

C903 - MBARI

A	1	FRONT SHEET
	2	24V REGULATED PSU'S
	3	24V UN-REGULATED PSU'S & 48V REGULATED PSU'S
	4	110V AC DISTRIBUTION
	5	240V AC DISTRIBUTION & GYRO CARD
	6	LIM VACUUM & TRIGGER CARDS
	7	WAGO MODULES - DIGI I/P & O/P
	8	WAGO MODULES - DIGI O/P
	9	WAGO MODULES - DIGI O/P
	10	WAGO MODULES - C.O. RELAY & ANA I/P
	11	SIGNALS ISOLATION BOARD RS232
	12	SIGNALS ISOLATION BOARD RS232
	13	SIGNALS ISOLATION BOARD RS485
	14	SIGNALS ISOLATION BOARD VIDEO
	15	GROUND FAUL T MONITORING BOARDS
	16	FOCAL INTERFACE RACK
	17	FACEPLATE CONNECTOR - POD POWER, FIBRE, 12ST VT
	18	FACEPLATE CONNECTOR - JB1 SIG, JB1 POWER, JB2 POWER
	19	FACEPLATE CONNECTOR - JB 2 SIG, TCU, TOOLSLIED INTERFACE
	20	FACEPLATE CONNECTOR - AUX JB, LAMP DIMMER

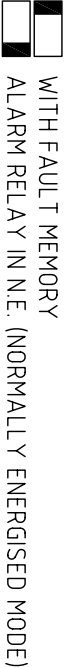
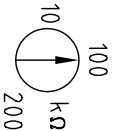
NO.	DATE	CHANGE	DRAWN	CHECK
1	09-01-08	AS BUILT.	P.S.	C.L.T.
2	28-04-08	NOTES MODIFIED, RE-NUMBERED & NEW NOTE 12 ADDED.	P.S.	C.L.T.
3	07-07-08	NOTE 3 AMENDED.	P.S.	C.L.T.

ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.

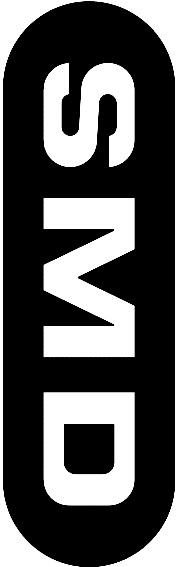
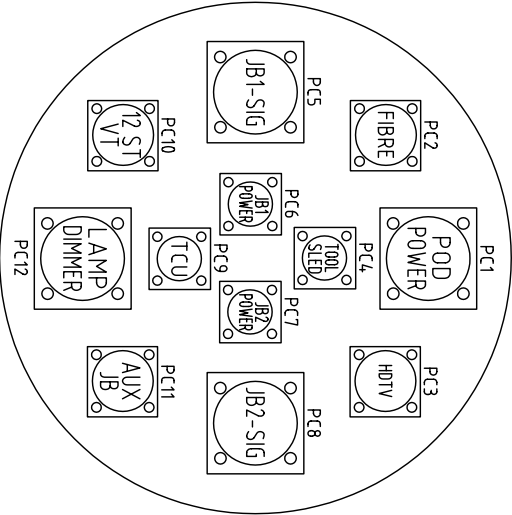
NOTES:

- 1. WIRE NUMBERS ALLOCATED TO THIS DRG ARE 400 - 652
- 2. LAST WIRE NUMBER USED 652
- 3. UNUSED WIRE Nos. ARE 458, 459, 463-467,494-499,552-556,559,562,564,576.
- 4. PAIR CABLE NUMBERS USED ON THIS DRG. ARE P1 TO P63
- 5. COAX CABLE NUMBERS USED ON THIS DRG. ARE X1 TO X24
- 6. FIBRE CABLE NUMBERS USED ON THIS DRG. ARE F1 & F2.
- 7. WIRE NUMBERS OTHER THAN ABOVE ARE DERIVED FROM OTHER SHEETS.
- 8. LAST FUSE NUMBER USED F51 LAST RELAY NUMBER USED R26.
- 9. ALL CABLES TO BE IN ACCORDANCE WITH SMD DRG.No.PD0739 (LATEST ISSUE No 3)

- RED CABLE = 240V DC POWER
- 10. FUSE TYPE IS DENOTED BY THE FOLLOWING REFERENCES-
 - S - AC SELF-RESETTING FUSE (AA9038-5A,FUSE+AA9039-7A,FUSE+PB6471-HOLDER)
 - R - SELF-RESETTING FUSE (PB6471-HOLDER)
 - A - AUTOMOBILE FUSE (PK3834-20A,FUSE + PK3777-HOLDER)
- 11. 24VDC RELAYS R1-R21, R24-R26 ARE PART Nos PG3465 (RELAY), PG3466 (BASE).
- 12. 24V DC RELAYS R23, R23 ARE PART No. AC2374.
- 13. TIMING RELAY TO BE SET-UP AS FOLLOWS-
 - SIDE SWITCH = 24V.
 - TOP SWITCH = 0.5
 - MIDDLE SWITCH = 10 S
 - BOTTOM SWITCH = 20 w†
- 14. LIM UNITS TO BE SET-UP AS FOLLOWS-



- 15. OPTO ISOLATOR TO BE SET UP AS FOLLOWS:-
 - LINK 1 OUT
 - LINK 2 IN
 - LINK 3 OUT
- 16. FIBRE OPTIC GYRO TO BE SET UP AS FOLLOWS:-
 - MODE SWITCH (ROTARY) SET TO 4
 - INTERNAL DIP SWITCH SET TO 1=ON, 2=ON, 3=ON, 4=ON
- 17. MUX SLOT F CH1 - SET DIP SWITCHES TO 422



Soil Machine Dynamics

AB6315

3

DO NOT SCALE

DRAWING NO.

SHEET 1 OF 20

TITLE

POD WIRING - C903RV

ISSUE NO.

MATERIAL

-

DIMENSIONS

-

SCALE

-

PROJECTION

3RD

DESIGNED

C.L.T.

DRAWN

C.L.T.

TOLERANCES UNLESS OTHERWISE STATED

UP TO 100

100 TO 300

300 TO 1000

OVER 1000

DATE

10-08-07

CHECKED

I.M.P.

FABRICATION

± 1.0

± 1.5

± 2.0

± 3.0

MACHINED PART

± 0.15

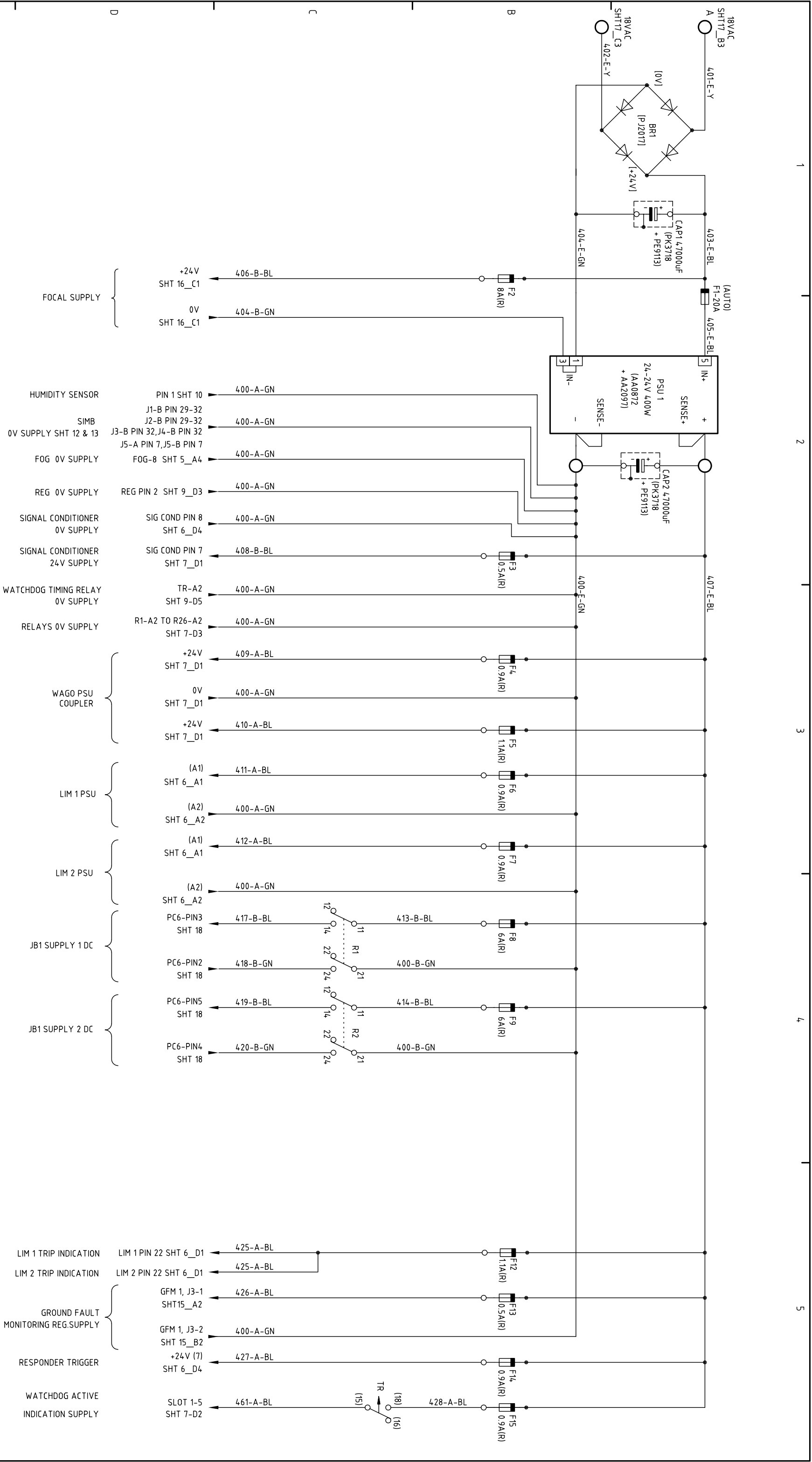
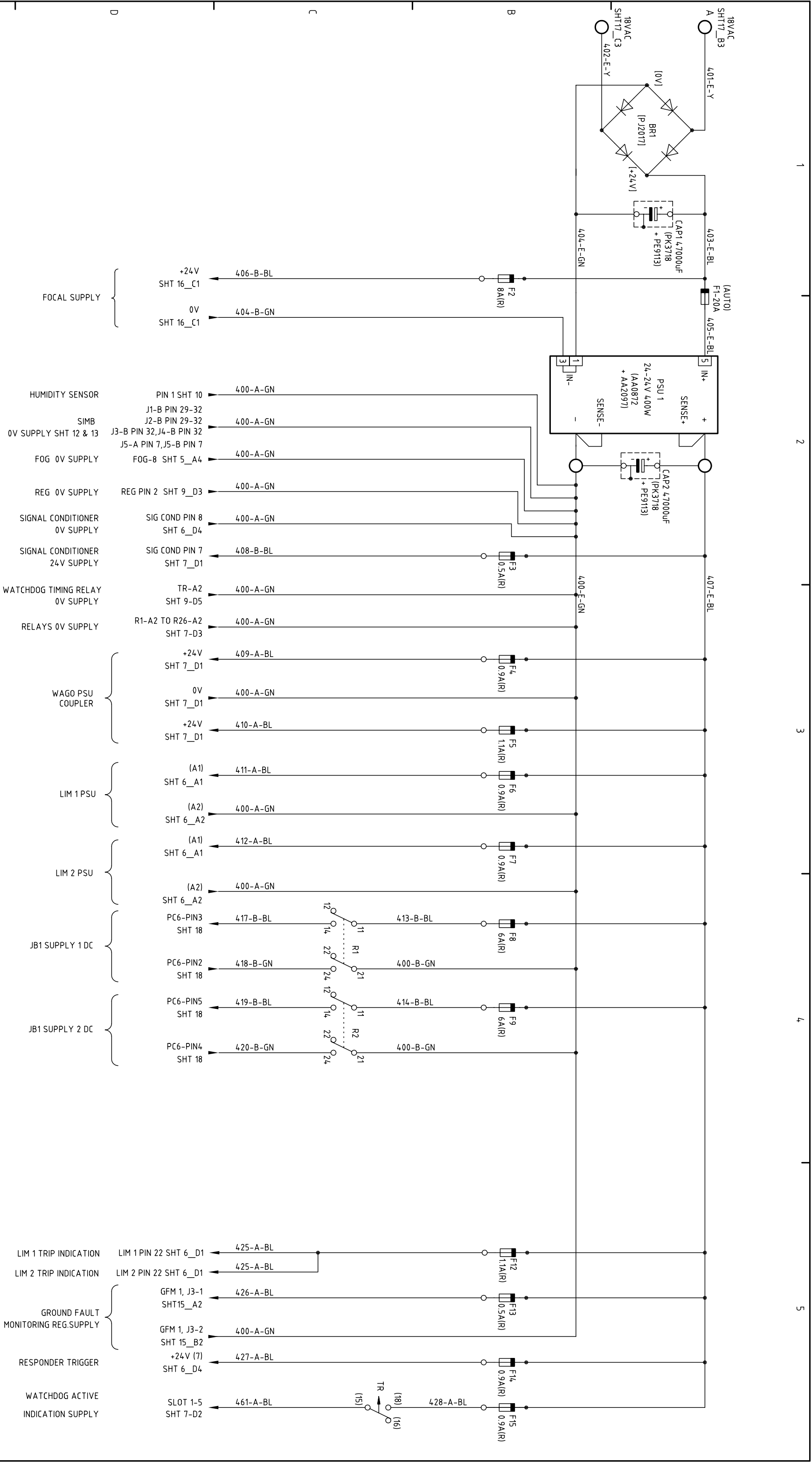
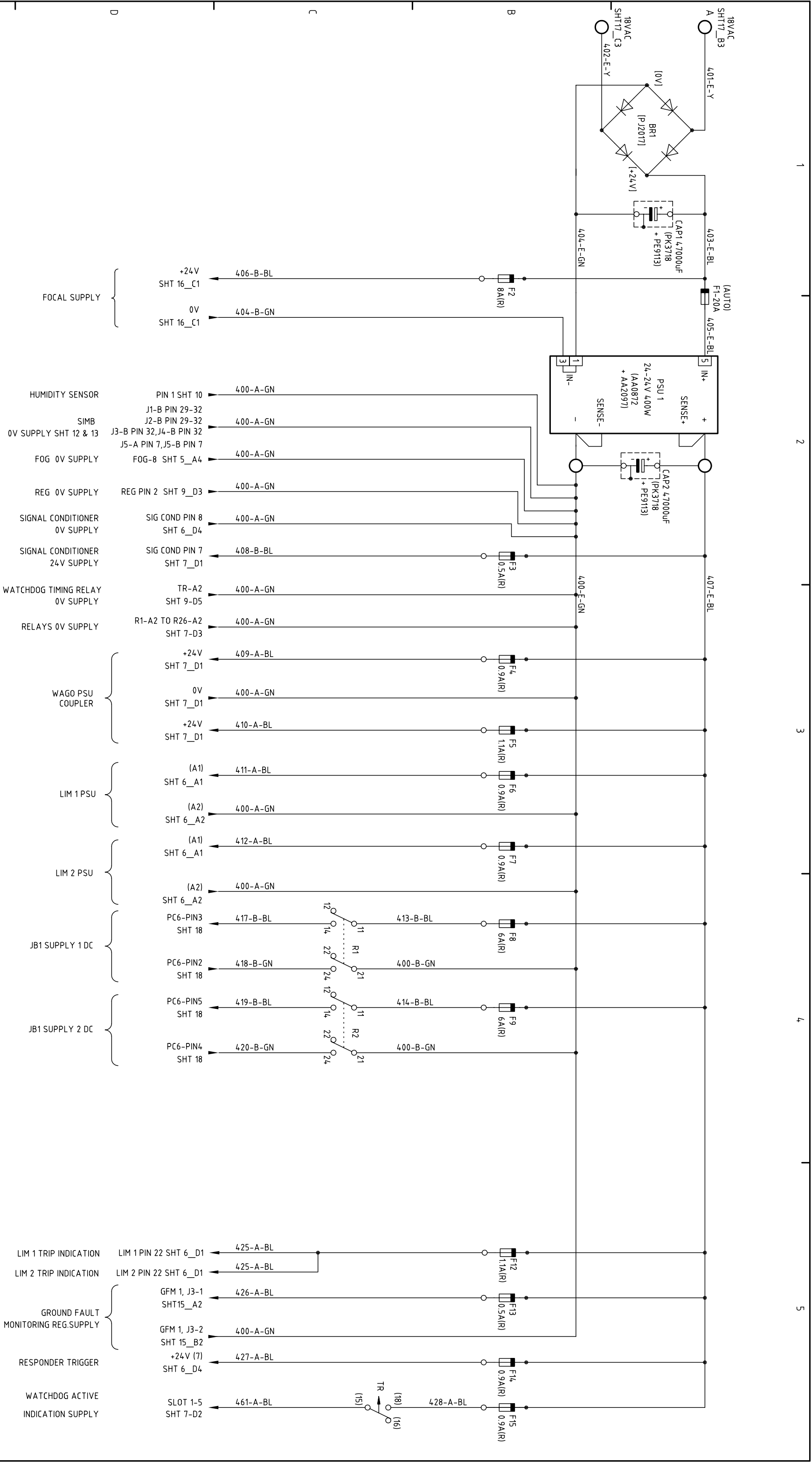
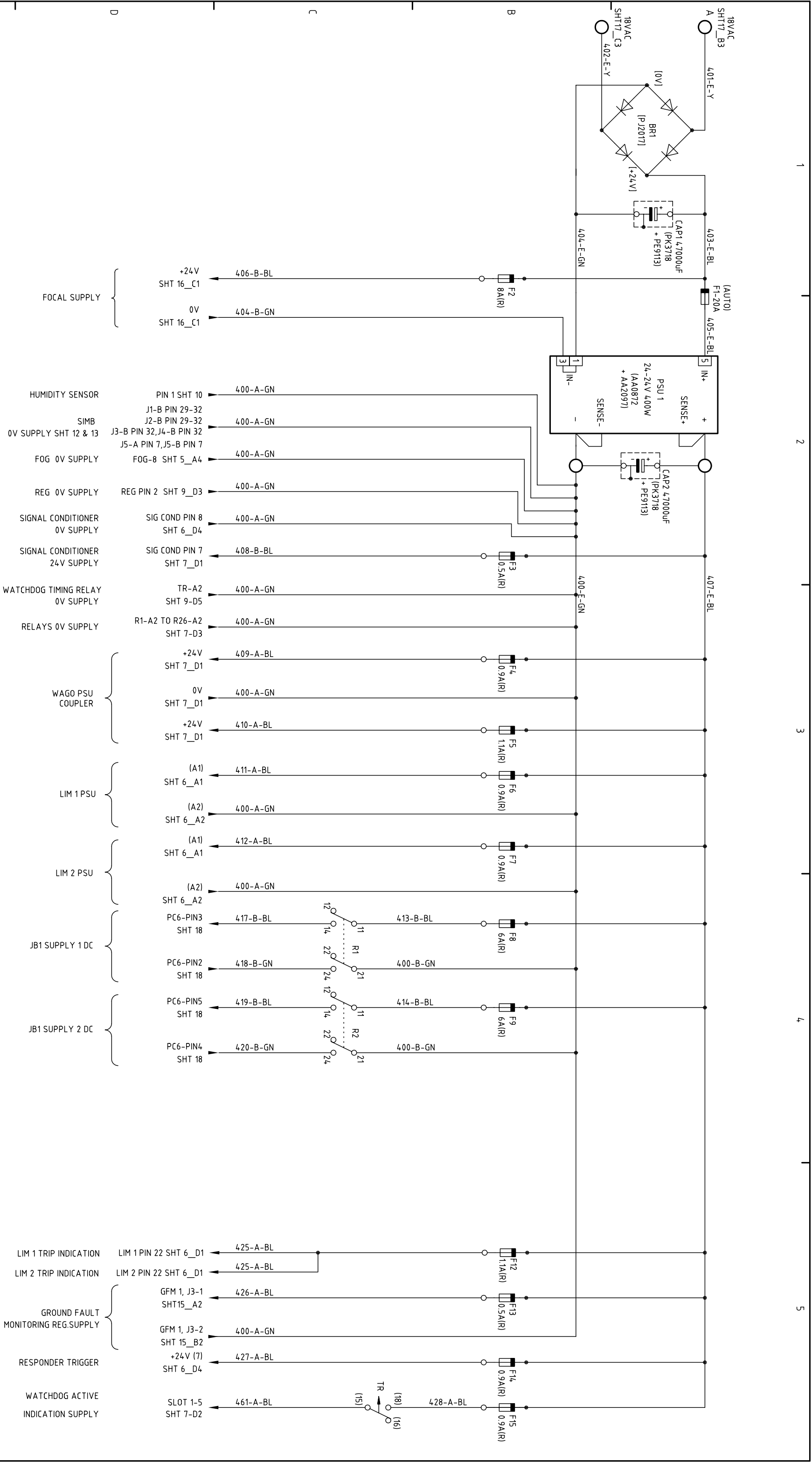
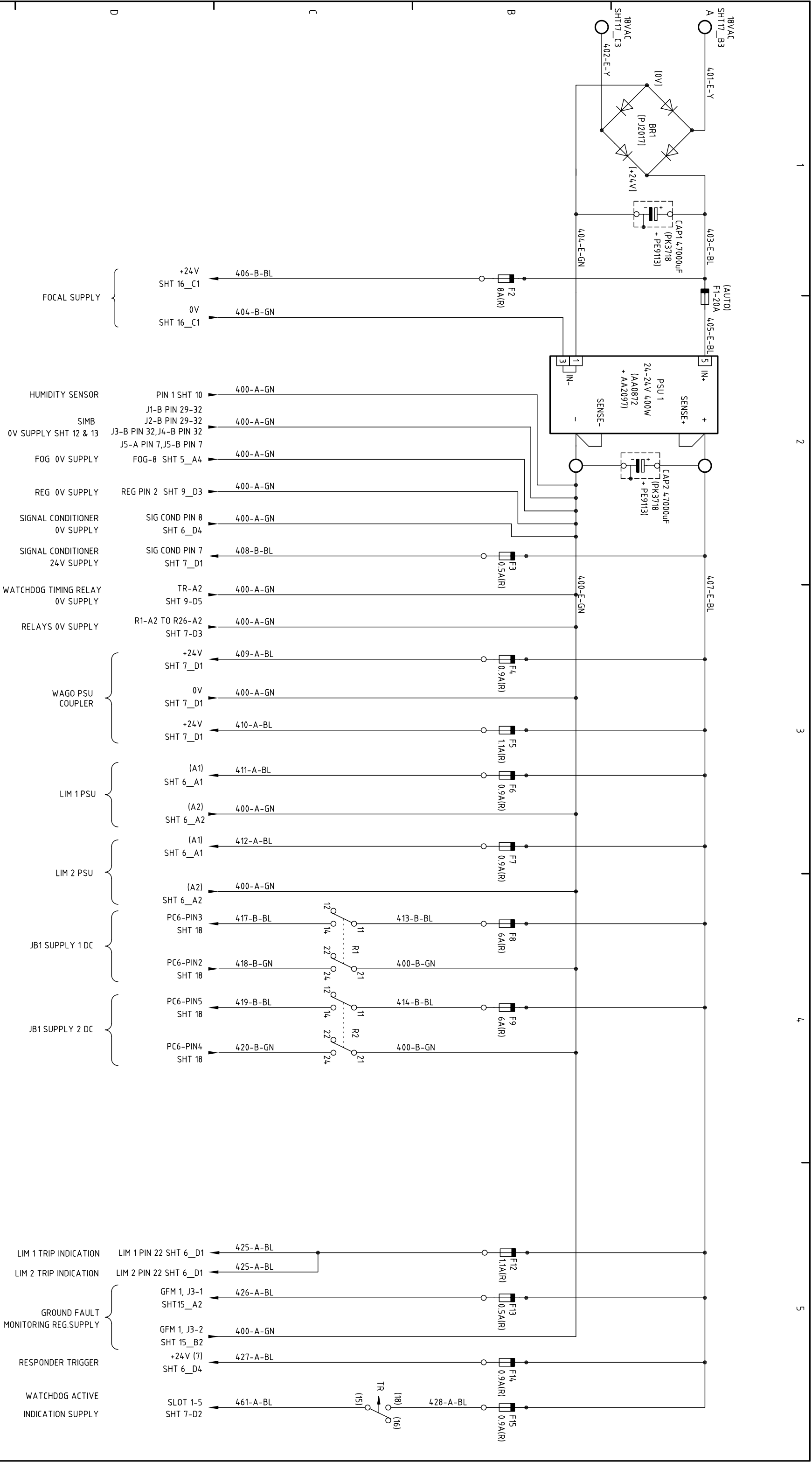
± 0.4

