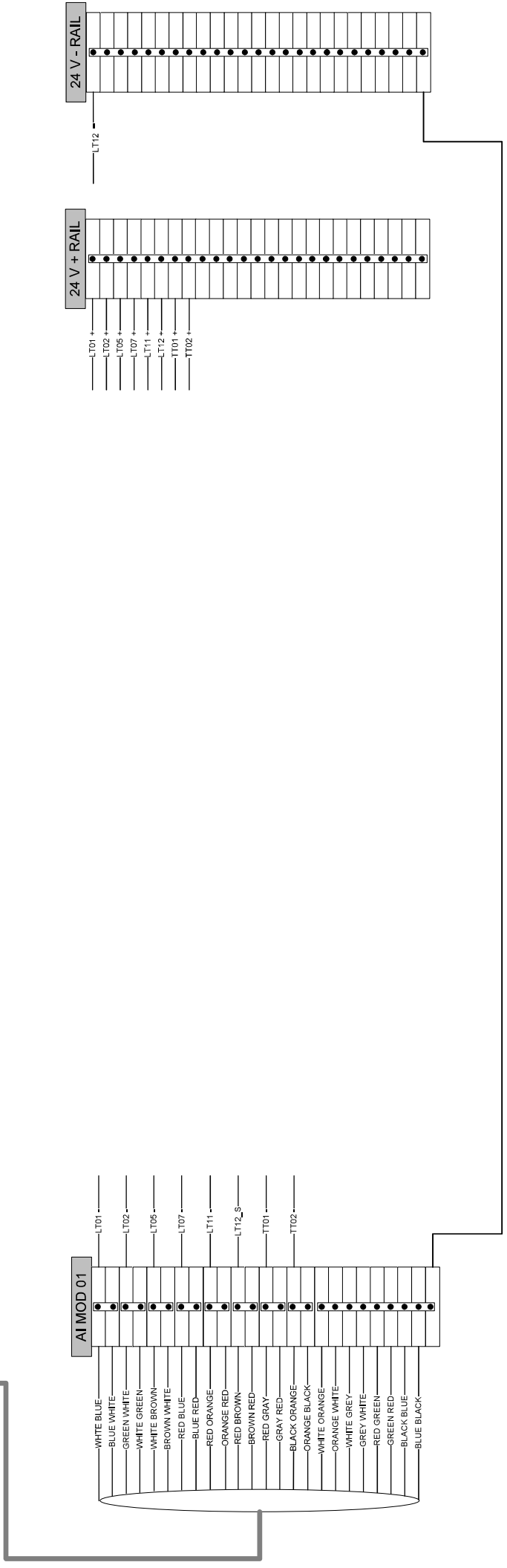


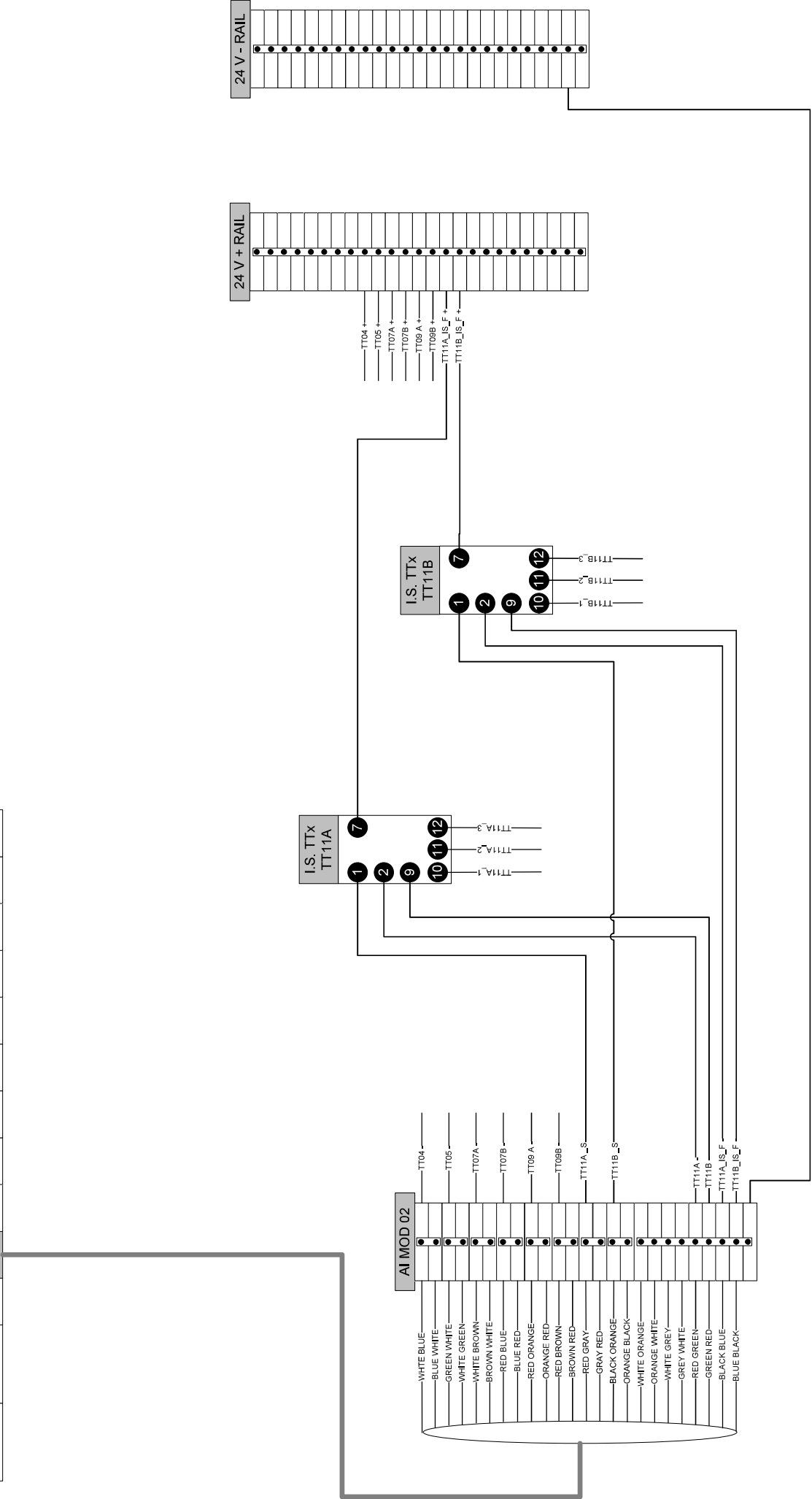
# PLC I/O WIRING – AI MODULE SLOT 01

PLC PSU	PLC CPU	01	AI MOD	02	AI MOD	03	AI MOD	04	AO MOD	05	DI MOD	06	