55-2	COM
		MTA	P55-3	FSS4NC
		MTA	P55-4	COM
		MTA	P56-1	TSTAMB1
		MTA	P56-2	COM
		MTA	P56-3	TSTAMB2
		MTA	P56-4	COM
		MTA	P57-1	CABSW1NC
		MTA	P57-2	COM
		MTA	P57-3	CABSW1NO
		MTA	P57-4	CABSW2NC
		MTA	P57-5	COM
		MTA	P57-6	CABSW2NO
		MTA	P57-7	CABSW3NC
		MTA	P57-8	COM
		MTA	P57-9	CABSW3NO
		MTA	P57-10	CABSW4NC
		MTA	P57-11	COM
		MTA	P57-12	CABSW4NO
		MTA	P58-1	SPARE1NC
		MTA	P58-2	COM
		MTA	P58-3	SPARE1NO
		MTA	P58-4	SPARE2NC
		MTA	P58-5	COM
		MTA	P58-6	SPARE2NO
		MTA	P59-1	SPARE3NC
		MTA	P59-2	COM
		MTA	P59-3	SPARE3NO
		MTA	P59-4	SPARE4NC
		MTA	P59-5	COM
		MTA	P59-6	SPARE4NO
		FIBER	GRY	PORT0-TX
		FIBER	BLU	PORT0-RX
		FIBER	GRY	PORT1-TX
		FIBER	BLU	PORT1-RX
		FIBER	GRY	PORT2-TX
		FIBER	BLU	PORT2-RX

TSTAMB1

DOORSW1 (SHOWN WITH DOOR OPEN)

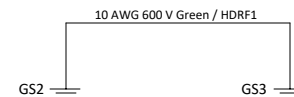
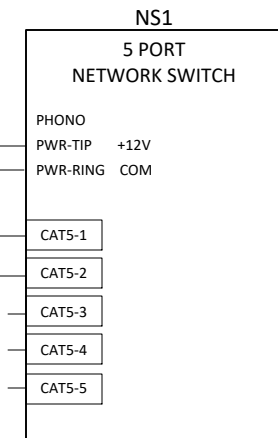
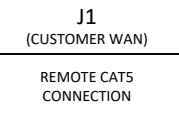
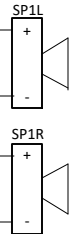
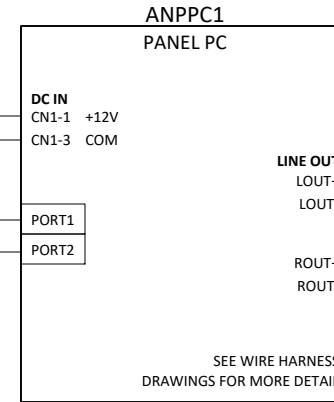
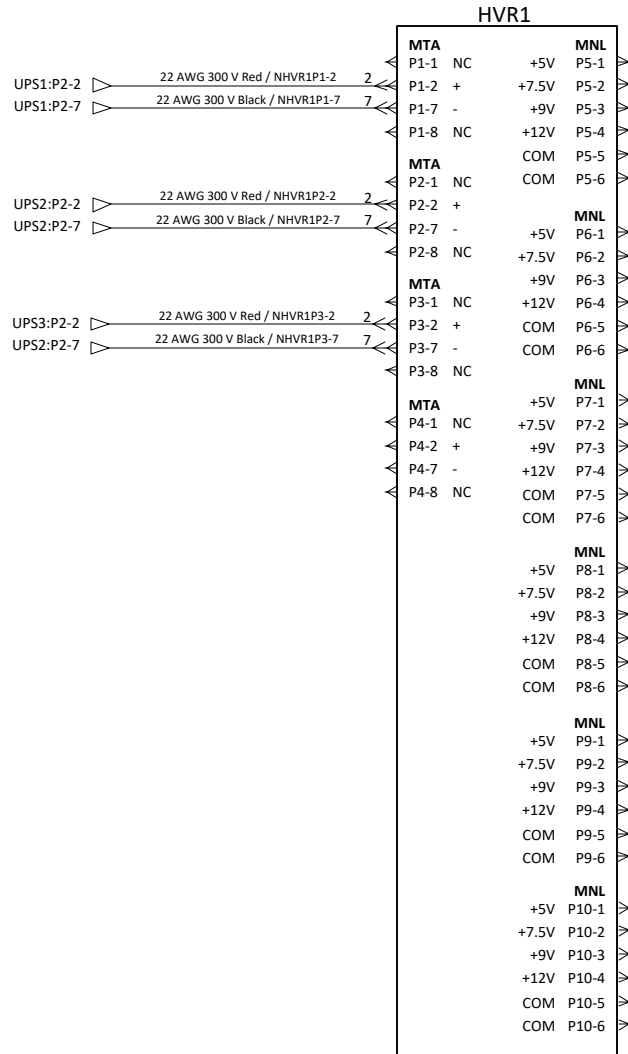
DOORSW2 (SHOWN WITH DOOR OPEN)