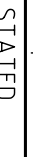
± 0.8

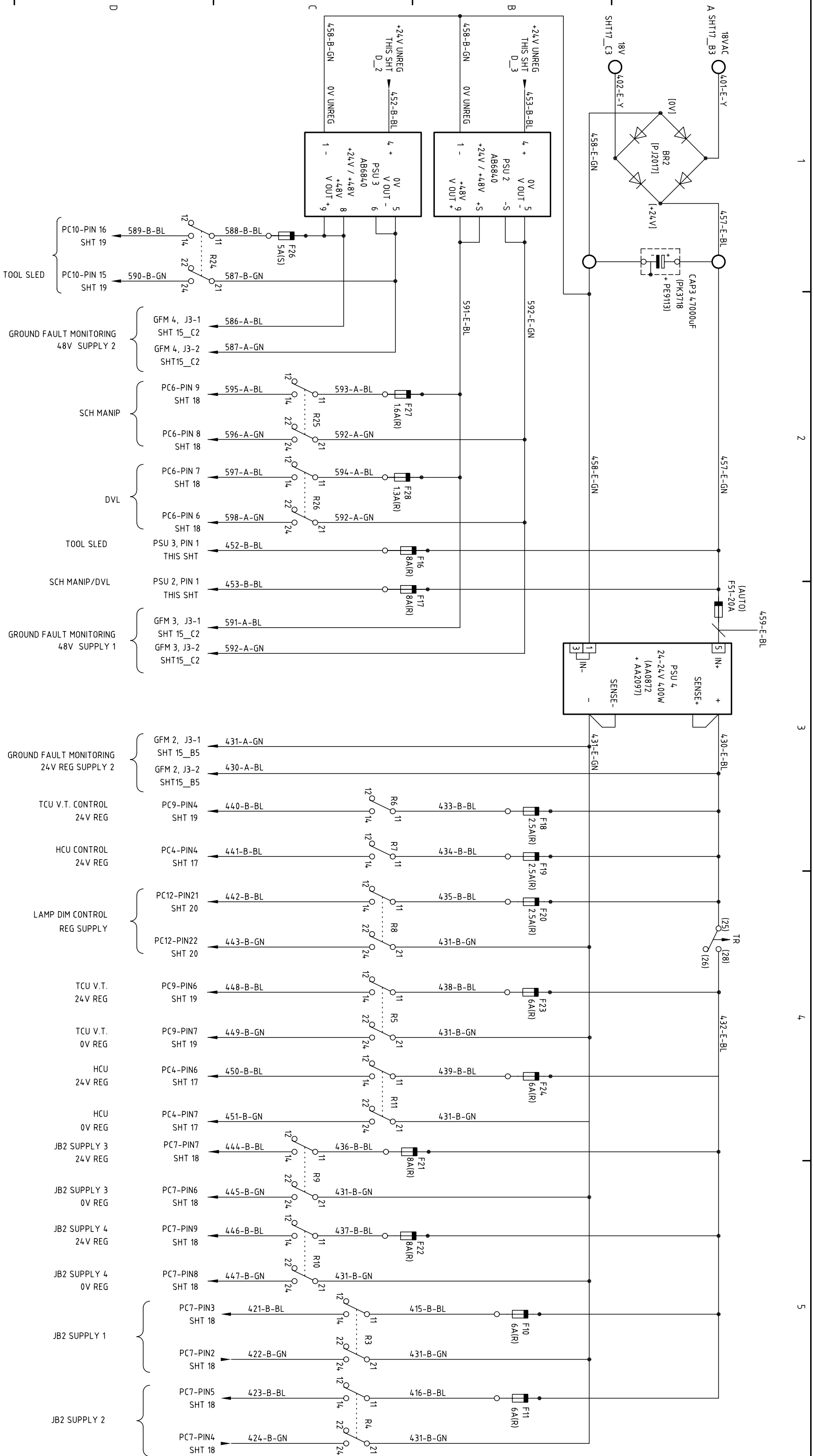
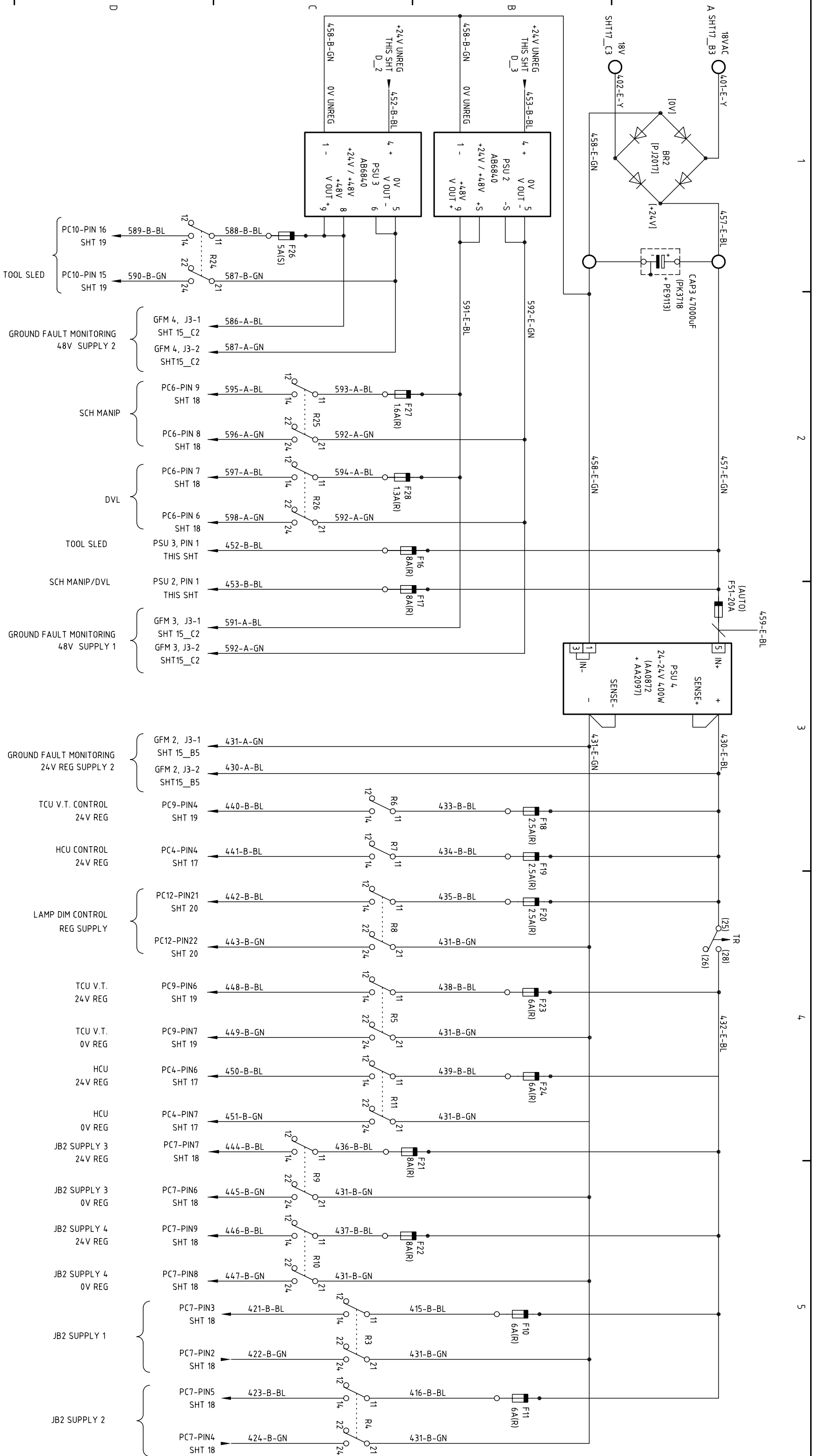
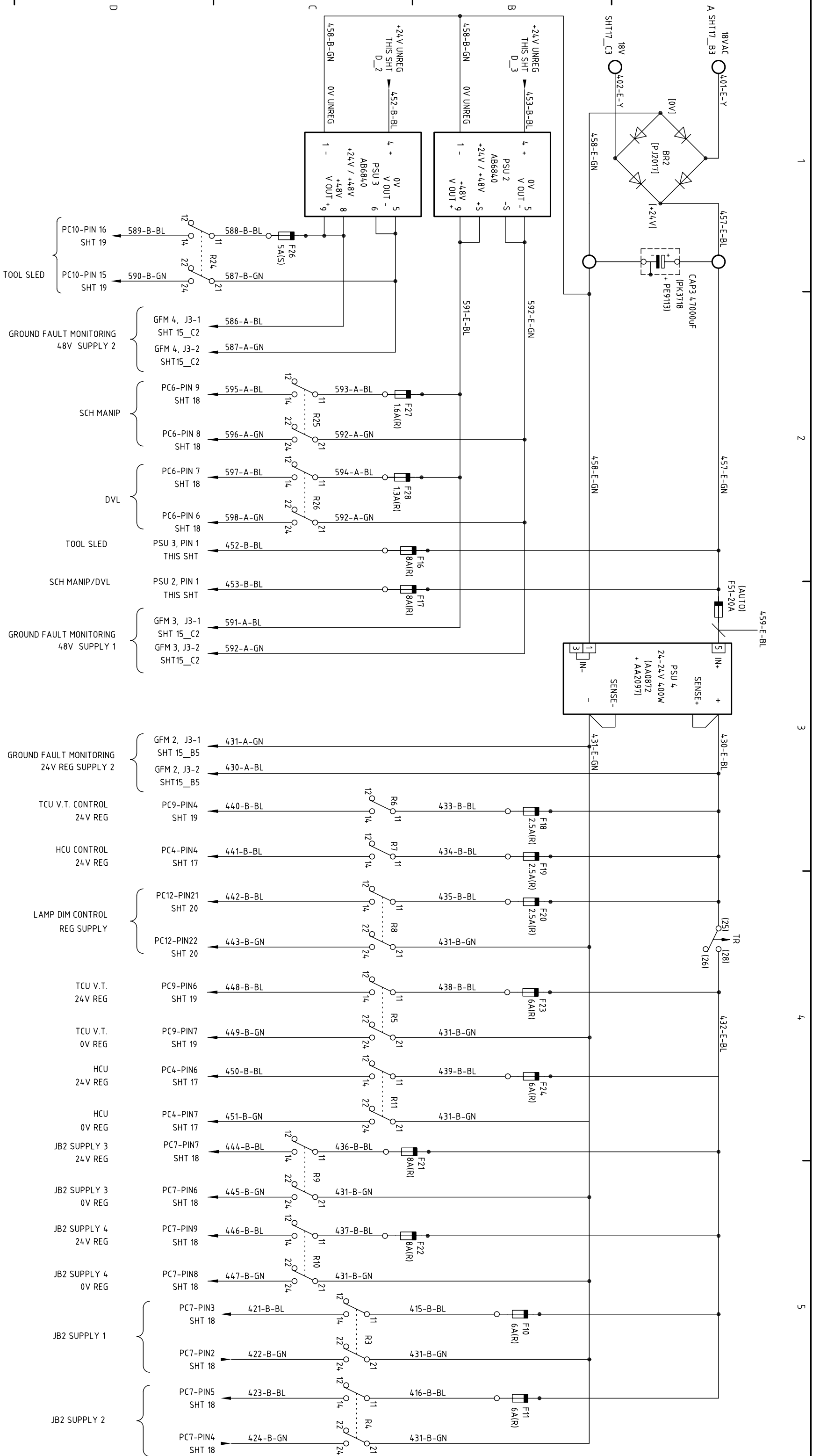
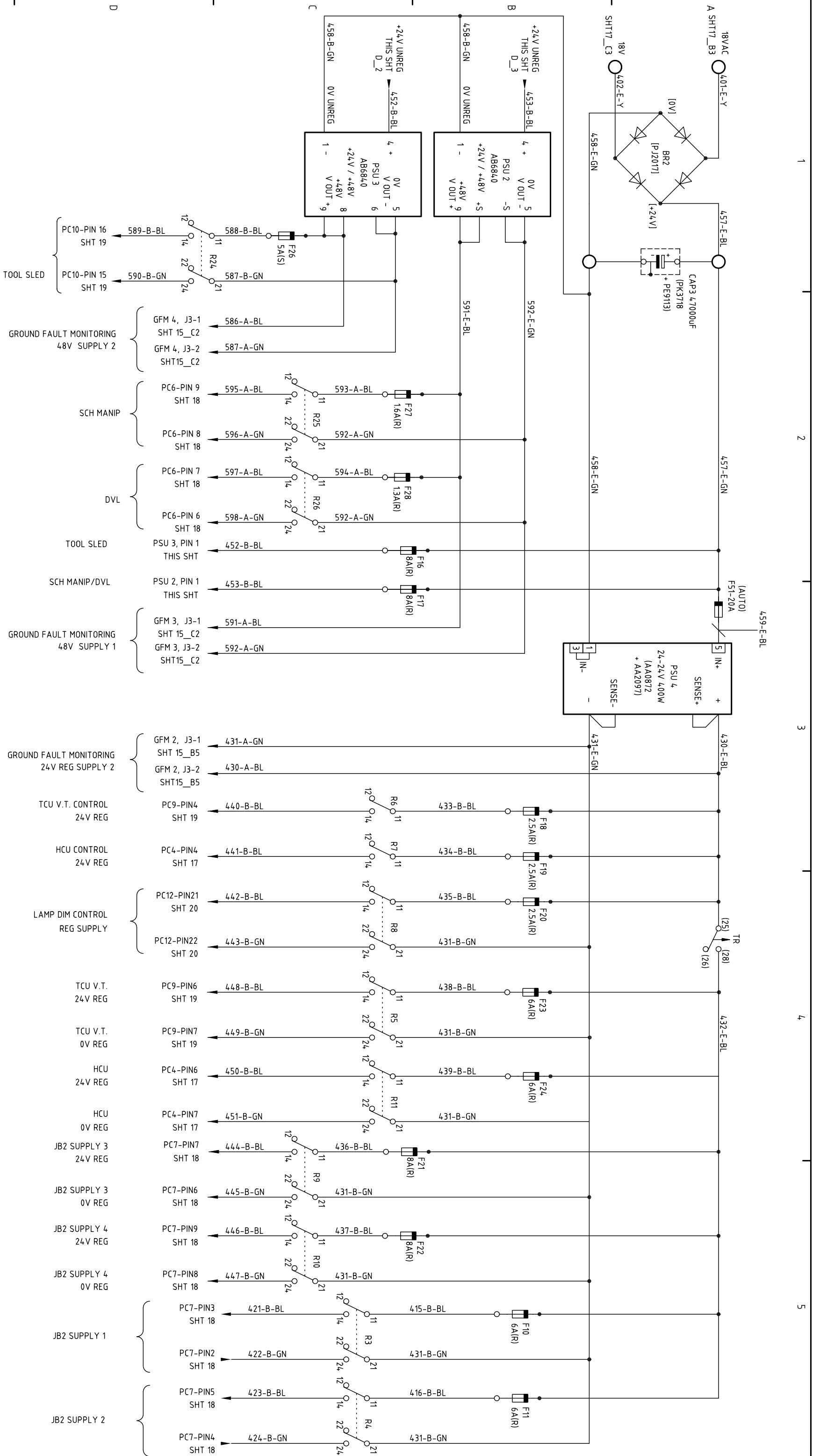
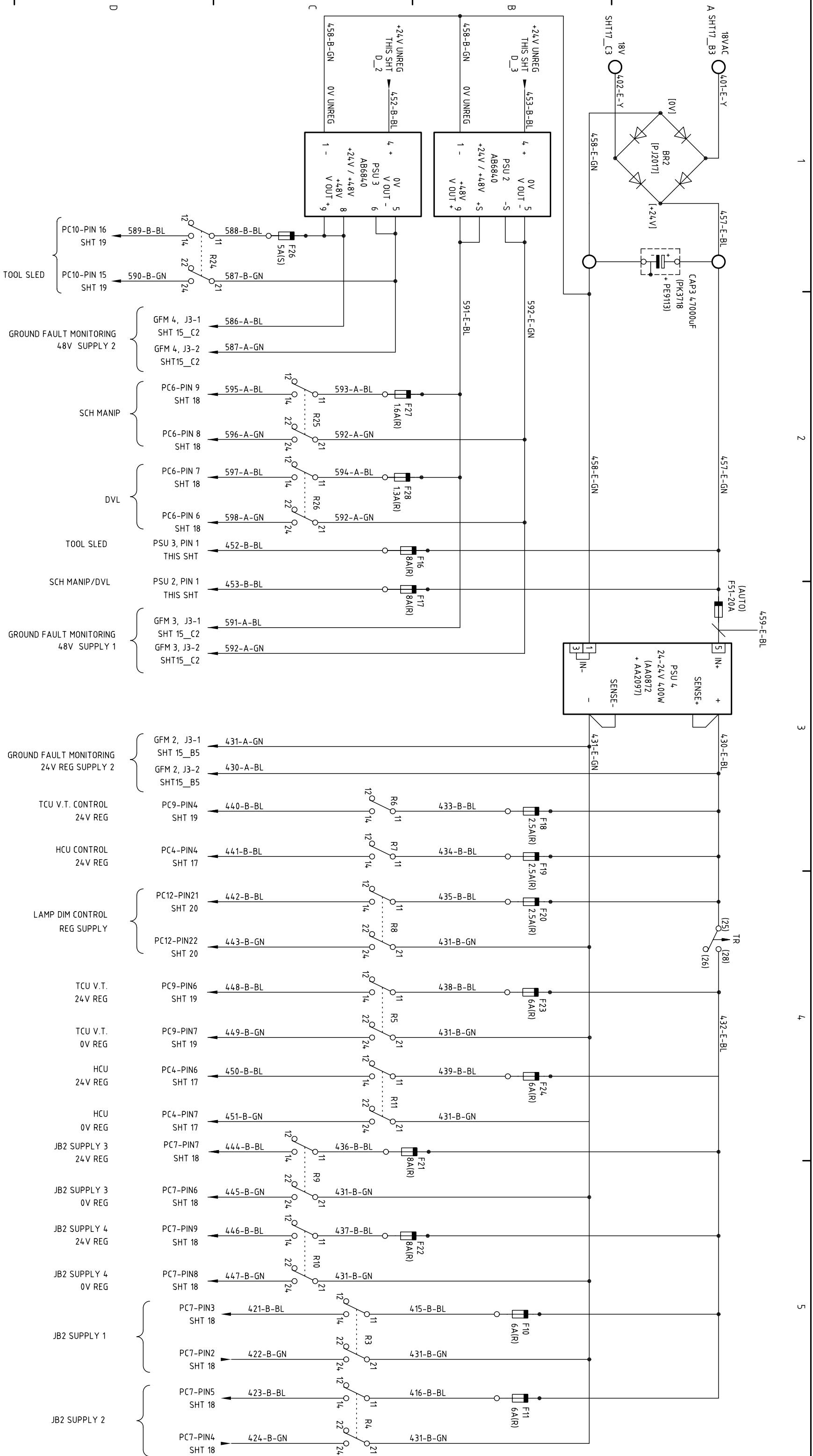
± 1.0

