



Newburg, Missouri, USA  
 573-368-7399  
 machmotion.com

SALES ORDER No.: xxxxx

DRAWING No.: A3SY00-003

SUPPLY VOLTAGE: 240 VOLTS 60 Hz

PHASE:	-	3 PH (240V)
FULL LOAD AMPS:	-	24.6 AMPS
LARGEST LOAD:	-	9.7 AMPS
MAX SPINDLE MOTOR SIZE:	-	2.2 KW
MIN SUPPLY CIRCUIT CONDUCTOR:	-	25 AMPS
MAX SUPPLY CIRCUIT OCPD:	-	35 AMPS

SHORT CIRCUIT CURRENT RATING: 5 kA @ 240 VOLTS MAX

AMBIENT TEMPERATURE RATING: 41° TO 104° F (5° TO 40° C)

THIS EQUIPMENT DOES PROVIDE SUPPLY CIRCUIT OVERCURRENT PROTECTION.

NUMBER OF PAGES 32

COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020 REVISION:	-	ALL RIGHTS RESERVED				DRAWING NO: A3SY00-003 SUPPLIER NO: XXXXX	NAME: -	=	+
DESIGNER: JUSTIN R. WALZ	APPROVER:	LOC:	FACTORY:	DEPT:	OP. NO:	STA. NO:	MACH. NAME:	DRAWING NO:	TITLE PAGE / COVER SHEET	PREV PAGE: <<--- PAGE:
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80	8000 DRV - 90/180 VDC DRIVE	9/15/2020	JUSTIN R. WALZ
90	9000 MDL - ETHERNET SWITCH	9/15/2020	JUSTIN R. WALZ
99	9900 HMI - MAIN OPERATOR INTERFACE	10/13/2020	JUSTIN R. WALZ

# CHANGE HISTORY

NR.	DATE (MM/DD/YYYY)	EDITOR	CHANGE SPECIFICATION	ID	PAGES
000	10/28/2020	JUSTIN WALZ	INITIAL RELEASE		ALL
001	11/27/2020	WILLIAM BLANDON	ENABLE CONTACTORS DRIVEN FRON SAFETY REALY. ADDED LIMIT & HOME SWITCHES TO APOLLO III INPUTS, ARRANGE OUTOUT APOLLO III RELAYS		21, 30 ,66, 67
002					
003					
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018					

DESCRIPTION	NEMA SYMBOLS	IEC SYMBOLS	LETTER CODE TO IEC 617
NORMALLY OPEN CONTACTOR CONTACT	M	KM	KM - CONTACTOR
NORMALLY CLOSED CONTACTOR CONTACT	M	KM	KM - CONTACTOR
NORMALLY CLOSED AUXILIARY CONTACT	M	KM	KM - CONTACTOR
NORMALLY OPEN RELAY CONTACT	CR	KA	KA - RELAY
NORMALLY CLOSED RELAY CONTACT	CR	KA	KA - RELAY
NORMALLY OPEN DELAYED CLOSING CONTACT	T	KT	KT - TIME DELAY
NORMALLY CLOSED DELAYED OPENING CONTACT	T	KT	KT - TIME DELAY
NORMALLY OPEN DELAYED OPENING CONTACT	T	KT	KT - TIME DELAY
NORMALLY CLOSED DELAYED CLOSING CONTACT	T	KT	KT - TIME DELAY
NORMALLY OPEN PUSH BUTTON	PB	SB	SB - PUSH BUTTON
NORMALLY CLOSED PUSH BUTTON	PB	SB	SB - PUSH BUTTON
EMERGENCY STOP PUSH BUTTON	PB	SB	SB - PUSH BUTTON
NORMALLY OPEN LEVEL SWITCH	LVS	SL	SL - LEVEL SWITCH
NORMALLY OPEN PRESSURE SWITCH	PS	SP	SP - PRESSURE SWITCH
NORMALLY OPEN FLOW SWITCH	FS	SF	SF - FLOW SWITCH
NORMALLY OPEN TEMPERATURE SWITCH	TS	ST	ST - TEMPERATURE SWITCH
NORMALLY OPEN LIMIT SWITCH	LS	SQ	SQ - LIMIT SWITCH
NORMALLY CLOSED LIMIT SWITCH	LS	SQ	SQ - LIMIT SWITCH
PLUG	PLG	XP	XP - PLUG
SOCKET	PLG	XS	XS - SOCKET
PLUG AND SOCKET	PLG	XS	XS - PLUG AND SOCKET
CONTACTOR COIL	M	KM	KM - CONTACTOR
CONTROL RELAY COIL	CR	KA	KA - RELAY
SLOW OPERATING (ON DELAY) RELAY COIL	TR	KT	KT - TIMED RELAY
SLOW RELEASING (OFF DELAY) RELAY COIL	TR	KT	KT - TIMED RELAY
SOLENOID COIL	SOL	YV	YV - ELECTROMAGNETIC OPERATED VALVE
PROXIMITY SENSOR	PRX	SQ	SQ - PROXIMITY SWITCH

DESCRIPTION	NEMA SYMBOLS	IEC SYMBOLS	LETTER CODE TO IEC 617
PROXIMITY SENSOR	PRX	SQ	SQ - PHOTOEYE SWITCH
ISOLATOR/DISCONNECT SWITCH	KS	QS	QS - ISOLATOR/DISCONNECT DEVICE
FUSE	FU	FU	FU - FUSE
CIRCUIT BREAKER	CB	QF	QF - CIRCUIT BREAKER
WARNING HORN	HN	HA	HA - WARNING HORN
INDICATOR LAMP (PILOT LIGHT)	LT	HL	HL - INDICATOR LAMP
PUSH TO TEST INDICATOR LAMP (PILOT LIGHT)	LT	HL	HL - INDICATOR LAMP
FLUORESCENT LIGHT	LT	EL	EL - CABINET LIGHTING
SELECTOR SWITCH	SS	SA	SA - SELECTOR SWITCH
4 POSITION SELECTOR SWITCH	SS	SA	SA - SELECTOR SWITCH
MOTOR	MTR	M	M - MOTOR
ELECTROMAGNETIC BRAKE	BRK	YB	YB - ELECTROMAGNETIC BRAKE

BQ - POSITION TRANSDUCER  
 E - MISCELLANEOUS COMPONENTS  
 EH - HEATING DEVICE  
 FR - CURRENT PROTECTIVE DEVICE  
 GS - SUPPLY DEVICE (POWER SUPPLY)  
 HV - VENTILATOR  
 XB - LINK  
 XT - FUSED TERMINAL  
 X1 - TERMINAL  
 TA - CURRENT TRANSFORMER  
 TC - CONTROL CIRCUIT TRANSFORMER  
 TM - POWER TRANSFORMER  
 TS - MAGNETIC STABILISER  
 TV - VOLTAVE TRANSFORMER

WIRE COLOR CHART						
VOLTAGE	LINE SIDE OF MAIN DISCONNECT (ABOVE DISCONNECTING MEANS)		LOAD SIDE OF MAIN DISCONNECT (BELOW DISCONNECTING MEANS)		WIRES TO EXTERNAL ELECTRICAL ENCLOSURES (INTERLOCKING)	
	HOT CONDUCTOR	GROUNDING CURRENT CARRYING CONDUCTOR	HOT CONDUCTOR	GROUNDING CURRENT CARRYING CONDUCTOR	HOT CONDUCTOR	GROUNDING CURRENT CARRYING CONDUCTOR
241 - 575 VAC	BLACK / ORANGE TRACER/SLEEVE/TUBE		BLACK			
151 - 575 VDC			BLACK			
151 - 240 VAC			RED	WHITE		
0 - 150 VAC	ORANGE	WHITE/ ORANGE TRACER/SLEEVE/TUBE	RED	WHITE		
24 VDC (0 - 50)	BLUE / ORANGE TRACER/SLEEVE/TUBE	WHITE WITH BLUE TRACER & ORANGE TAPE	BLUE	WHITE/BLUE TRACER/SLEEVE/TUBE	ORANGE	ORANGE
GROUND	GREEN/ YELLOW TRACER					

WIRE COLOR CODE CHART	
WIRE COLOR	ABBREVIATION
BLACK	BK
BROWN	BN
RED	RD
ORANGE	OG
YELLOW	YE
GREEN	GN
BLUE	BU
VIOLET	VT
GRAY	GY
WHITE	WH
PINK	PK
GOLD	GD
TURQUOISE	TQ
SILVER	SR
GREEN WITH YELLOW TRACER	GNYE
BLACK WITH ORANGE TRACER	BKOG
BLUE WITH ORANGE TRACER	BUOG
WHITE WITH RED TRACER	WHRD
WHITE WITH ORANGE TRACER	WHOG
WHITE WITH BLUE TRACER	WHBU
WHITE WITH BLUE TRACER AND ORANGE TAPE (OR SHRINK TUBE)	WHBU+OG

CABLE SIZE CONVERSION TABLE		
METRIC	TO	AWG
0.5		20
0.75		18
1.0		16
1.5		14
2.5		12
4.0		10
6.0		8
10.0		6
16.0		4
25.0		2
35.0		1
50.0		0

NFPA 79 - 2015 EDITION	
Table 8.2.2.3 Minimum Size of Equipment Grounding Conductors and Bonding Jumpers	
Rating or Setting of Automatic Overcurrent Device in Circuit Ahead of the Equipment (Not Exceeding Amperes)	Copper Conductor Size (AWG or kcmil)
10	16
15	14
20	12
30	10
40	10
60	10
100	8
200	6
300	4
400	3
500	2
600	1
800	1/0
1000	2/0
1200	3/0
1600	4/0
2000	250
2500	350
3000	400
4000	500
5000	700
6000	800

NFPA 79 - 2015 EDITION			
Table 12.5.1 Conductor Ampacity Based on Copper Conductors with 60°C (140°F), 75°C (167°F), 90°C (194°F) Insulation in an Ambient Temperature of 30°C (86°F)			
Conductor Size (AWG)	Ampacity		
	60°C (140°F)	75°C (167°F)	90°C (194°F)
30	-	0.5	0.5
28	-	0.8	0.8
26	-	1	1
24	2	2	2
22	3	3	3
20	5	5	5
18	7	7	14
16	10	10	18
14	20	20	25
12	25	25	30
10	30	35	40
8	40	50	55
6	55	65	75
4	70	85	95
3	85	100	110
2	95	115	130
1	110	130	150
1/0	125	150	170
2/0	145	175	195
3/0	165	200	225
4/0	195	230	260
250	215	255	290
300	240	285	320
350	260	310	350
400	280	335	380
500	320	380	430
600	355	420	475
700	385	460	520
750	400	475	535
800	410	490	555
900	435	520	585
1000	455	545	615

Notes:  
(1) Wire types listed in 12.3.1 shall be permitted to be used at the ampacities listed in this table.  
(2) The sources for the ampacities in this table are Table 310.15(B)(16) of NFPA 70.

NFPA 79 - 2015 EDITION			
Table 12.5.5(a) Ambient Correction Factors			
For ambient temperatures other than 30°C (86°F), multiply the allowable ampacity by the appropriate factor shown below.			
Ambient Temperature (°C)	Correction Factor 60°C	Correction Factor 75°C	Correction Factor 90°C
21-25	1.08	1.05	1.04
26-30	1.00	1.00	1.00
31-35	0.91	0.94	0.96
36-40	0.82	0.88	0.91
40-45	0.71	0.82	0.87
46-50	0.58	0.75	0.82
51-55	0.41	0.67	0.76
56-60	-	0.58	0.71
61-70	-	0.33	0.58
71-80	-	-	0.41

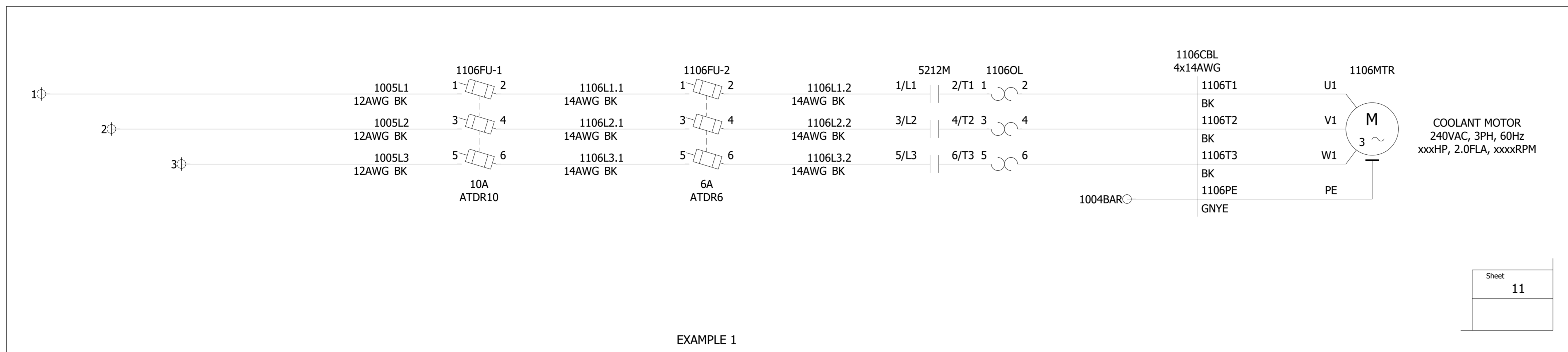
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WIRE INFORMATION		=	+
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#	NEXT PAGE: --->>	07	

**EXAMPLE 1**

IF DEVICES / WIRES ARE CONNECTED TO 3 PHASE LINES

1. DEVICES ARE IDENTIFIED BY THE ALPHA SUFFIX ACCORDING TO NEMA/NFPA COMBINED WITH THE SHEET NUMBER AND LINE REFERENCE AT WHICH THE DEVICE IS POSITIONED.
2. IF TWO OR MORE DEVICES WITH THE SAME PREFIX EXIST ON THE SAME LINE REFERENCE, THEN DEVICES ARE SUFFIXED -1, -2, -3...
3. WIRE NUMBERS ARE CONSTRUCTED FROM THE SHEET AND LINE NUMBER ON WHICH THEY OCCUR, WITH THE THREE PHASE IDENTIFIER L1, L2, L3 (OR T1, T2, T3) DEPENDING ON TERMINATION TO END DEVICE.

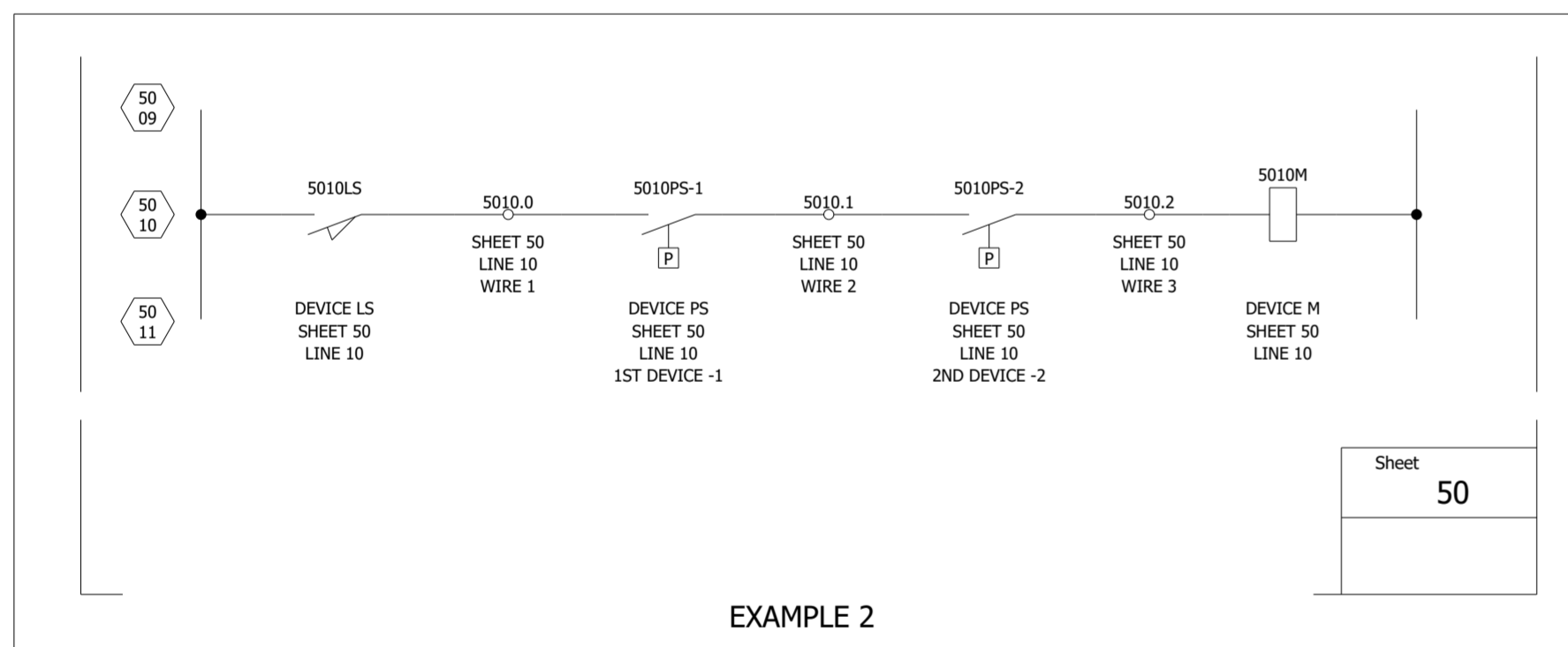


EXAMPLE 1

**EXAMPLE 2**

IF DEVICES / WIRES ARE NOT CONNECTED TO A PLC INPUT OR OUTPUT THEN:

1. DEVICES ARE IDENTIFIED BY THE ALPHA SUFFIX ACCORDING TO NEMA/NFPA COMBINED WITH THE SHEET NUMBER AND LINE REFERENCE AT WHICH THE DEVICE IS POSITIONED.
2. IF TWO OR MORE DEVICES WITH THE SAME PREFIX EXIST ON THE SAME LINE REFERENCE, THEN DEVICES ARE SUFFIXED -1, -2, -3...
3. WIRE NUMBERS ARE CONSTRUCTED FROM THE SHEET AND LINE NUMBER ON WHICH THEY OCCUR, WITH AN EXTRA DIGIT AFTER THIS RANGING FROM 1 TO 9 GOING FROM LEFT TO RIGHT.

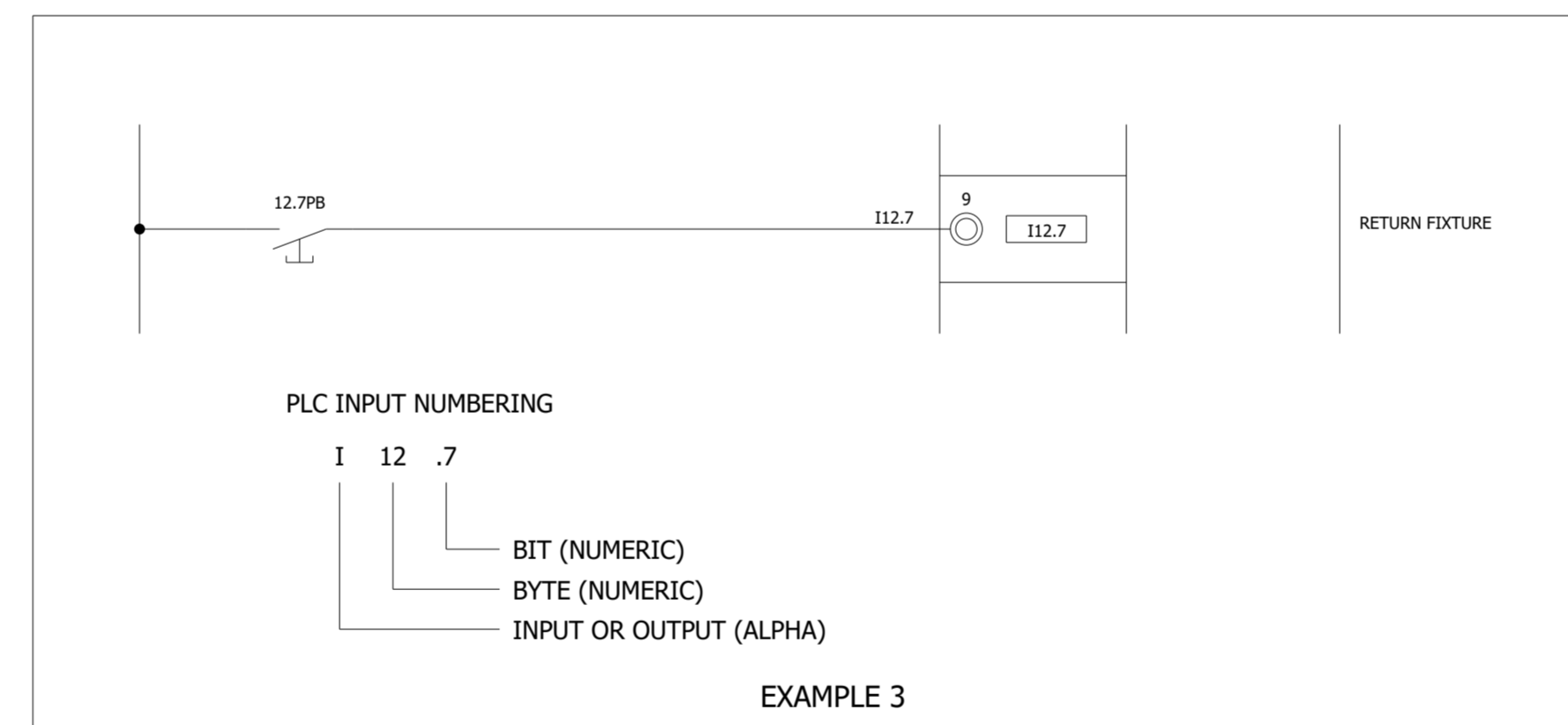


EXAMPLE 2

**EXAMPLE 3**

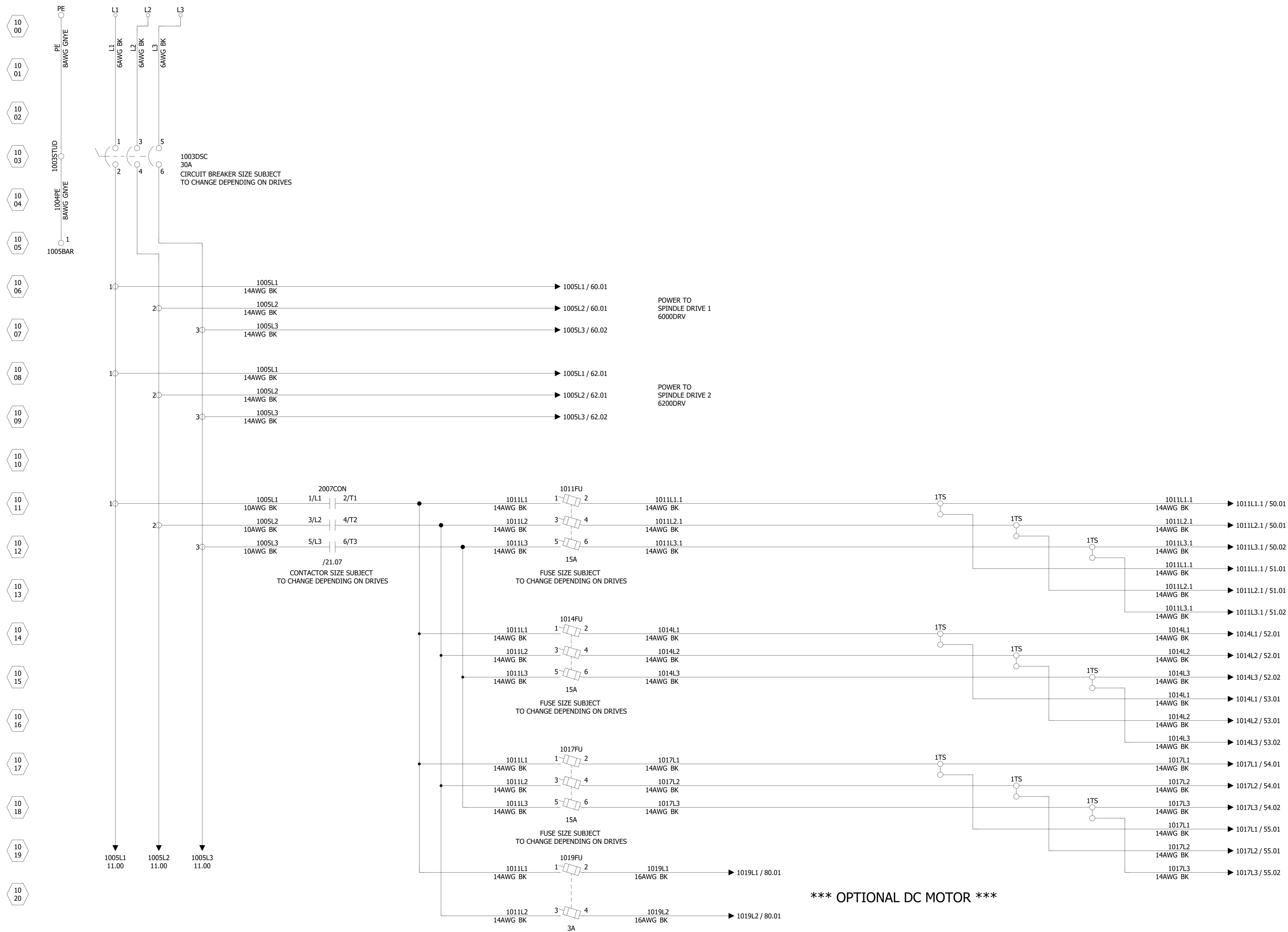
IF DEVICES / WIRES ARE CONNECTED TO A PLC INPUT OR OUTPUT THEN:

1. DEVICES ARE IDENTIFIED BY THE ALPHA SUFFIX ACCORDING TO NEMA/NFPA COMBINED WITH THE PLC ADDRESS TO WHICH IT IS CONNECTED. CONTACTS, AUX. CONTACTS FROM HARDWIRE DEVICES ARE IDENTIFIED BY THE DEVICE DESIGNATION WHERE THE DEVICE IS WIRED.
2. WIRES ARE NUMBERED USING THE FULL PLC I/O ADDRESS OF THE INPUT OR OUTPUT TO WHICH THEY ARE CONNECTED.