DO MOD	07	DO MOD	08	DO MOD	09	DO MOD	10	DO MOD	SPARE SLOT
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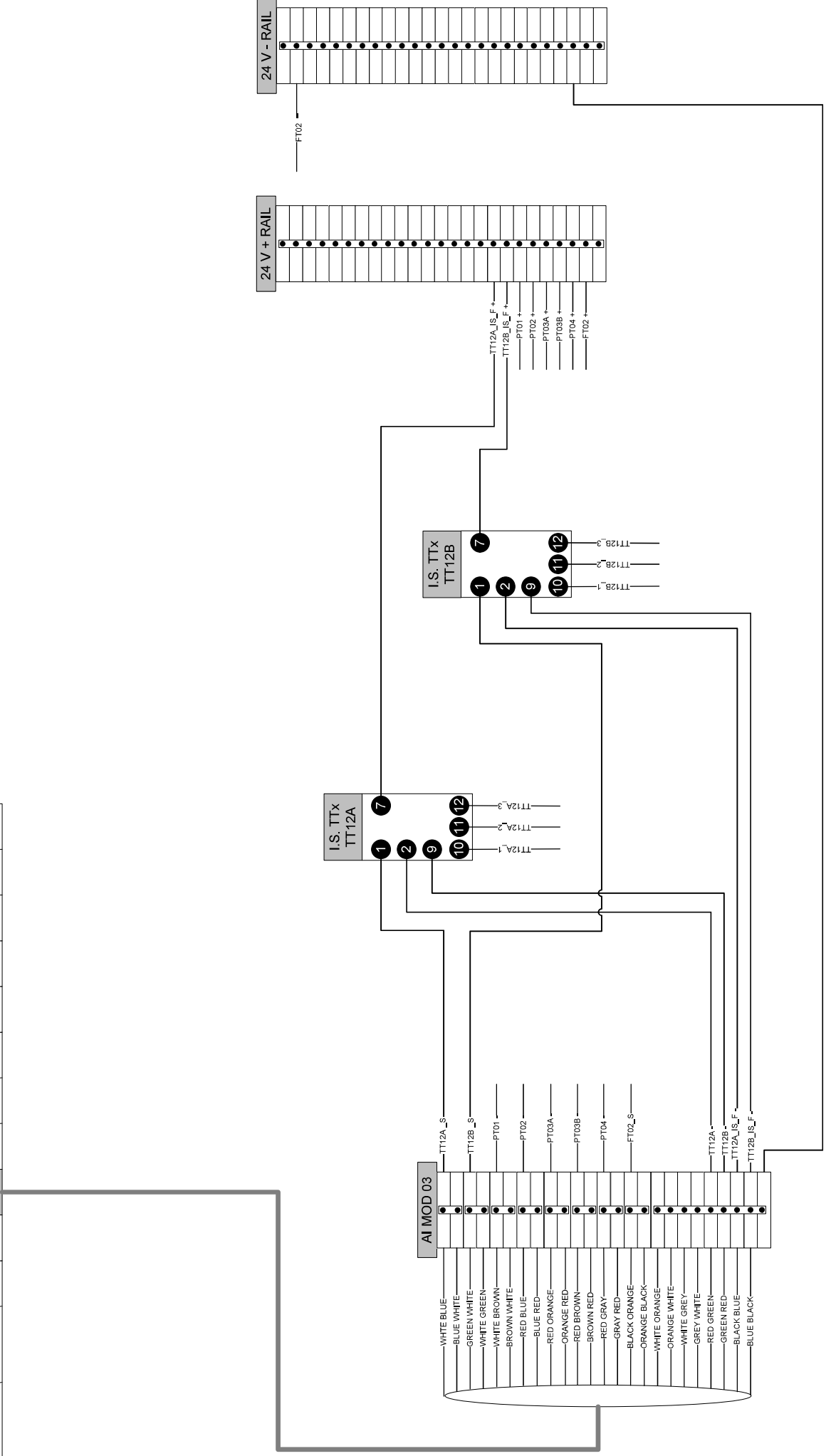
# PLC I/O WIRING – AI MODULE SLOT 02