AB6315

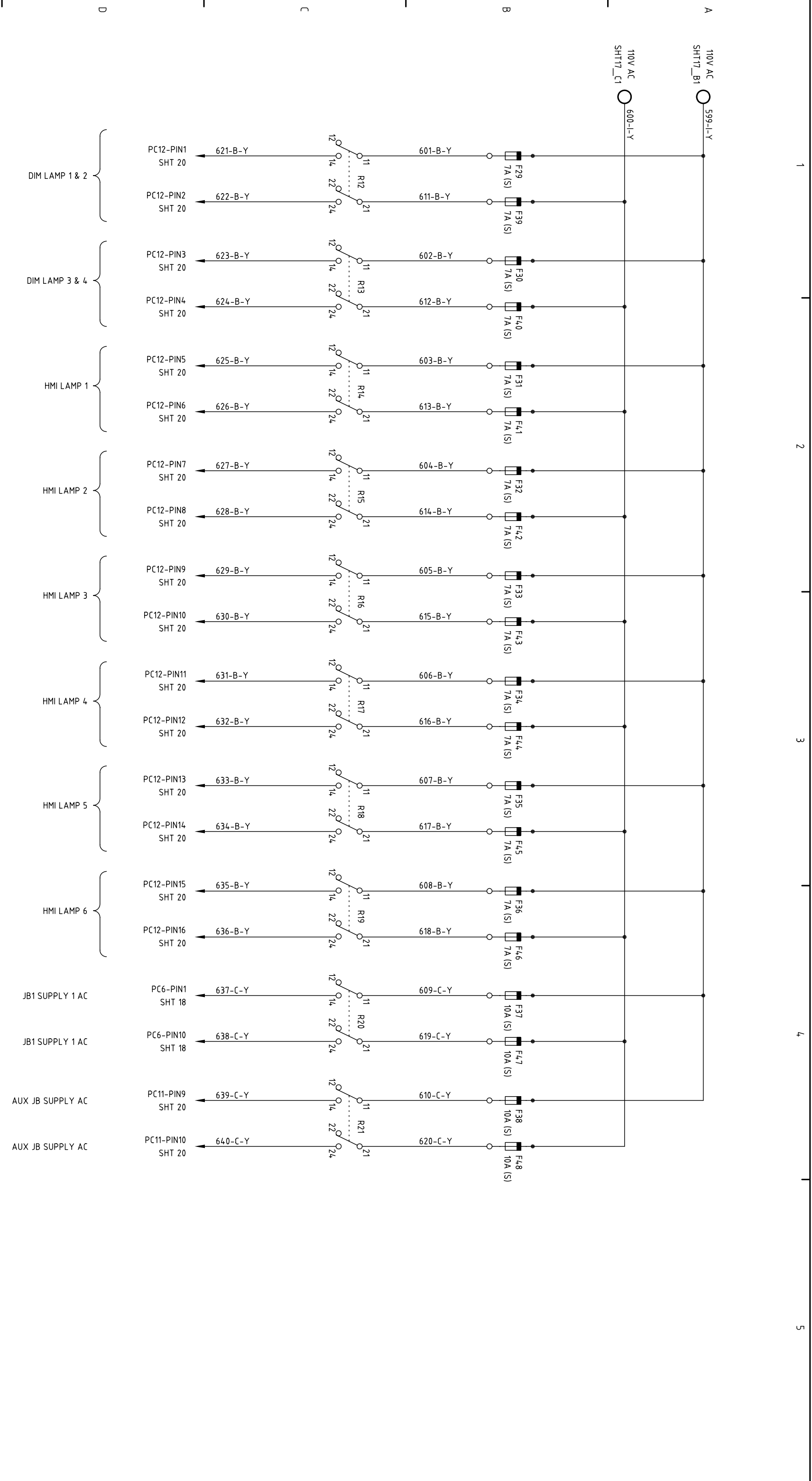
3



ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.													
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL					TITLE			
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-		DIMENSIONS		SCALE				
2	28-04-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED				
3	07-07-08	JB2 SUPPLIES 1 & 2 MOVED TO SHEET 3.	P.S.	C.L.T.	DATE		CHECKED		FABRICATION		DO NOT SCALE		
					10-08-07	LM.P.							
					DRAWING NO.								ISSUE NO.
					AB6315								3
					SHEET 2 OF 20								



CHANGE					TITLE						
NO.	DATE		DRAWN	CHECK	MATERIAL	DIMENSIONS	SCALE	PROJECTION 3RD			
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-	-	-		POD WIRING – C903RV (24V UNREGULATED PSU's & 48v REG PSU)		
2	28-04-08	PSU 4 ADDED & CABLING RE-ARRANGED, CABLES 458 & 459 ADDED.	P.S.	C.L.T.							
3	07-07-08	GROUND FAULT MONITORING DELETED, CIRCUIT CHANGES.	P.S.	C.L.T.							
					DESIGNED C.L.T.	DRAWN C.L.T.	TOLERANCES UNLESS OTHERWISE STATED				
					DATE 10-08-07	CHECKED I.M.P.	UP TO 100	100 TO 300		300 TO 1000	OVER 1000
							FABRICATION	± 1.0	± 1.5	± 2.0	± 3.0
							MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.											
Soil Machine Dynamics											
A3 CAD											
DO NOT SCALE							DRAWING NO.		ISSUE NO.		
							AB6315		3		
							SHEET 3 OF 20				



CHANGE					MATERIAL		DIMENSIONS		SCALE		PROJECTION 3RD		TITLE	
NO.	DATE			DRAWN	CHECK									
1	09-01-08	AS BUILT.		P.S.	C.L.T.	-		-					POD WIRING - C903RV	
2	28-04-08	NO CHANGE TO THIS SHEET.		P.S.	C.L.T.								(110V.DISTRIBUTION)	
3	07-07-08	NO CHANGE TO THIS SHEET.		P.S.	C.L.T.									
						DESIGNED C.L.T.	DRAWN C.L.T.	TOLERANCES UNLESS OTHERWISE STATED						
						DATE 10-08-07	CHECKED I.M.P.	DIMENSION mm	UP TO 100	100 TO 300	300 TO 1000	OVER 1000		
								FABRICATION	± 1.0	± 1.5	± 2.0	± 3.0		
								MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0		
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.														
Soil Machine Dynamics														
A3 CAD														
DO NOT SCALE														
DRAWING NO. AB6315													ISSUE NO. 3	
SHEET 4 OF 20														

1

2

3

4

5

NO.		DATE	CHANGE		DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD		TITLE								
1		09-01-08	AS BUILT.		P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED DIMENSION mm		POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)								
2		28-04-08	CHANGE TO RELAY REFERENCES.		P.S.	C.L.T.															
3		07-07-08	2 x SUPPRESSORS ADDED.		P.S.	C.L.T.															
							DATE 10-08-07	CHECKED I.M.P.	FABRICATION MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE							
														DRAWING NO. AB6315							
															ISSUE NO. 3						
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																					
							Soil Machine Dynamics														
							A3 CAD														
							SHEET 5					OF 20									

NO.		DATE	CHANGE		DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD		TITLE								
1		09-01-08	AS BUILT.		P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED DIMENSION mm		POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)								
2		28-04-08	CHANGE TO RELAY REFERENCES.		P.S.	C.L.T.															
3		07-07-08	2 x SUPPRESSORS ADDED.		P.S.	C.L.T.															
							DATE 10-08-07	CHECKED I.M.P.	FABRICATION MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE							
														DRAWING NO. AB6315							
															ISSUE NO. 3						
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																					
Soil Machine Dynamics																					
A3 CAD																					
SHEET 5 OF 20																					

NO.		DATE	CHANGE		DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD		TITLE								
1		09-01-08	AS BUILT.		P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED DIMENSION mm		POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)								
2		28-04-08	CHANGE TO RELAY REFERENCES.		P.S.	C.L.T.															
3		07-07-08	2 x SUPPRESSORS ADDED.		P.S.	C.L.T.															
							DATE 10-08-07	CHECKED I.M.P.	FABRICATION MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE							
														DRAWING NO. AB6315							
															ISSUE NO. 3						
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																					
Soil Machine Dynamics																					
A3 CAD																					
SHEET 5 OF 20																					

NO.		DATE	CHANGE		DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD		TITLE								
1		09-01-08	AS BUILT.		P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED DIMENSION mm		POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)								
2		28-04-08	CHANGE TO RELAY REFERENCES.		P.S.	C.L.T.															
3		07-07-08	2 x SUPPRESSORS ADDED.		P.S.	C.L.T.															
							DATE 10-08-07	CHECKED I.M.P.	FABRICATION MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE							
														DRAWING NO. AB6315							
															ISSUE NO. 3						
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																					
Soil Machine Dynamics																					
A3 CAD																					
SHEET 5 OF 20																					

NO.		DATE	CHANGE		DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD		TITLE								
1		09-01-08	AS BUILT.		P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED DIMENSION mm		POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)								
2		28-04-08	CHANGE TO RELAY REFERENCES.		P.S.	C.L.T.															
3		07-07-08	2 x SUPPRESSORS ADDED.		P.S.	C.L.T.															
							DATE 10-08-07	CHECKED I.M.P.	FABRICATION MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE							
														DRAWING NO. AB6315							
															ISSUE NO. 3						
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																					
Soil Machine Dynamics																					
A3 CAD																					
SHEET 5 OF 20																					

NO.		DATE	CHANGE		DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD		TITLE		
1		09-01-08	AS BUILT.		P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED DIMENSION mm		POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)		
2		28-04-08	CHANGE TO RELAY REFERENCES.		P.S.	C.L.T.									
3		07-07-08	2 x SUPPRESSORS ADDED.		P.S.	C.L.T.									
							DATE	CHECKED	FABRICATION	MACHINED PART			DO NOT SCALE	DRAWING NO. AB6315	ISSUE NO. 3
							10-08-07	I.M.P.							
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.															
Soil Machine Dynamics															
A3 CAD															
SHEET 5 OF 20															