SCB1:PORT6-RX-1

SCB1:PORT6-TX-1

		PAGE DESCRIPTION		
		SCHEMATIC, Series 70 eSTS		
JOB	DRAWN	DATE	DWG NO	REV
LZ-11142	CHK	DATE	94-ES-11142-2	A
	APPR	DATE	SHEET 22 OF 33	

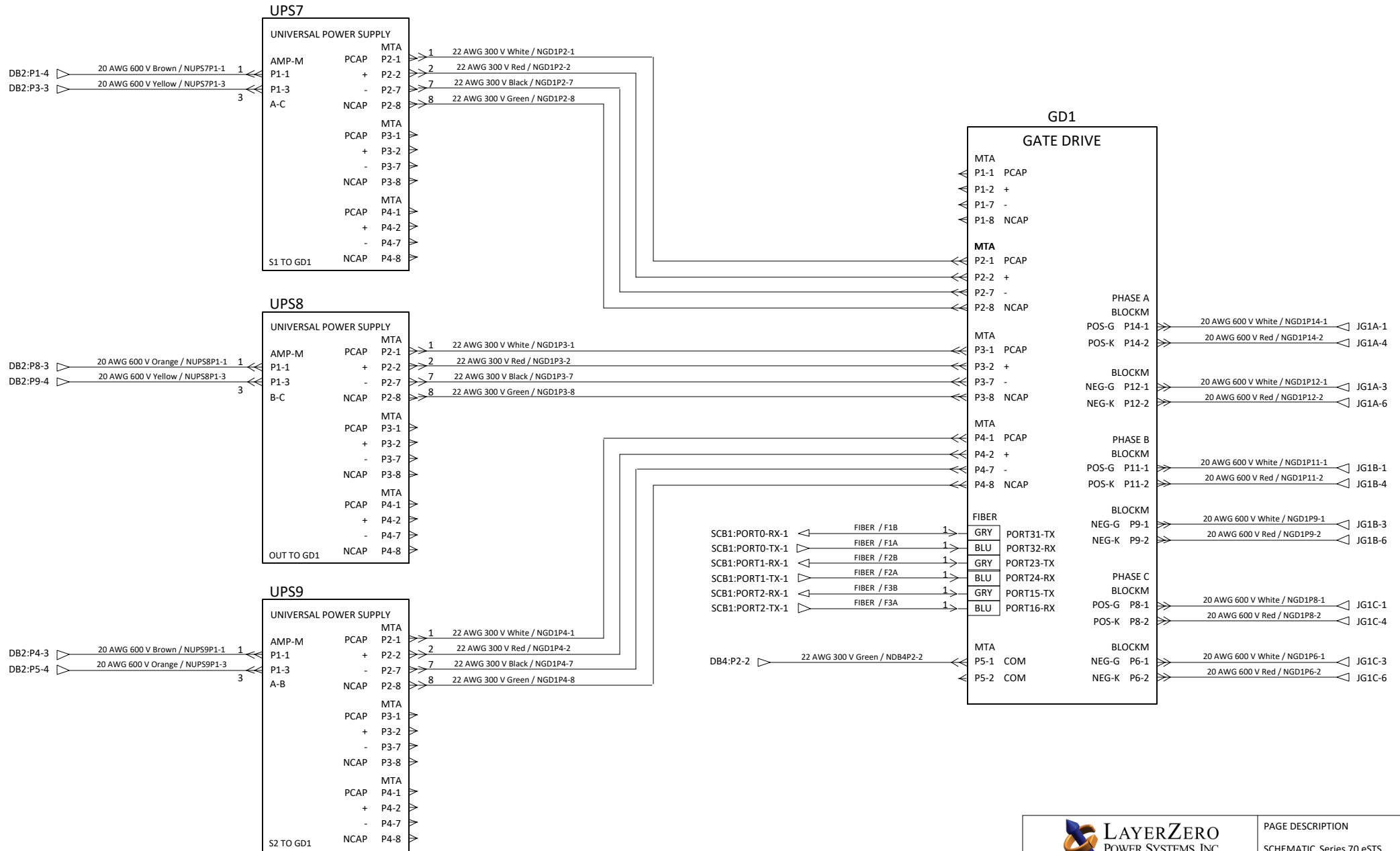
DB4:P2-9 20 AWG 600 V Green / NHVR1P6-6



 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 23 OF 33	

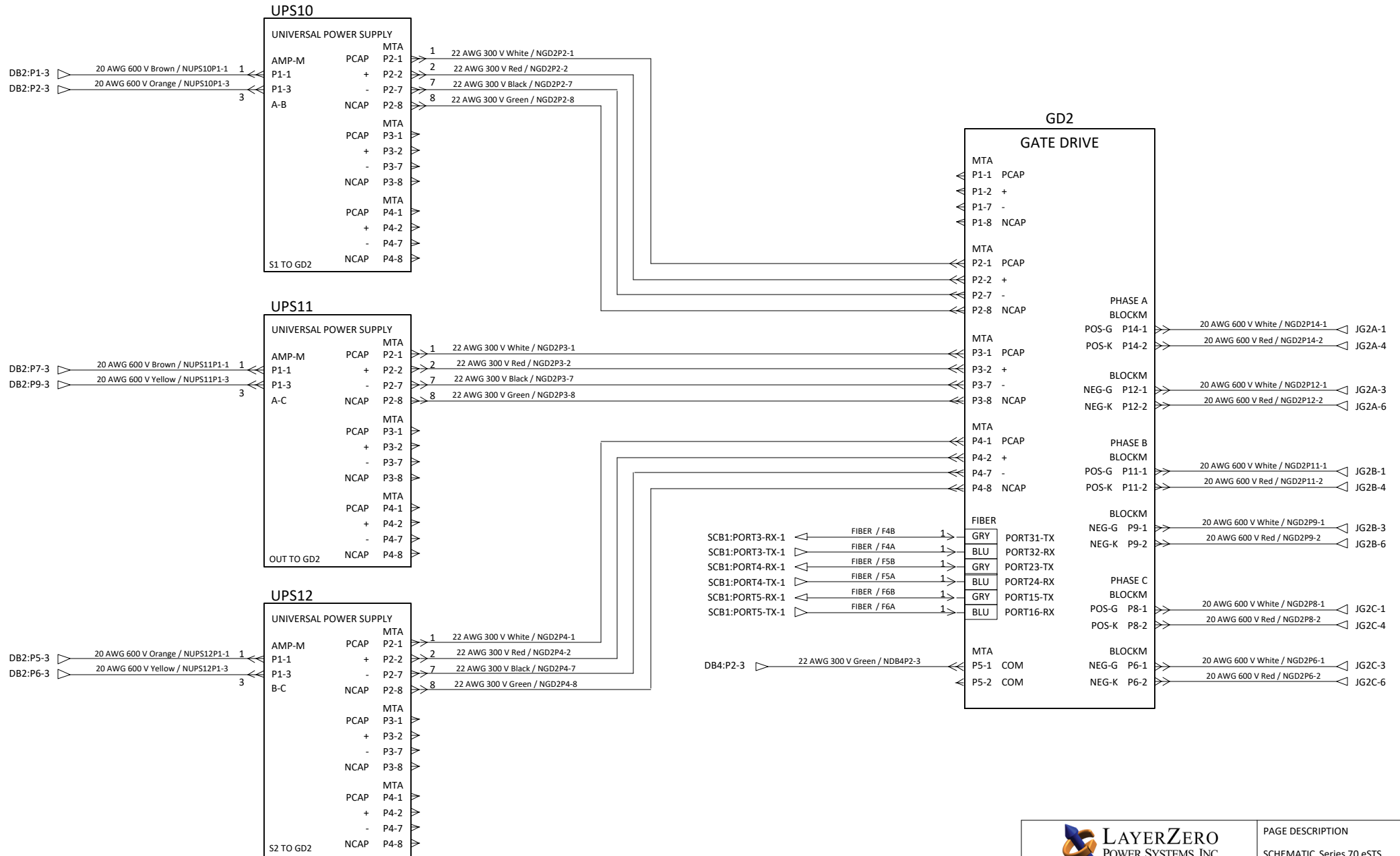
 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 25 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 26 OF 33	



PAGE DESCRIPTION				
SCHEMATIC, Series 70 eSTS				
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO	REV
	CHK	DATE	94-ES-11142-2	A
	APPR	DATE	SHEET 27 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 28 OF 33	



PAGE DESCRIPTION				
SCHEMATIC, Series 70 eSTS				
JOB	DRAWN	DATE	DWG NO	REV
LZ-11142	CHK	DATE	94-ES-11142-2	A
APPR	DATE	SHEET 29 OF 33		

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 30 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 31 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 32 OF 33	

 LAYERZERO POWER SYSTEMS, INC.			PAGE DESCRIPTION SCHEMATIC, Series 70 eSTS	
JOB LZ-11142	DRAWN	DATE 8/9/2023	DWG NO 94-ES-11142-2	REV A
	CHK	DATE		
	APPR	DATE	SHEET 33 OF 33	