PLC PSU	PLC CPU	01	AI MOD	02	AI MOD	03	AI MOD	04	AO MOD	05	DI MOD	06	DO MOD	07	DO MOD	08	DO MOD	09	DO MOD	10	DO MOD	SPARE SLOT
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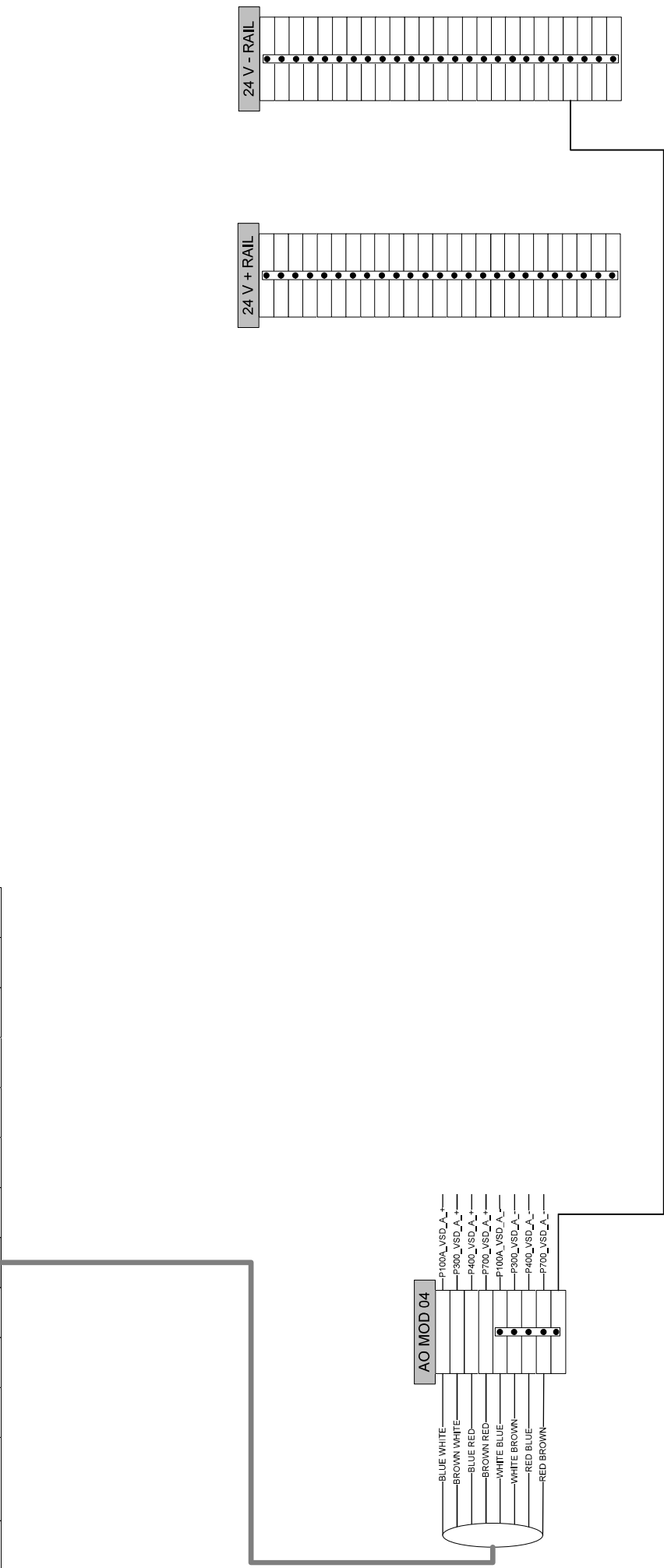
# PLC I/O WIRING – AI MODULE SLOT 03

PLC PSU	PLC CPU	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
		AI MOD	AI MOD	AI MOD	AO MOD	DI MOD	DO MOD	DO MOD	DO MOD	DO MOD	DO MOD	