NO.		DATE	CHANGE		DRAWN	CHECK
-----	--	------	--------	--	-------	-------

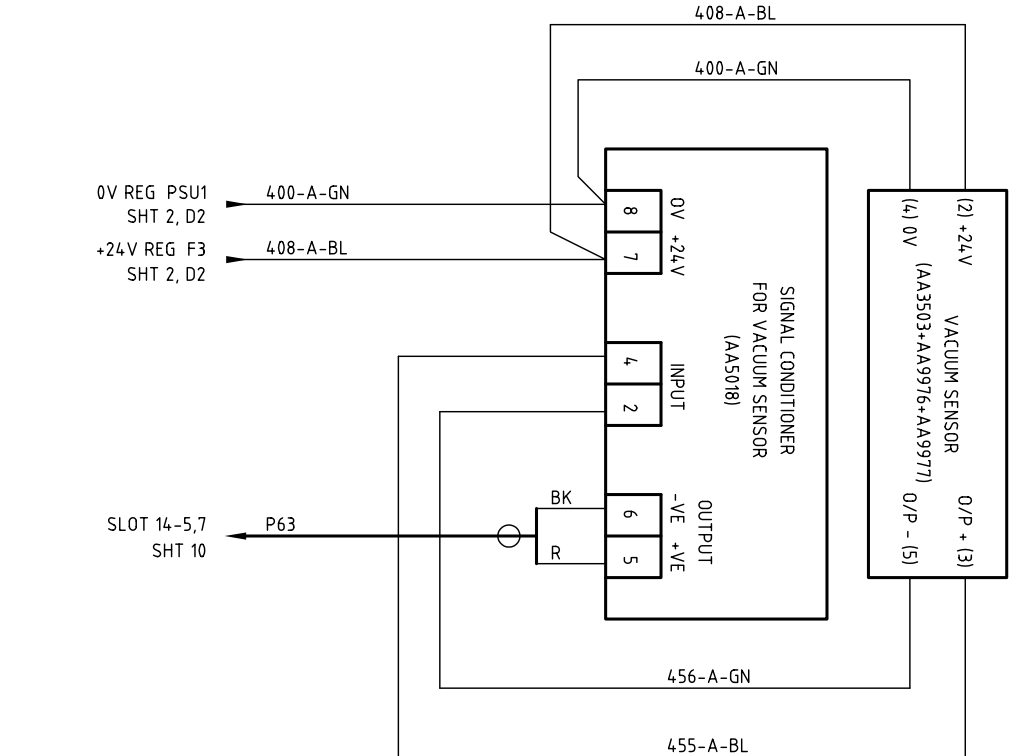
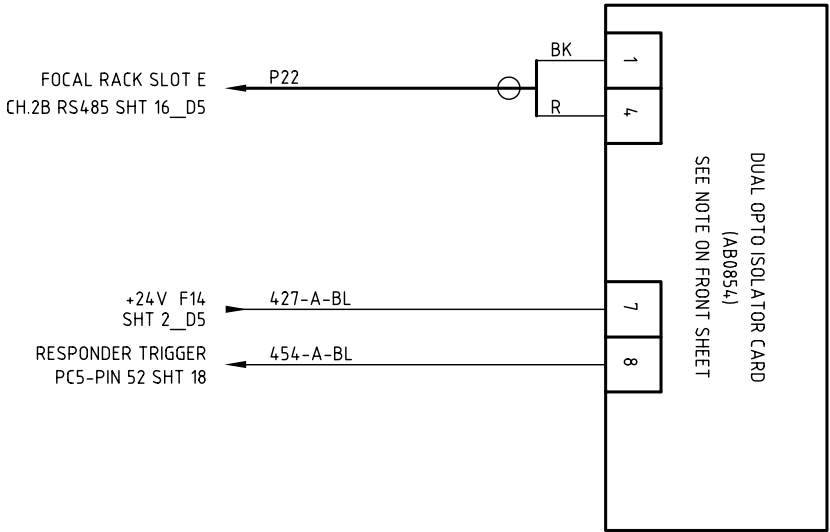
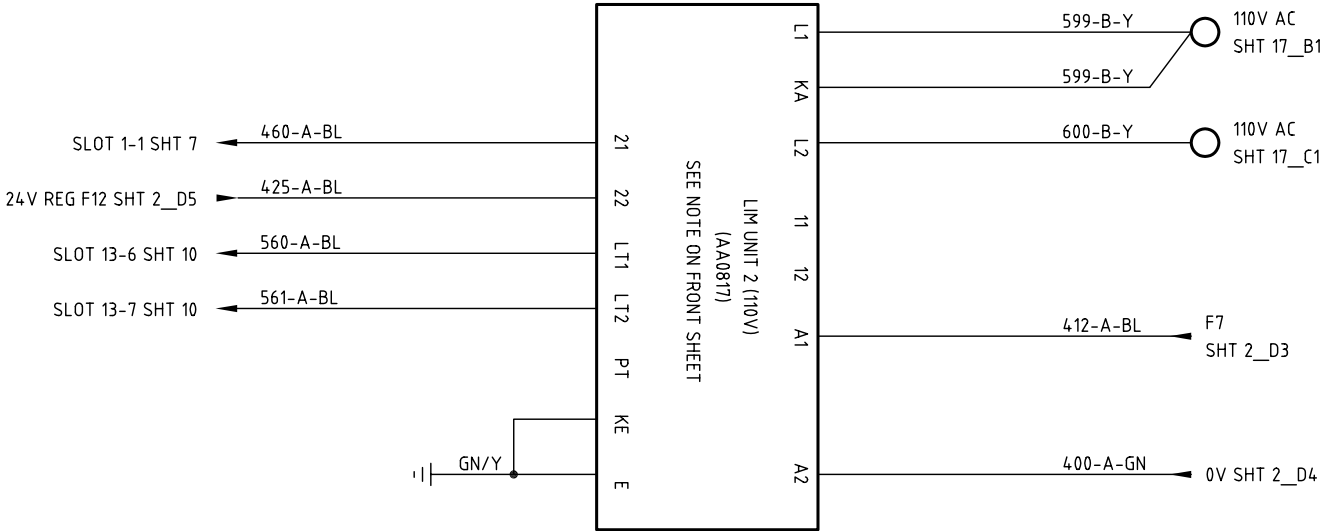
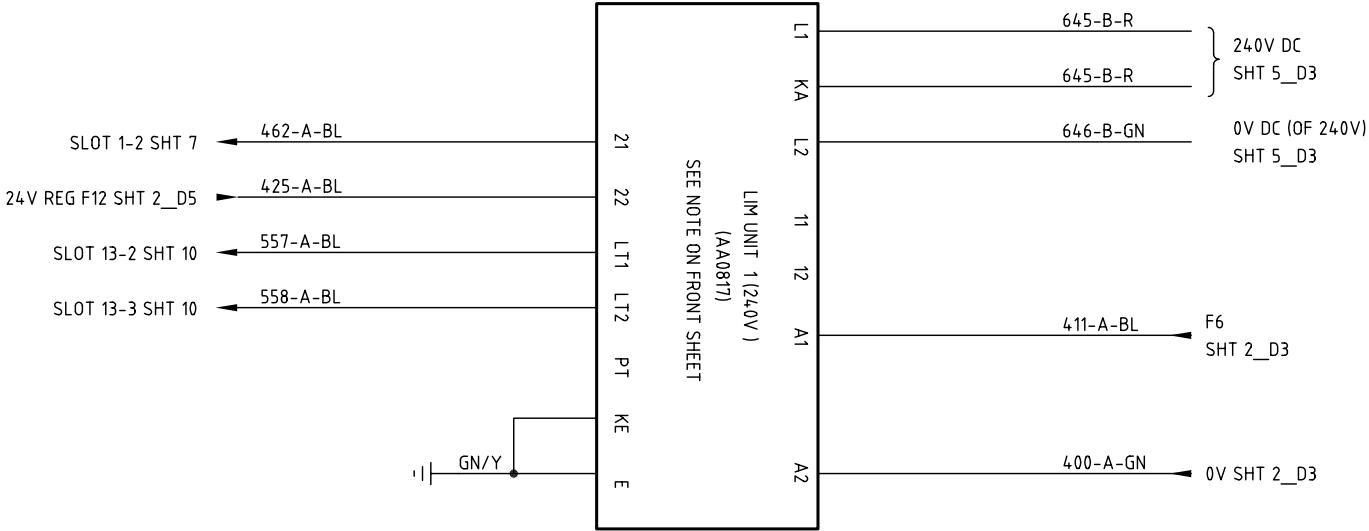
1

2

3

4

5

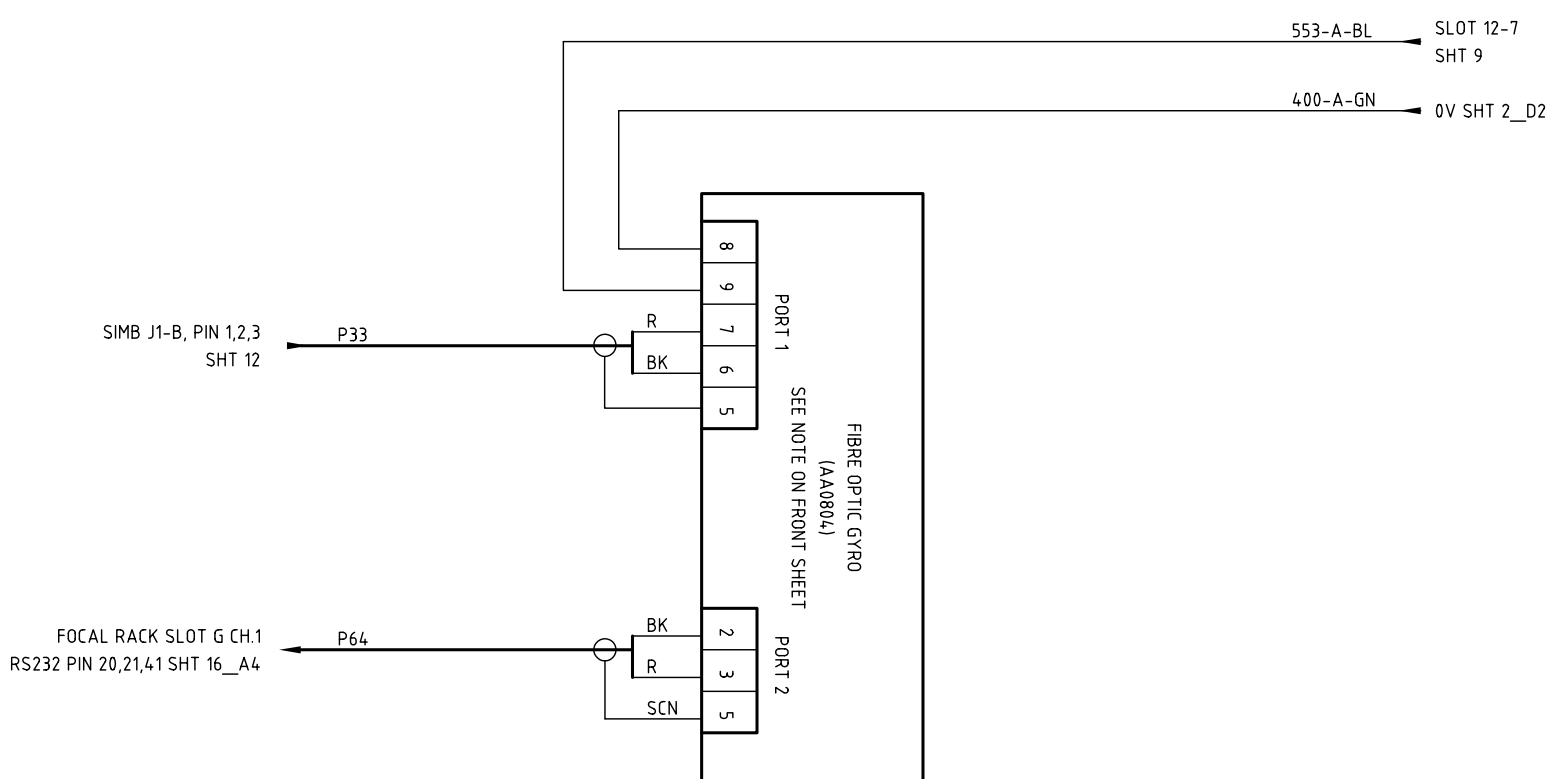
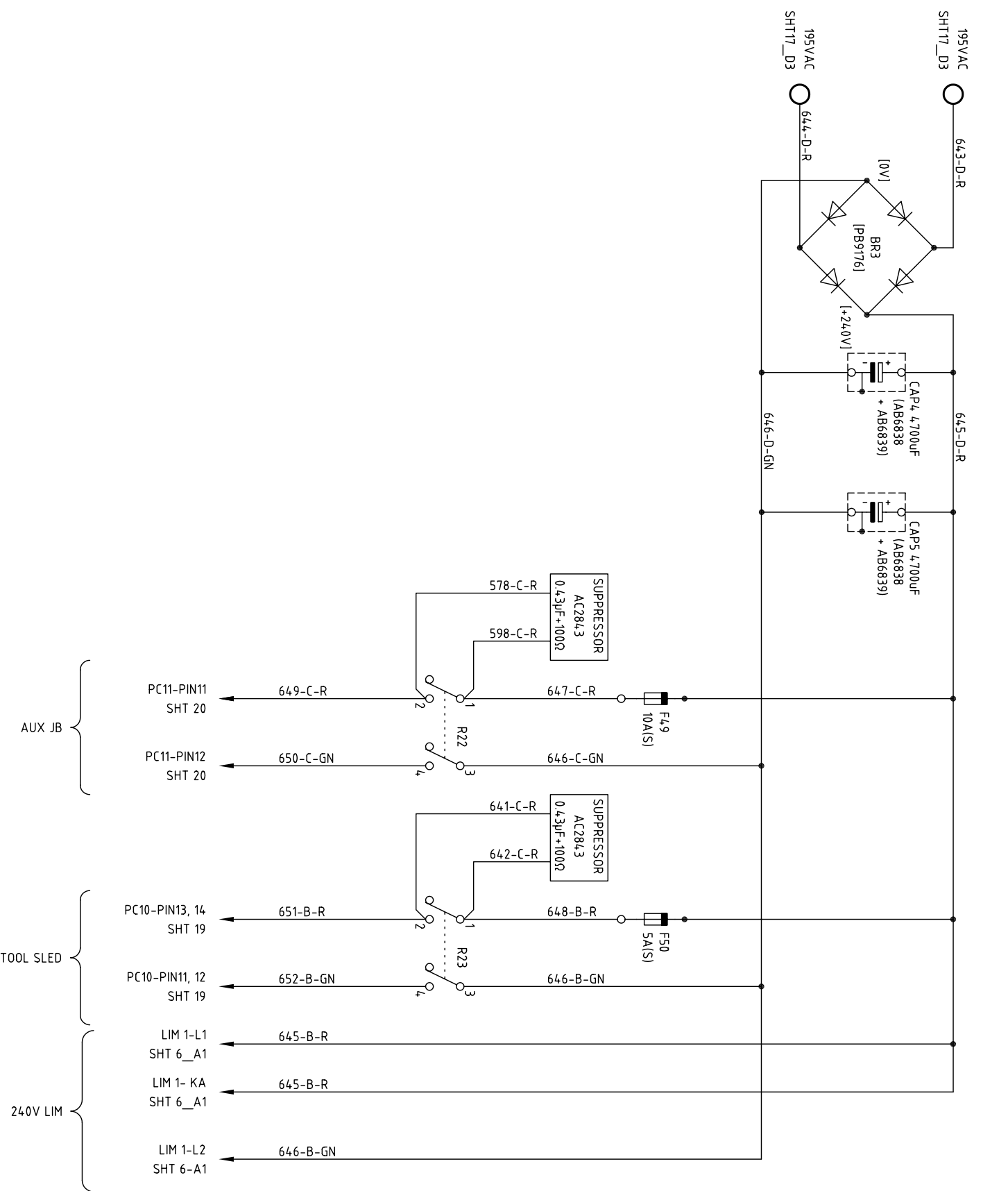


CHANGE					MATERIAL		DIMENSIONS		SCALE		PROJECTION 3RD		TITLE					
NO.	DATE		DRAWN	CHECK														
1	09-01-07	AS BUILT.	P.S.	C.L.T.										POD WIRING - C903RV (LIM, VACUUM & TRIGGER CARDS)				
2	28-04-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.														
3	07-07-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.														
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																		
Soil Machine Dynamics					DESIGNED		DRAWN		TOLERANCES UNLESS OTHERWISE STATED									
					C.L.T.		C.L.T.											
					DATE		CHECKED		DIMENSION mm		UP TO 100		100 TO 300		300 TO 1000		OVER 1000	
					10-08-07		I.M.P.		FABRICATION		± 1.0		± 1.5		± 2.0		± 3.0	
									MACHINED PART		± 0.15		± 0.4		± 0.8		± 1.0	
A3 CAD					DO NOT SCALE		DRAWING NO. AB6315											
SHEET 6 OF 20					ISSUE NO. 3													

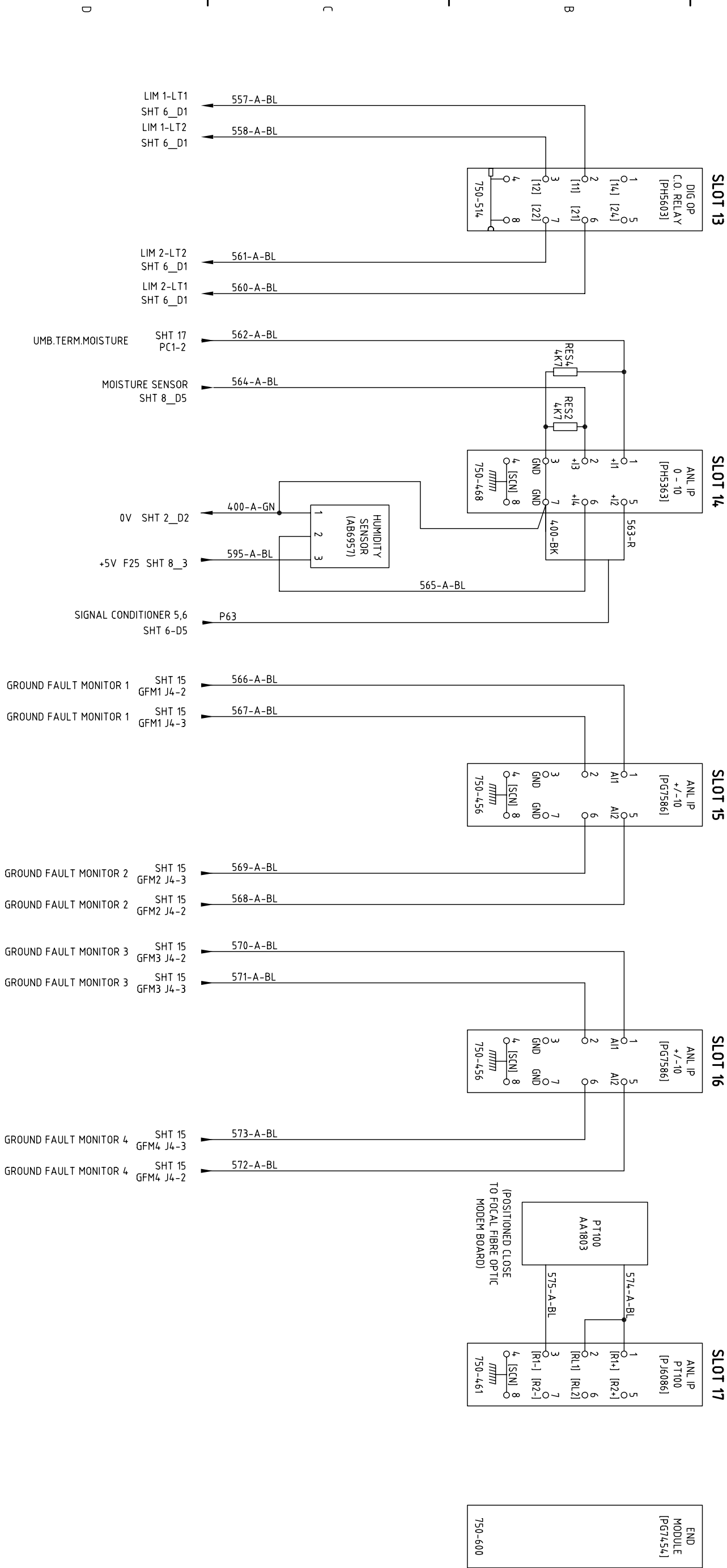
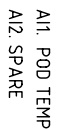
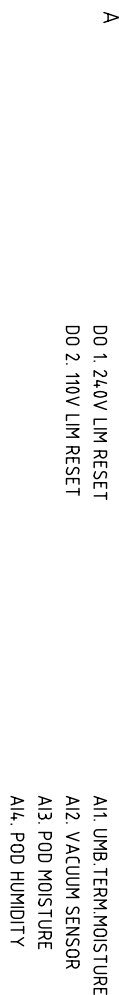
Soil Machine Dynamics

A3 CAD

SHEET 6 OF 20



ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.														
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL - DESIGNED C.L.T. DRAWN C.L.T. TOLERANCES UNLESS OTHERWISE STATED UP TO 100 TO 300 TO 1000 TO OVER 100 300 1000 1000 DATE 10-08-07 CHECKED I.M.P. FABRICATION MACHINED PART							PROJECTION 3RD 		TITLE POD WIRING - C903RV (240 V DISTRIBUTION / GYRO CARD)
1	09-01-08	AS BUILT.	P.S.	C.L.T.										
2	28-04-08	CHANGE TO RELAY REFERENCES.	P.S.	C.L.T.										
3	07-07-08	2 x SUPPRESSORS ADDED.	P.S.	C.L.T.										
					DO NOT SCALE							DRAWING NO. AB6315		ISSUE NO. 3
Soil Machine Dynamics										A3 CAD				
										SHEET 5 OF 20				



ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.									
Soil Machine Dynamics									
A3 CAD									
SHEET 10 OF 20									
3									
ISSUE NO.									
DRAWING NO.									
AB6315									
DO NOT SCALE									
(WAGO MODULES - C.O. RELAY / ANALOGUE I/P)									
POD WIRING - C903RV									
TITLE									
MATERIAL			DIMENSIONS		SCALE		PROJECTION 3RD		
-			-		-				
DESIGNED			DRAWN		TOLERANCES UNLESS OTHERWISE STATED				
C.L.T.			C.L.T.		UP TO 100 TO 300 TO 1000 TO OVER				
					DIMENSION mm 100 300 1000 1000				
DATE			CHECKED		FABRICATION		± 1.0 ± 1.5 ± 2.0 ± 3.0		
10-08-07			I.M.P.		MACHINED PART		± 0.15 ± 0.4 ± 0.8 ± 1.0		
CHANGE			DRAWN		CHECK				
NO. 1			DATE 09-01-08		AS BUILT.		P.S. C.L.T.		
2			28-04-08		NO CHANGE TO THIS SHEET.		P.S. C.L.T.		
3			07-07-08		SLOTS 15 & 16 WAGO TYPE'S AMENDED.		P.S. C.L.T.		