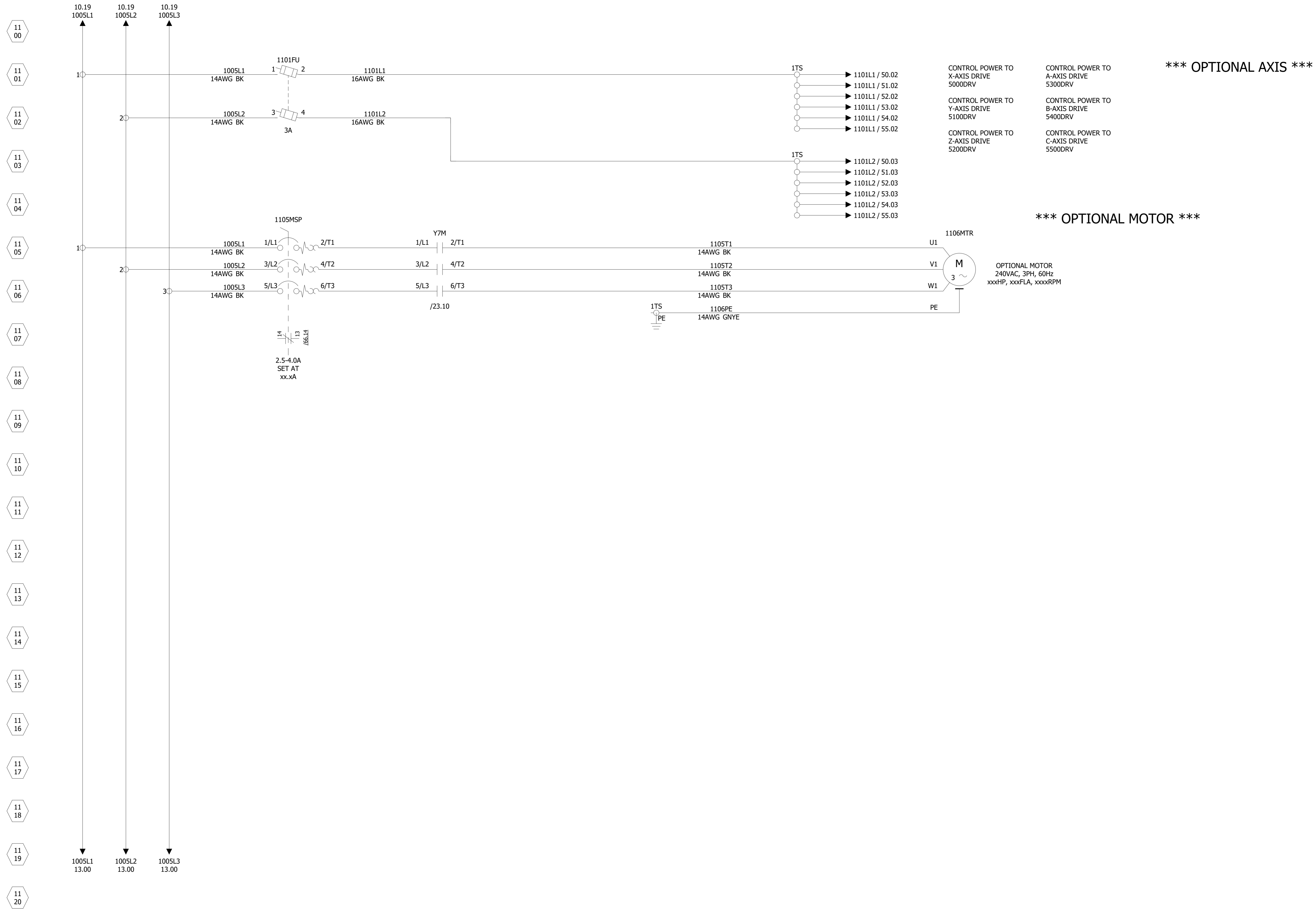


EXAMPLE 3

CUSTOMER SUPPLIED 3 PHASE POWER  
 INCOMING : 3 PHASE + GROUND / 240 VAC / 60 Hz / 60 AMPS



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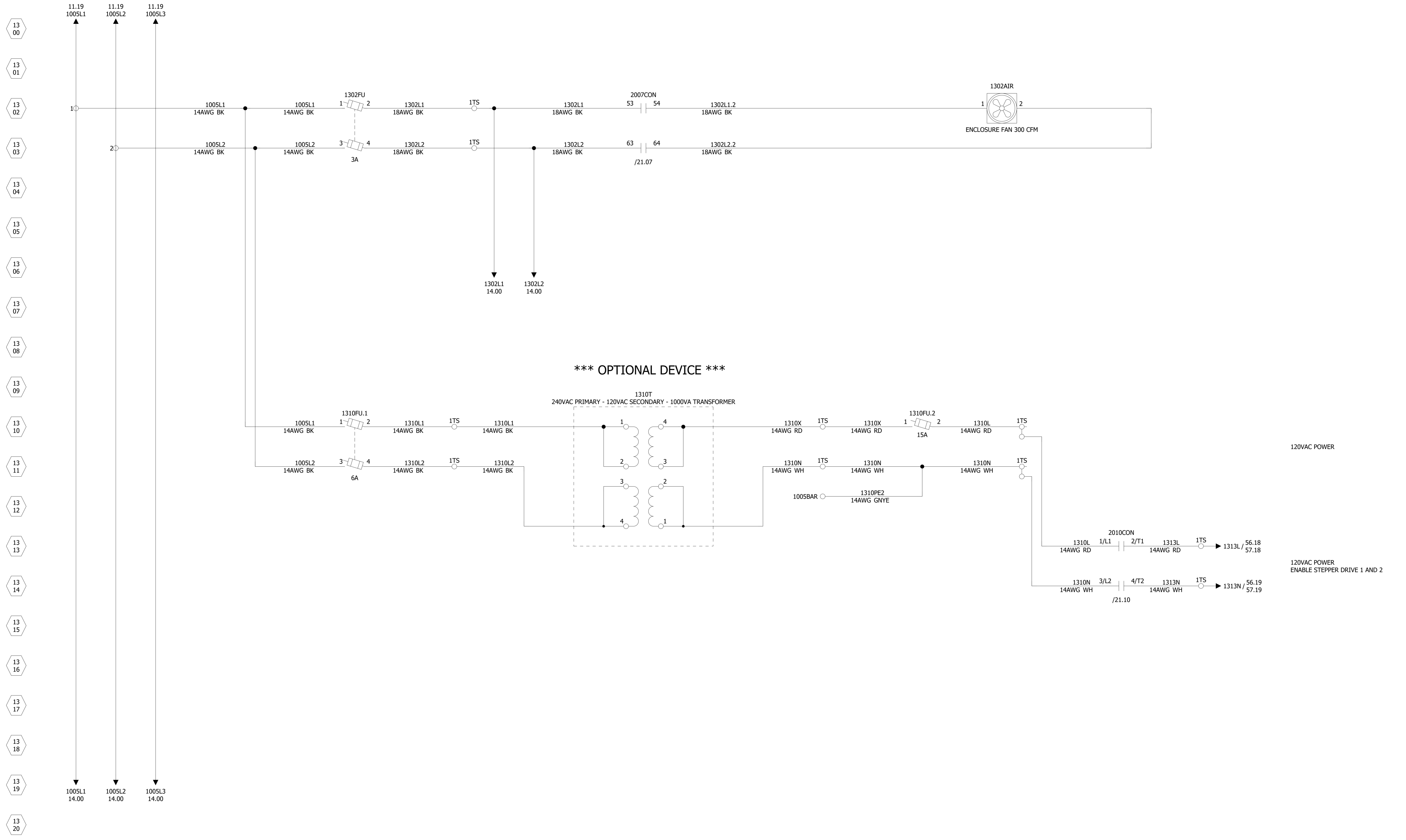
\*\*\* OPTIONAL AXIS \*\*\*

\*\*\* OPTIONAL MOTOR \*\*\*

- 11 00
- 11 01
- 11 02
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		STA. NO: -	MACH. NAME: -	DRAWING NO:	3 PHASE POWER - CONTROL POWER
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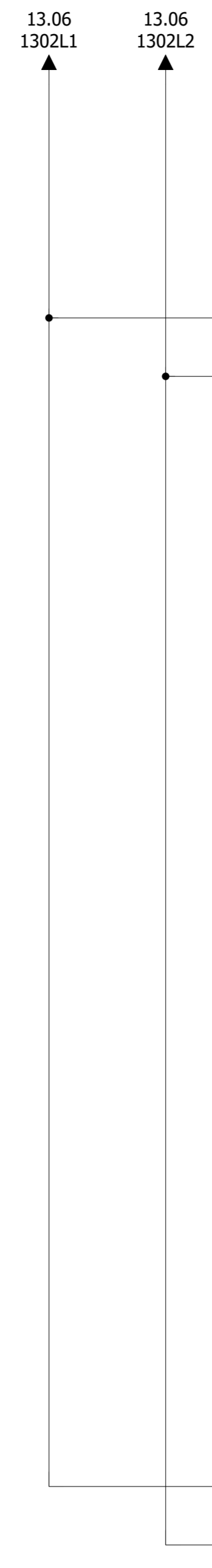
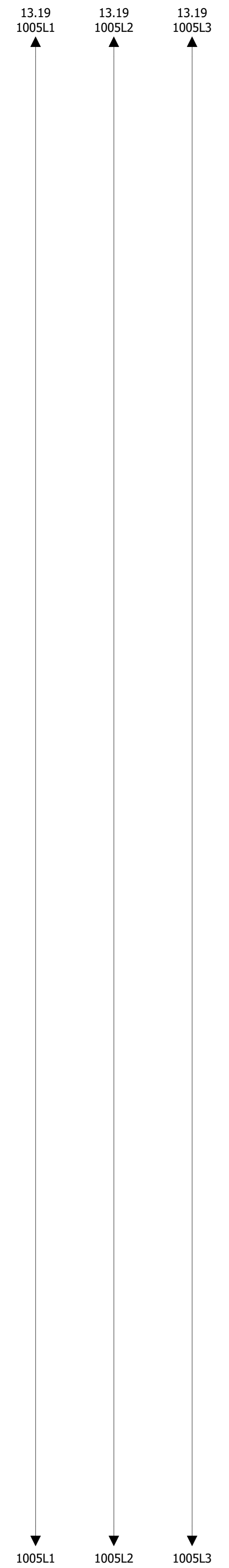


\*\*\* OPTIONAL DEVICE \*\*\*

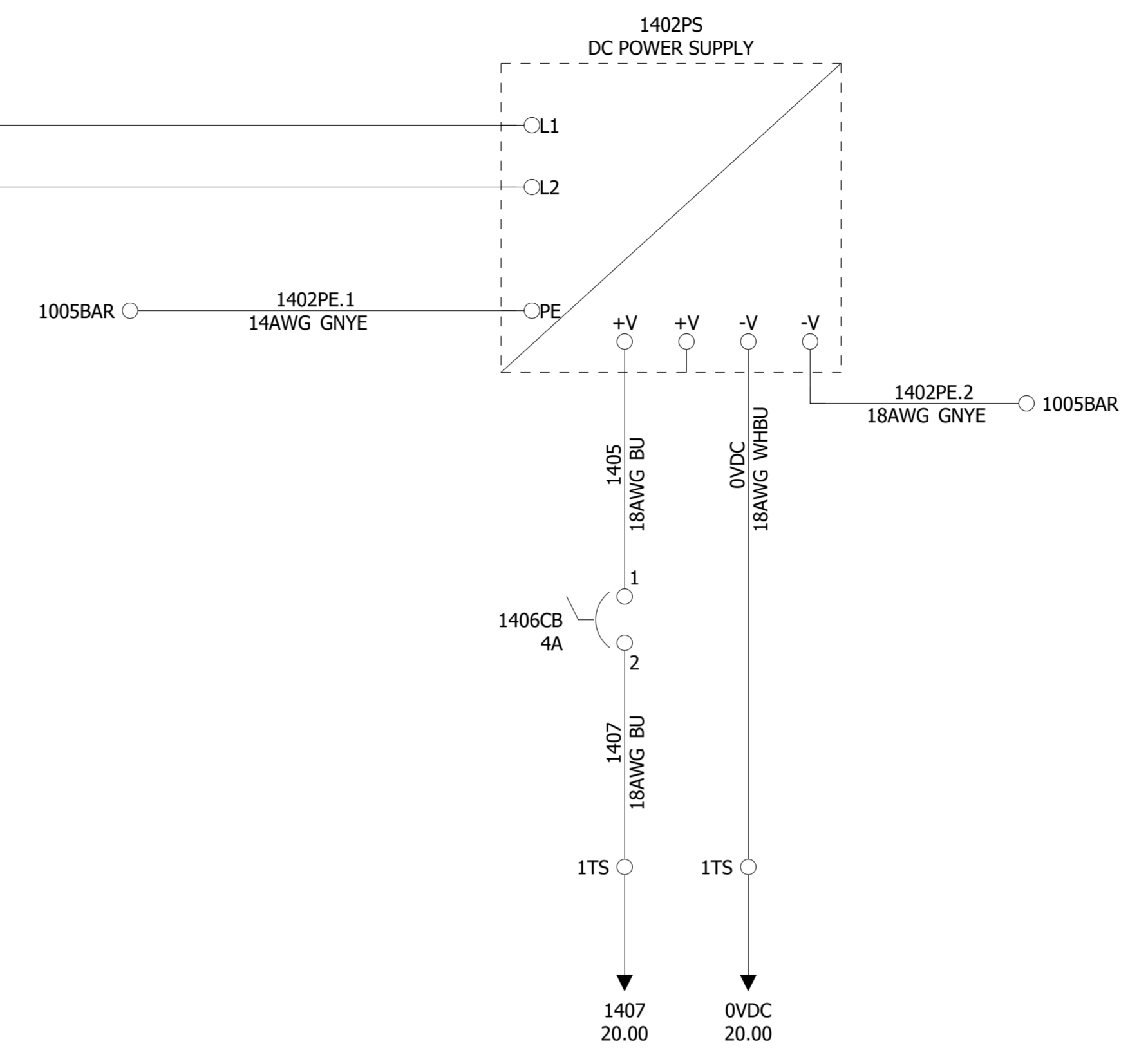
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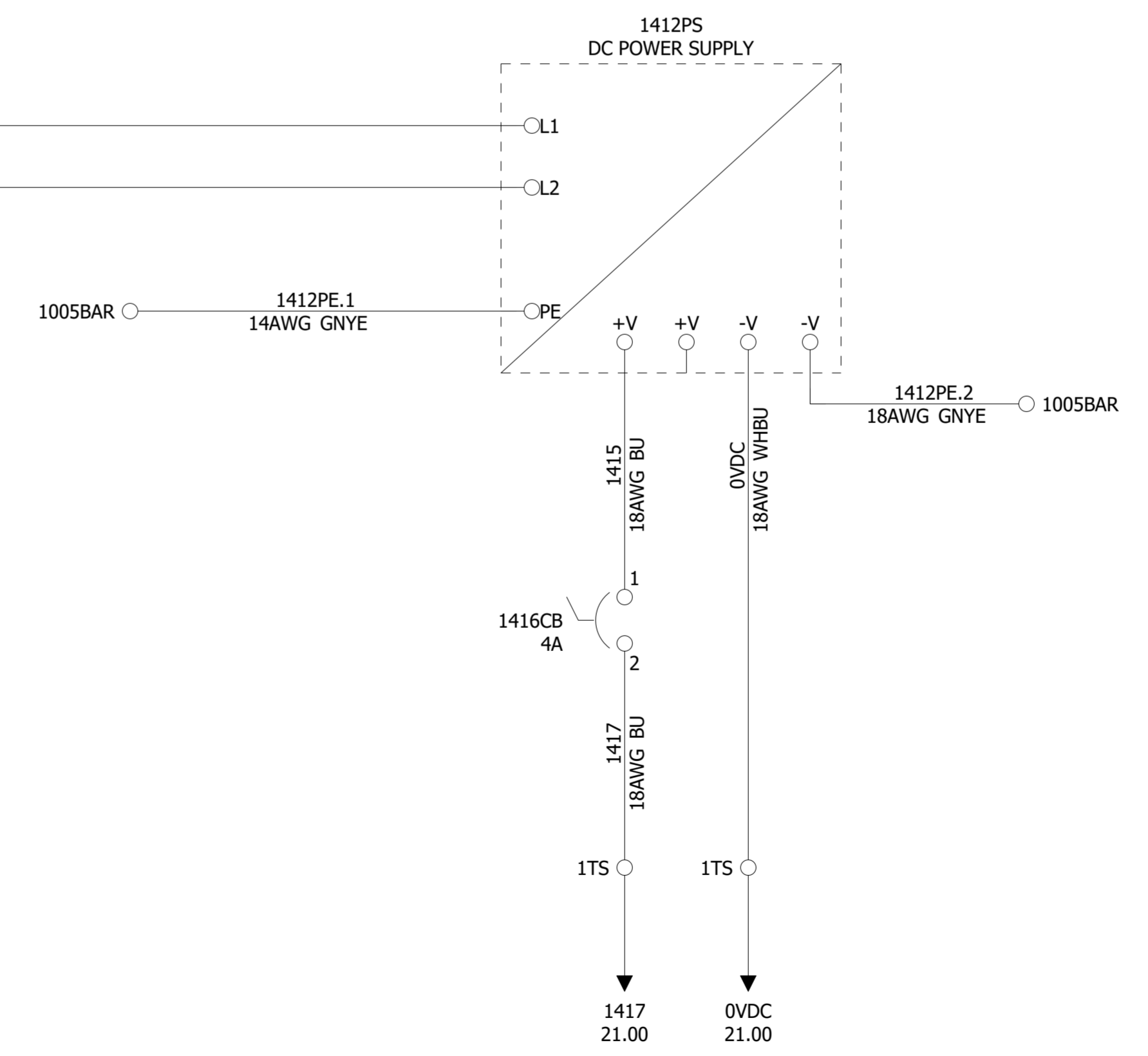


1302L1  
18AWG BK  
1302L2  
18AWG BK



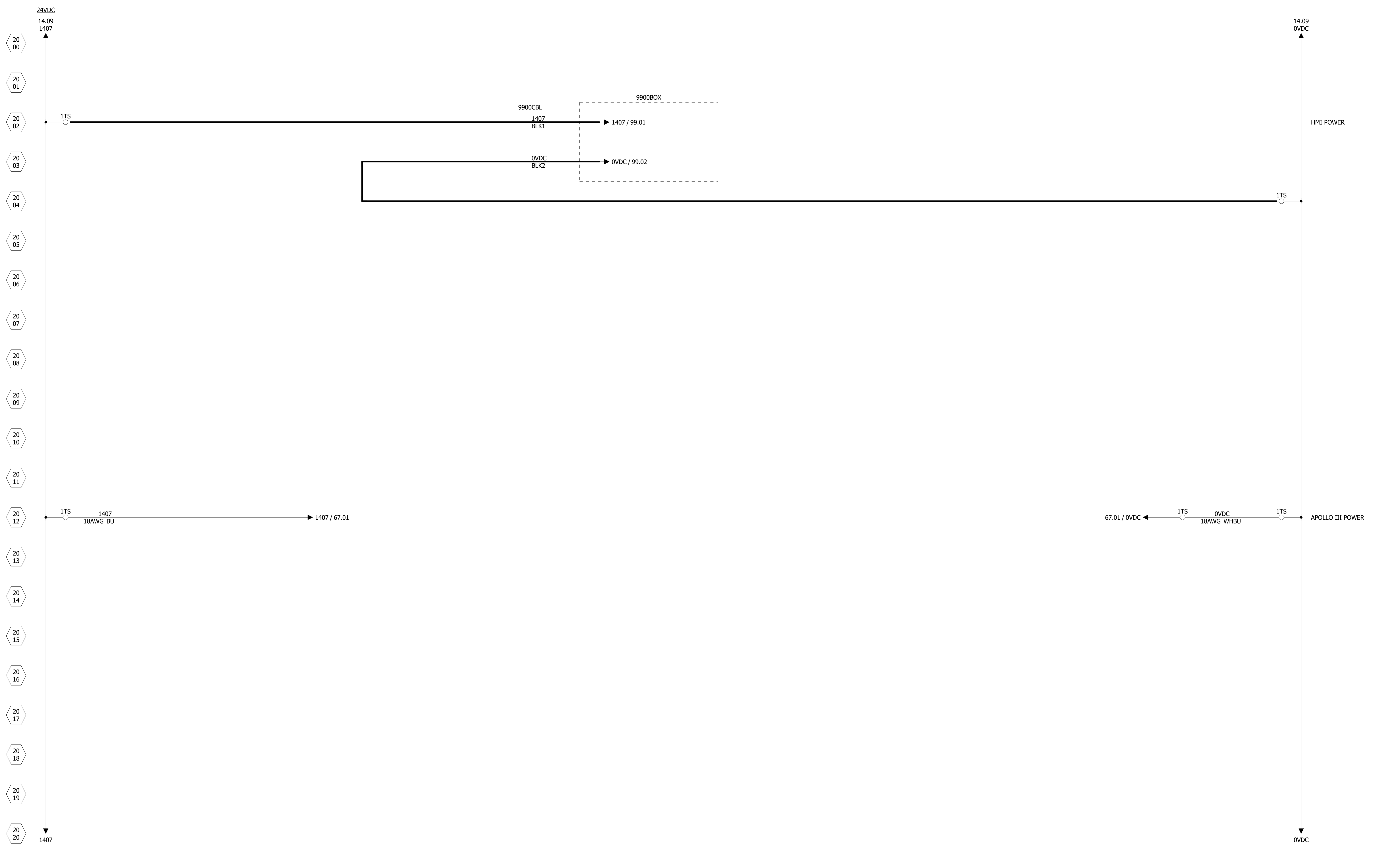
24VDC - HMI POWER  
APOLLO III POWER

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18AWG BK  
1302L2  
18AWG BK

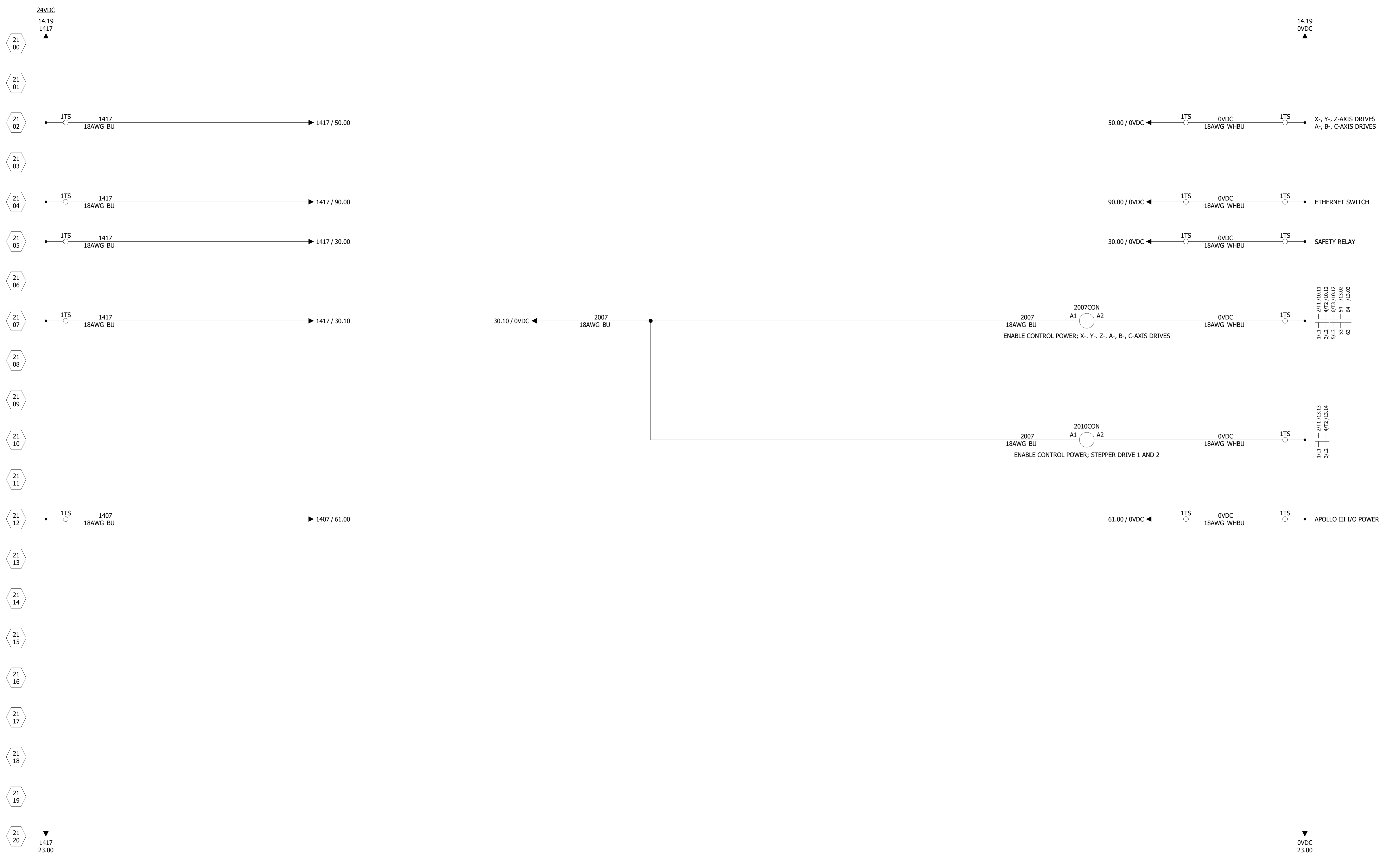


24VDC - MACHINE POWER

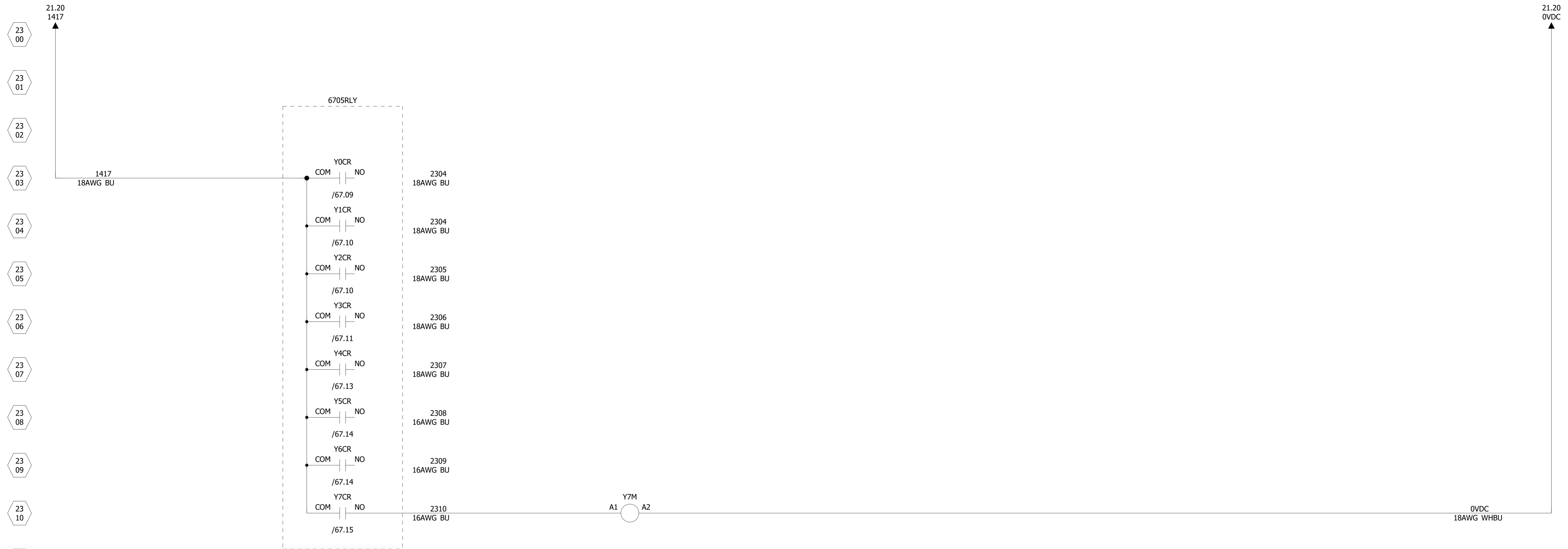
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								SUPPLIER NO: XXXXX		24 VDC POWER DISTRIBUTION
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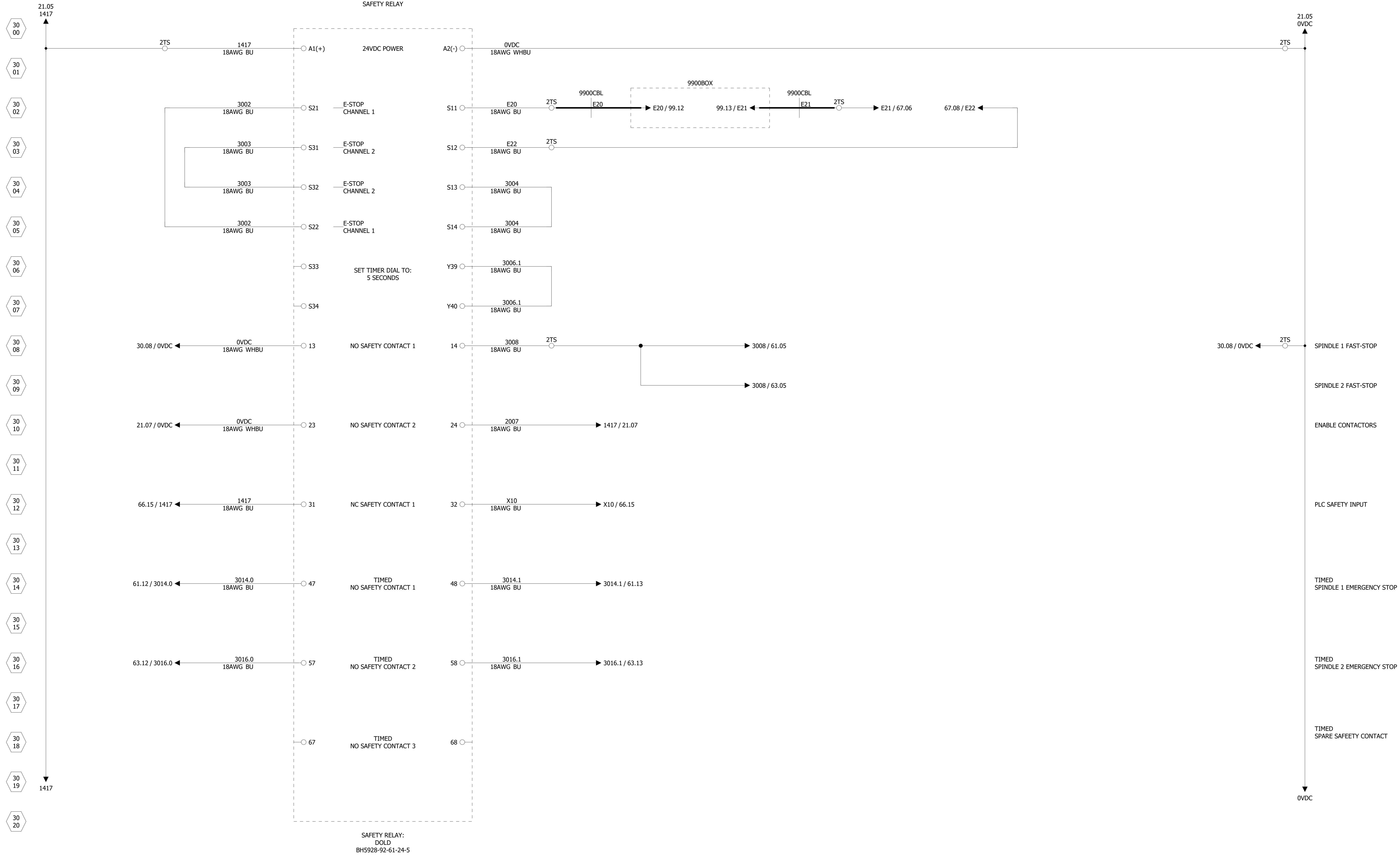