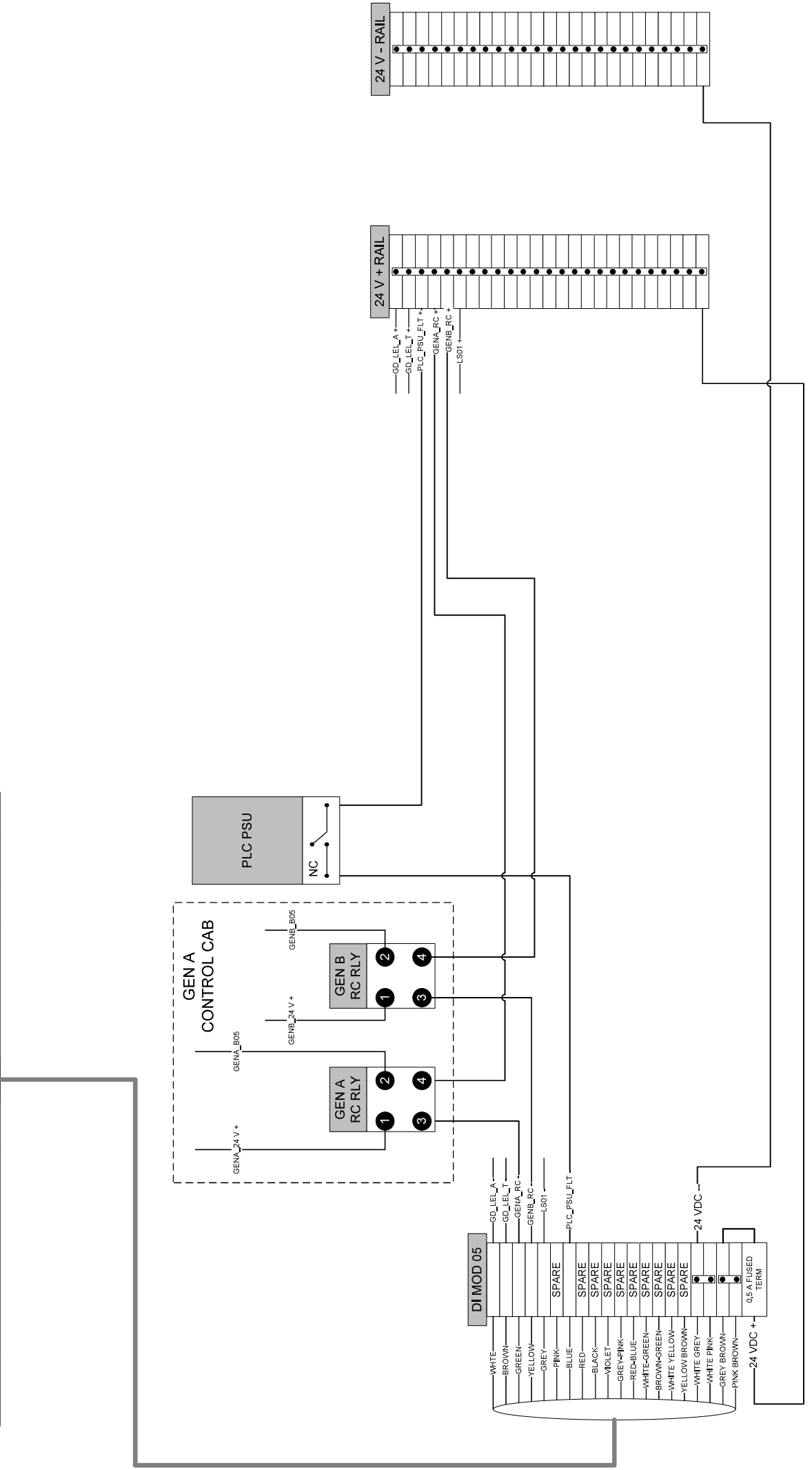
# PLC I/O WIRING – AO MODULE SLOT 04

PLC PSU	PLC CPU	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
		AI MOD	AI MOD	AI MOD	AO MOD	DI MOD	DO MOD	DO MOD	DO MOD	DO MOD	DO MOD	