1

2

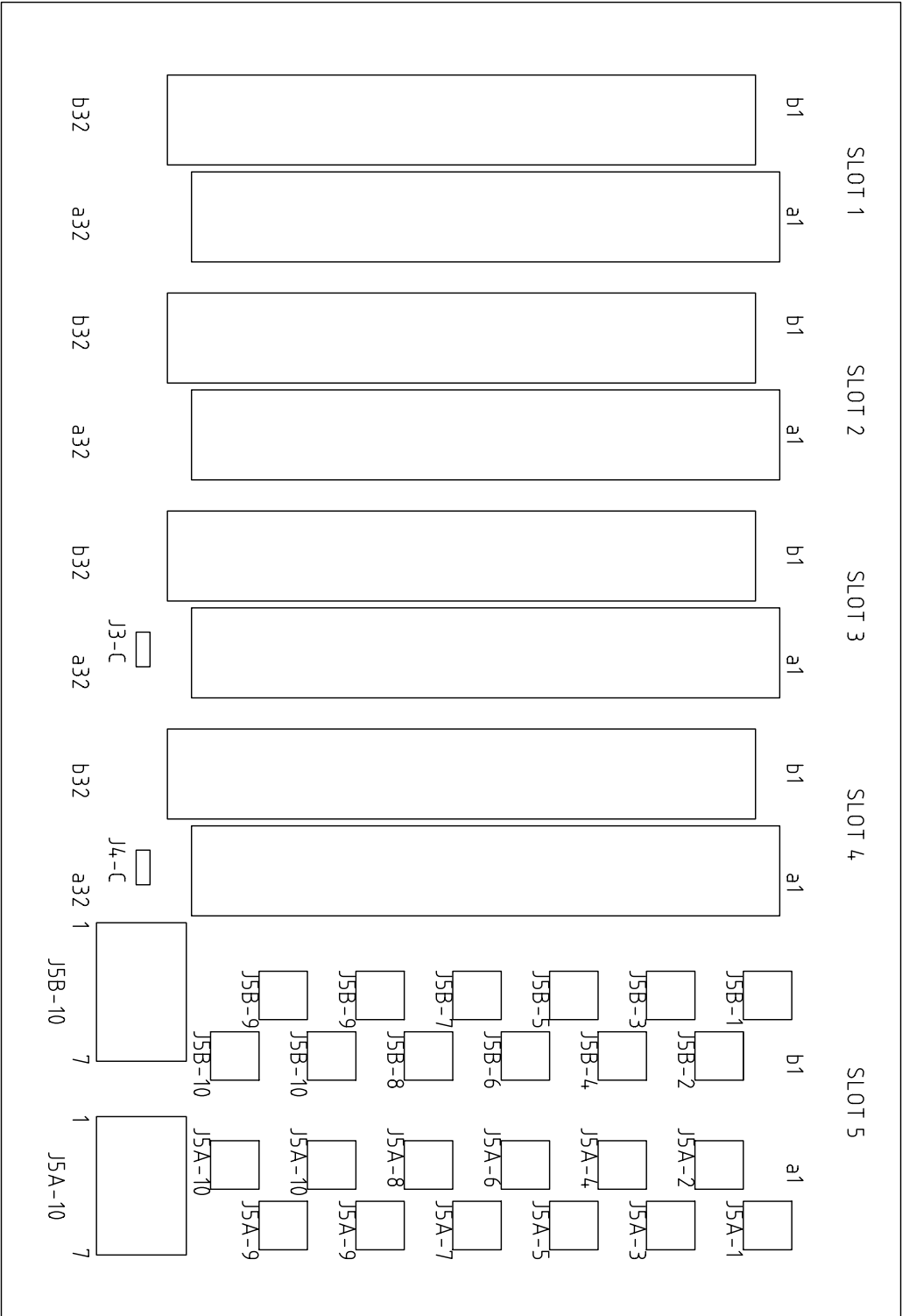
3

4

5

A

SIGNAL ISOLATION MOTHERBOARD (SIMB)
(AB7546)



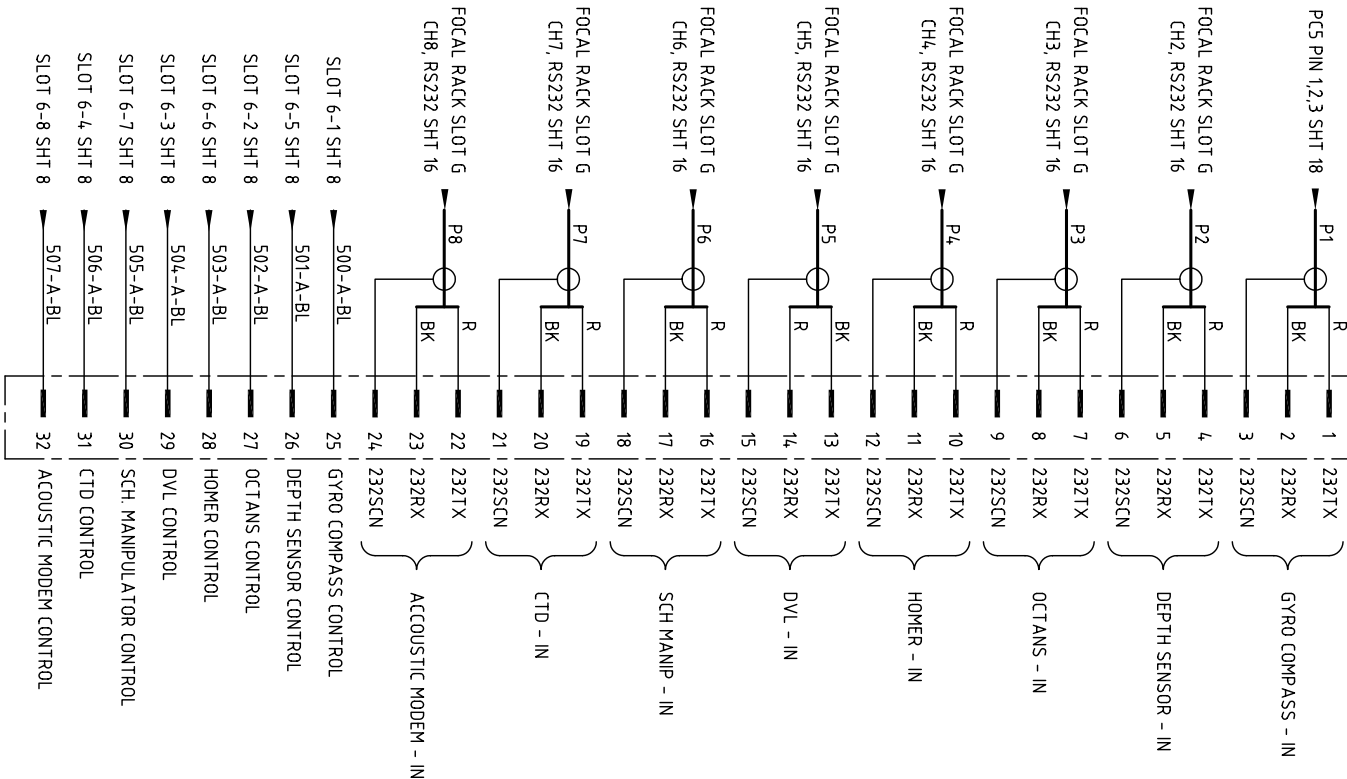
C

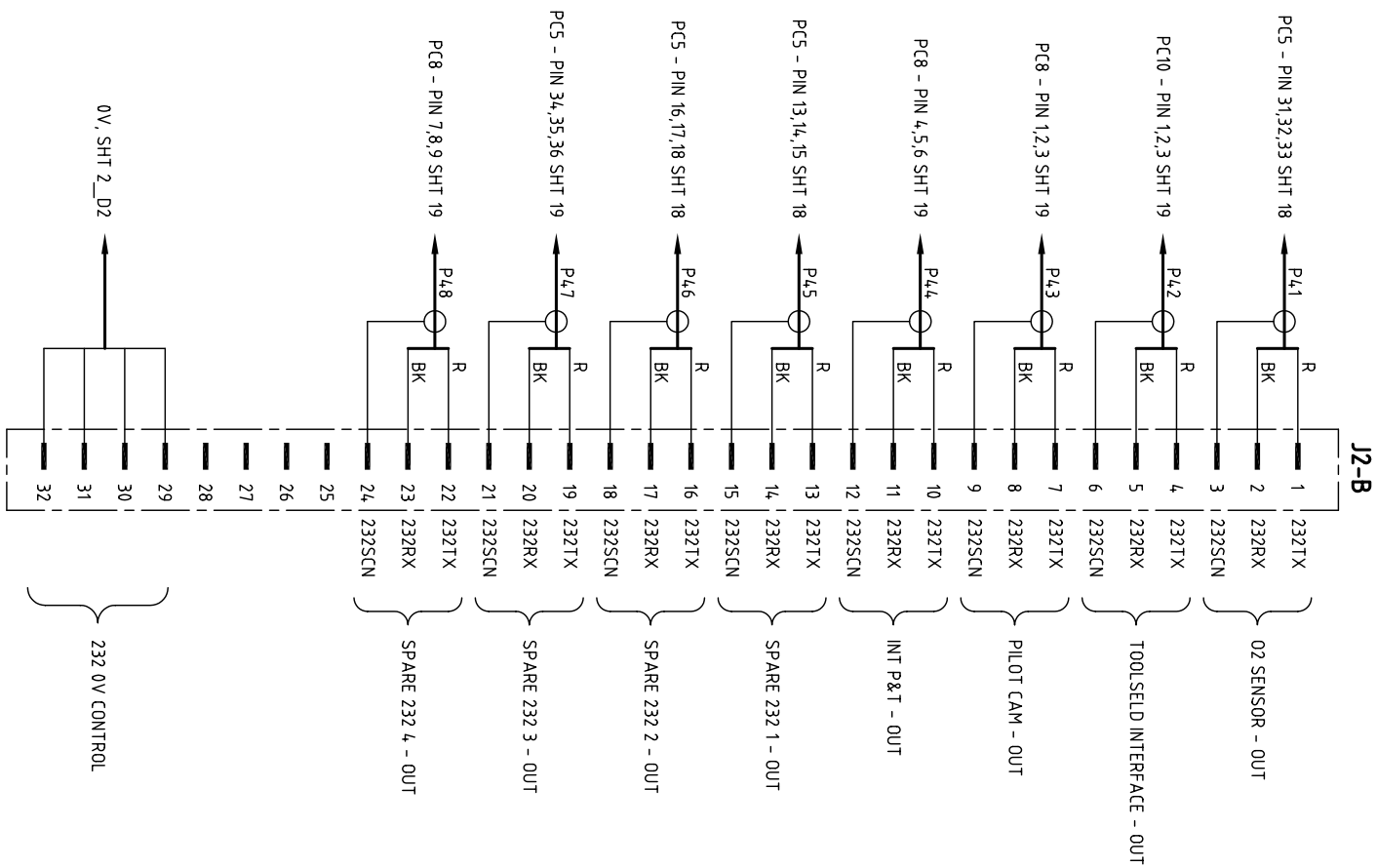
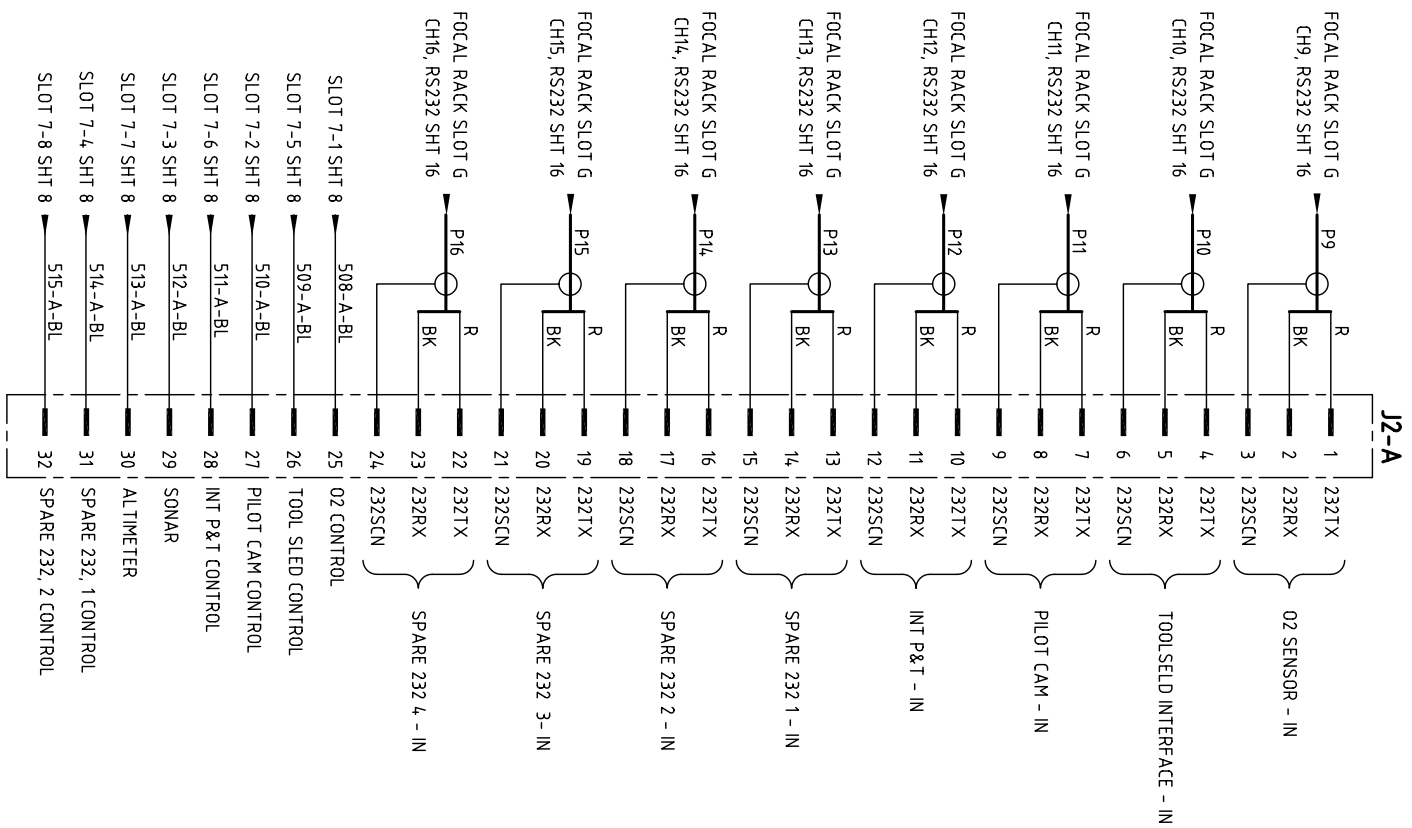
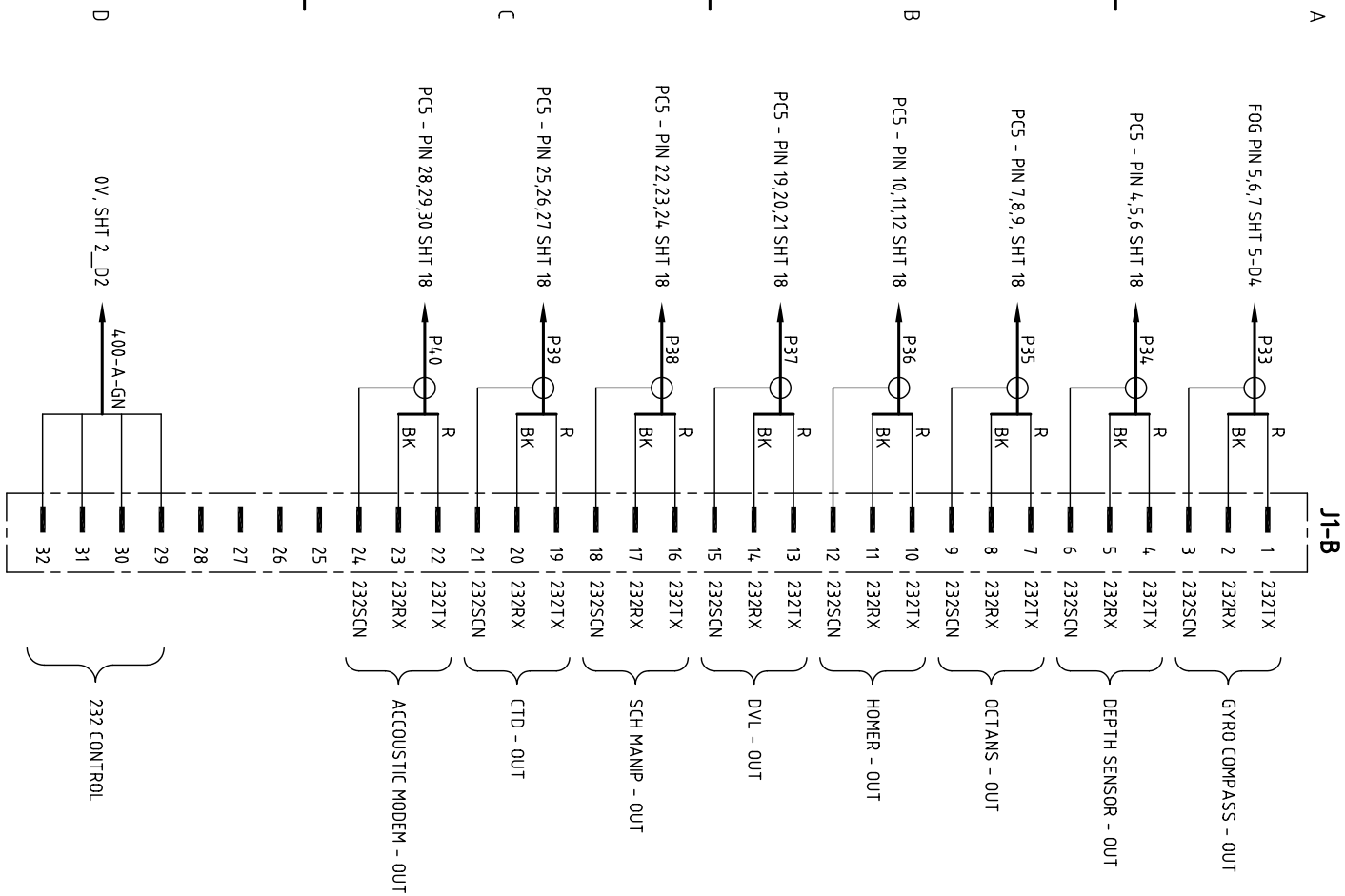
B