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**3000SR**  
SAFETY RELAY



SAFETY RELAY:  
DOLD  
BH5928-92-61-24-5

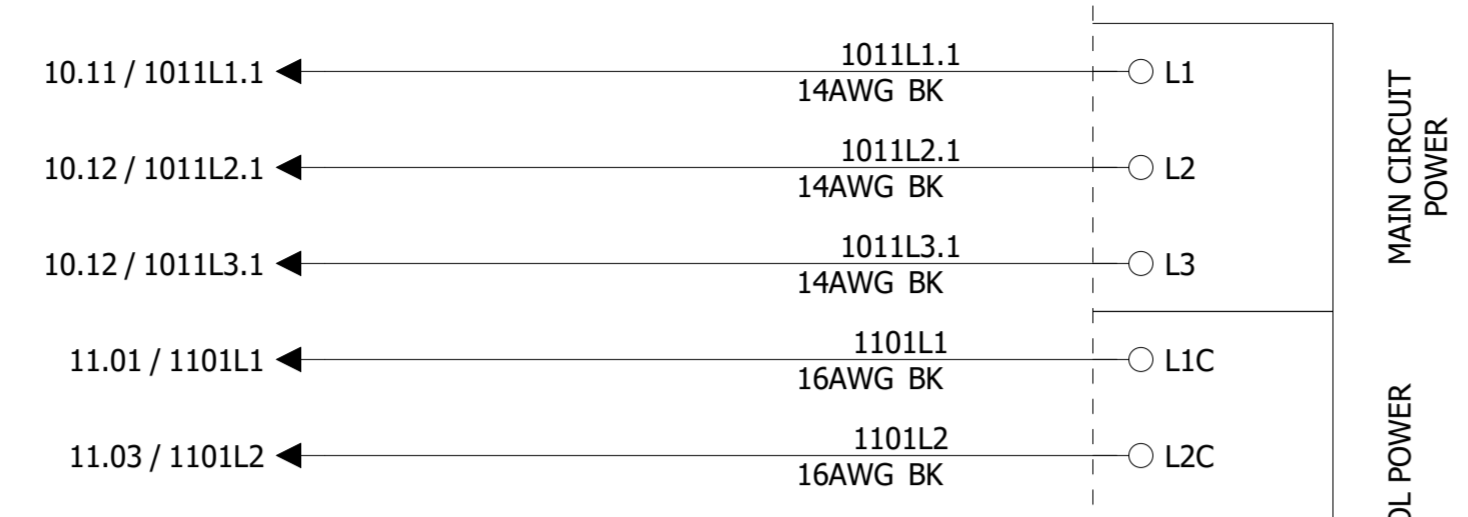
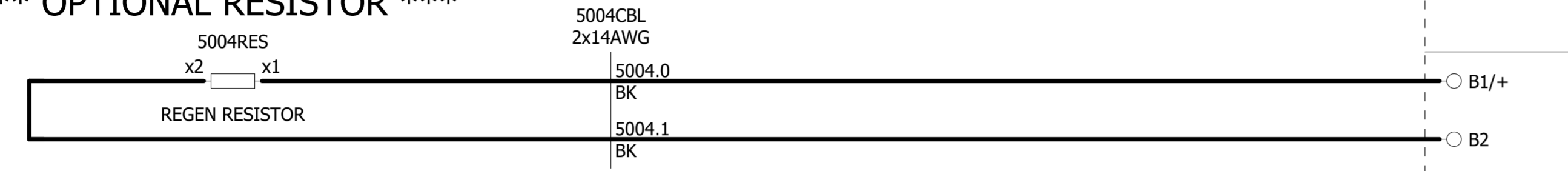
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5000DRV  
X-AXIS DRIVE

\*\*\* OPTIONAL AXIS \*\*\*

- 50 00
- 50 01
- 50 02
- 50 03
- 50 04
- 50 05
- 50 06
- 50 07
- 50 08
- 50 09
- 50 10
- 50 11
- 50 12
- 50 13
- 50 14
- 50 15
- 50 16
- 50 17
- 50 18
- 50 19
- 50 20

\*\*\* OPTIONAL RESISTOR \*\*\*



MAIN CIRCUIT POWER

CONTROL POWER

EXT BRAKE RESISTOR

INT BRAKE RESISTOR

DC REACTOR

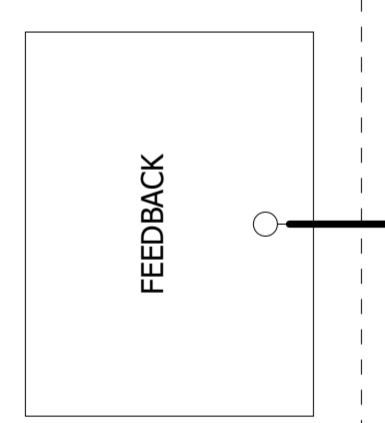
DIGITAL OPERATOR

PERSONAL COMPUTER

MOTOR FEEDBACK

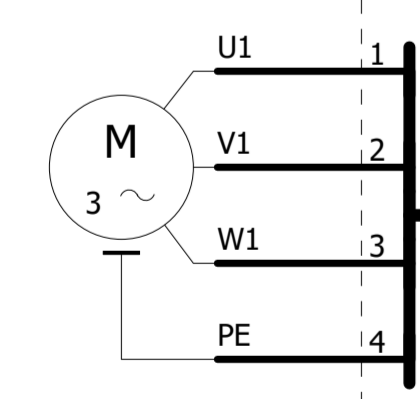
MOTOR POWER

5000MTR  
X-AXIS MOTOR

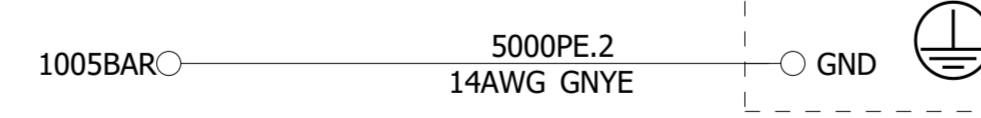
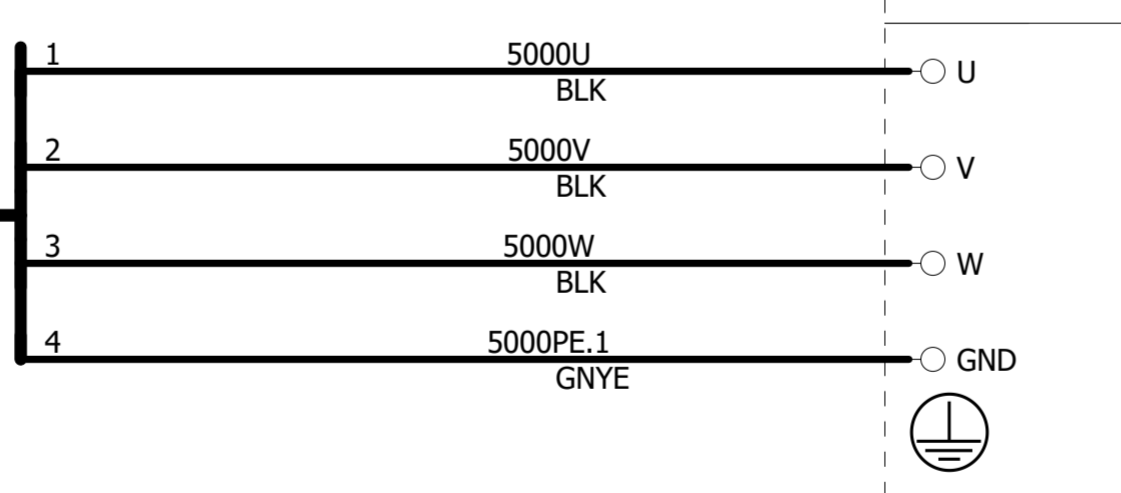


5000CBL-F

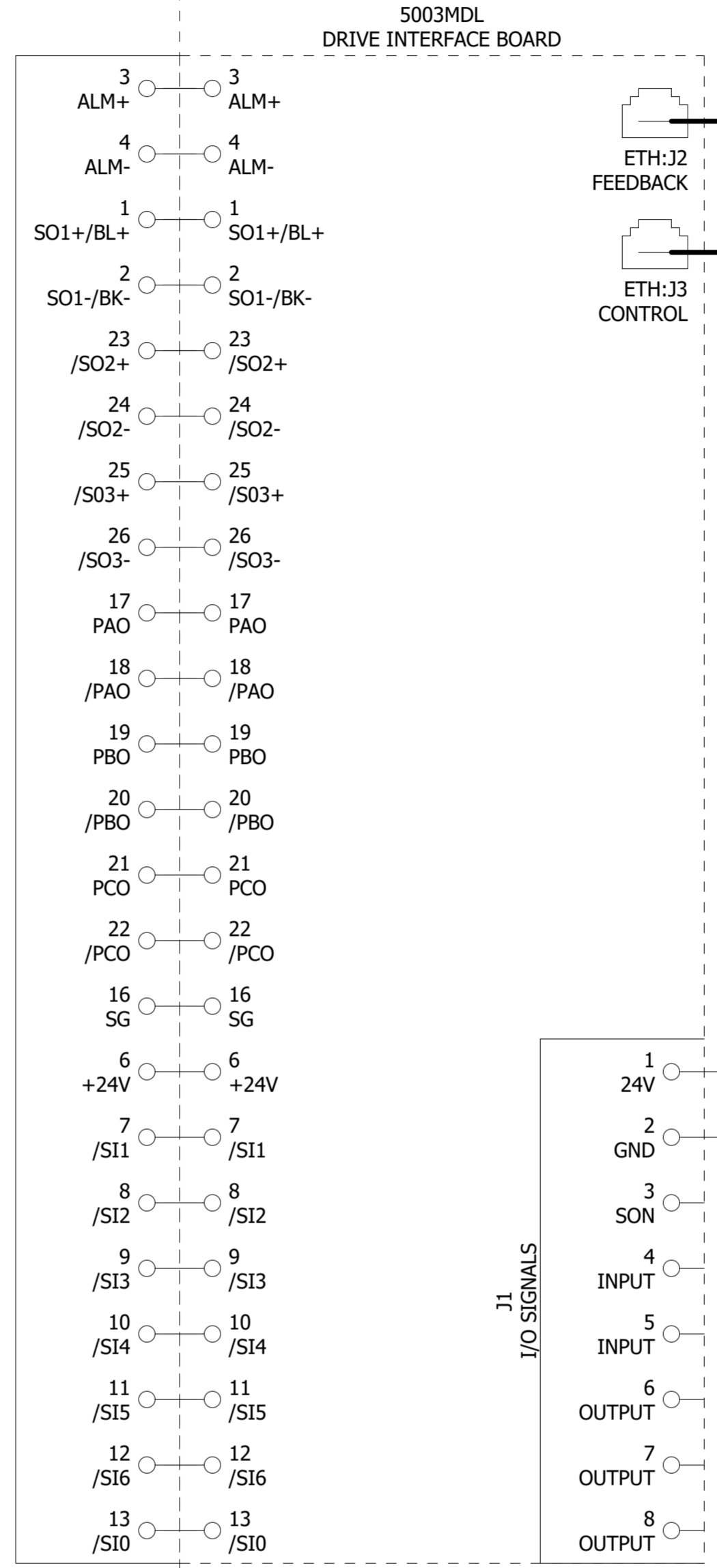
CN2



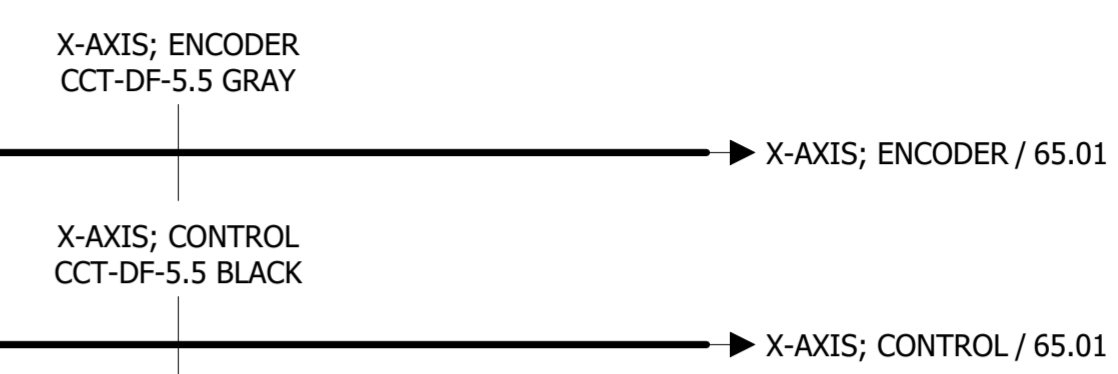
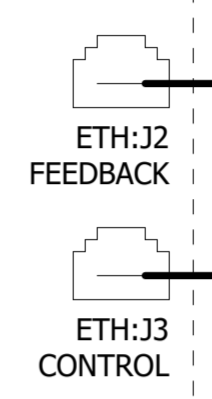
5000CBL-M



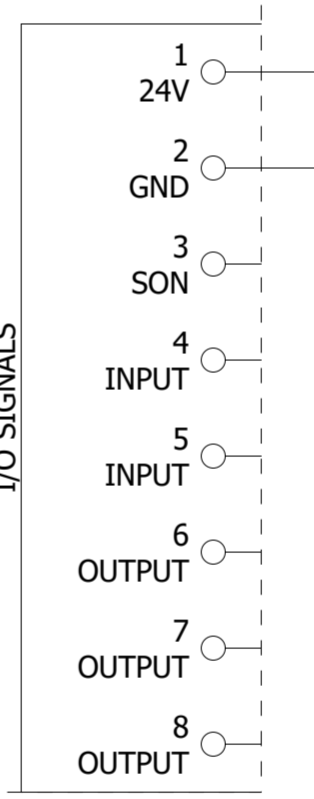
CN1  
I/O SIGNAL CONNECTOR



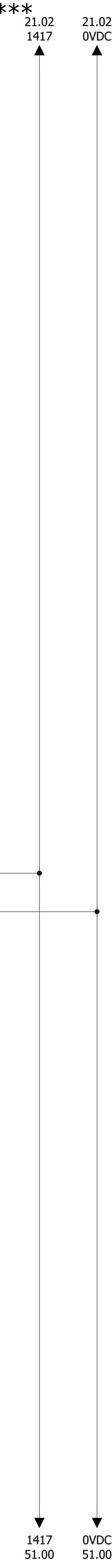
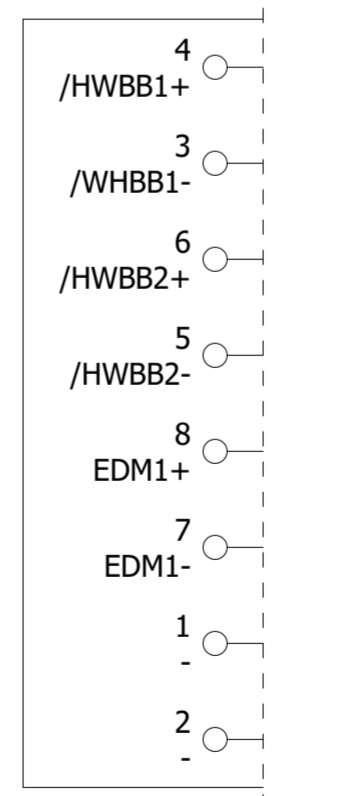
5003MDL  
DRIVE INTERFACE BOARD



J1  
I/O SIGNALS



CN8  
SAFETY FUNCTIONS

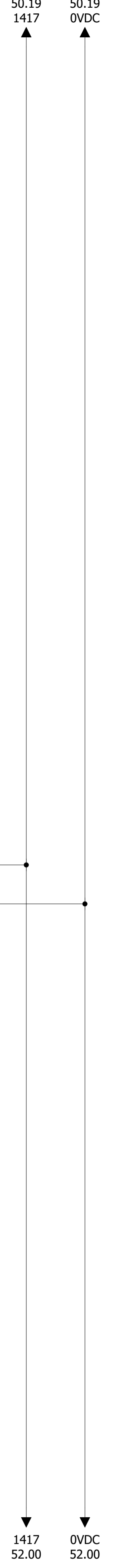
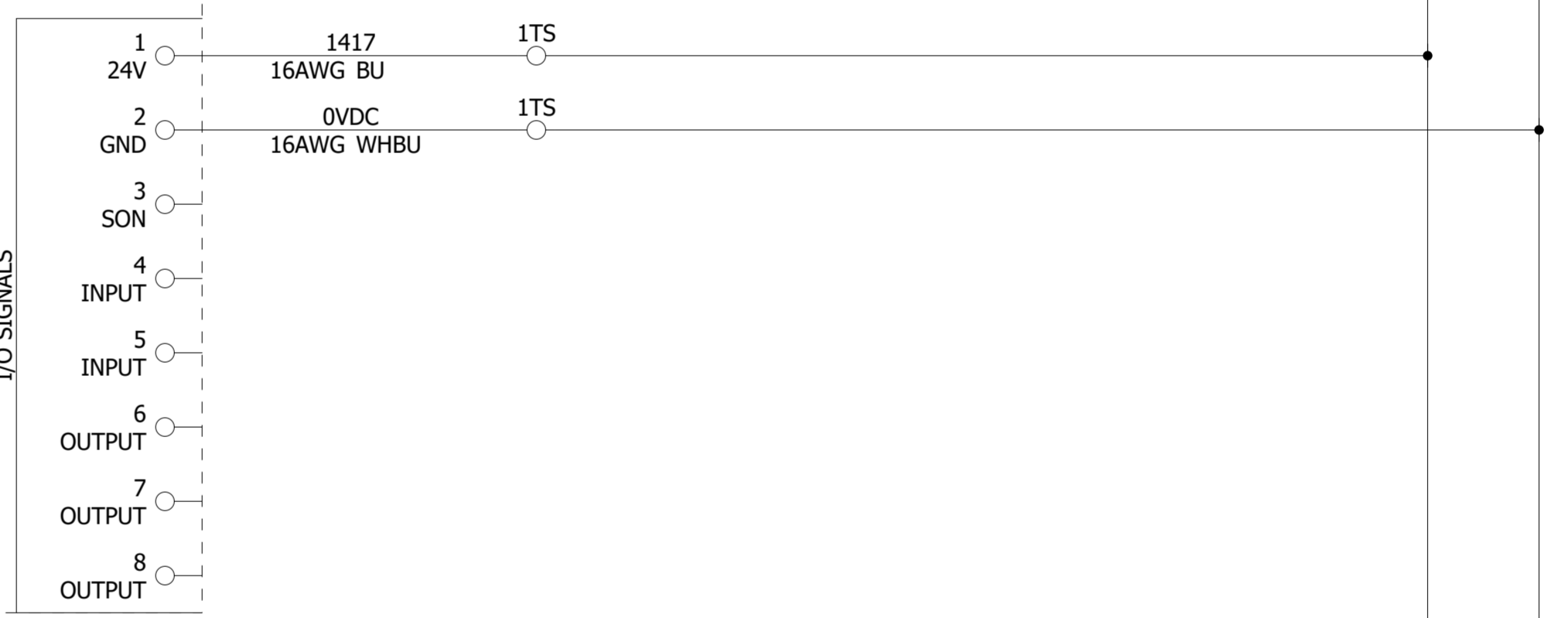
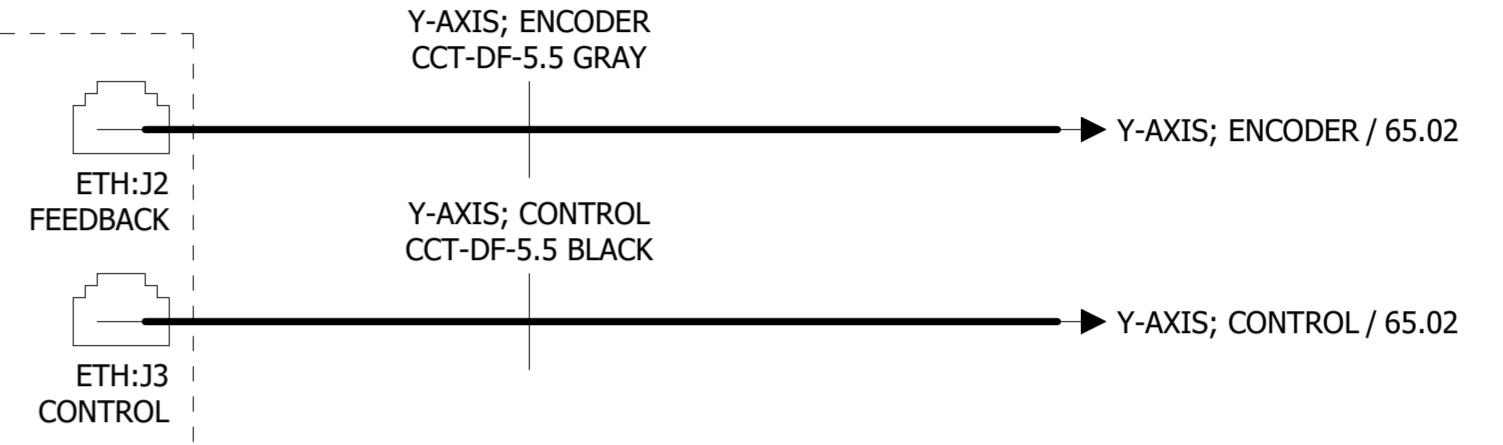
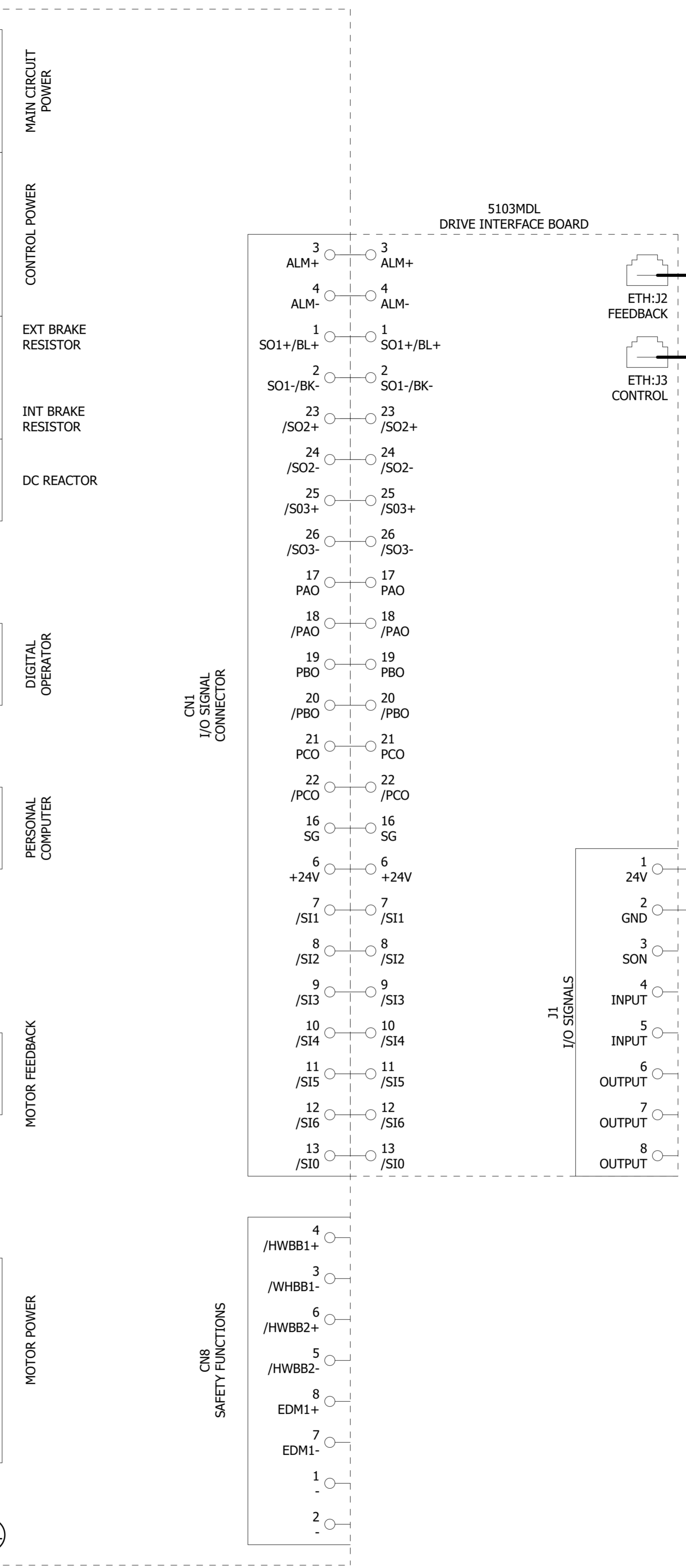
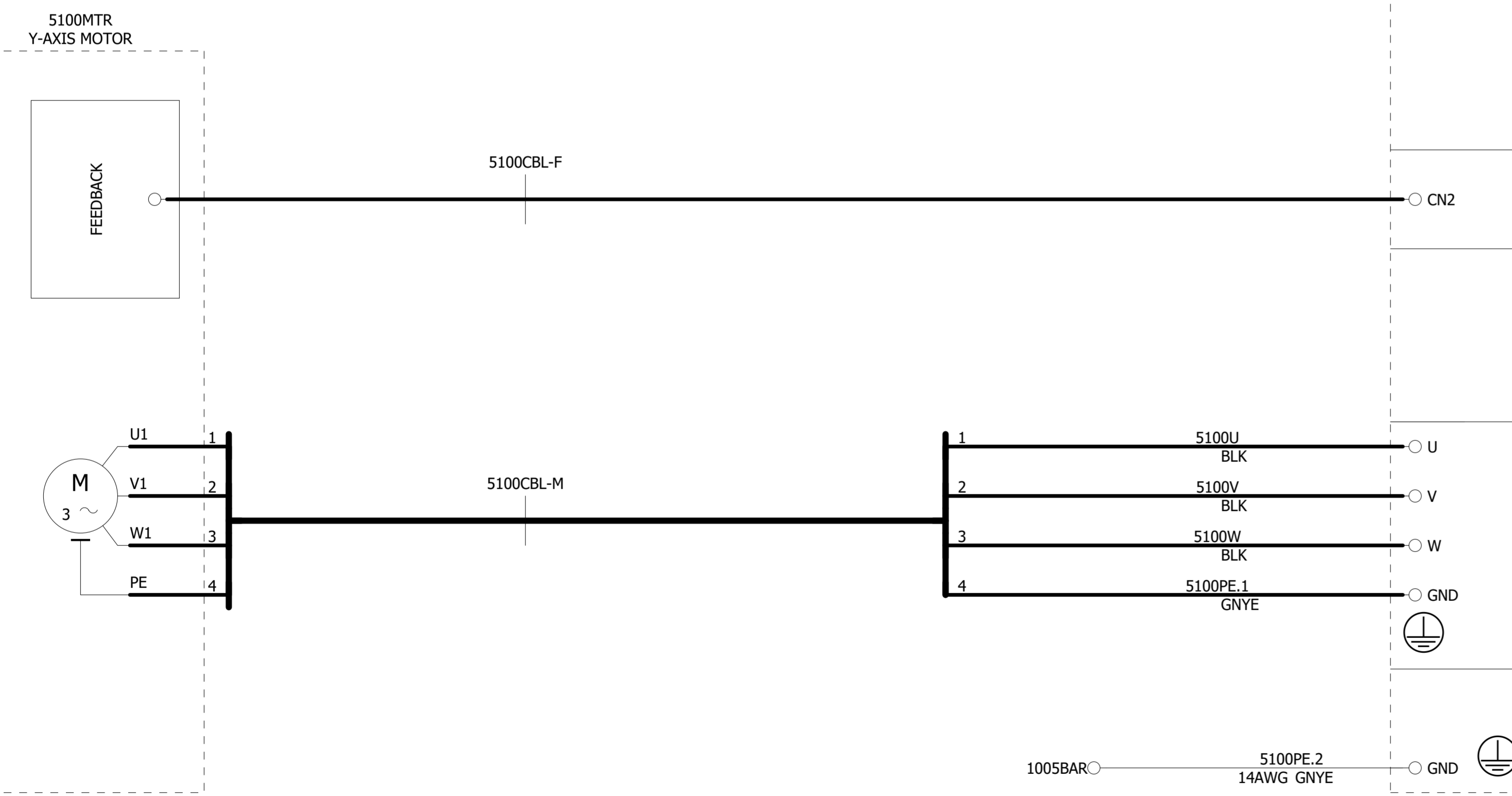
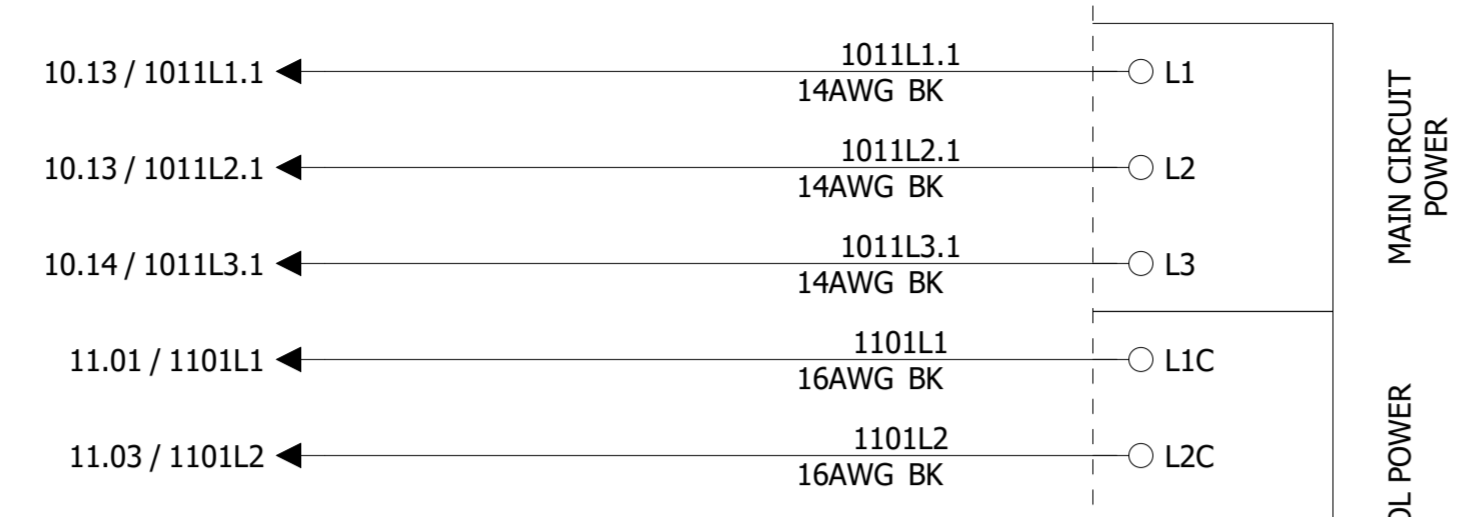
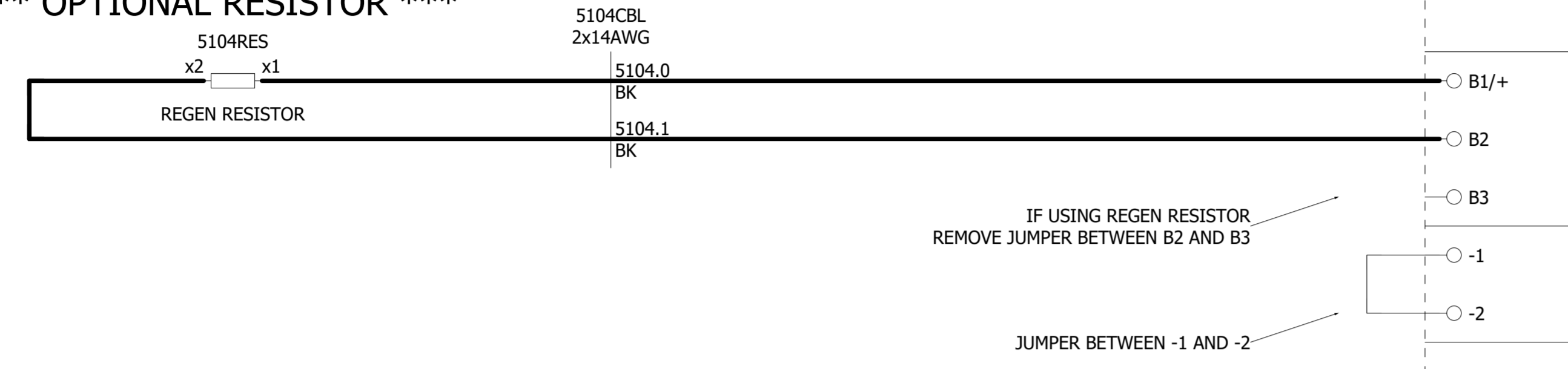