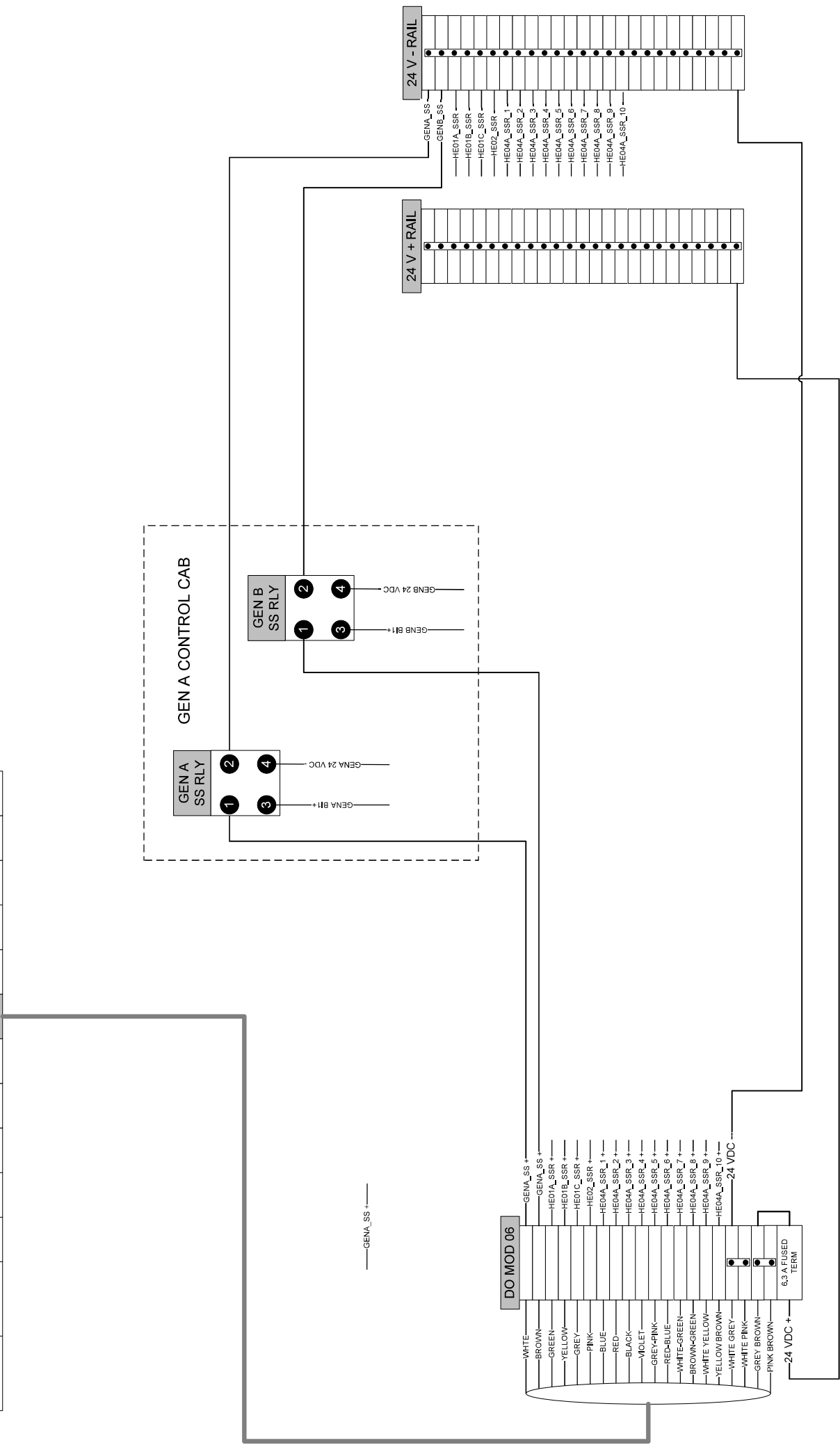
# PLC I/O WIRING – DI MODULE SLOT 05

PLC PSU	PLC CPU	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
		AI MOD	AI MOD	AI MOD	AO MOD	DI MOD	DO MOD	DO MOD	DO MOD	DO MOD	DO MOD	



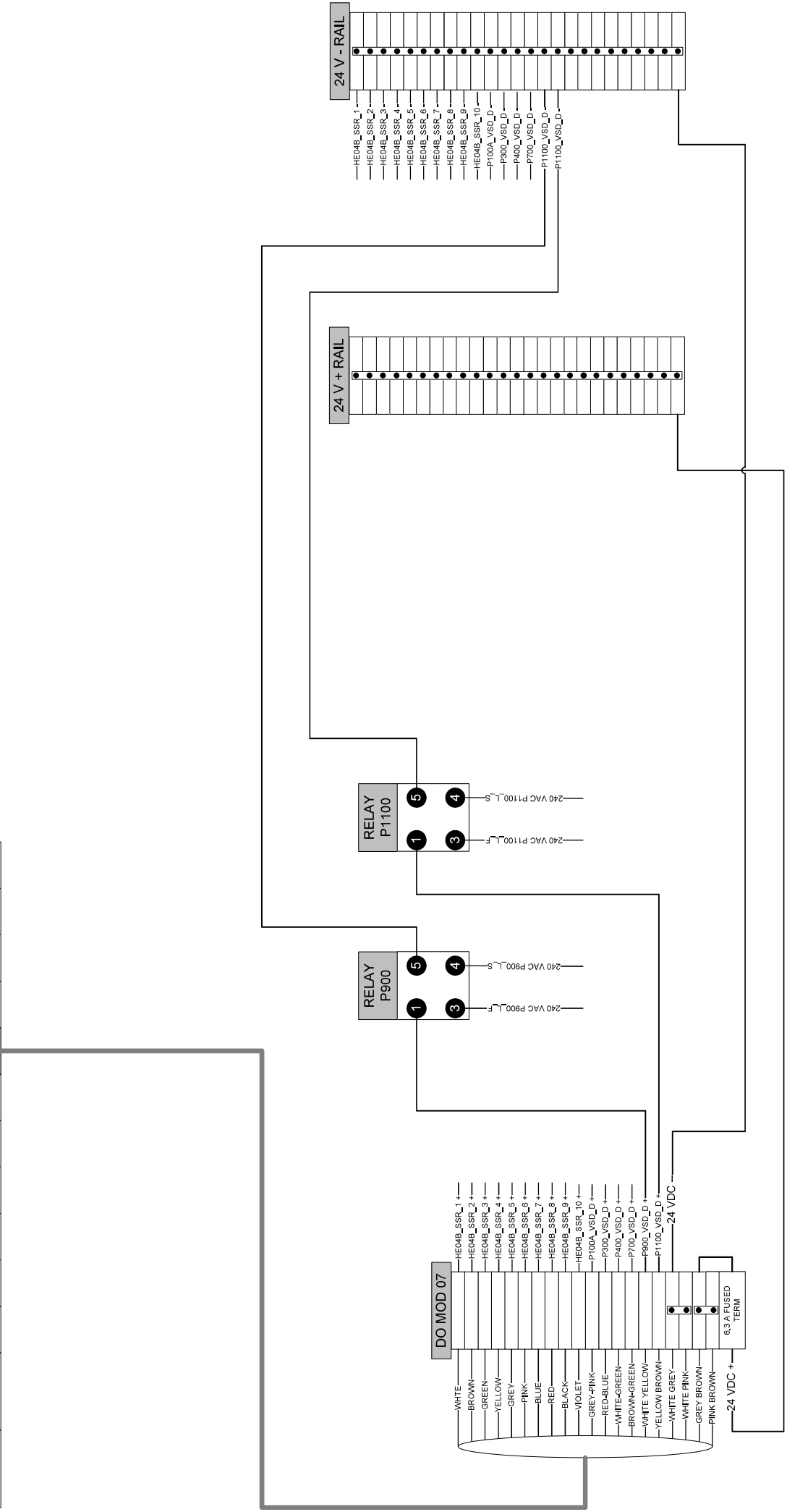
# PLC I/O WIRING – DO MODULE SLOT 06

PLC PSU	PLC CPU	01	AI MOD	02	AI MOD	03	AI MOD	04	AO MOD	05	DI MOD	06	DO MOD	07	DO MOD	08	DO MOD	09	DO MOD	10	DO MOD	SPARE SLOT
---------	---------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	----	-----------	------------