D

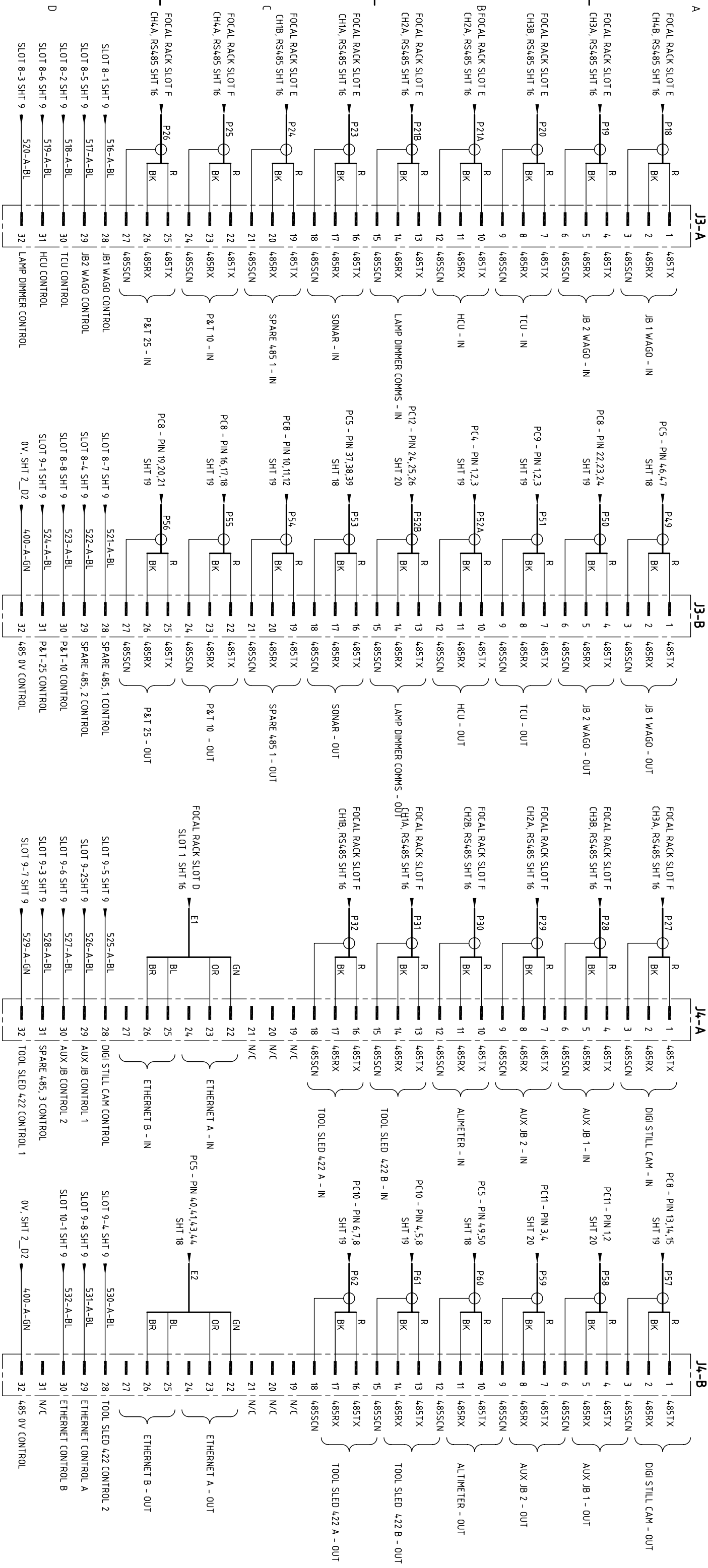
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.					Soil Machine Dynamics										A3 CAD		
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION 3RD			TITLE					
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-		-	-				POD WIRING - C903RV (SIGNALS ISOLATION BOARD)					
2	28-04-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.	DESIGNED	DRAWN	TOLERANCES UNLESS OTHERWISE STATED										
3	07-07-08	CABLE P5 CORES AMENDED.	P.S.	C.L.T.	C.L.T.	C.L.T.	UP TO 100 TO 100 TO 300 TO 1000 TO OVER										
							DIMENSION mm	100	300	1000	1000						
					DATE	CHECKED	FABRICATION	MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE		DRAWING NO.		ISSUE NO.
					10-08-07	I.M.P.							AB6315		SHEET 11 OF 20		3

J1-A





NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL	DIMENSIONS	SCALE	PROJECTION	3RD	TITLE
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-	-	-			POD WIRING - C903RV (SIGNALS ISOLATION BOARD)
2	28-04-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.						
3	07-07-08	J2-A & J2-B TERMINALS 13 - 24 FUNCTIONS AMENDED.	P.S.	C.L.T.						
					DESIGNED C.L.T.	DRAWN C.L.T.	TOLERANCES UNLESS OTHERWISE STATED			
					DATE 10-08-07	CHECKED I.M.P.	UP TO 100	100 TO 300	300 TO 1000	
							FABRICATION ± 1.0	± 1.5	± 2.0	± 3.0
							MACHINED PART ± 0.15	± 0.4	± 0.8	± 1.0
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.										
Soil Machine Dynamics										
A3 CAD										
DO NOT SCALE						DRAWING NO.		ISSUE NO.		
						AB6315		3		
						SHEET 12 OF 20				



NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL	DIMENSIONS	SCALE	PROJECTION	TITLE
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-	-	-	3RD	POD WIRING - C903RV
2	28-04-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.	-	-	-	3RD	POD WIRING - C903RV
3	07-07-08	J3-A & J3-B TERMINALS 16 - 20 FUNCTIONS AMENDED.	P.S.	C.L.T.	-	-	-	3RD	POD WIRING - C903RV

ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.

Soil Machine Dynamics

A3 CAD

DRAWING NO. AB6315

SHEET 13 OF 20

3

1		2		3		4		5					
A	FOCAL RACK SLOT A SMB 1, SHT 16			J5A -1 VIDEO PILOT CAM 1 - IN									
	FOCAL RACK SLOT A SMB 2, SHT 16			J5A -2 VIDEO PILOT CAM 2 - IN									
	FOCAL RACK SLOT A SMB 3, SHT 16			J5A -3 VIDEO PILOT CAM 3 - IN									
	FOCAL RACK SLOT A SMB 4, SHT 16			J5A -4 VIDEO DIGI STILL CAM - IN									
B	FOCAL RACK SLOT B SMB 1A, SHT 16			J5A -5 VIDEO INT P&T - IN									
	FOCAL RACK SLOT B SMB 1B, SHT 16			J5A -6 VIDEO AUX CAM 1 - IN									
	FOCAL RACK SLOT B SMB 2A, SHT 16			J5A -7 VIDEO UMB CAM - IN									
	FOCAL RACK SLOT B SMB 4B, SHT 16			J5A -12 VIDEO AUX CAM 4 - IN									
	FOCAL RACK SLOT B SMB 4A, SHT 16			J5A -11 VIDEO TOOL SLED CAM 2 - IN									
	FOCAL RACK SLOT B SMB 3B, SHT 16			J5A -10 VIDEO AUX CAM 3 - IN									
	FOCAL RACK SLOT B SMB 3A, SHT 16			J5A -9 VIDEO TOOL SLED CAM 1 - IN									
	FOCAL RACK SLOT B SMB 2B, SHT 16			J5A -8 VIDEO AUX CAM 2 - IN									
C	FOCAL RACK SLOT B SMB 1B, SHT 16			J5B -1 VIDEO PILOT CAM 1 - OUT									
	FOCAL RACK SLOT B SMB 2A, SHT 16			J5B -2 VIDEO PILOT CAM 2 - OUT									
	FOCAL RACK SLOT B SMB 2A, SHT 16			J5B -3 VIDEO PILOT CAM 3 - OUT									
	FOCAL RACK SLOT B SMB 2A, SHT 16			J5B -4 VIDEO DIGI STILL CAM - OUT									
D	SLOT 10-5, SHT 9			S33-A-BL		1		PILOT CAM 1 CONTROL					
	SLOT 10-2, SHT 9			S34-A-BL		2		PILOT CAM 2 CONTROL					
	SLOT 10-6, SHT 9			S35-A-BL		3		PILOT CAM 3 CONTROL					
	SLOT 10-3, SHT 9			S36-A-BL		4		DIGI STILL CAM CONTROL					
SLOT 10-7, SHT 9			S37-A-BL		5		INT P&T CONTROL						
SLOT 10-4, SHT 9			S38-A-BL		6		AUX CAM 1 CONTROL						
0V, SHT2_D2			400-A-GN		7		VIDEO 0V CONTROL						
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.													
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL	DIMENSIONS	SCALE	PROJECTION 3RD	TITLE				
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-	-	-		POD WIRING - C903RV (SIGNALS ISOLATION BOARD)				
2	28-04-08	NO CHANGE TO THIS SHEET.	P.S.	C.L.T.	DESIGNED	DRAWN	TOLERANCES UNLESS OTHERWISE STATED						
3	07-07-08	J5A & J5B CIRCUIT FUNCTIONS AMENDED.	P.S.	C.L.T.	C.L.T.	C.L.T.	UP TO 100	100 TO 300		300 TO 1000	OVER 1000		
							FABRICATION	± 1.0		± 1.5	± 2.0	± 3.0	
					DATE	CHECKED	I.M.P.	MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	DO NOT SCALE
DRAWING NO. AB6315										ISSUE NO. 3			

Soil Machine Dynamics

A3 CAD

1

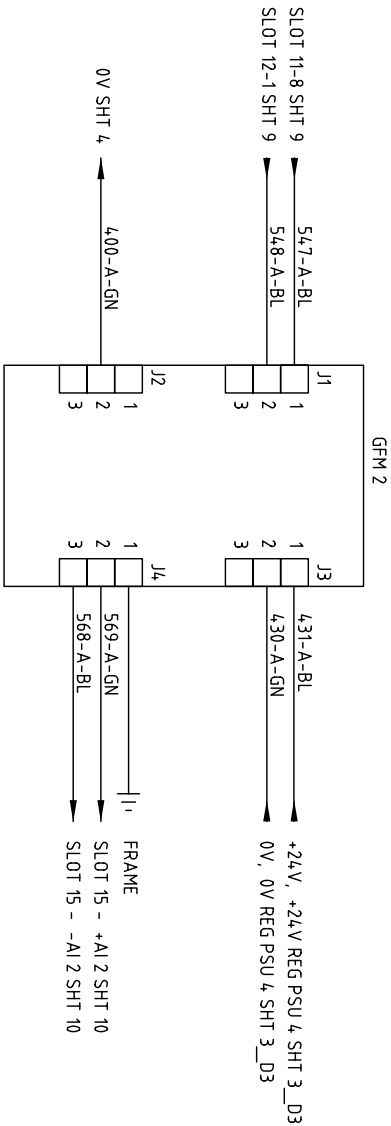
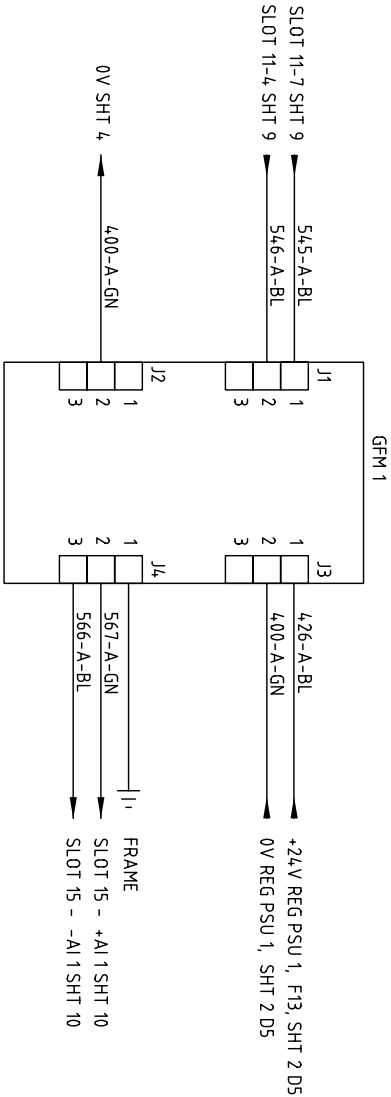
2

3

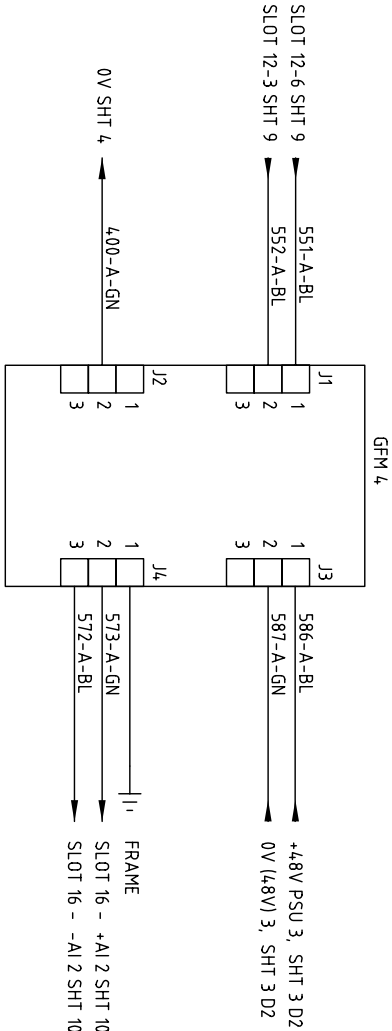
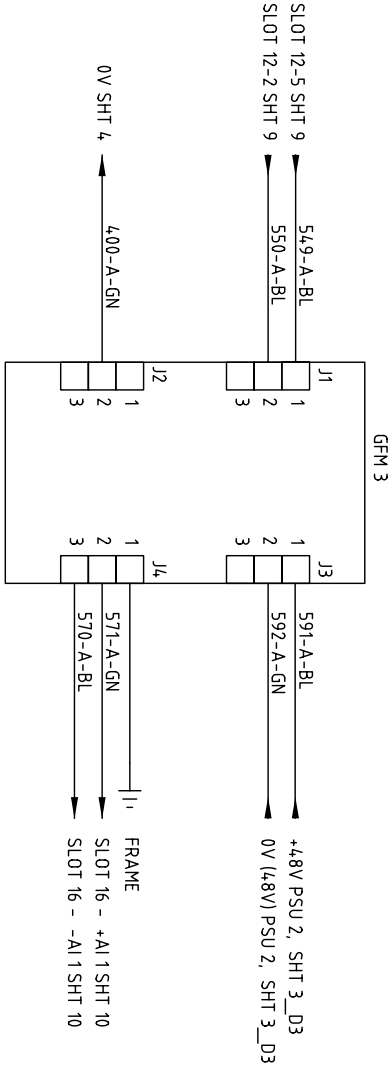
4

5

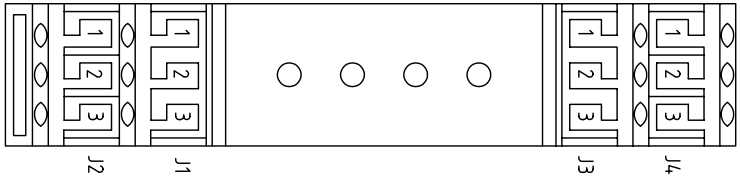
A



B



C



D

GFM FRONT VIEW

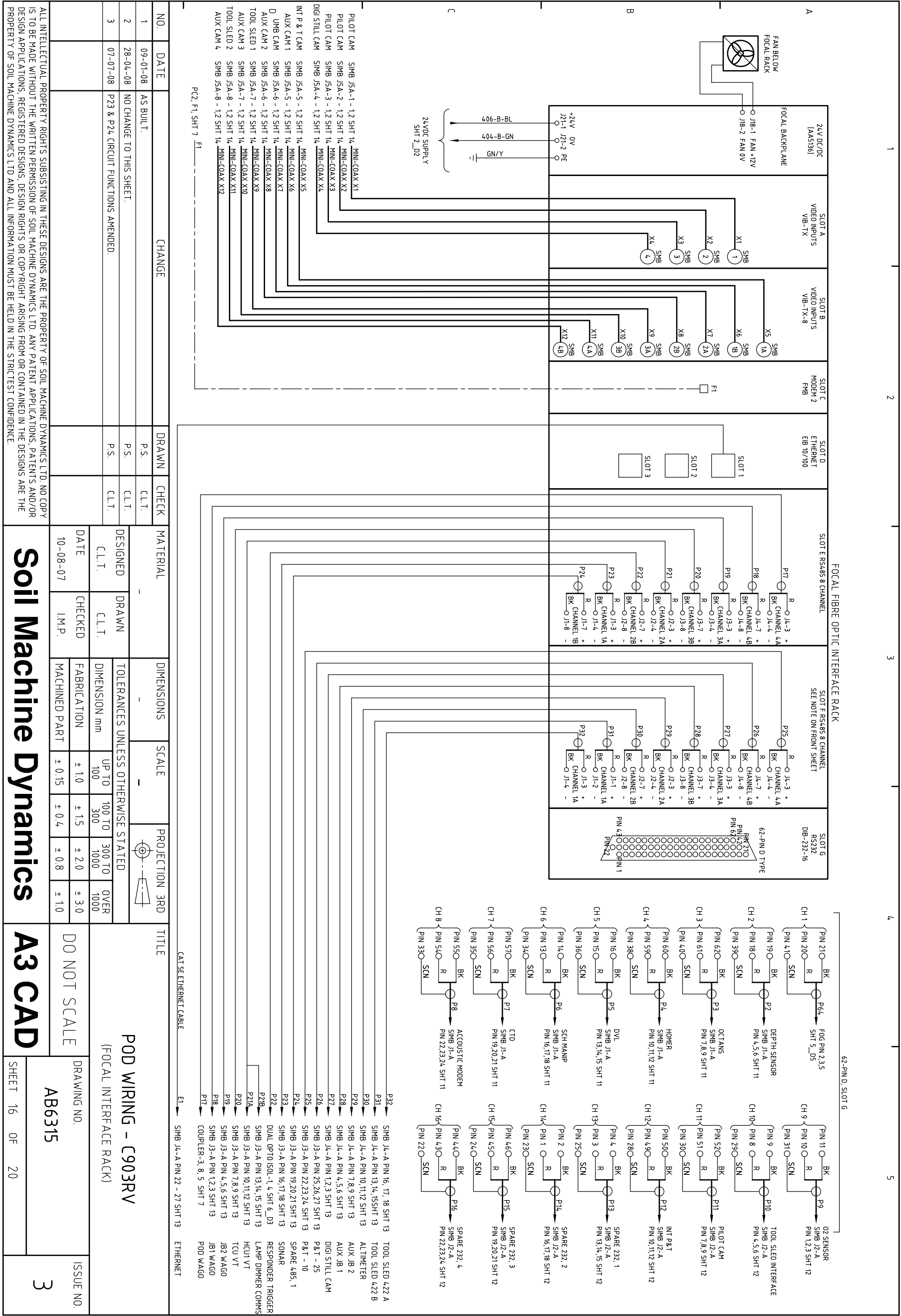
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL		DIMENSIONS	SCALE	PROJECTION	3RD	TITLE	
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-	-	-	-			POD WIRING - C903RV (GROUND FAULT MONITORING BOARDS)	
2	28-04-08	GFM2 SUPPLY CABLES ADDED & AMENDED.	P.S.	C.L.T.								
3	07-07-08	GFM1 - GFM4 CIRCUIT FUNCTIONS AMENDED.	P.S.	C.L.T.								
					DESIGNED	DRAWN	TOLERANCES UNLESS OTHERWISE STATED					
					C.L.T.	C.L.T.	DIMENSION mm	UP TO 100	100 TO 300	300 TO 1000		OVER 1000
					DATE	CHECKED	FABRICATION	± 1.0	± 1.5	± 2.0	± 3.0	DRAWING NO. AB6315
					10-08-07	I.M.P.	MACHINED PART	± 0.15	± 0.4	± 0.8	± 1.0	