5100DRV  
Y-AXIS DRIVE

\*\*\* OPTIONAL AXIS \*\*\*

- 51 00
- 51 01
- 51 02
- 51 03
- 51 04
- 51 05
- 51 06
- 51 07
- 51 08
- 51 09
- 51 10
- 51 11
- 51 12
- 51 13
- 51 14
- 51 15
- 51 16
- 51 17
- 51 18
- 51 19
- 51 20

\*\*\* OPTIONAL RESISTOR \*\*\*



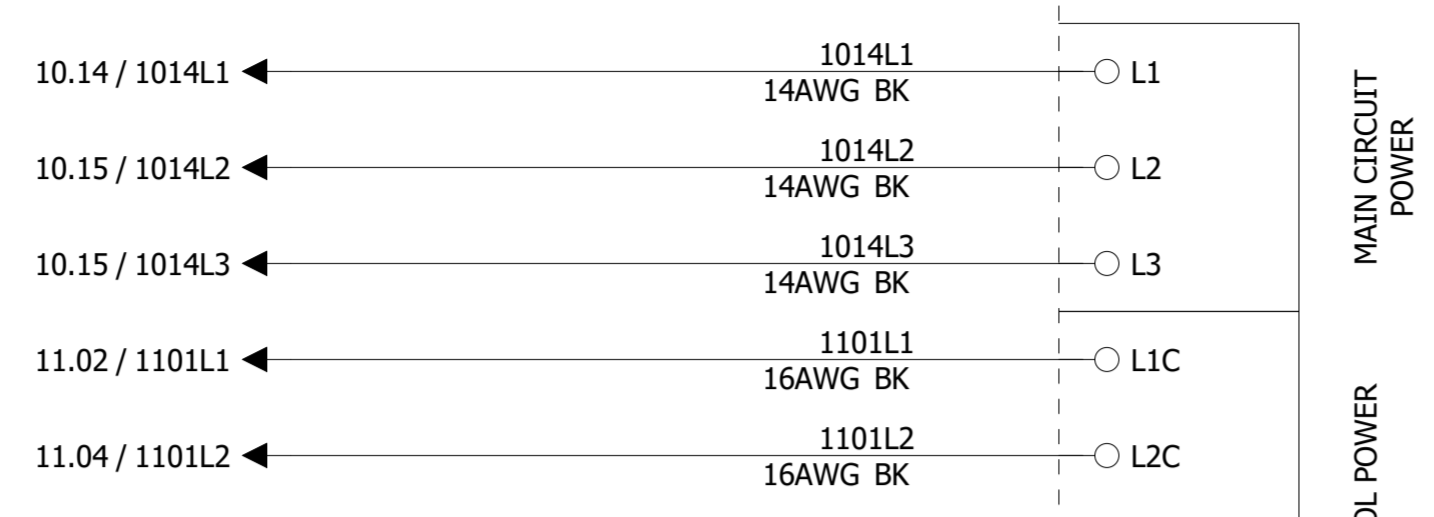
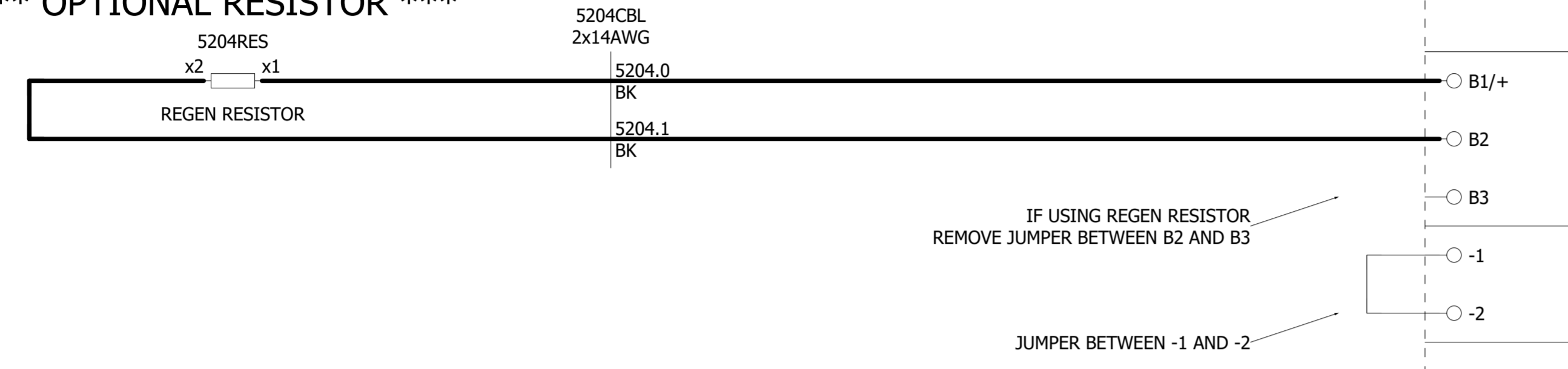


5200DRV  
Z-AXIS DRIVE

\*\*\* OPTIONAL AXIS \*\*\*

- 52 00
- 52 01
- 52 02
- 52 03
- 52 04
- 52 05
- 52 06
- 52 07
- 52 08
- 52 09
- 52 10
- 52 11
- 52 12
- 52 13
- 52 14
- 52 15
- 52 16
- 52 17
- 52 18
- 52 19
- 52 20

\*\*\* OPTIONAL RESISTOR \*\*\*



MAIN CIRCUIT POWER

CONTROL POWER

EXT BRAKE RESISTOR

INT BRAKE RESISTOR

DC REACTOR

DIGITAL OPERATOR

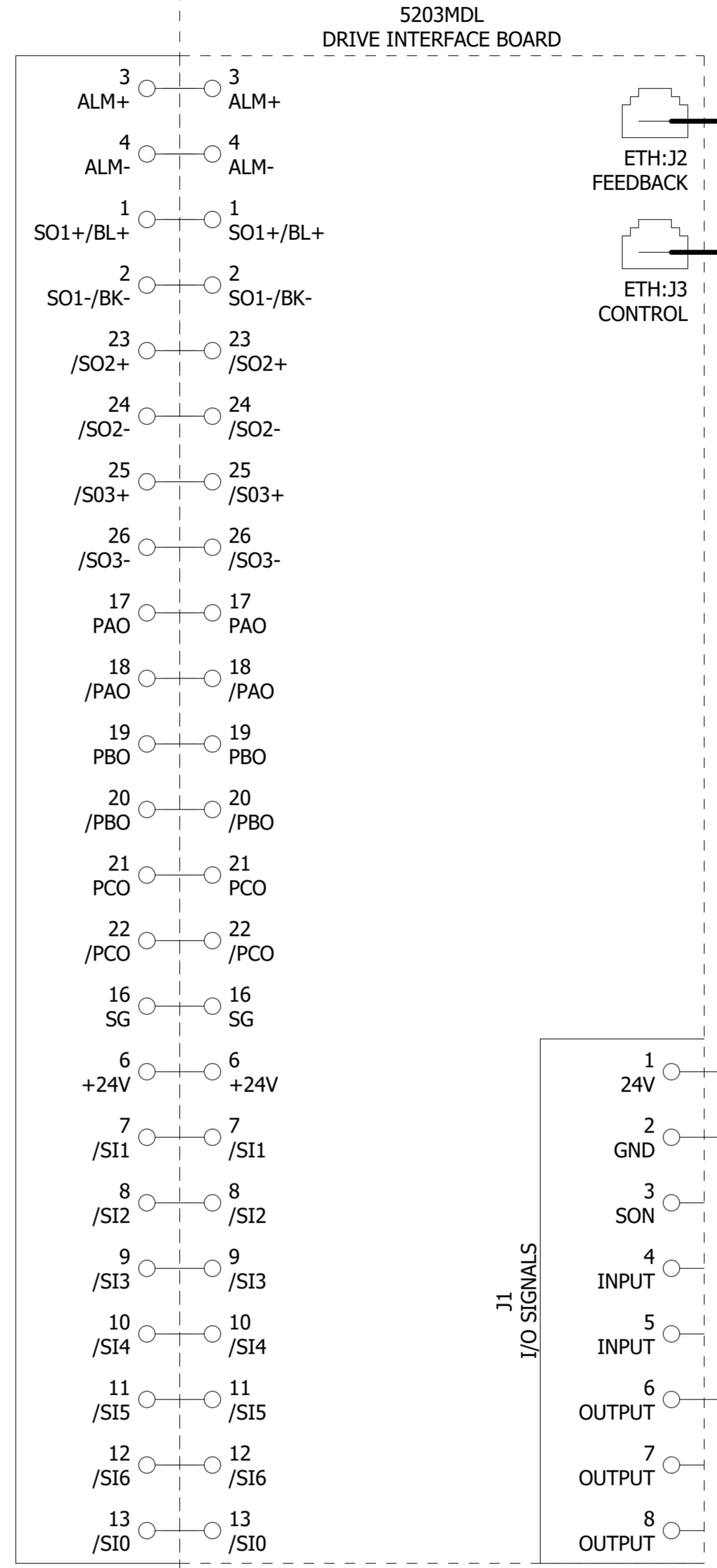
PERSONAL COMPUTER

MOTOR FEEDBACK

MOTOR POWER

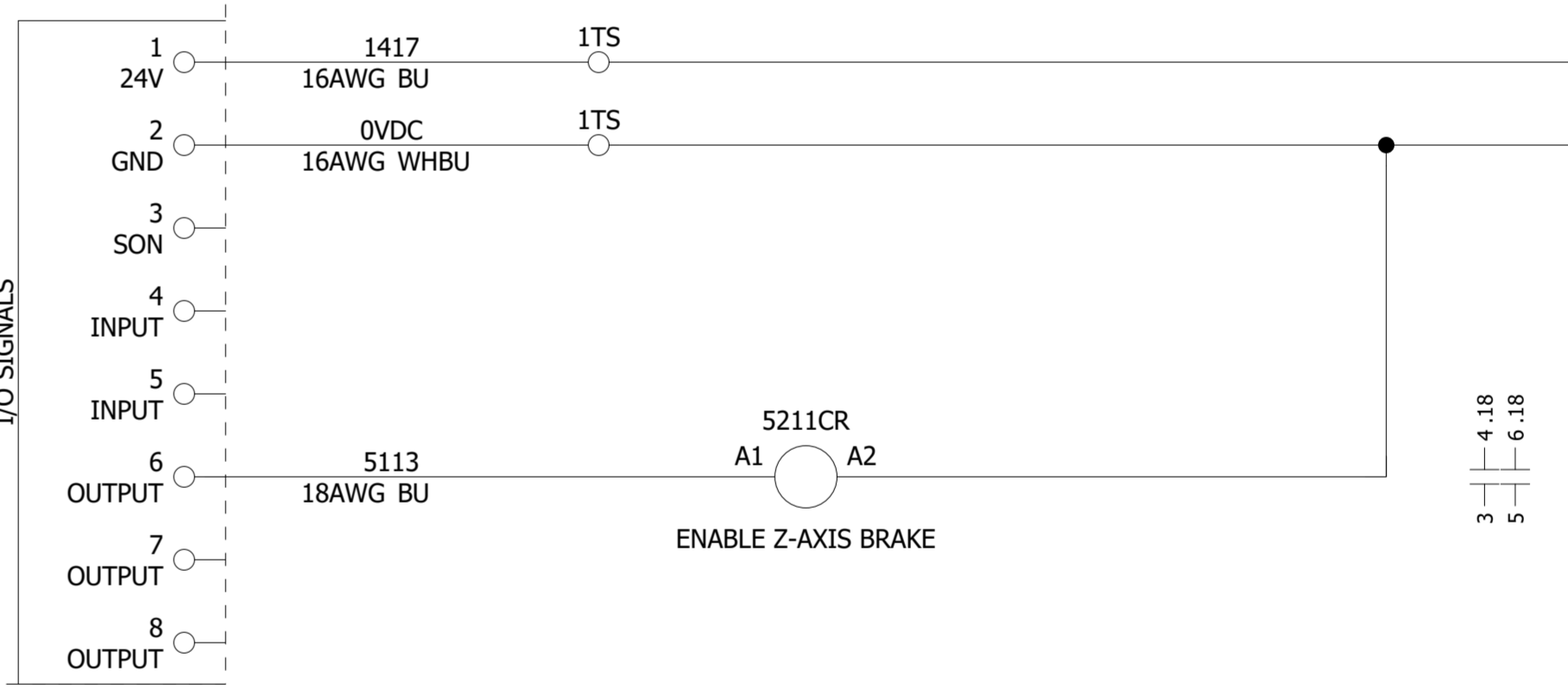
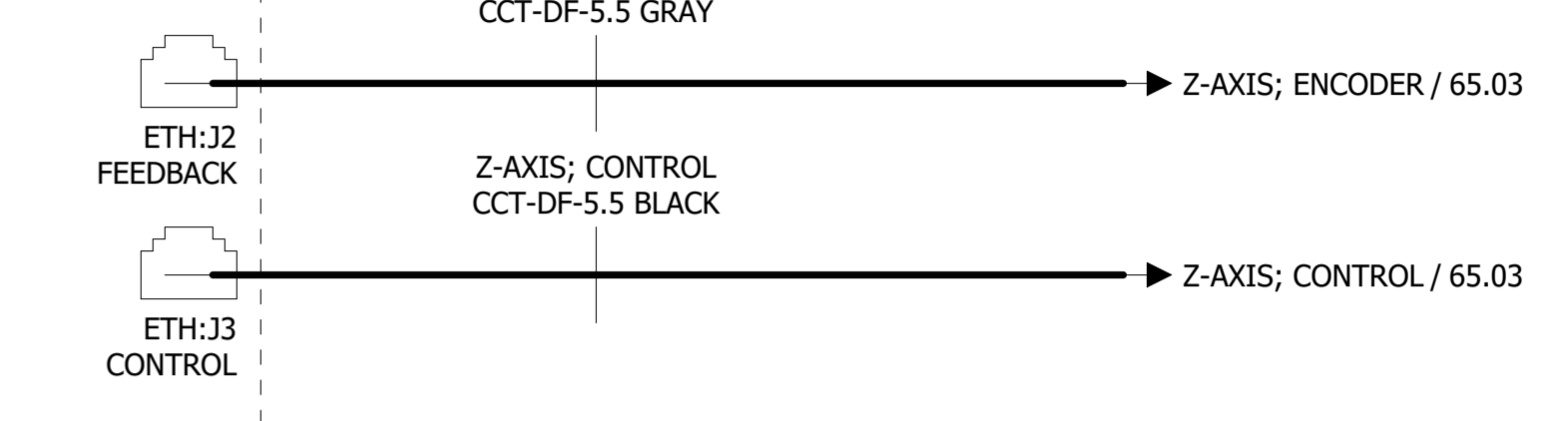
CN1 I/O SIGNAL CONNECTOR

CN8 SAFETY FUNCTIONS

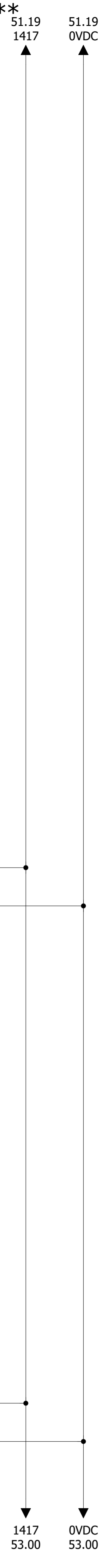
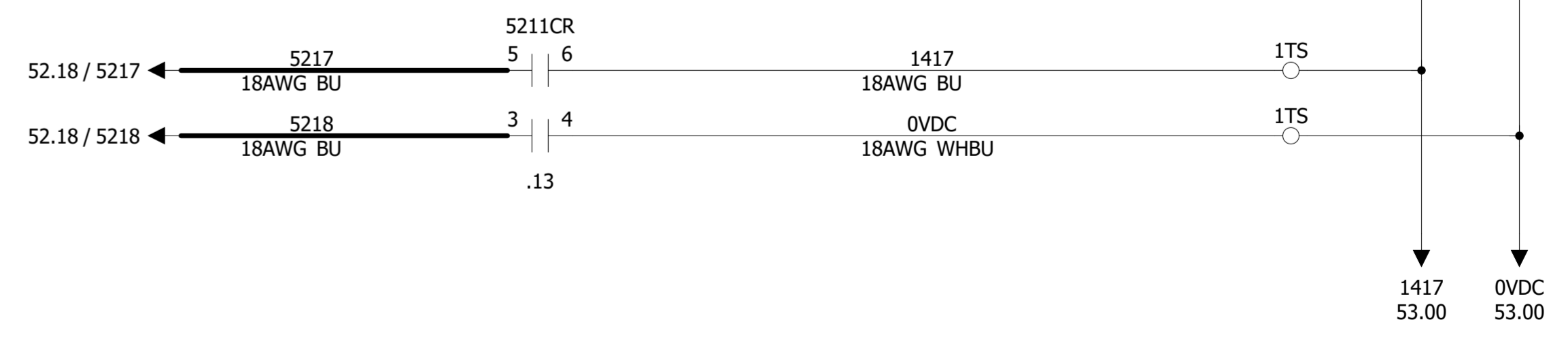
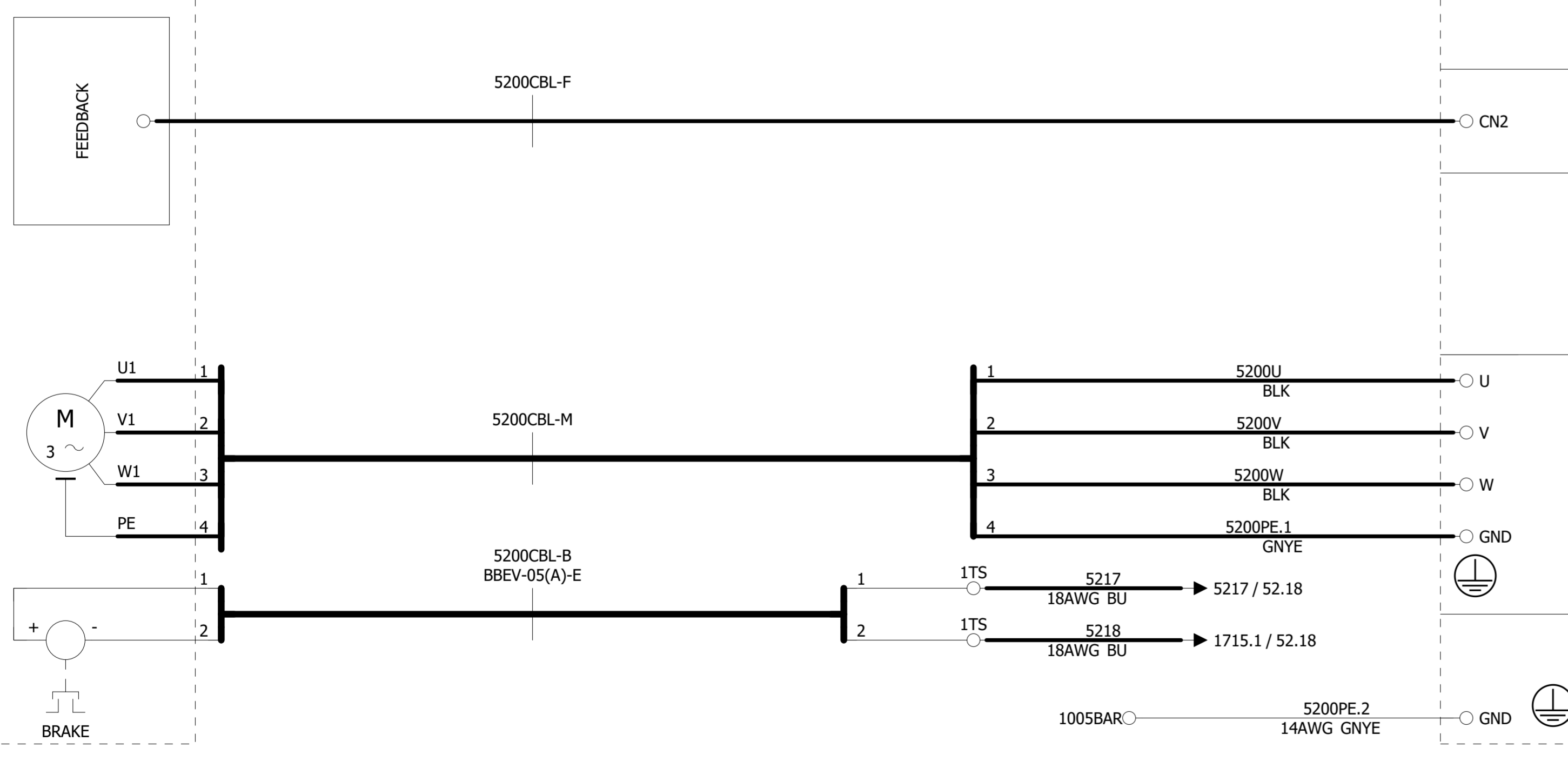