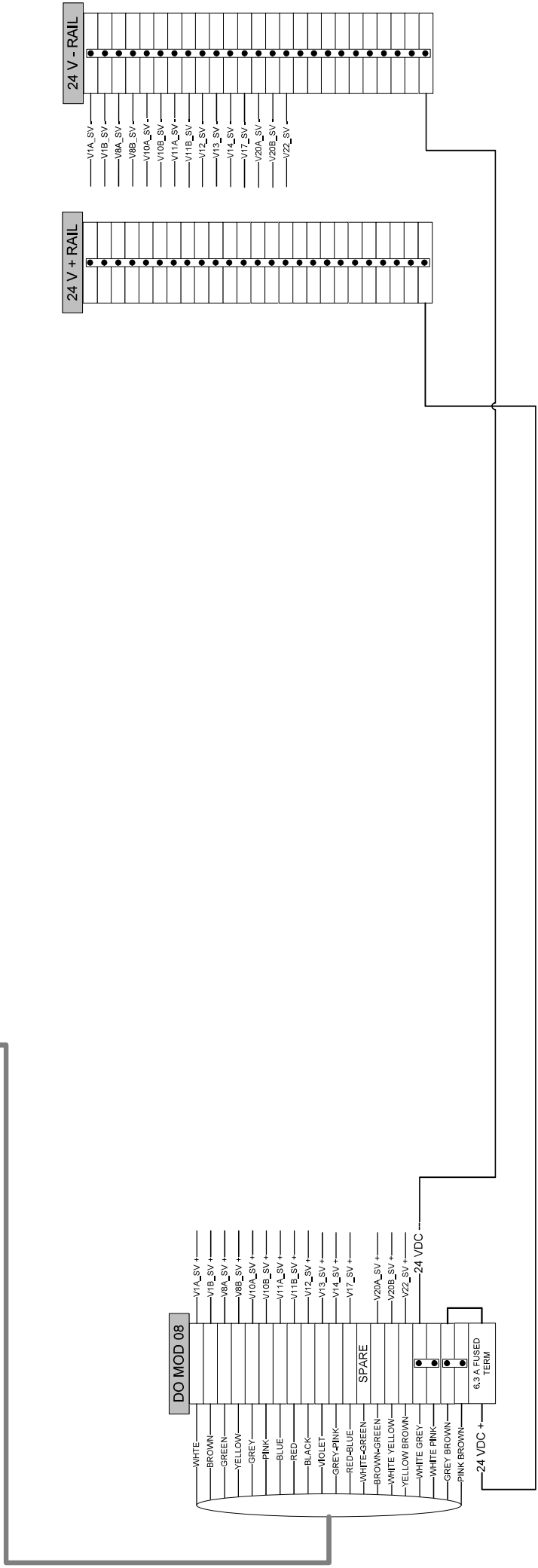
# PLC I/O WIRING – DO MODULE SLOT 07

PLC PSU	PLC CPU	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
		AI	AI	AI	AO	DI	DO	DO	DO	DO	DO	
		MOD	MOD	MOD	MOD	MOD	MOD	MOD	MOD	MOD	MOD	