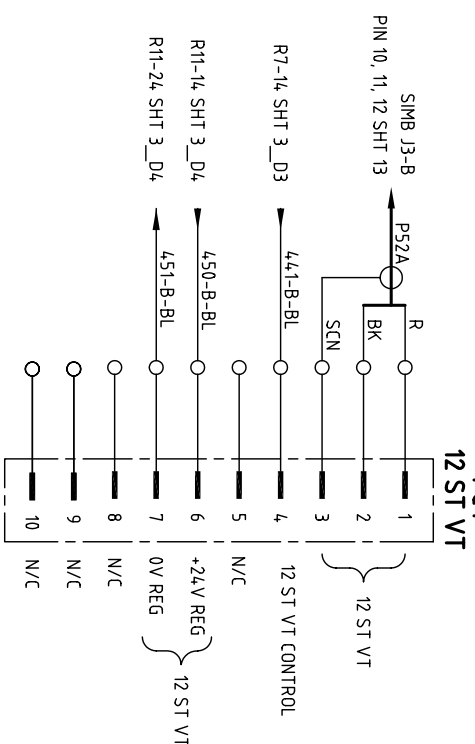
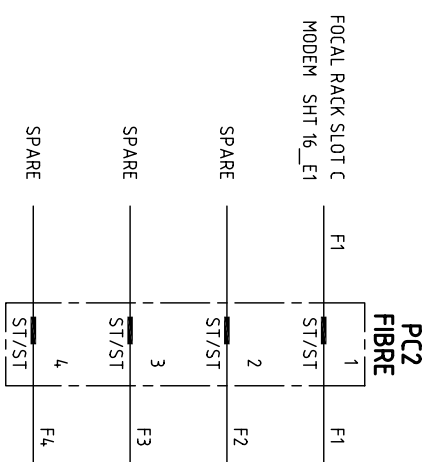
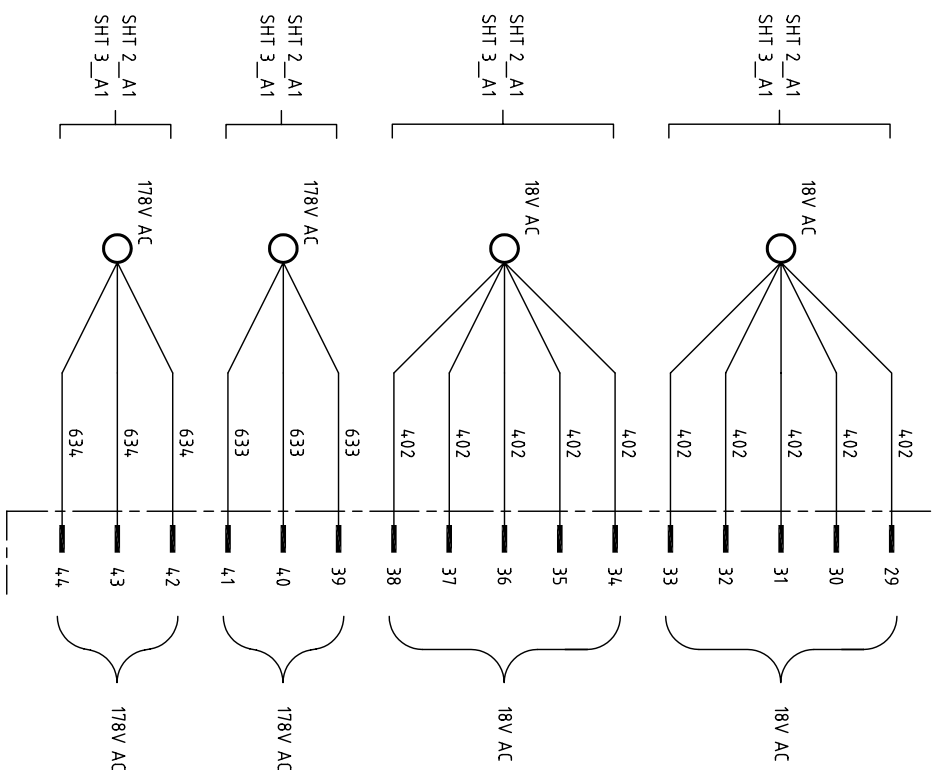
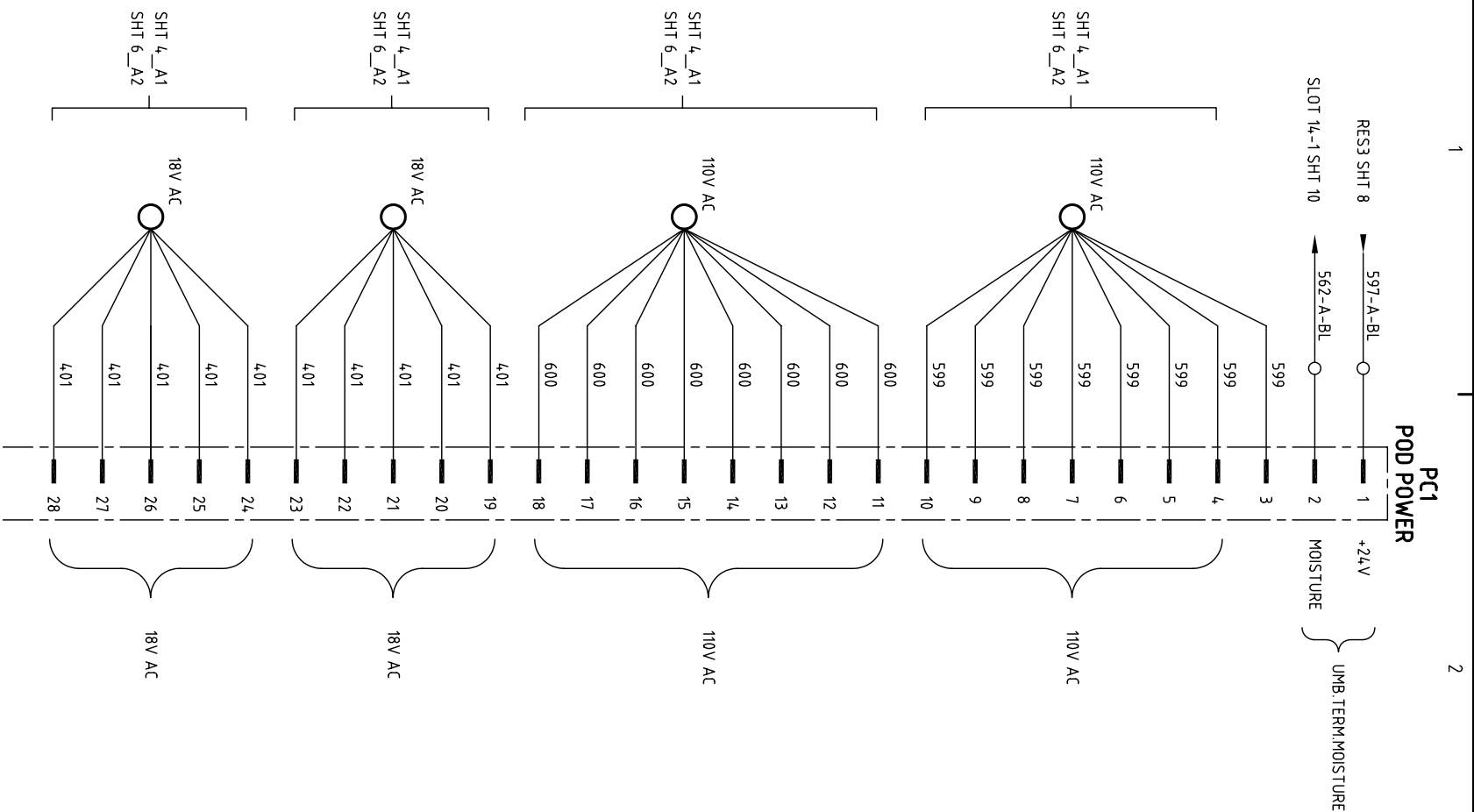
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.

Soil Machine Dynamics

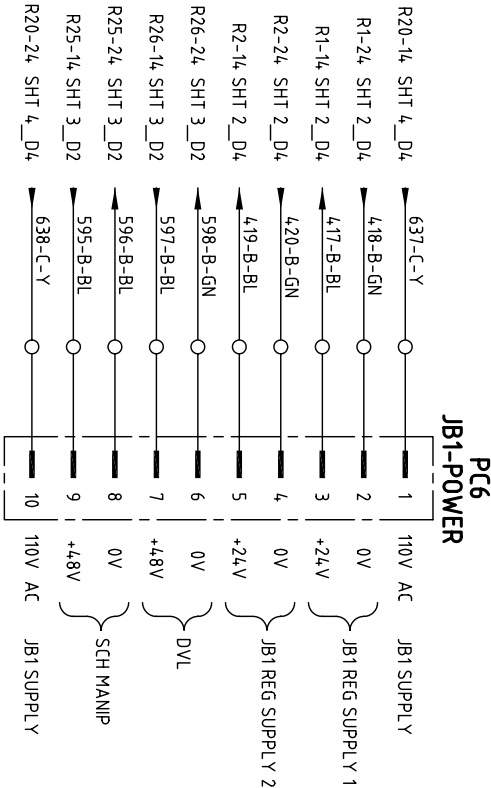
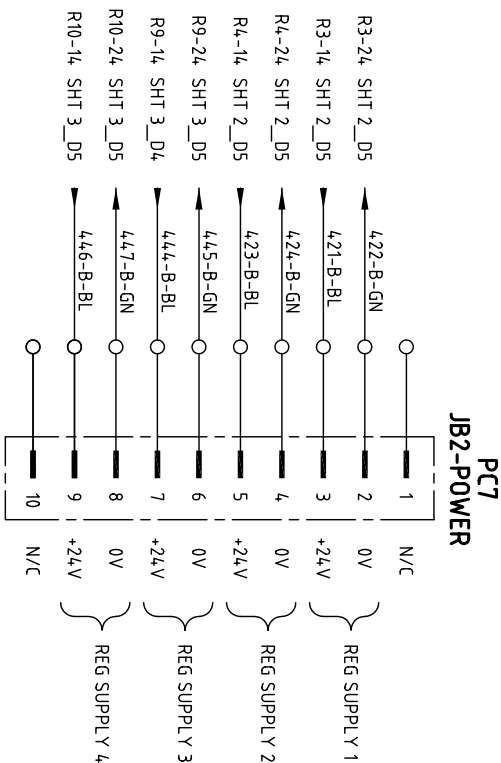
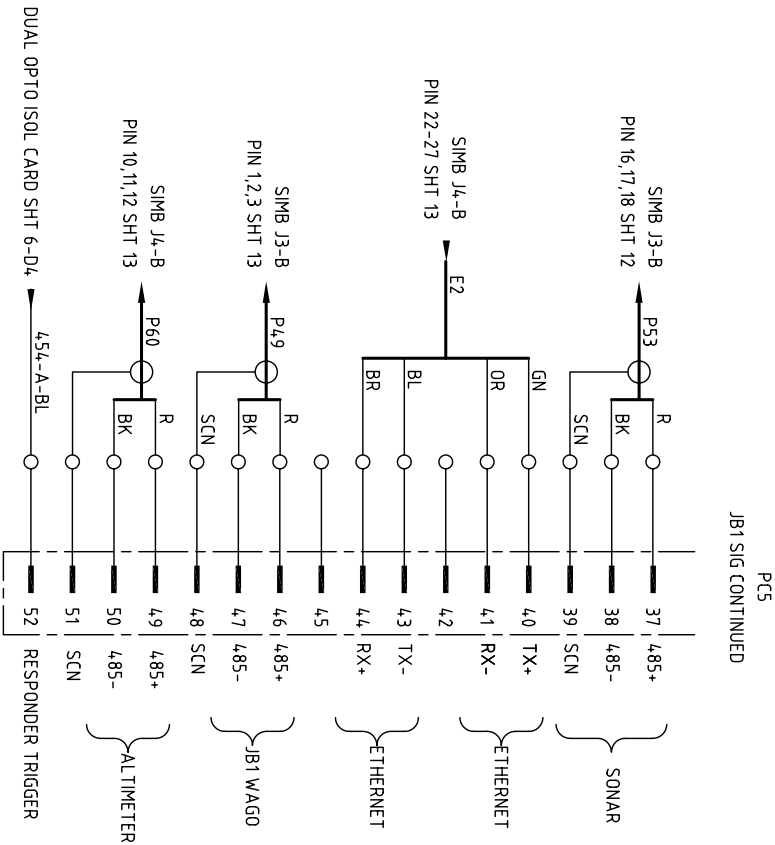
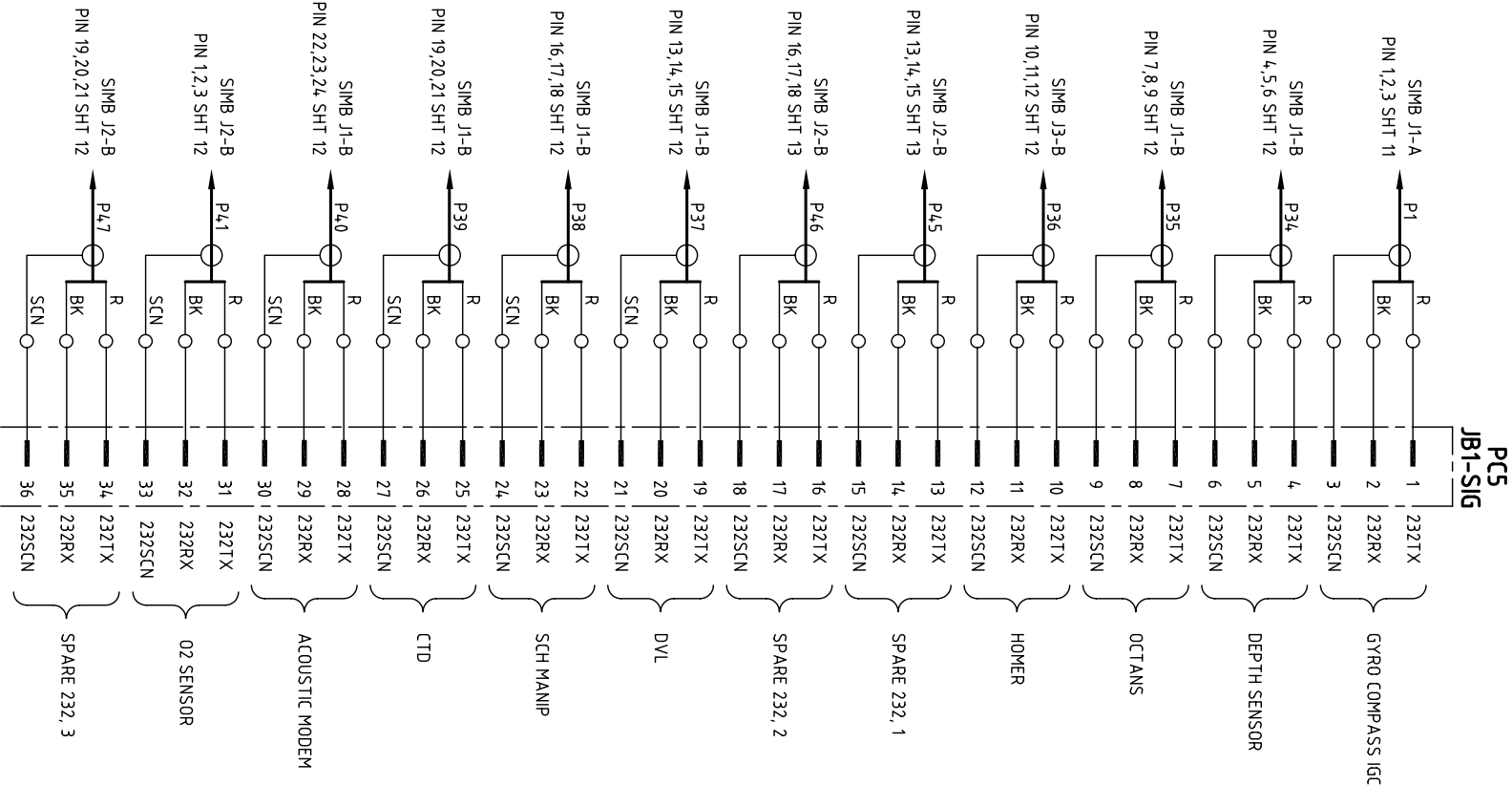
A3 CAD