5203MDL DRIVE INTERFACE BOARD

J1 I/O SIGNALS



5200MTR Z-AXIS MOTOR

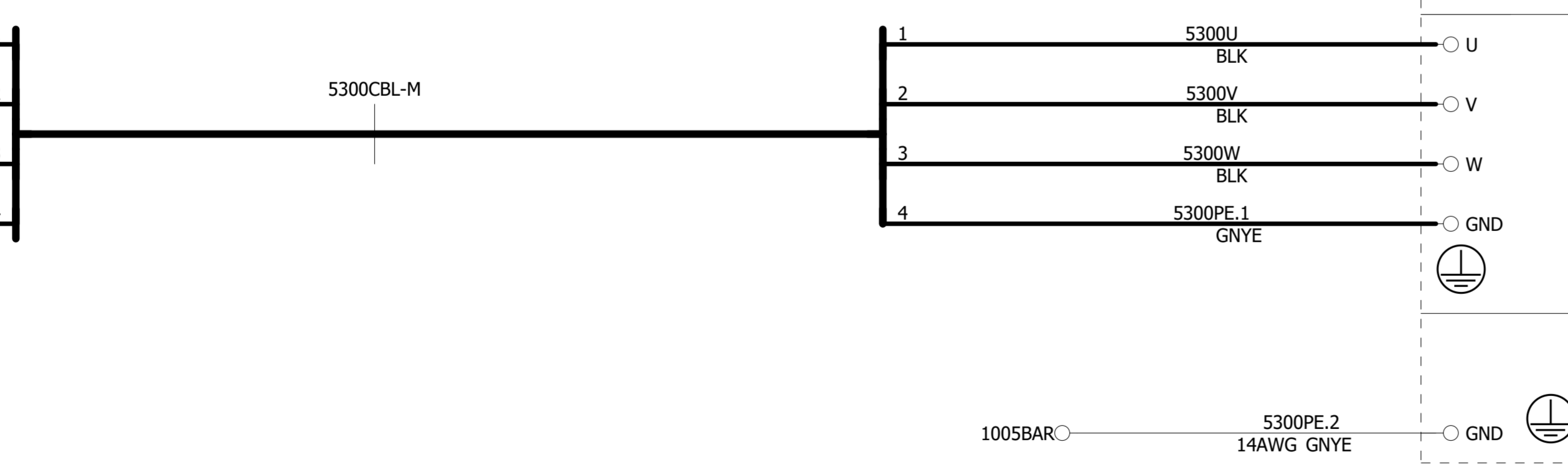
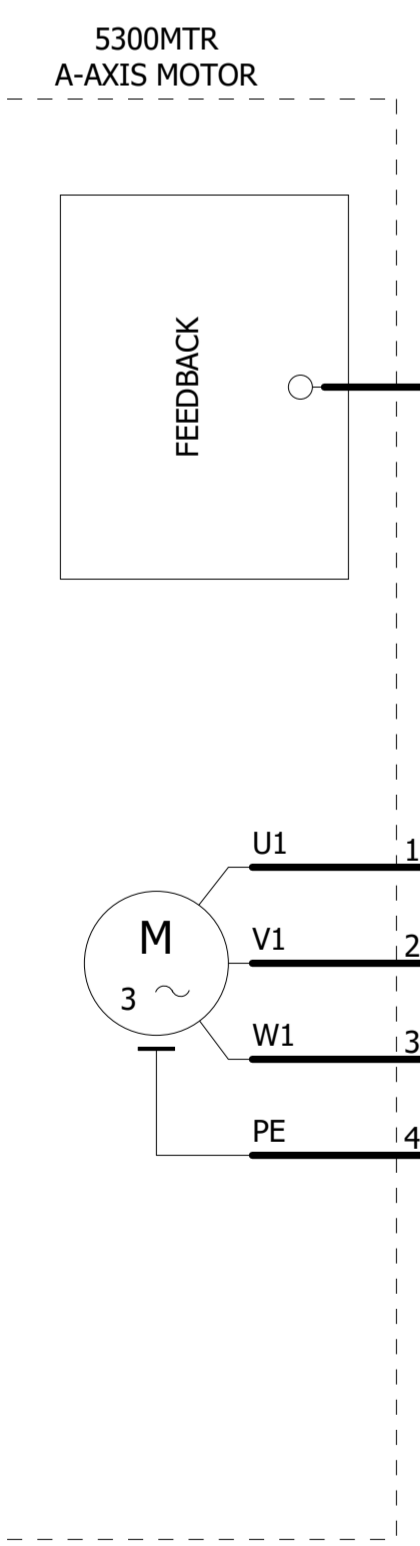
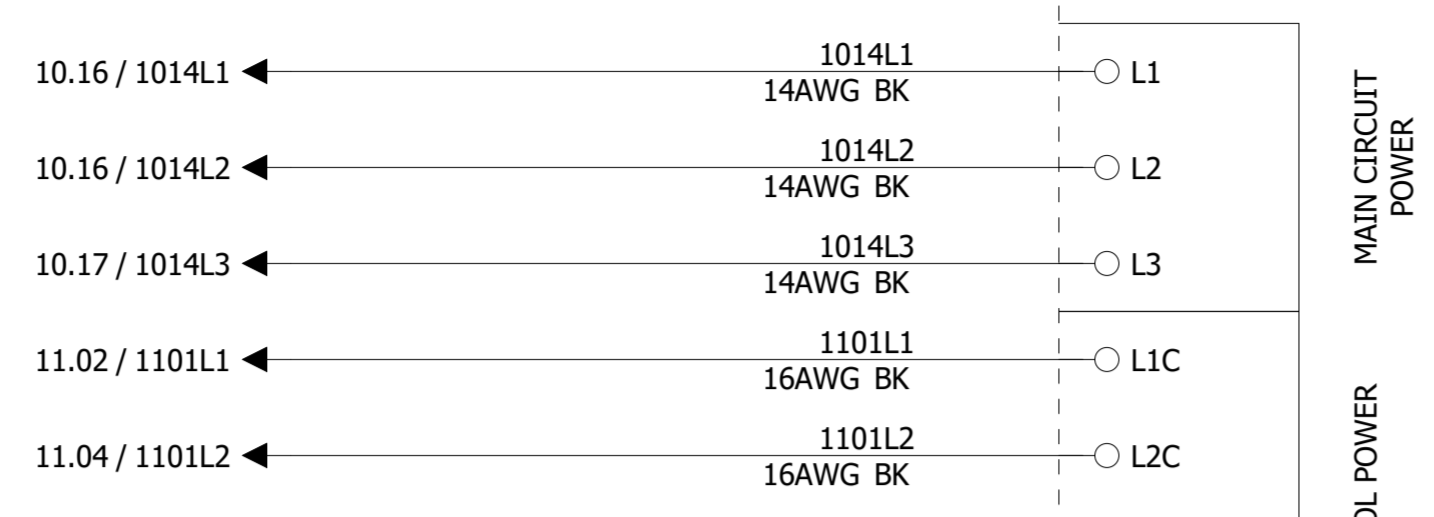
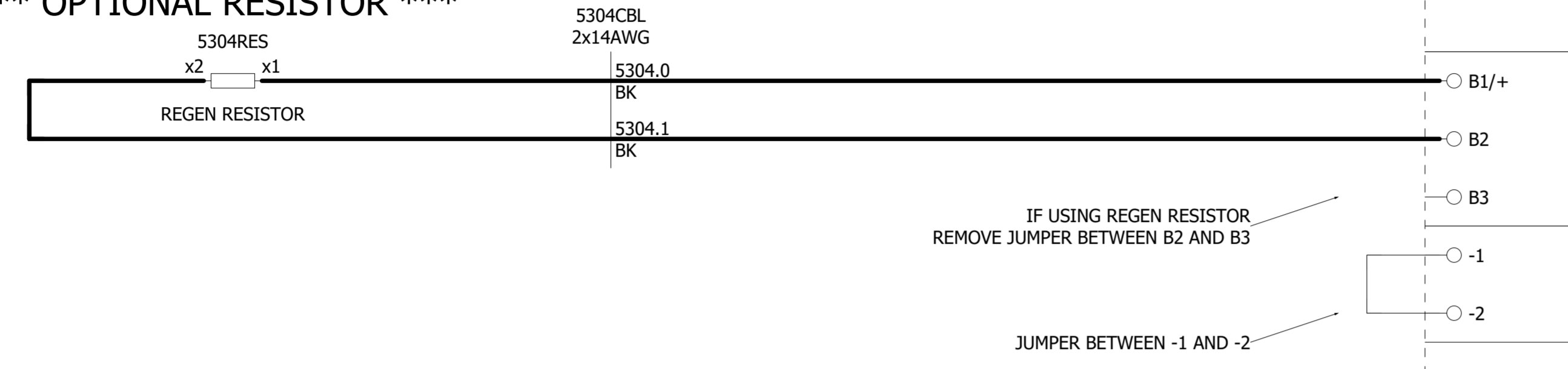


5300DRV  
A-AXIS DRIVE

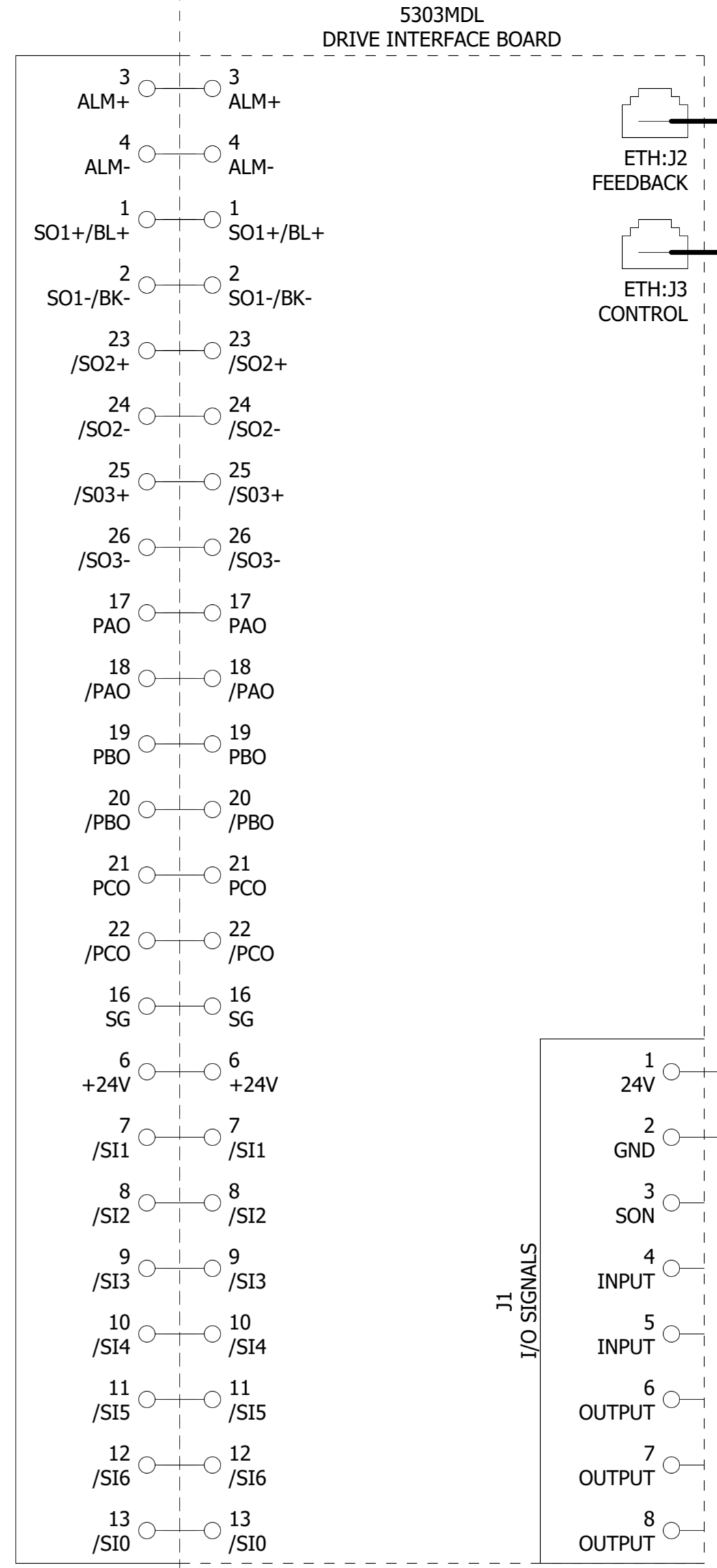
\*\*\* OPTIONAL AXIS \*\*\*

- 53 00
- 53 01
- 53 02
- 53 03
- 53 04
- 53 05
- 53 06
- 53 07
- 53 08
- 53 09
- 53 10
- 53 11
- 53 12
- 53 13
- 53 14
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- 53 16
- 53 17
- 53 18
- 53 19
- 53 20

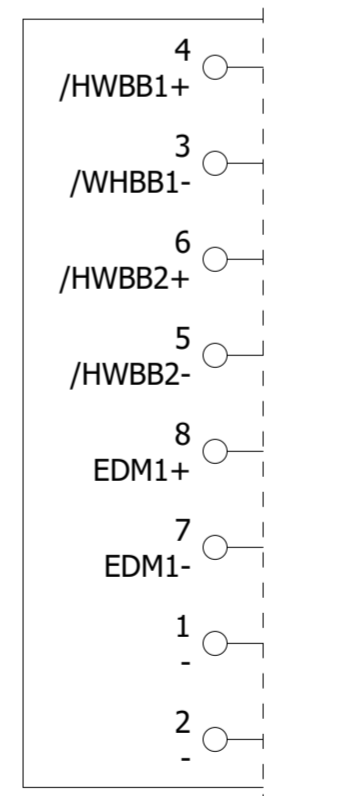
\*\*\* OPTIONAL RESISTOR \*\*\*



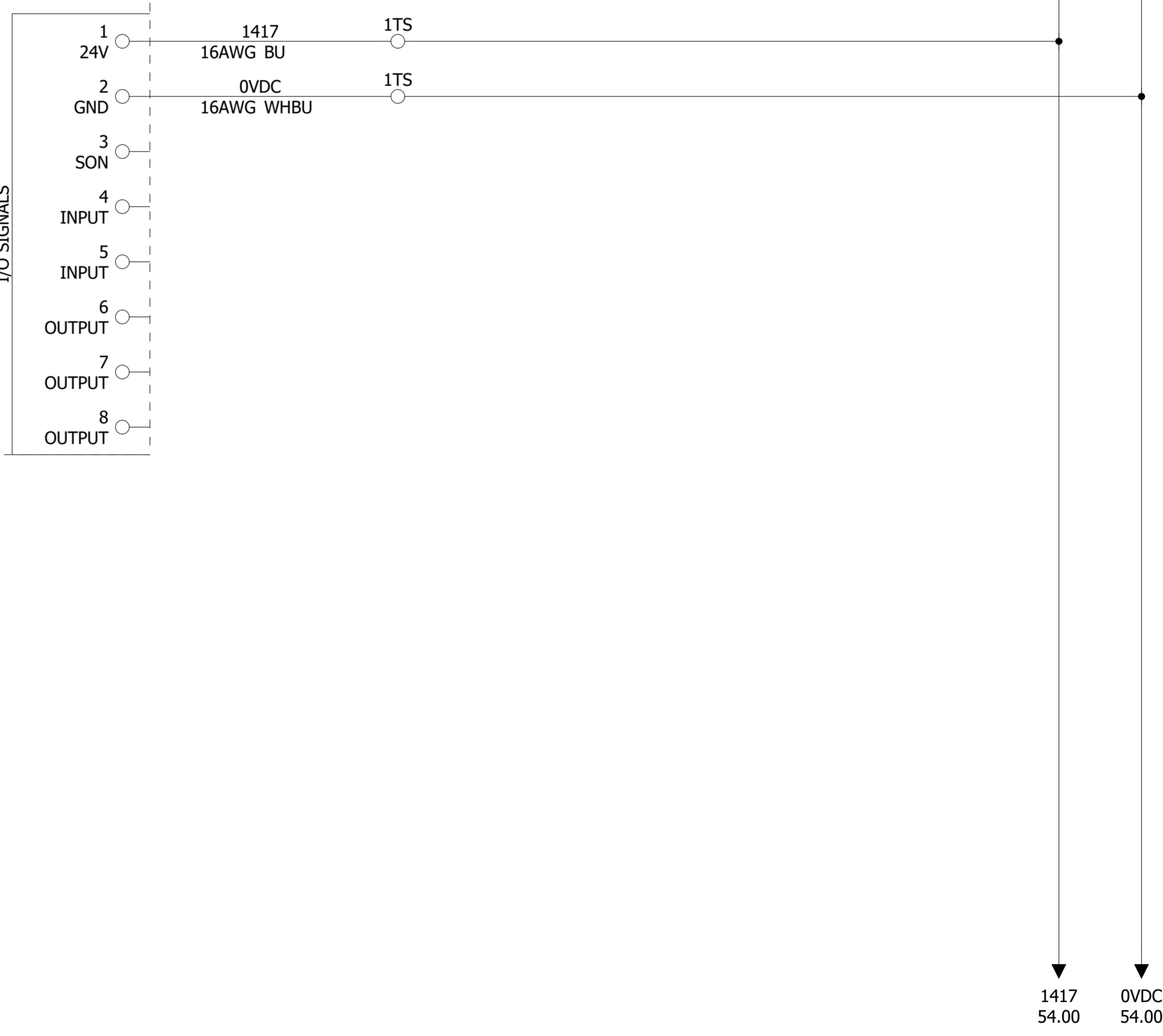
CN1  
I/O SIGNAL  
CONNECTOR



CN8  
SAFETY  
FUNCTIONS



J1  
I/O SIGNALS

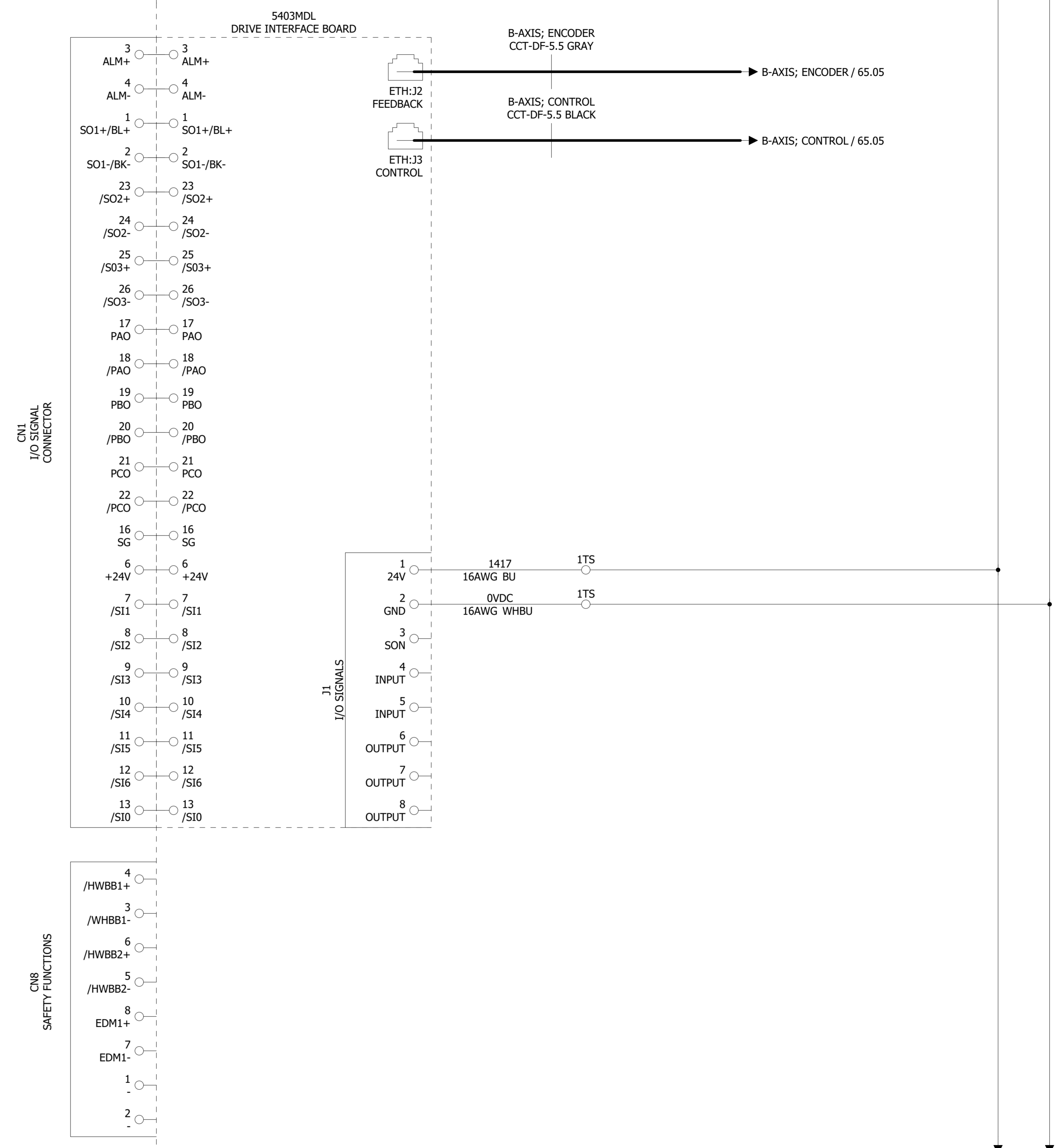
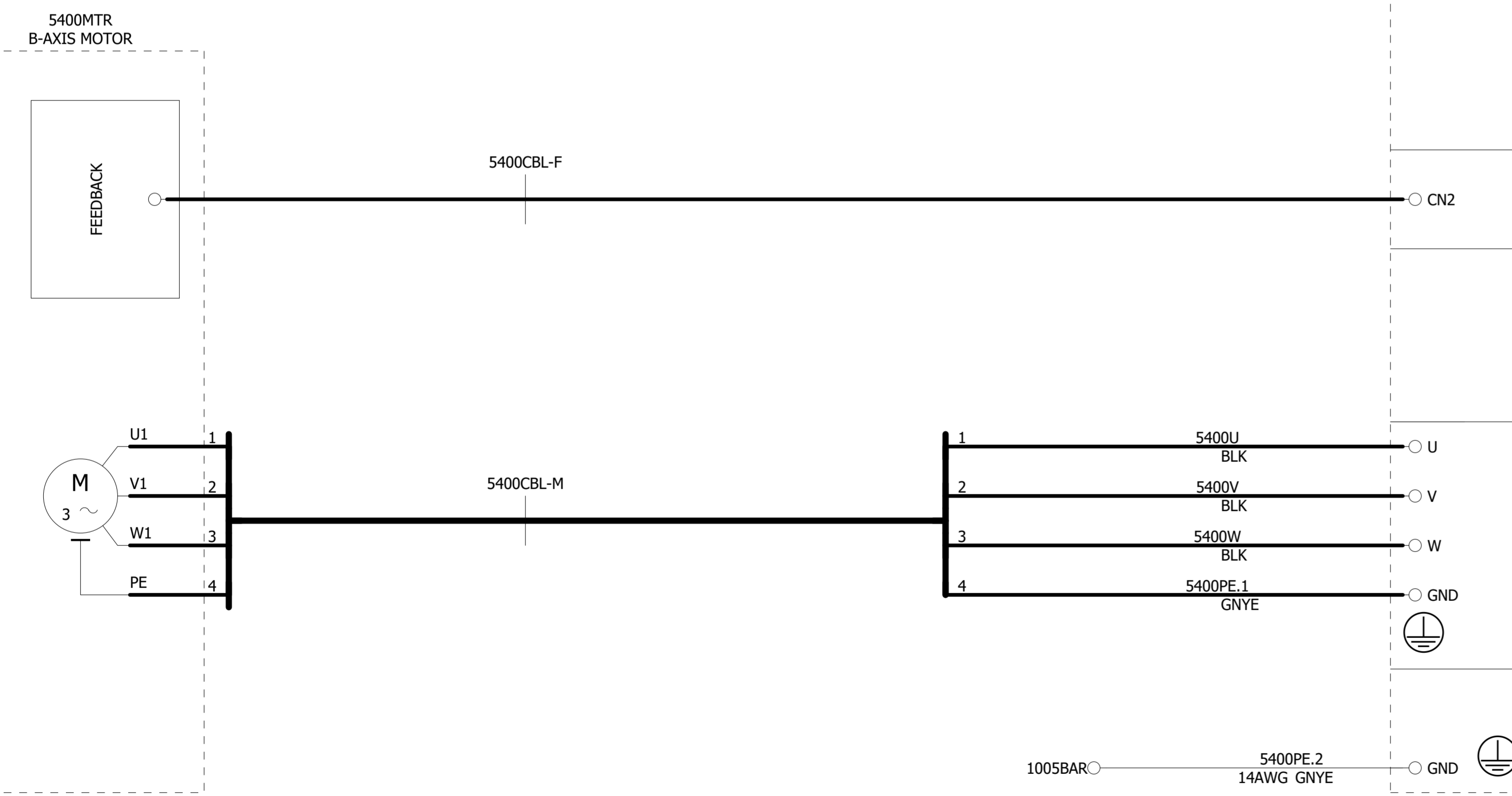
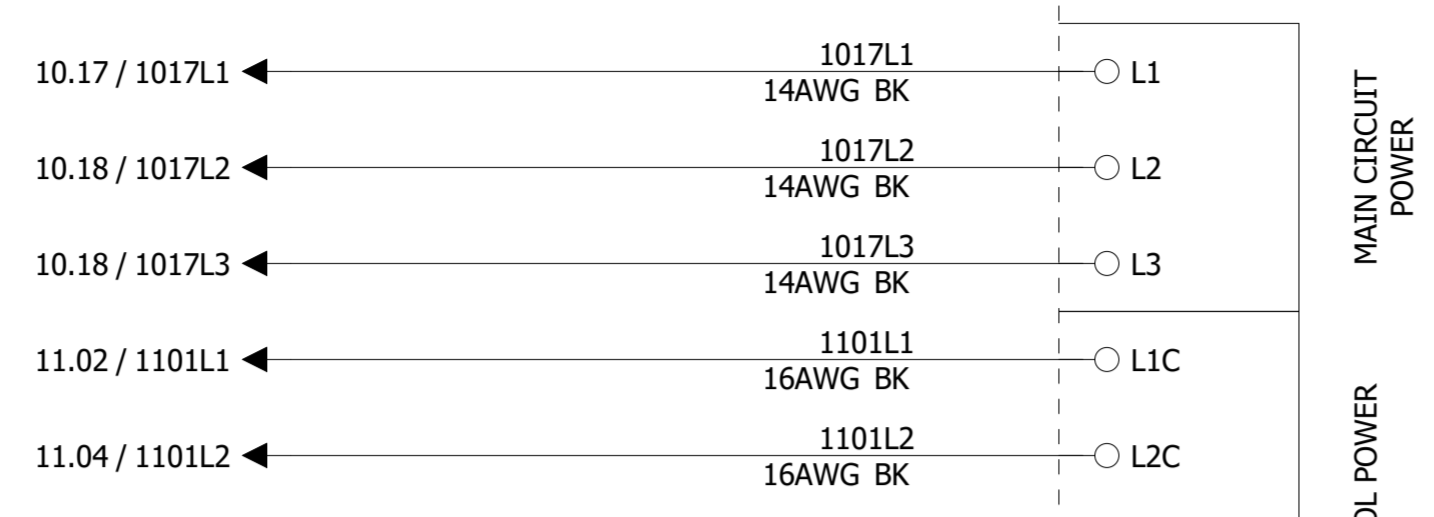
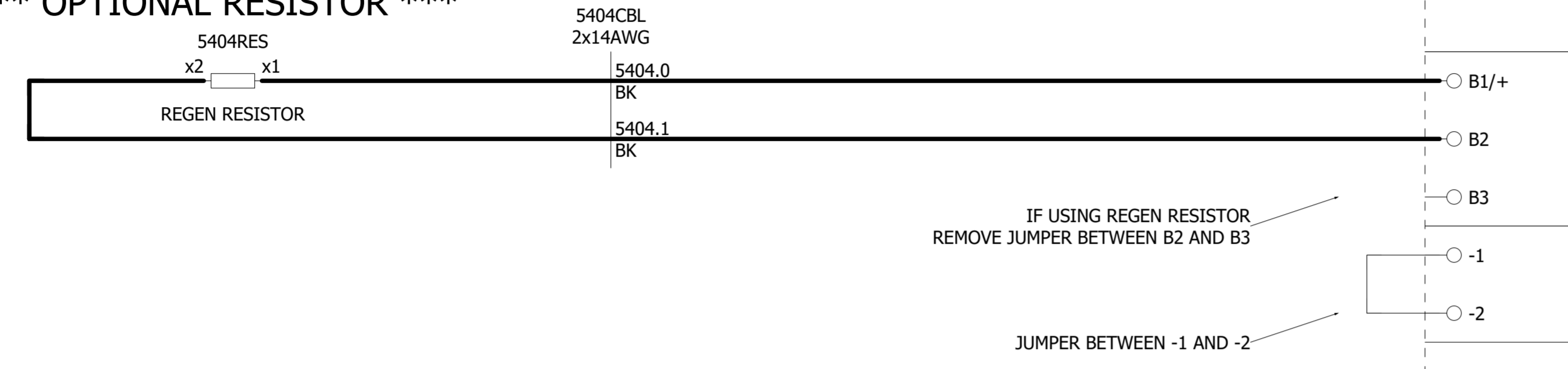