# PLC I/O WIRING – DO MODULE SLOT 08

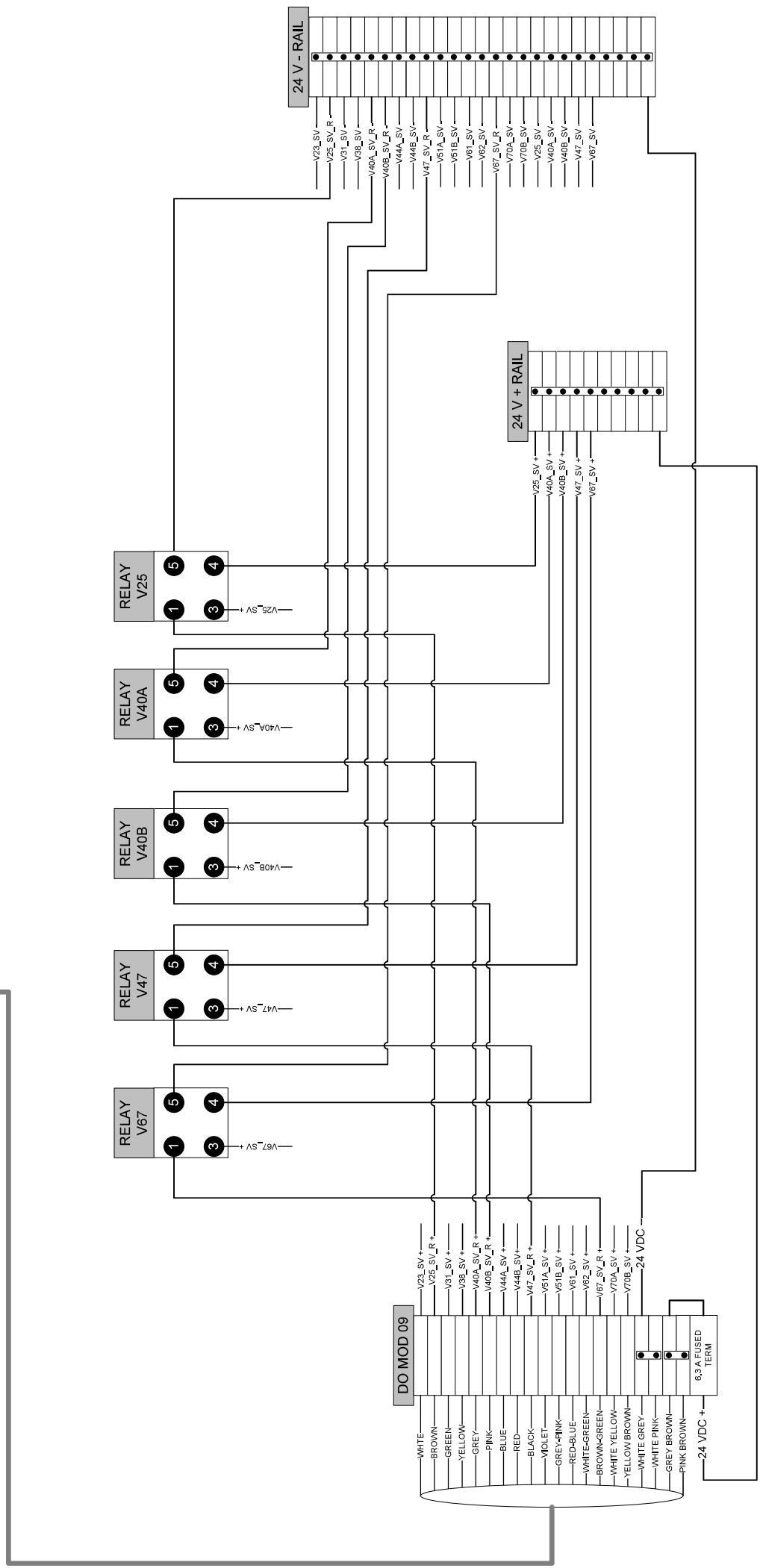
PLC PSU	PLC CPU	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
		AI MOD	AI MOD	AI MOD	AO MOD	DI MOD	DO MOD	DO MOD	DO MOD	DO MOD	DO MOD	