DO NOT SCALE	DRAWING NO. AB6315	ISSUE NO. 3
SHEET 15	OF 20	

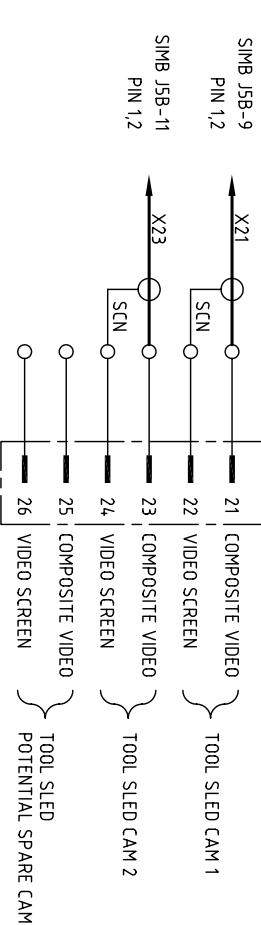
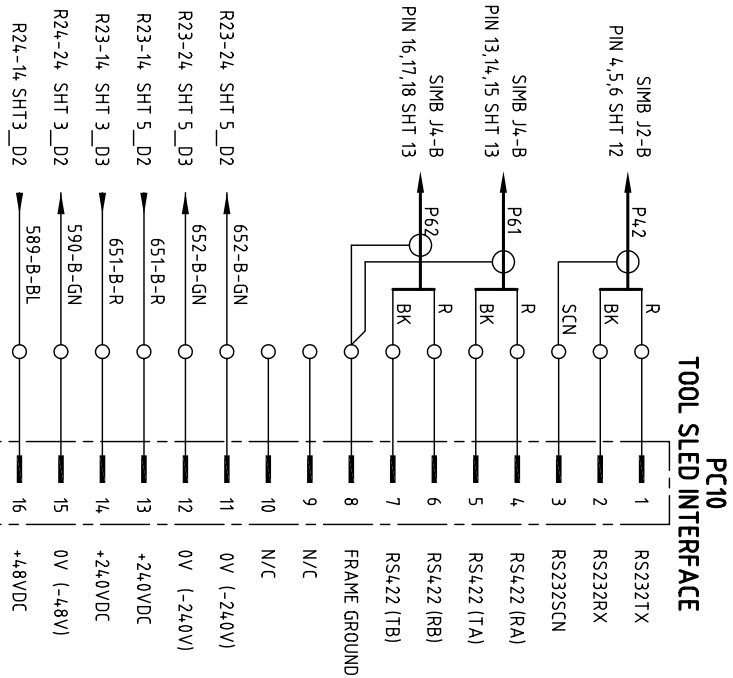
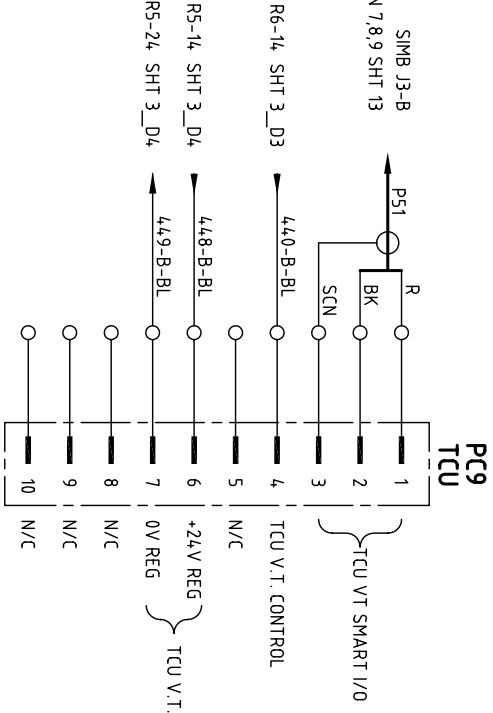
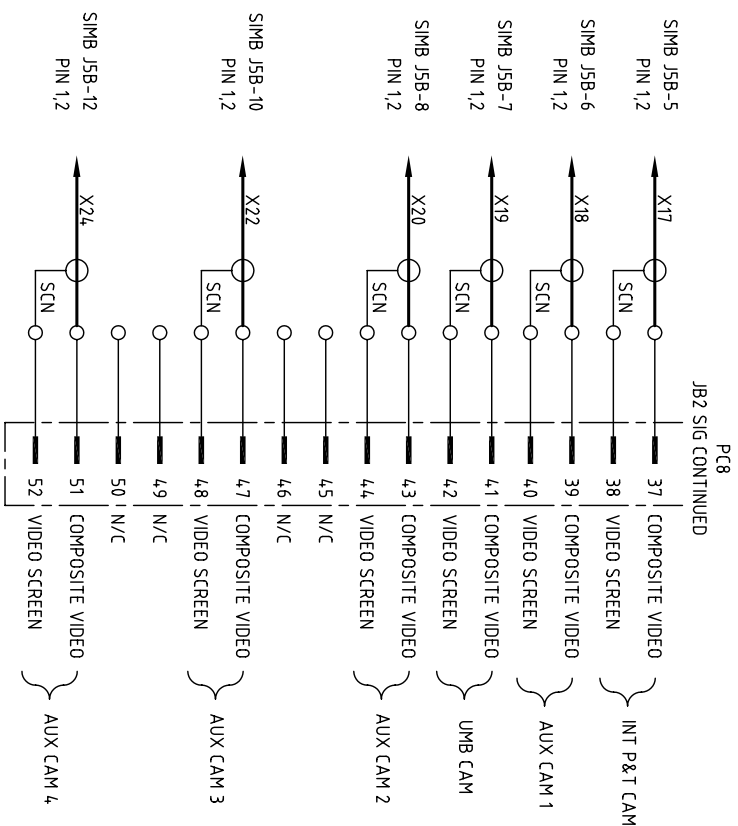
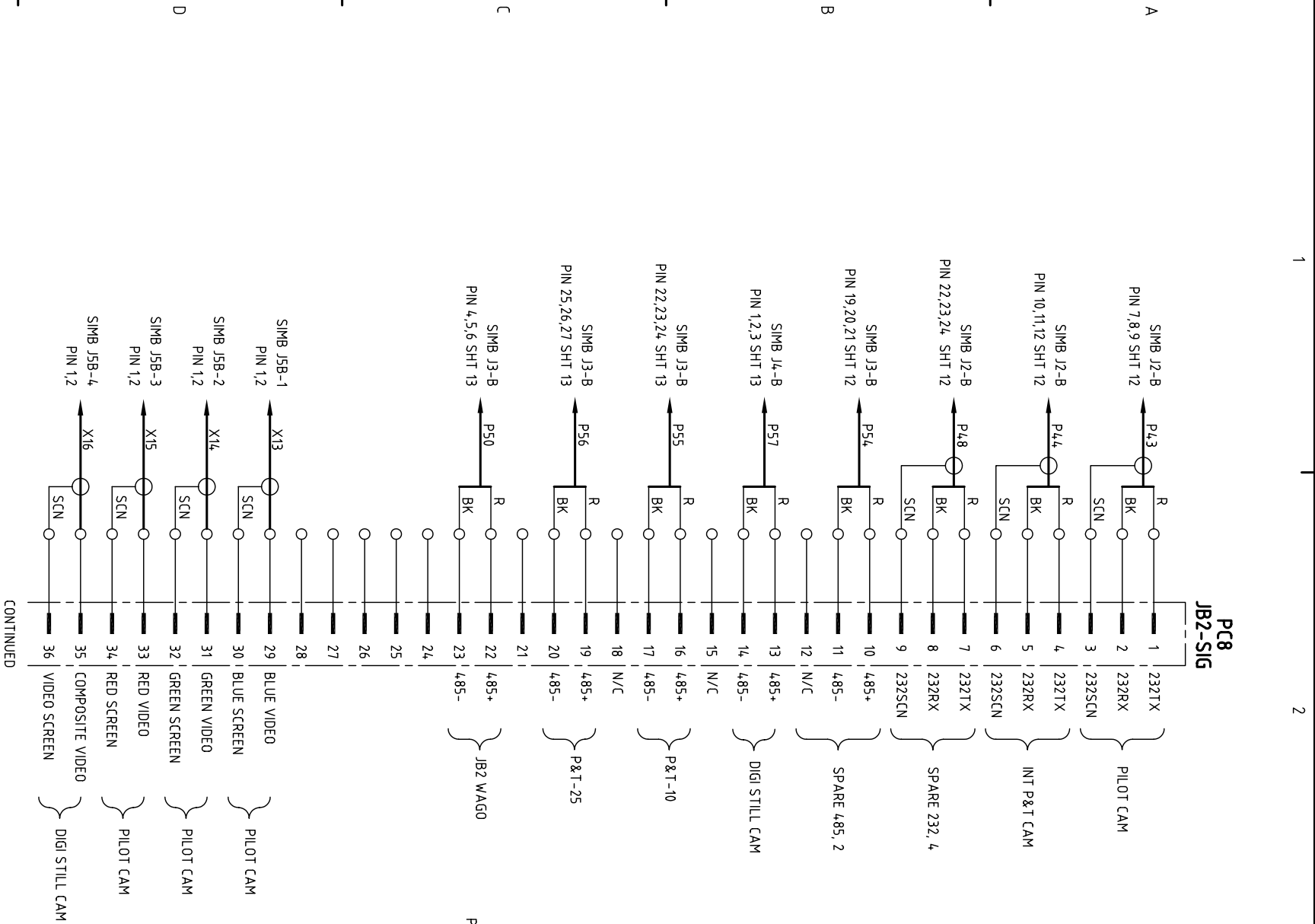




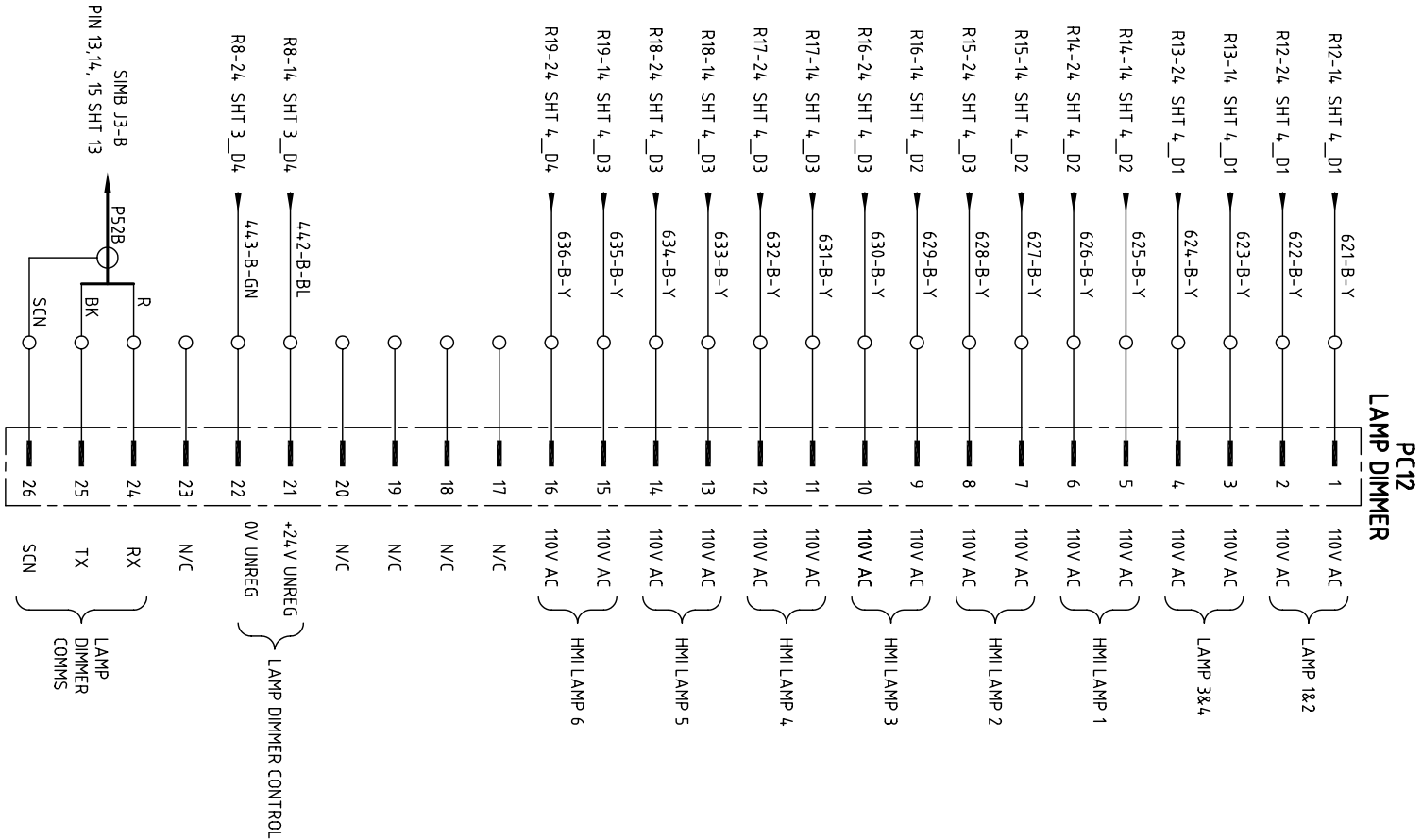
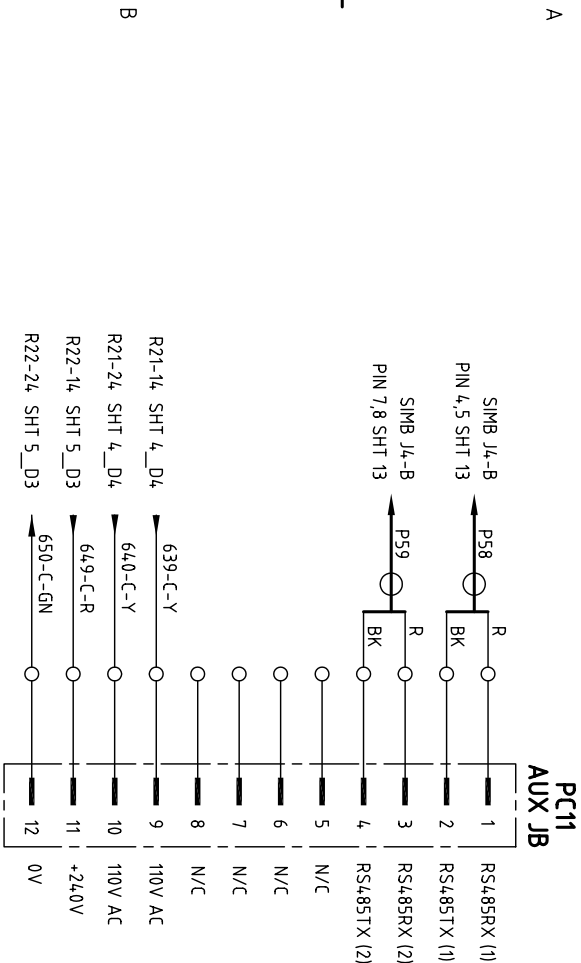
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.												
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL - DESIGNED C.L.T. DRAWN C.L.T. TOLERANCES UNLESS OTHERWISE STATED UP TO 100 TO 300 TO 1000 TO OVER 100 300 1000 1000 DATE 10-08-07 CHECKED I.M.P. FABRICATION MACHINED PART					TITLE POD WIRING - C903RV (FACEPLATE CONNECTOR - POD POWER) DRAWING NO. AB6315 SHEET 17 OF 20 ISSUE NO. 3		
1	09-01-08	AS BUILT.	P.S.	C.L.T.								
2	28-04-08	CROSS REFERENCES CHANGED.	P.S.	C.L.T.								
3	07-07-08	PCI TERMINAL ARRANGEMENT & PC4 CIRCUIT FUNCTIONS AMENDED.	P.S.	C.L.T.								



ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.																						
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL										DIMENSIONS		SCALE		PROJECTION 3RD		TITLE	
1	09-01-08	AS BUILT.	P.S.	C.L.T.	-										-		-				POD WIRING - C903RV (FACEPLATE CONNECTORS)	
2	28-04-08	CROSS REFERENCES CHANGED.	P.S.	C.L.T.	DESIGNED C.L.T.		DRAWN C.L.T.	TOLERANCES UNLESS OTHERWISE STATED					UP TO 100		100 TO 300	300 TO 1000	OVER 1000	DO NOT SCALE				
3	07-07-08	PC7 TERMINAL FUNCTIONS AMENDED.	P.S.	C.L.T.	CHECKED		I.M.P.	FABRICATION		± 1.0		± 1.5	± 2.0	± 3.0								
					DATE 10-08-07			MACHINED PART		± 0.15		± 0.4	± 0.8	± 1.0	DRAWING NO.		ISSUE NO.					
Soil Machine Dynamics					A3 CAD										AB6315		SHEET 18 OF 20		3			



ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.									
NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL - DESIGNED C.L.T. DRAWN C.L.T. TOLERANCES UNLESS OTHERWISE STATED UP TO 100 TO 100 TO 300 TO 300 TO 1000 OVER DIMENSION mm ± 1.0 ± 1.5 ± 2.0 ± 3.0 FABRICATION MACHINED PART ± 0.15 ± 0.4 ± 0.8 ± 1.0				
1	09-01-08	AS BUILT.	P.S.	C.L.T.					
2	28-04-08	CROSS REFERENCE CHANGED.	P.S.	C.L.T.					
3	07-07-08	PC9 TERMINAL FUNCTIONS AMENDED.	P.S.	C.L.T.					
					DATE 10-08-07	CHECKED I.M.P.			
Soil Machine Dynamics					TITLE POD WIRING - C903RV (FACEPLATE CONNECTORS)				
A3 CAD					DO NOT SCALE				
DRAWING NO. AB6315					ISSUE NO. 3				
					SHEET 19 OF 20				



NO.	DATE	CHANGE	DRAWN	CHECK	MATERIAL				DIMENSIONS	SCALE	PROJECTION 3RD		TITLE			
1	09-01-08	AS BUILT.	P.S.	C.L.T.	DESIGNED C.L.T.				DRAWN C.L.T.		TOLERANCES UNLESS OTHERWISE STATED			POD WIRING - C903RV (FACEPLATE CONNECTORS)		
2	28-04-08	CROSS REFERENCES CHANGED	P.S.	C.L.T.												
3	07-07-08	NO CHANGES TO THIS SHEET.	P.S.	C.L.T.												
					DATE	CHECKED	FABRICATION		MACHINED PART		DO NOT SCALE		DRAWING NO. AB6315	ISSUE NO. 3		
ALL INTELLECTUAL PROPERTY RIGHTS SUBSISTING IN THESE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD. NO COPY IS TO BE MADE WITHOUT THE WRITTEN PERMISSION OF SOIL MACHINE DYNAMICS LTD. ANY PATENT APPLICATIONS, PATENTS AND/OR DESIGN APPLICATIONS, REGISTERED DESIGNS, DESIGN RIGHTS OR COPYRIGHT ARISING FROM OR CONTAINED IN THE DESIGNS ARE THE PROPERTY OF SOIL MACHINE DYNAMICS LTD AND ALL INFORMATION MUST BE HELD IN THE STRICTEST CONFIDENCE.					10-08-07	I.M.P.										
Soil Machine Dynamics														A3 CAD	SHEET 20 OF 20	