5400DRV  
B-AXIS DRIVE

\*\*\* OPTIONAL AXIS \*\*\*

- 54 00
- 54 01
- 54 02
- 54 03
- 54 04
- 54 05
- 54 06
- 54 07
- 54 08
- 54 09
- 54 10
- 54 11
- 54 12
- 54 13
- 54 14
- 54 15
- 54 16
- 54 17
- 54 18
- 54 19
- 54 20

\*\*\* OPTIONAL RESISTOR \*\*\*

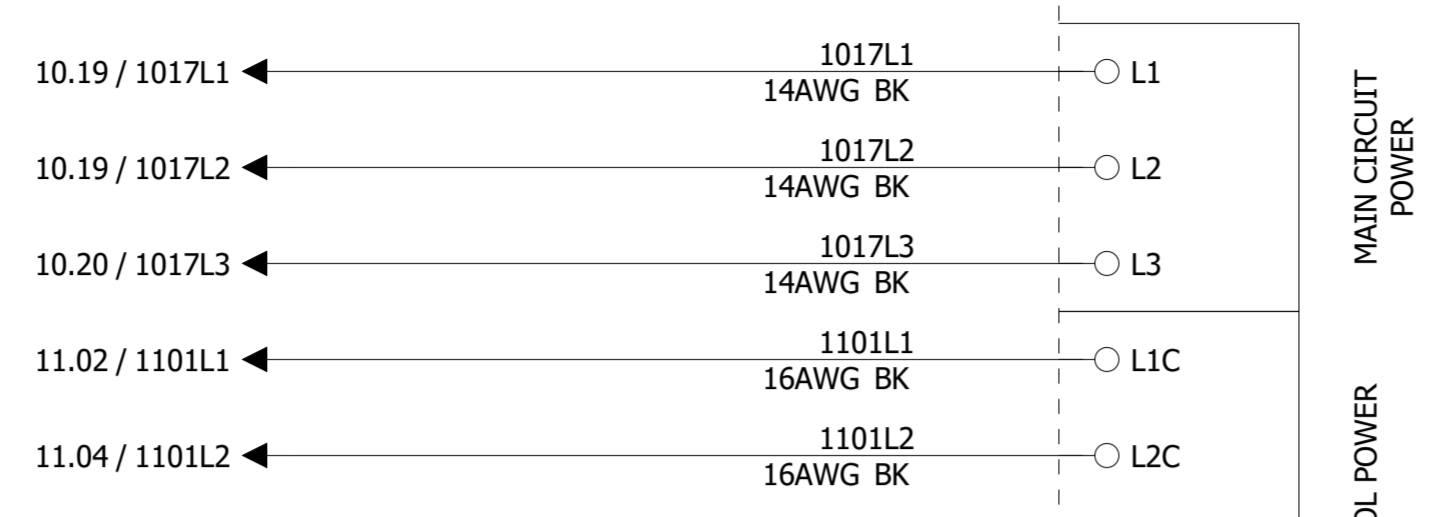
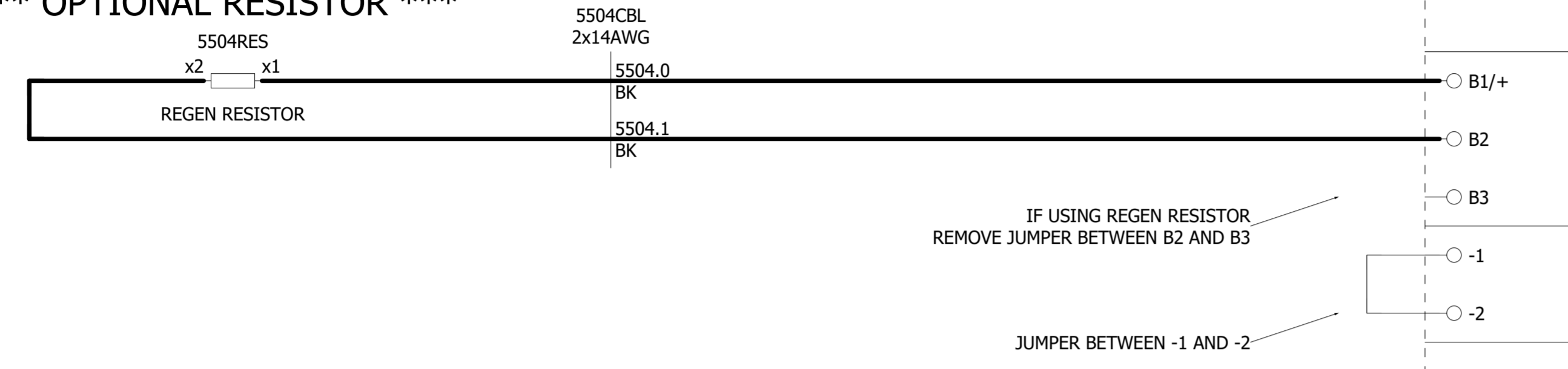


5500DRV  
C-AXIS DRIVE

\*\*\* OPTIONAL AXIS \*\*\*

- 55 00
- 55 01
- 55 02
- 55 03
- 55 04
- 55 05
- 55 06
- 55 07
- 55 08
- 55 09
- 55 10
- 55 11
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- 55 14
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- 55 16
- 55 17
- 55 18
- 55 19
- 55 20

\*\*\* OPTIONAL RESISTOR \*\*\*



MAIN CIRCUIT POWER

CONTROL POWER

EXT BRAKE RESISTOR

INT BRAKE RESISTOR

DC REACTOR

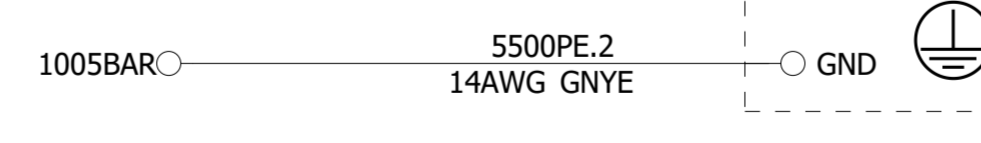
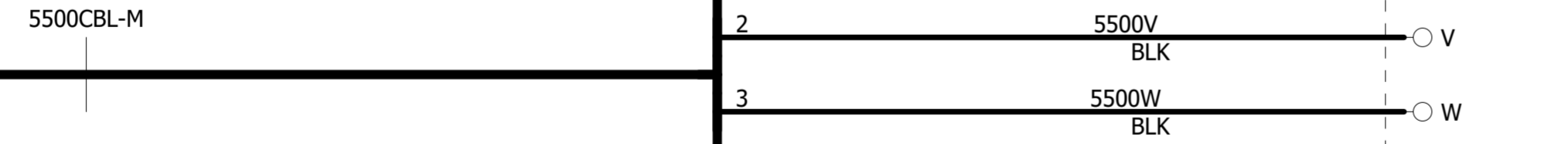
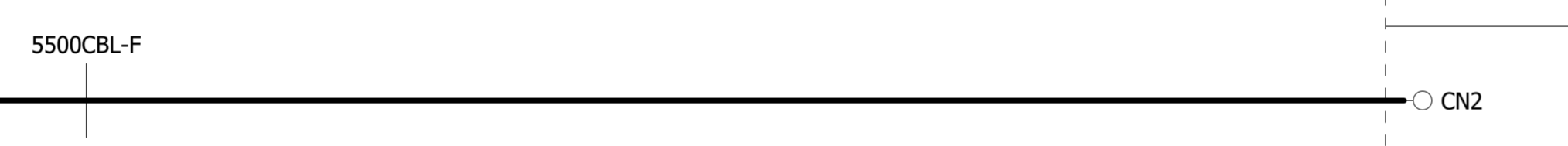
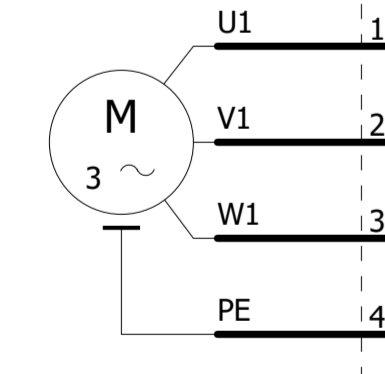
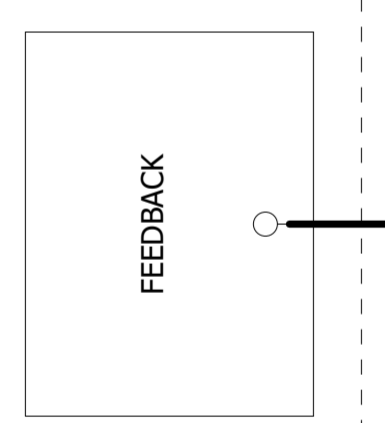
DIGITAL OPERATOR

PERSONAL COMPUTER

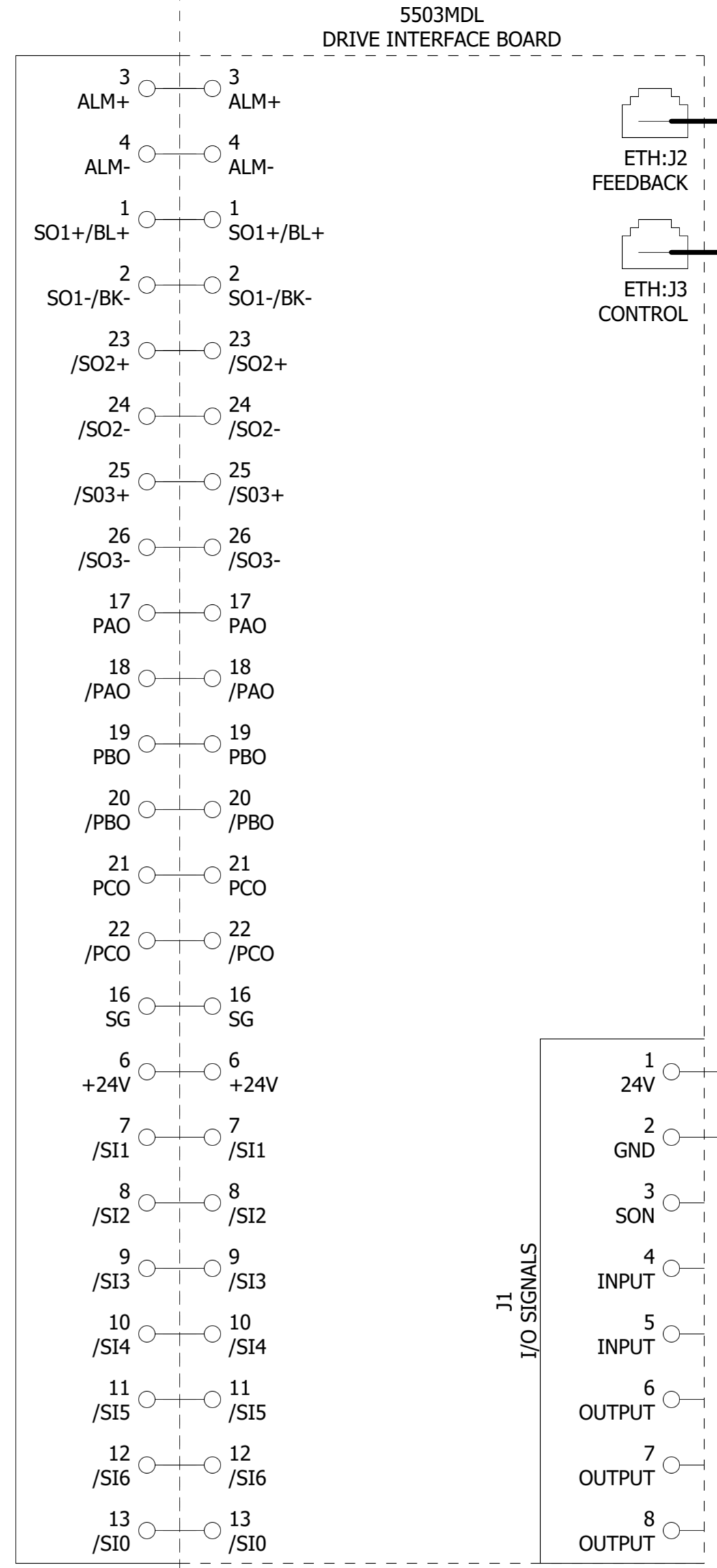
MOTOR FEEDBACK

MOTOR POWER

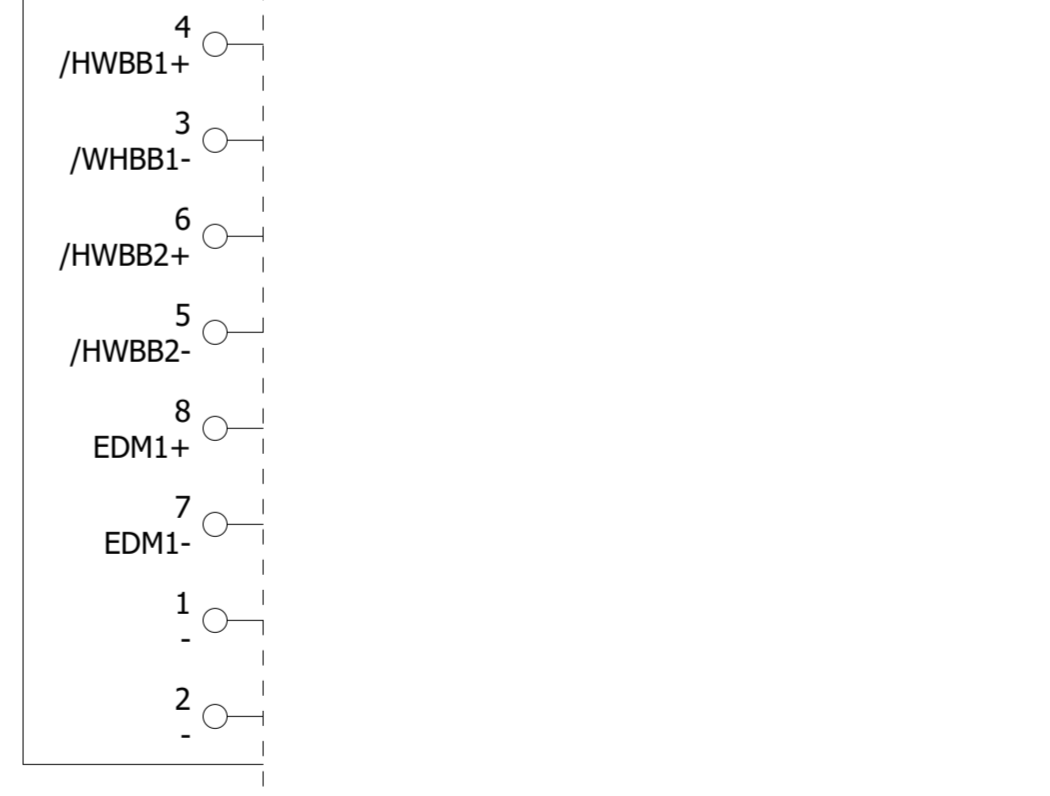
5500MTR  
C-AXIS MOTOR



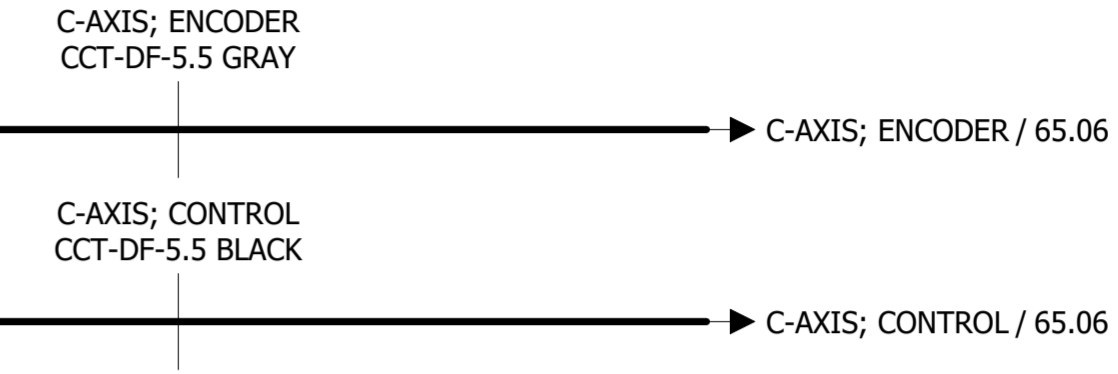
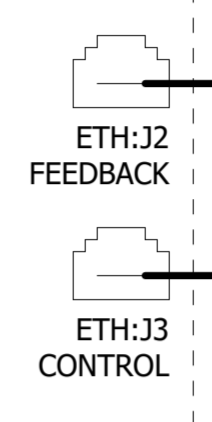
CN1  
I/O SIGNAL CONNECTOR



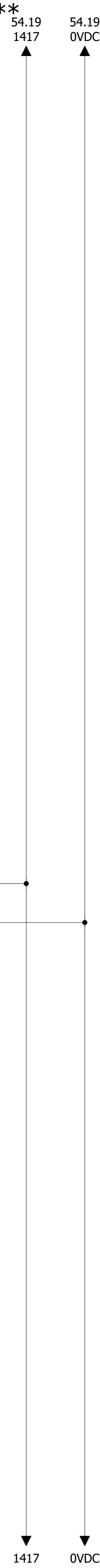
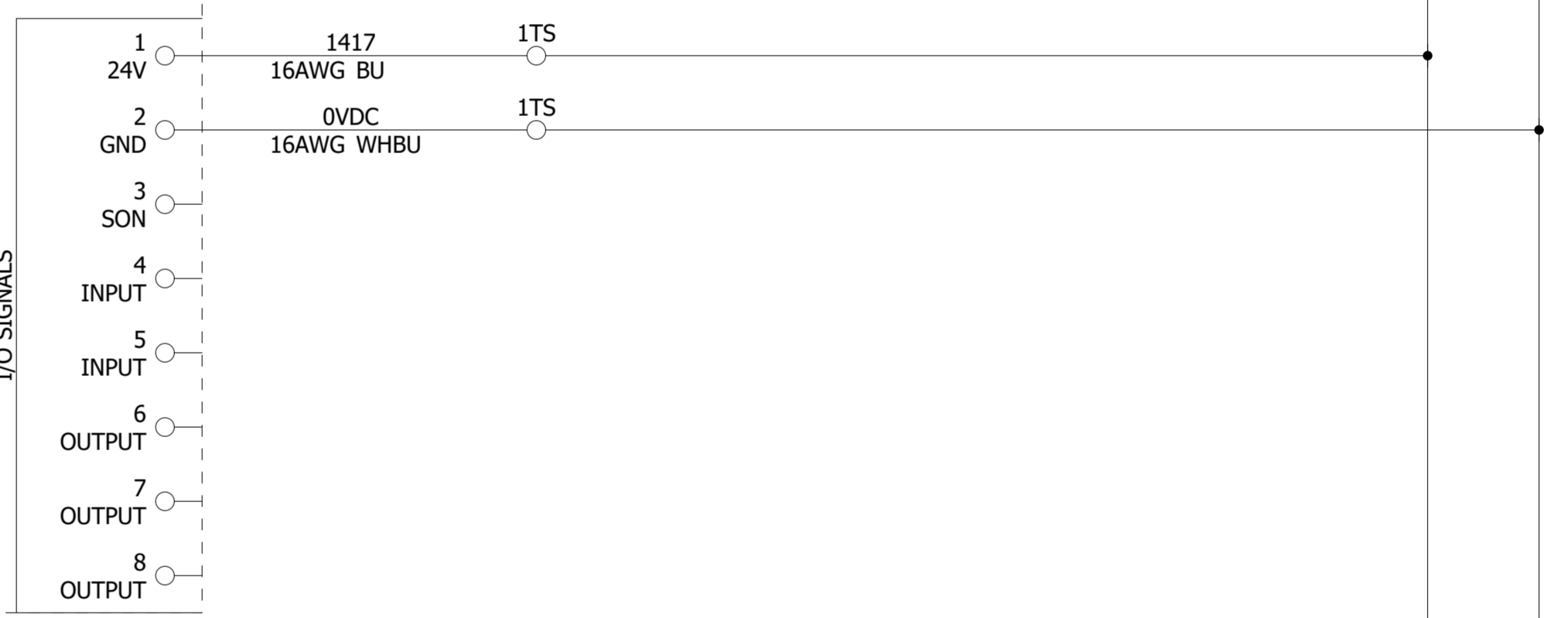
CN8  
SAFETY FUNCTIONS



5503MDL  
DRIVE INTERFACE BOARD

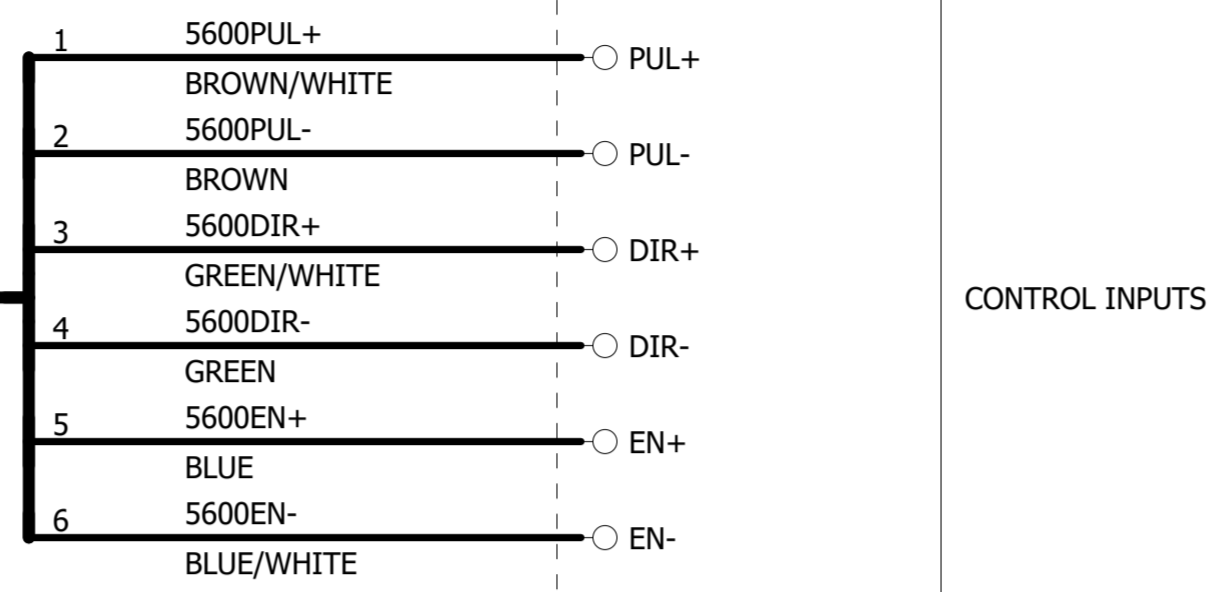


J1  
I/O SIGNALS



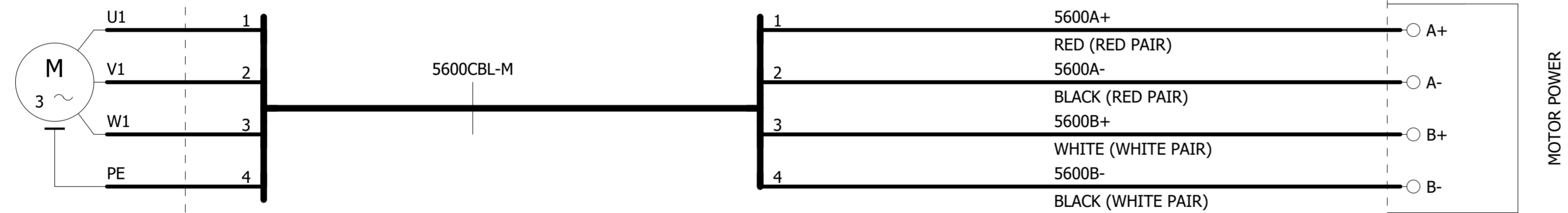
- 56 00
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- 56 20

65.07 / STEPPER 1; CONTROL ←

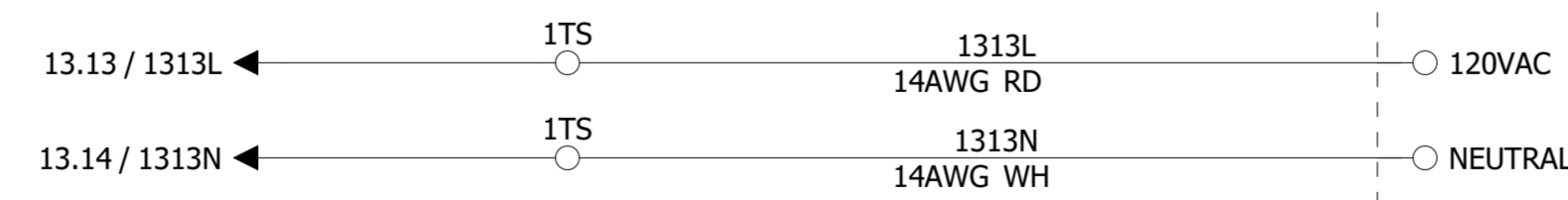


CONTROL INPUTS

5600MTR  
STEPPER MOTOR 1



MOTOR POWER

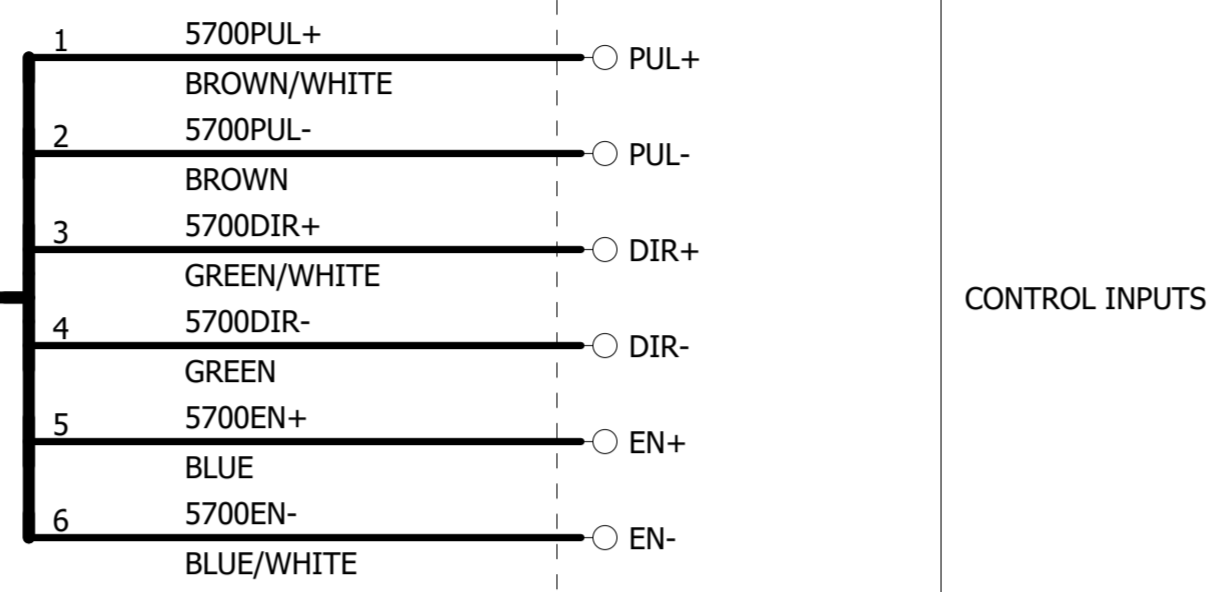


120VAC POWER

COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020 REVISION:	ALL RIGHTS RESERVED	DRAWING NO: A3SY00-003 SUPPLIER NO: XXXXX	NAME: -	= +					
DESIGNER: JUSTIN R. WALZ	APPROVER: -	LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: -	DRAWING NO: -	5600 DRV - STEPPER DRIVE 1	PREV PAGE: <<--- PAGE: 55
									NEXT PAGE: --->> 57	56

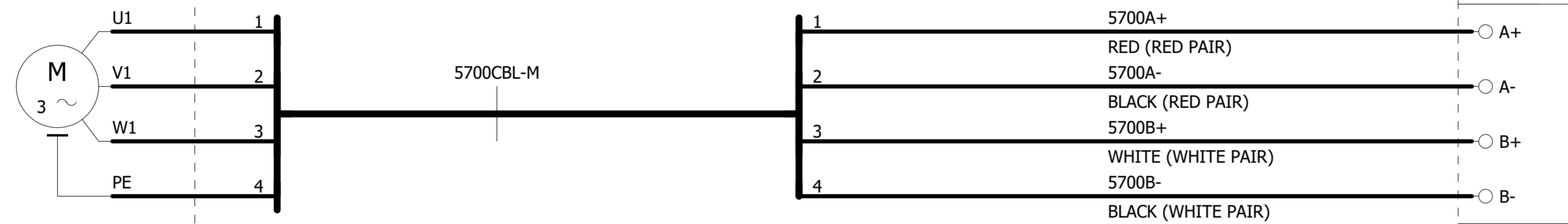
- 57 00
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- 57 14
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- 57 19
- 57 20

65.08 / STEPPER 2; CONTROL ←

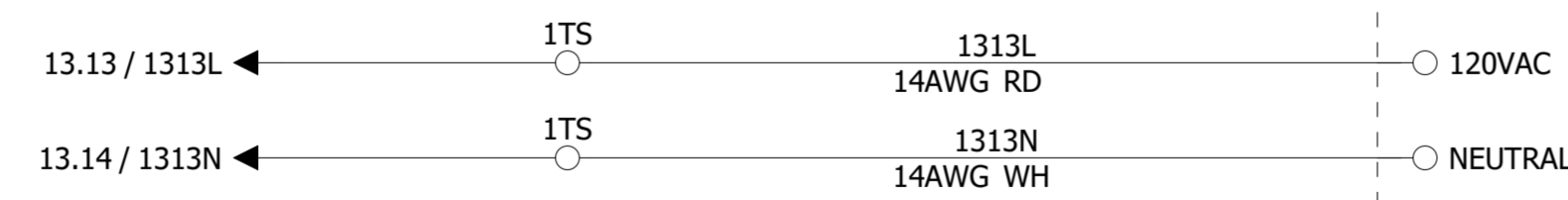


CONTROL INPUTS

5700MTR  
STEPPER MOTOR 2



MOTOR POWER



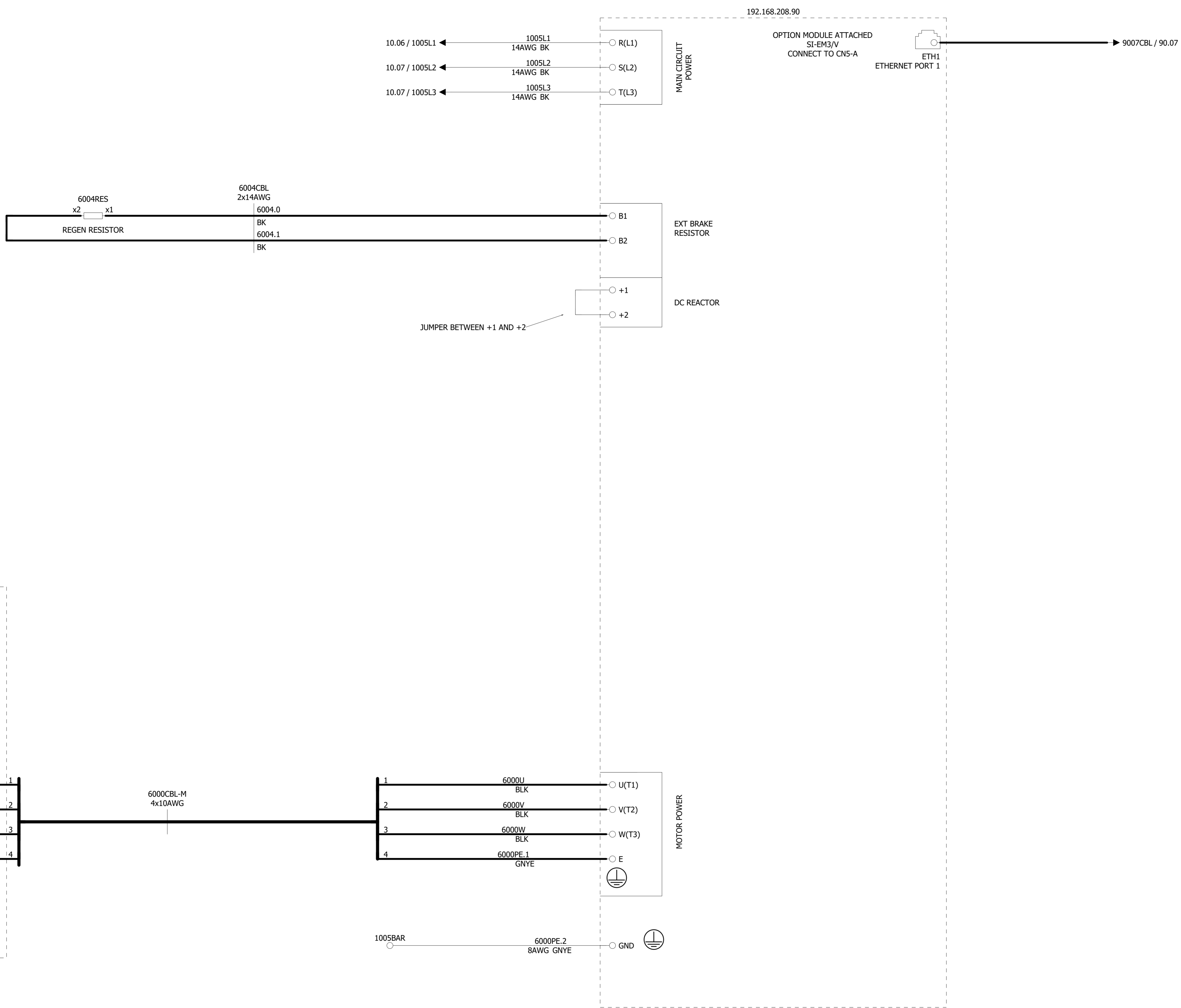
120VAC POWER

COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020 REVISION:	ALL RIGHTS RESERVED	DRAWING NO: A3SY00-003 SUPPLIER NO: XXXXX	NAME: -	= +					
DESIGNER: JUSTIN R. WALZ	APPROVER: -	LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: -	DRAWING NO:	5700 DRV - STEPPER DRIVE 2	PREV PAGE: <<--- PAGE: 56
									NEXT PAGE: --->> 60	57

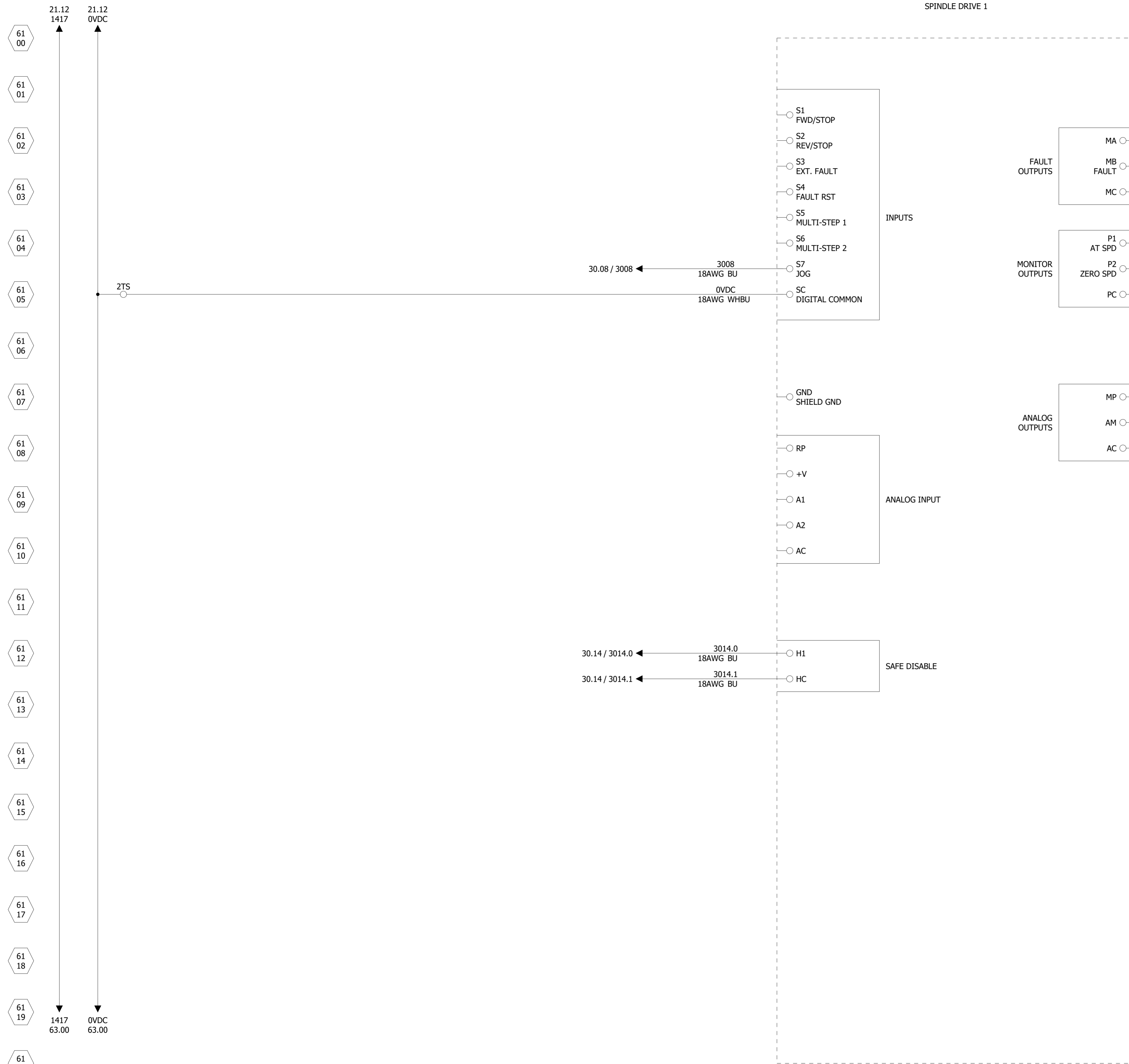
6000DRV  
SPINDLE DRIVE 1

\*\*\* OPTIONAL SPINDLE \*\*\*

- 60 00
- 60 01
- 60 02
- 60 03
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- 60 07
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- 60 18
- 60 19
- 60 20



COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020 REVISION:	ALL RIGHTS RESERVED					DRAWING NO: A3SY00-003 SUPPLIER NO: XXXXX	NAME: -	=	+
DESIGNER: JUSTIN R. WALZ	APPROVER: -	LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: -	DRAWING NO:	6000 DRV- SPINDLE DRIVE 1	
								&	PREV PAGE: <<--- PAGE: 57	
								#	NEXT PAGE: --->> PAGE: 61	



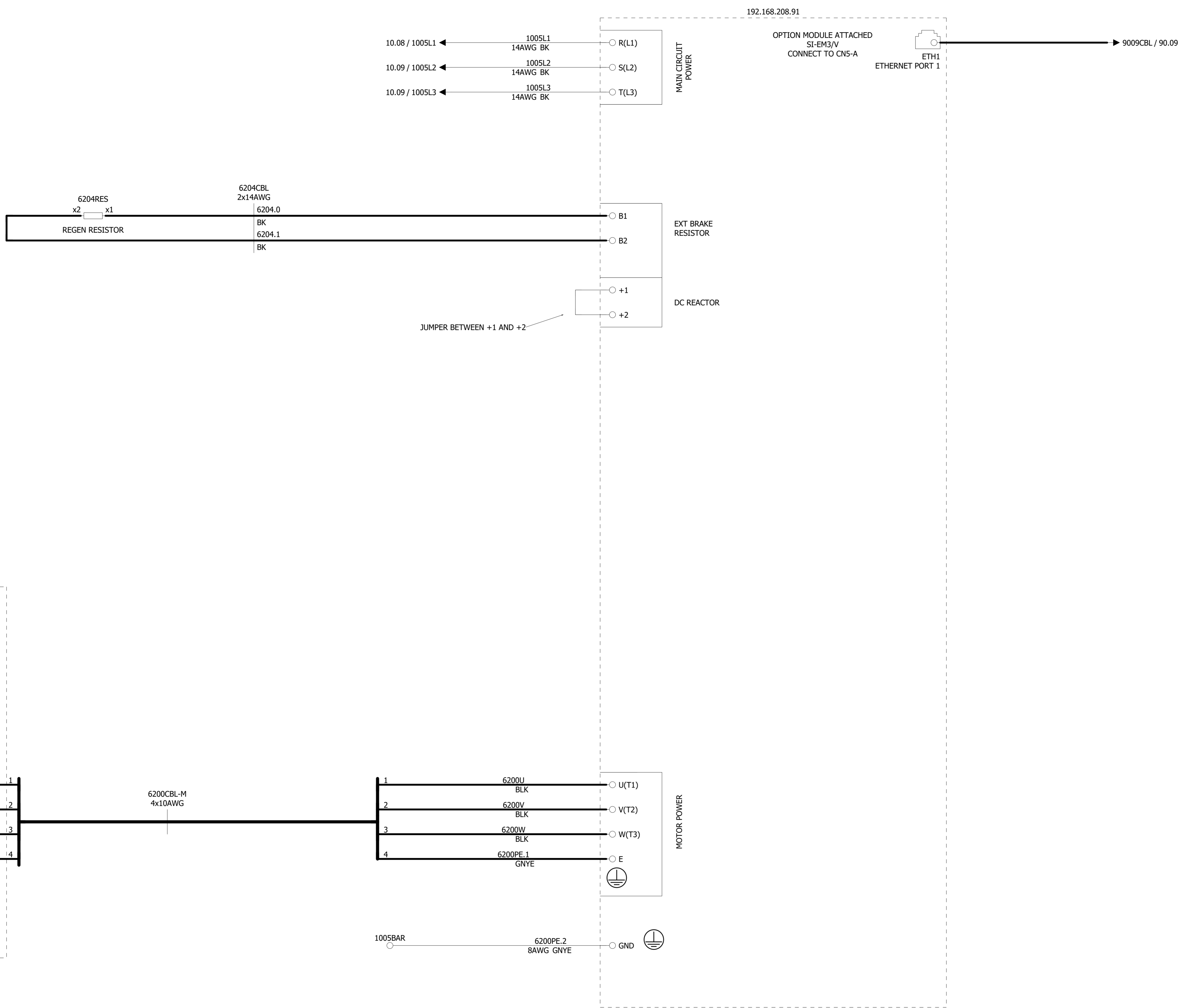
COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020	ALL RIGHTS RESERVED					DRAWING NO: A3SY00-003	NAME: -	=	+
DESIGNER: JUSTIN R. WALZ	REVISION:	LOC:	FACTORY:	DEPT:	OP. NO:	STA. NO:	SUPPLIER NO: XXXXX	6000 DRV- SPINDLE DRIVE 1	PREV PAGE: <<---	PAGE:
	APPROVER:	-	-	-	-	-	MACH. NAME:		60	
							DRAWING NO:		NEXT PAGE: --->>	62



6200DRV  
SPINDLE DRIVE 2

\*\*\* OPTIONAL SPINDLE \*\*\*

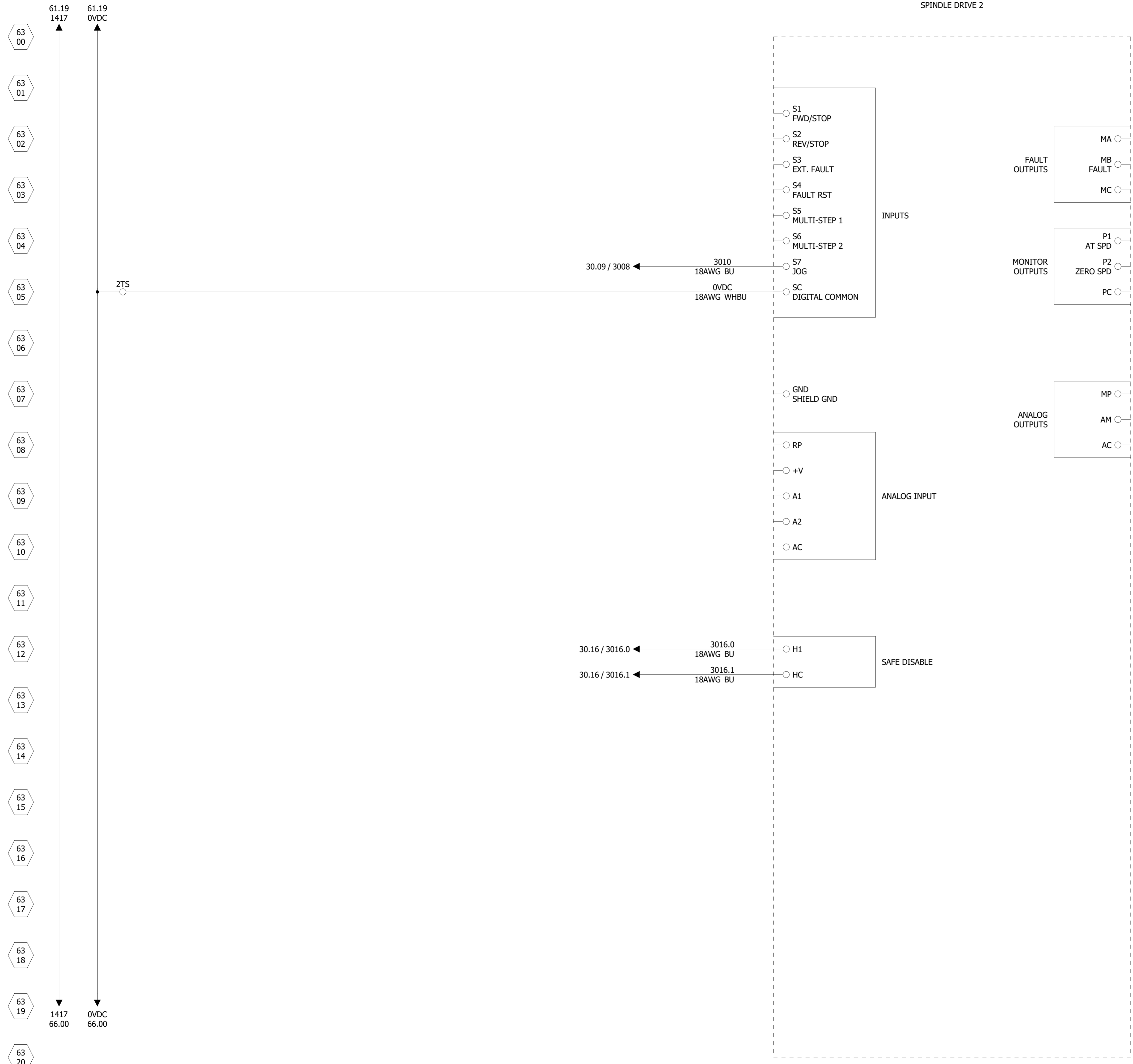
- 62 00
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- 62 18
- 62 19
- 62 20



COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020 REVISION:	ALL RIGHTS RESERVED					DRAWING NO: A3SY00-003 SUPPLIER NO: XXXXX	NAME: -	=	+
DESIGNER: JUSTIN R. WALZ	APPROVER: -	LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: 6200 DRV- SPINDLE DRIVE 2	DRAWING NO:	PREV PAGE: <<---	
								&	PAGE: 61	
								#	NEXT PAGE: --->> 63	

6200DRV  
SPINDLE DRIVE 2

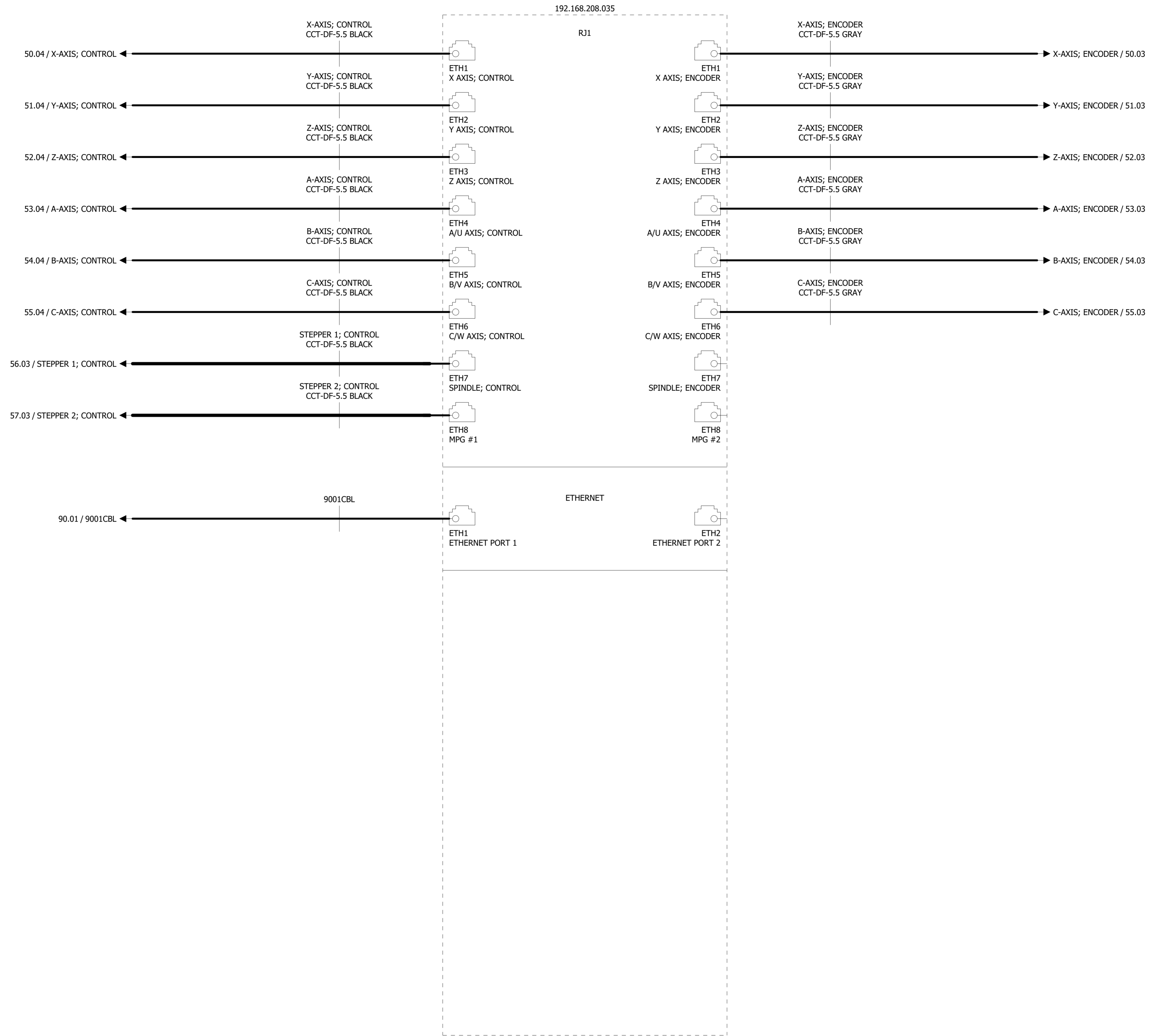
\*\*\* OPTIONAL SPINDLE \*\*\*



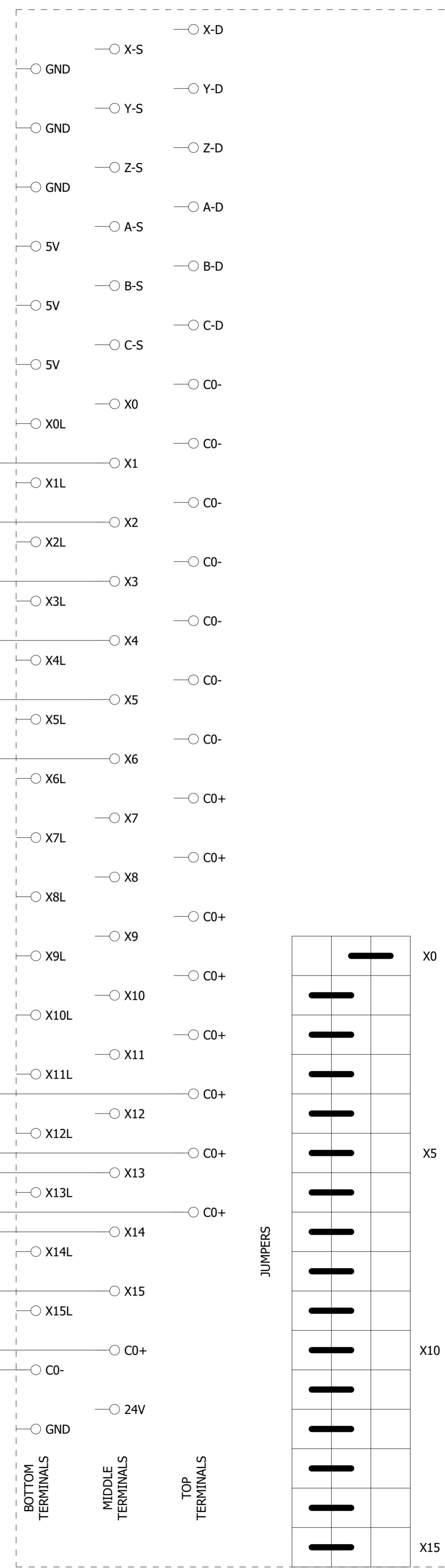
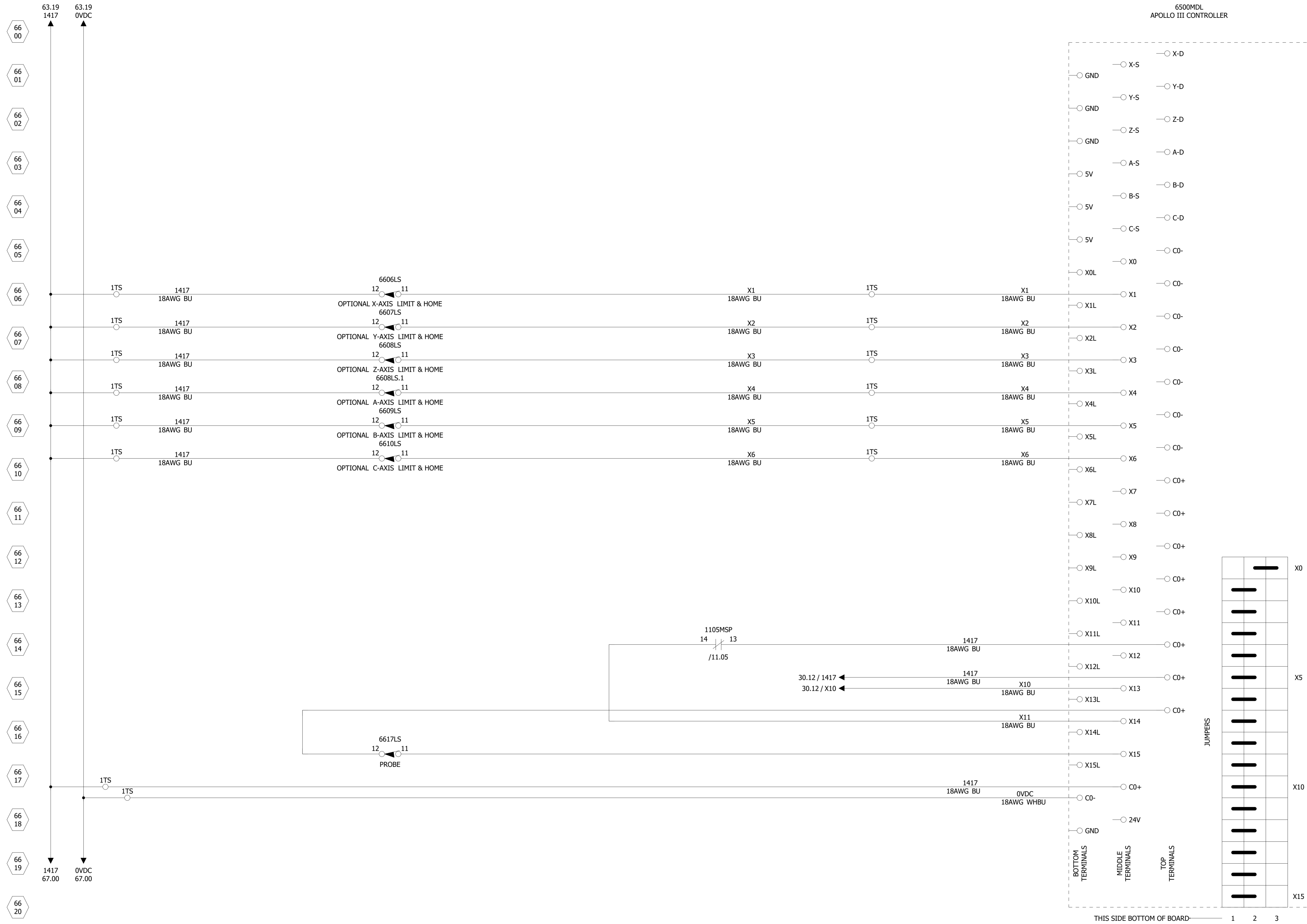
COMPANY: MACHMOTION NEWBURG, MISSOURI, USA		DATE: 28/10/2020		ALL RIGHTS RESERVED		DRAWING NO: A3SY00-003		NAME: -	
DESIGNER: JUSTIN R. WALZ		APPROVER: -		LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	DRAWING NO: -
								6200 DRV- SPINDLE DRIVE 2	
								= +	
								PREV PAGE: <<--- PAGE:	
								62	
								NEXT PAGE: --->>	
								65	

65 00  
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6500MDL  
APOLLO III CONTROLLER



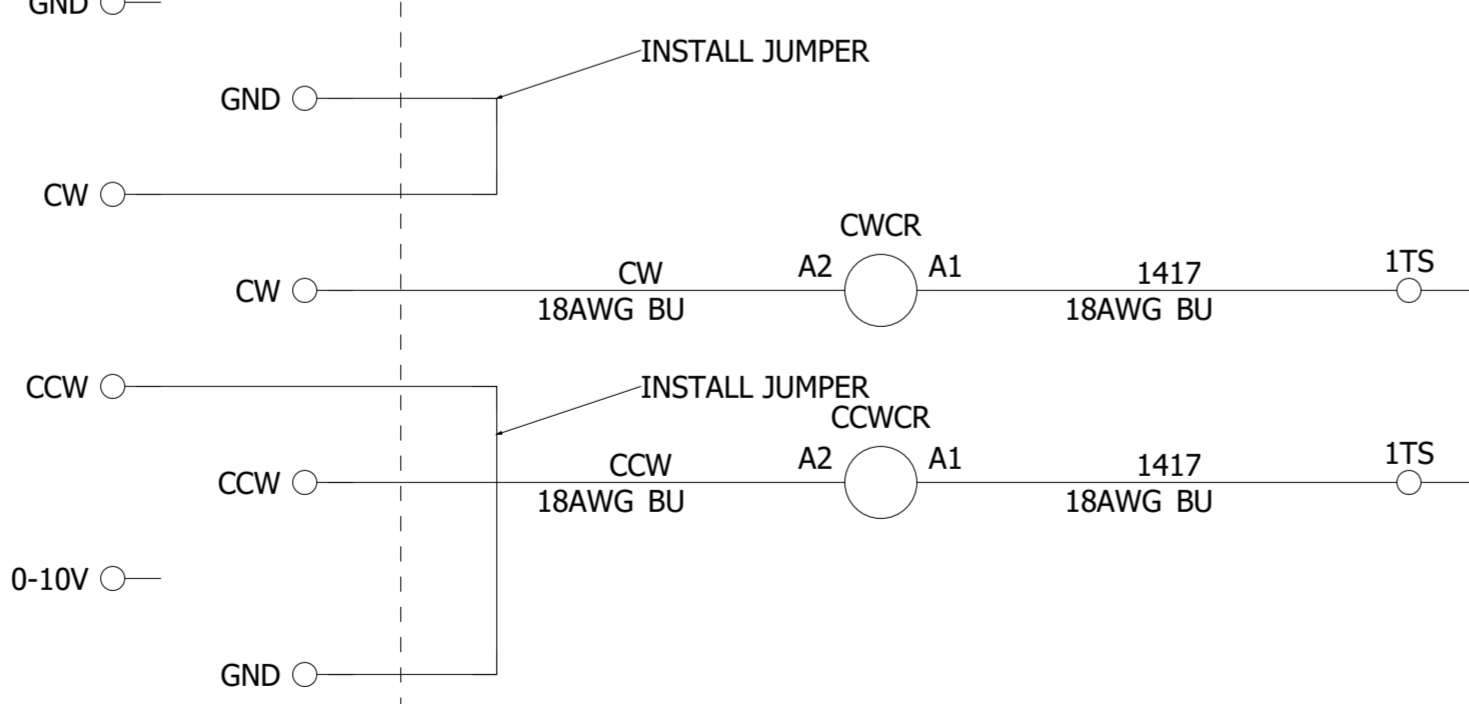
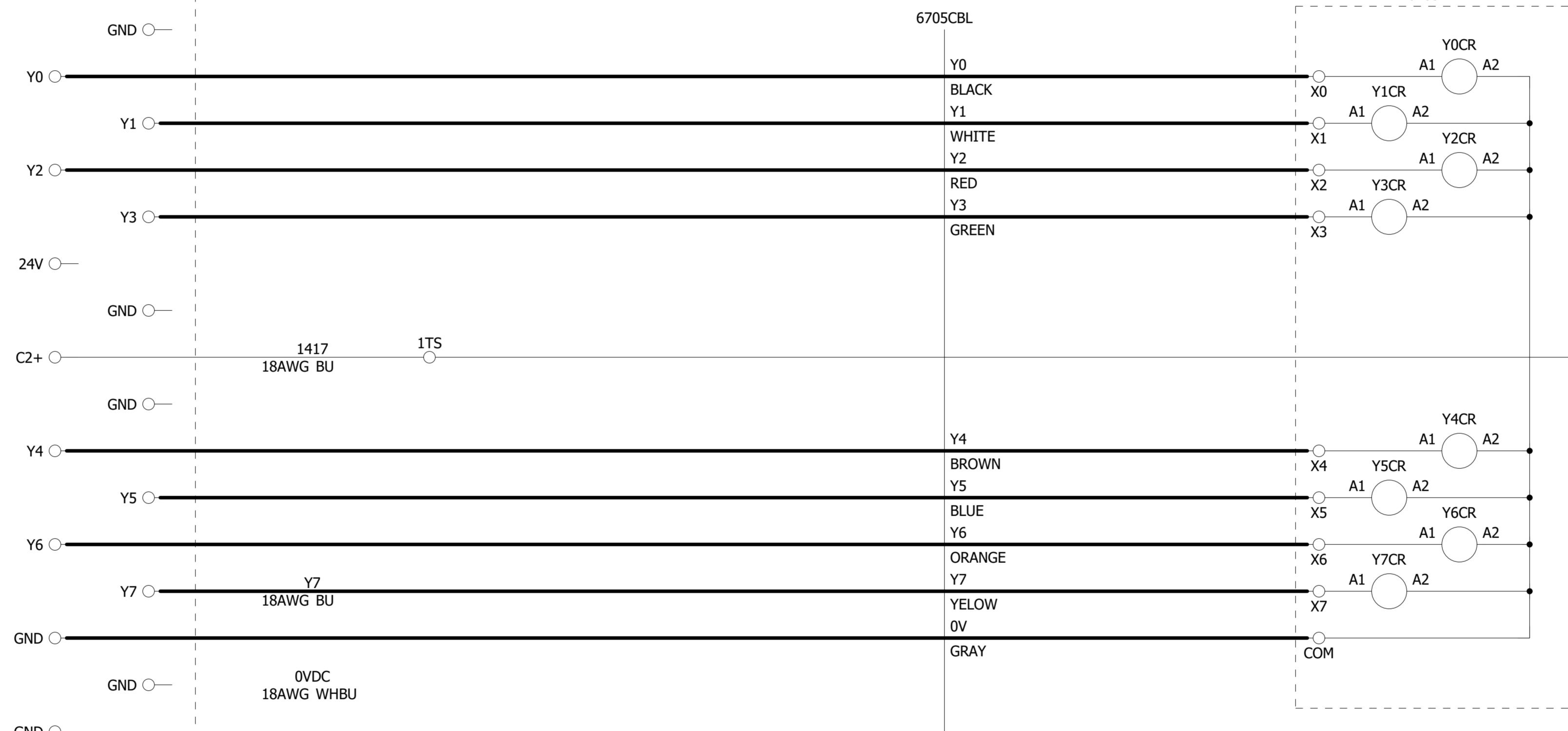
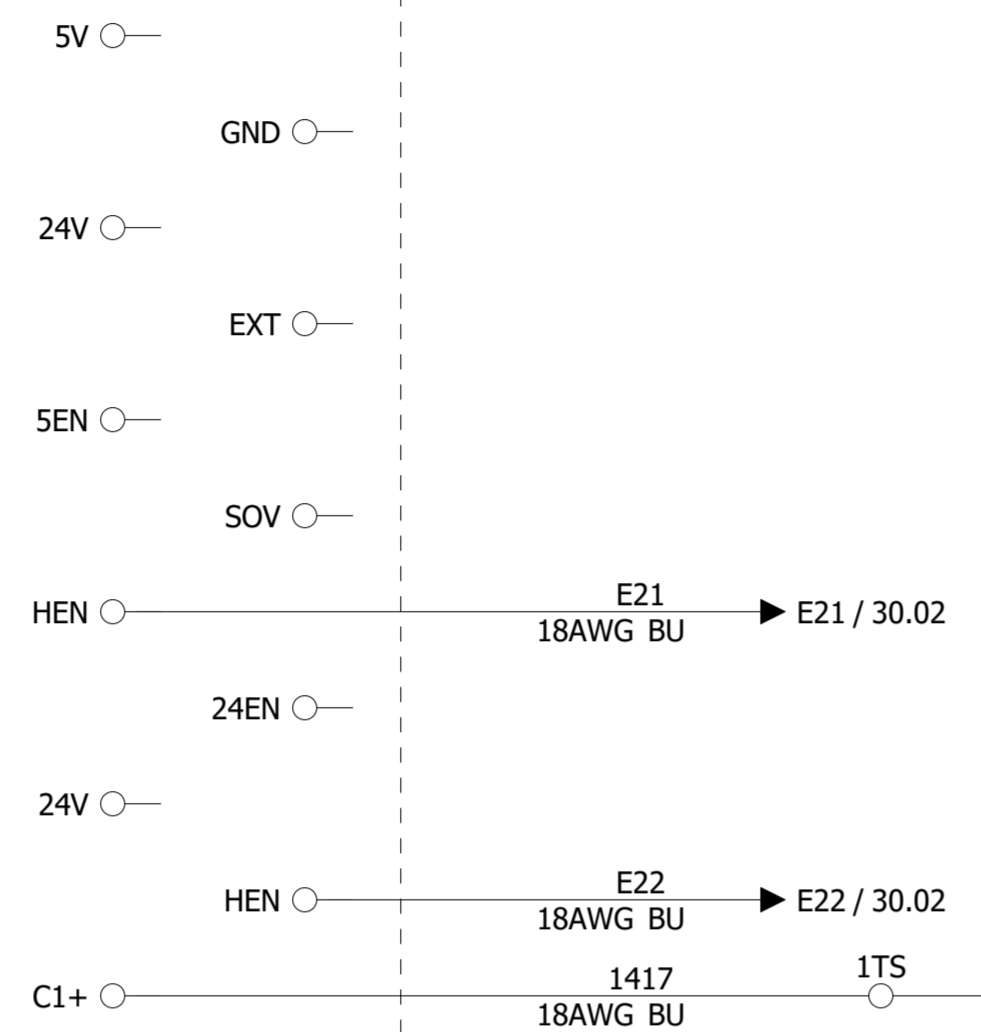
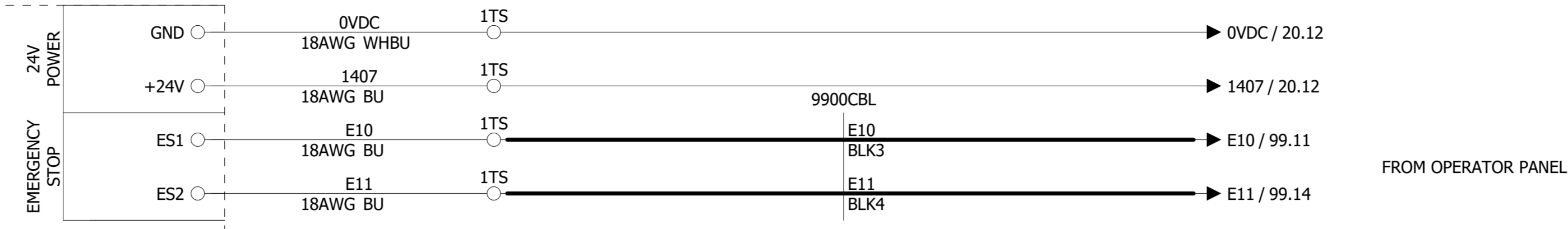
COMPANY: MACHMOTION NEWBURG, MISSOURI, USA	DATE: 28/10/2020 REVISION:	ALL RIGHTS RESERVED					DRAWING NO: A3SY00-003 SUPPLIER NO: XXXXX	NAME: -	=	+
DESIGNER: JUSTIN R. WALZ	APPROVER: -	LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: -	DRAWING NO:	6500 MDL- APOLLO III CONTROLLER ETHERNET CONNECTIONS	PREV PAGE: <<--- PAGE: 63
									NEXT PAGE: --->> 66	#



CONTROLLER INPUTS

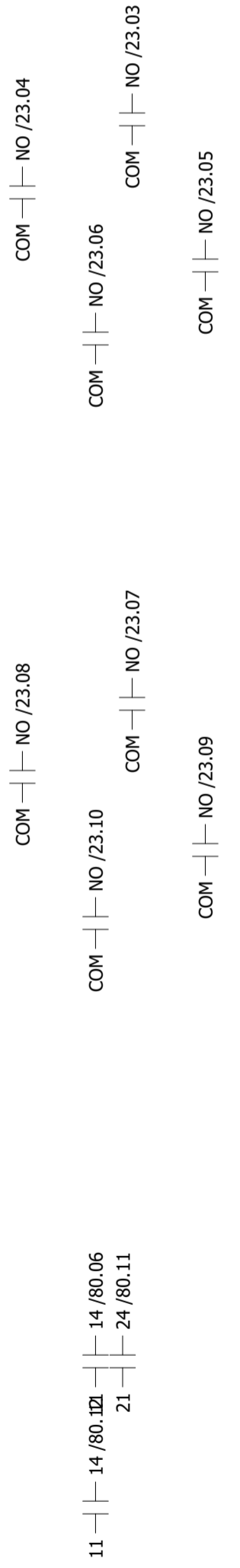
X0	DRIVE FAULT
X1	X-AXIS LIMIT & HOME
X2	Y-AXIS LIMIT & HOME
X3	Z-AXIS LIMIT & HOME
X4	A-AXIS LIMIT & HOME
X5	B-AXIS LIMIT & HOME
X6	C-AXIS LIMIT & HOME
X7	UNUSED INPUT
X8	UNUSED INPUT
X9	UNUSED INPUT
X10	UNUSED INPUT
X11	UNUSED INPUT
X12	UNUSED INPUT
X13	SAFETY NOT OK
X14	OVERLOADS
X15	PROBE

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- 67 02
- 67 03
- 67 04
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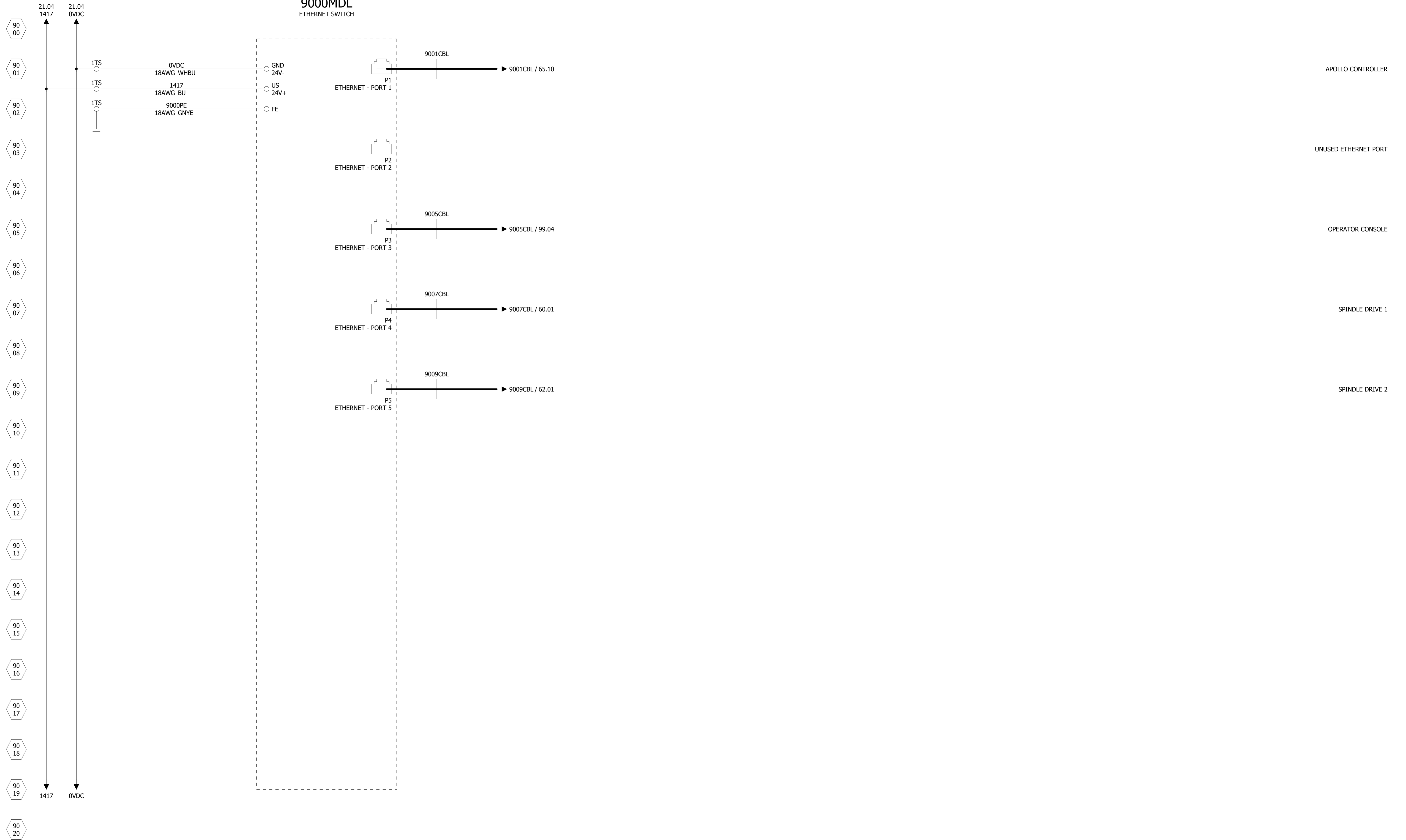
CONTROLLER OUTPUTS

24EN	ENABLE OKAY
Y0	UNUSED OUTPUT
Y1	UNUSED OUTPUT
Y2	UNUSED OUTPUT
Y3	UNUSED OUTPUT
Y4	UNUSED OUTPUT
Y5	UNUSED OUTPUT
Y6	UNUSED OUTPUT
Y7	OPTIONAL MOTOR



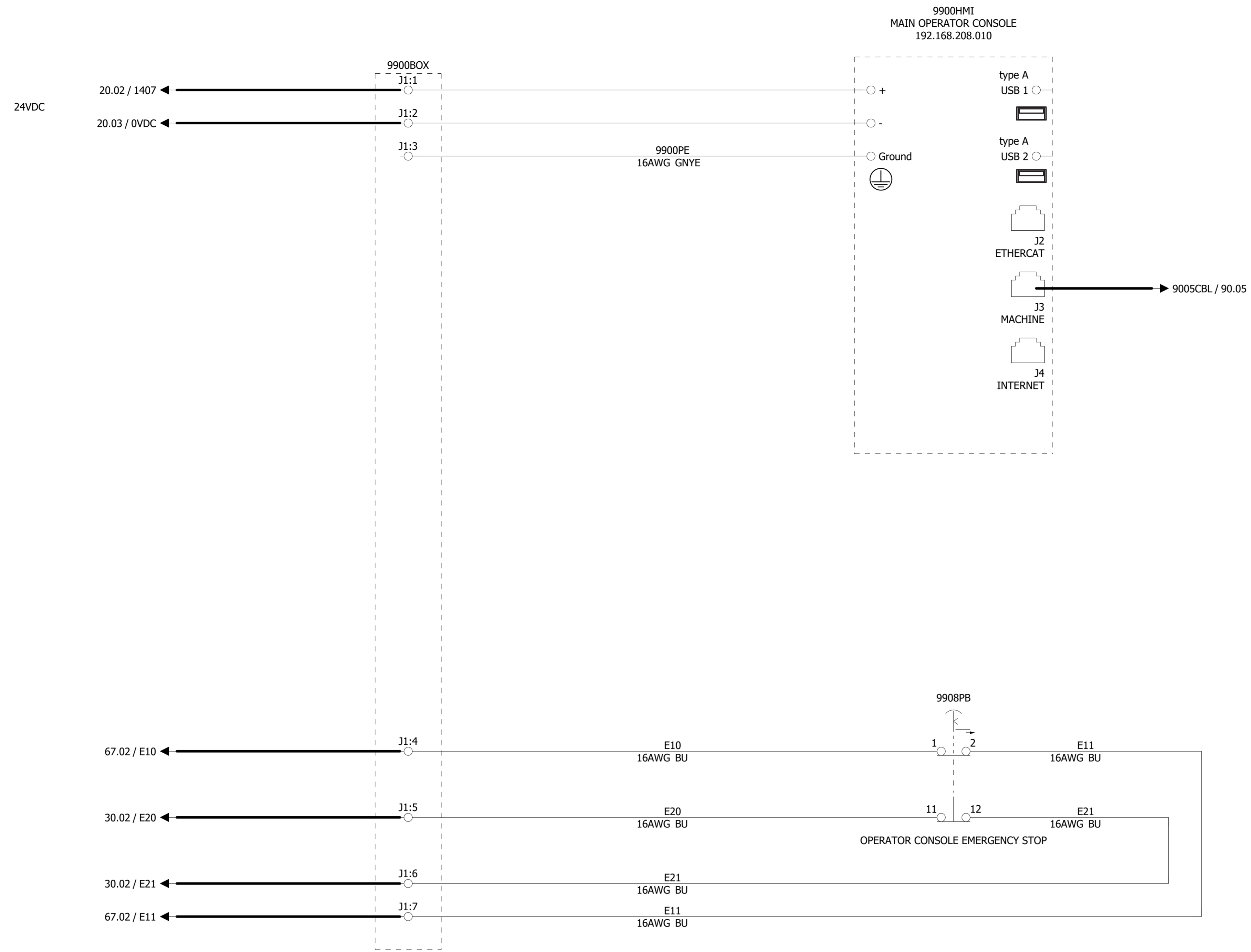


**9000MDL**  
ETHERNET SWITCH



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DESIGNER: JUSTIN R. WALZ		APPROVER: -		LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: 9000 MDL - ETHERNET SWITCH		PREV PAGE: <<--- PAGE: 80
											NEXT PAGE: --->> 99
											#

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DESIGNER: JUSTIN R. WALZ	APPROVER: -	LOC: -	FACTORY: -	DEPT: -	OP. NO: -	STA. NO: -	MACH. NAME: 9900 HMI - MAIN OPERATOR INTERFACE	&	PREV PAGE: <<--- 90 NEXT PAGE: --->>	
						DRAWING NO:		#		