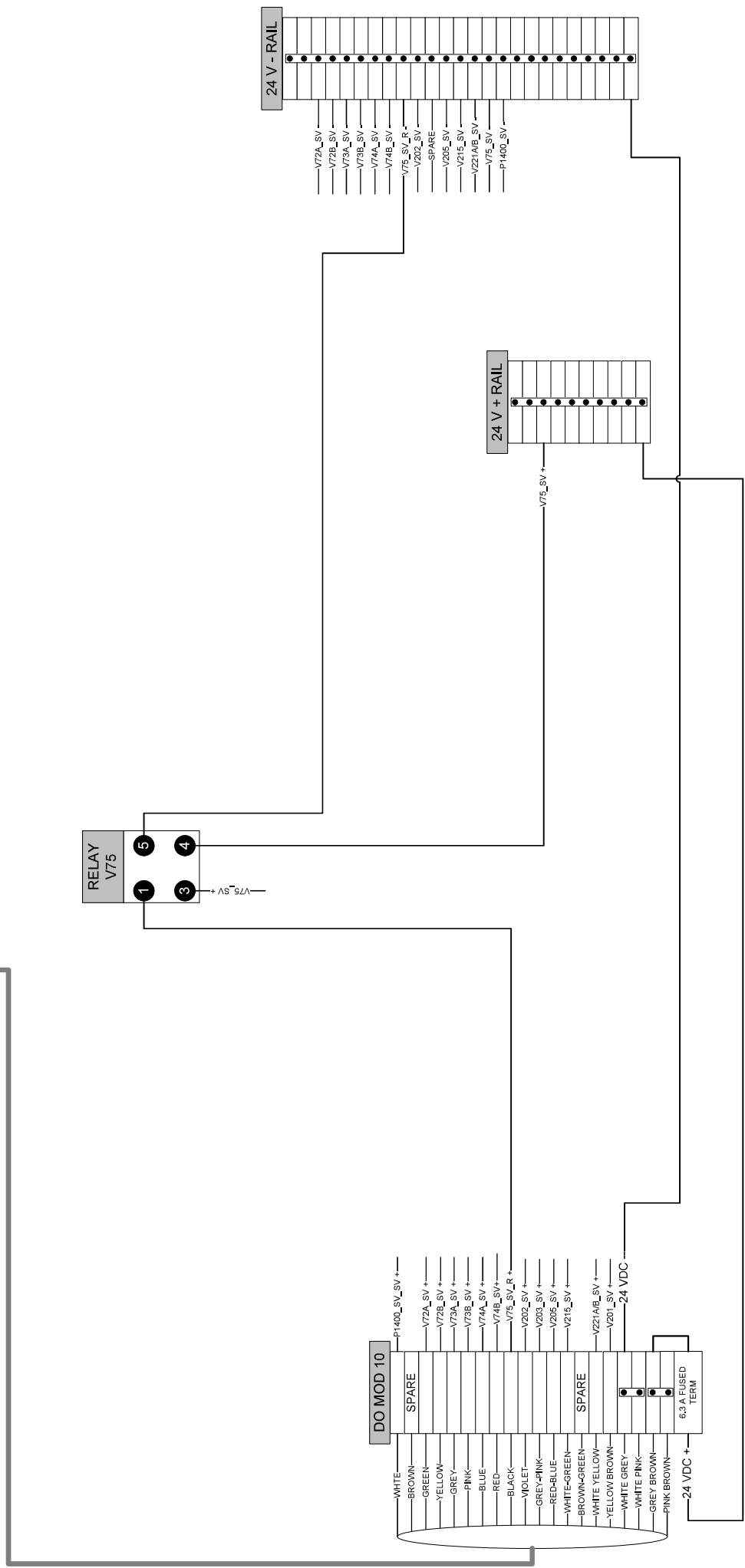
# PLC I/O WIRING – DO MODULE SLOT 09

PLC PSU	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
PLC CPU	AI MOD	AI MOD	AI MOD	AO MOD	DI MOD	DO MOD	DO MOD	DO MOD	DO MOD	DO MOD	



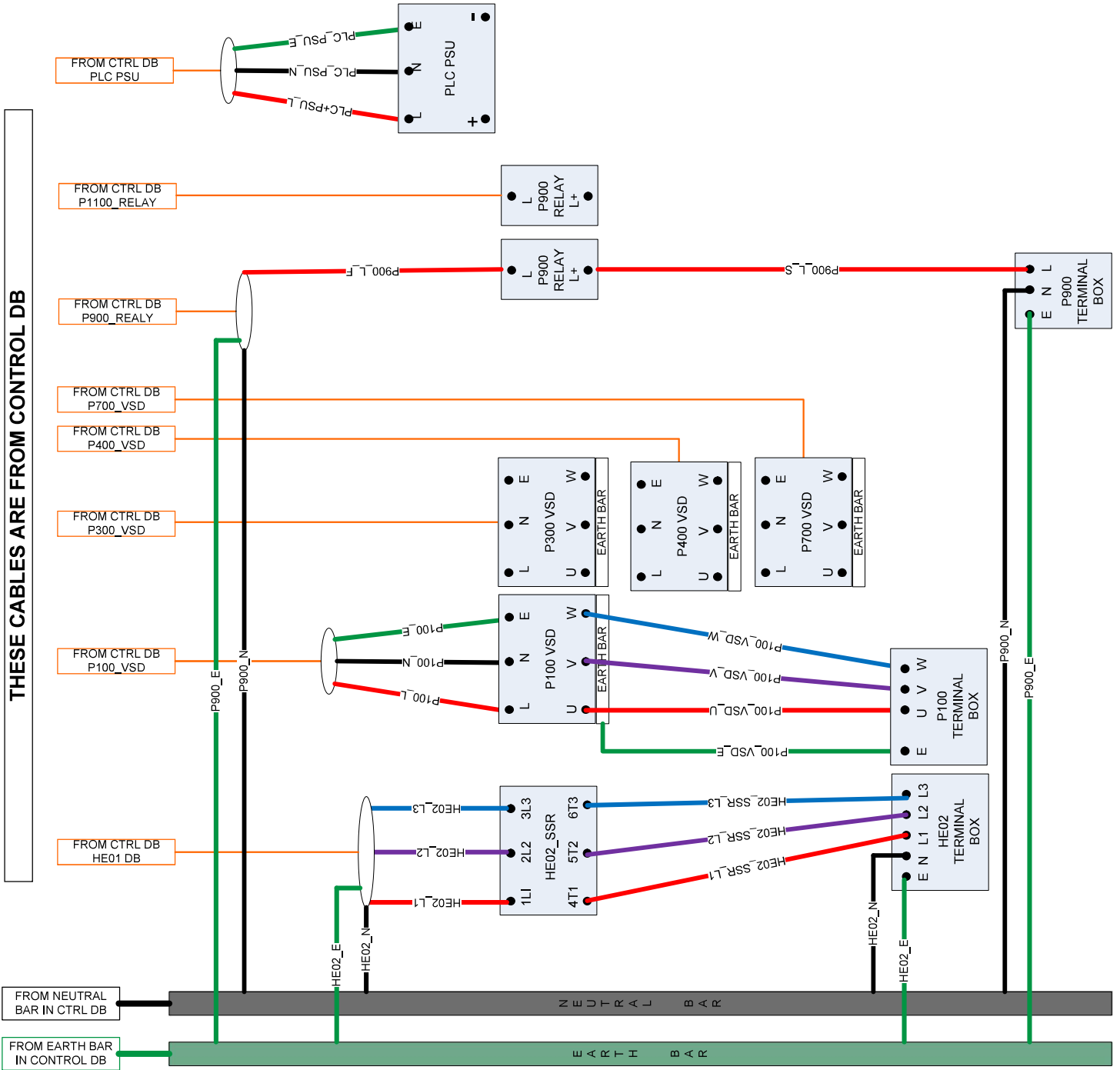
# PLC I/O WIRING – DO MODULE SLOT 10

PLC PSU	00	01	02	03	04	05	06	07	08	09	10	SPARE SLOT
	PLC CPU	AI MOD	AI MOD	AI MOD	AO MOD	DI MOD	DO MOD	DO MOD	DO MOD	DO MOD	DO MOD	

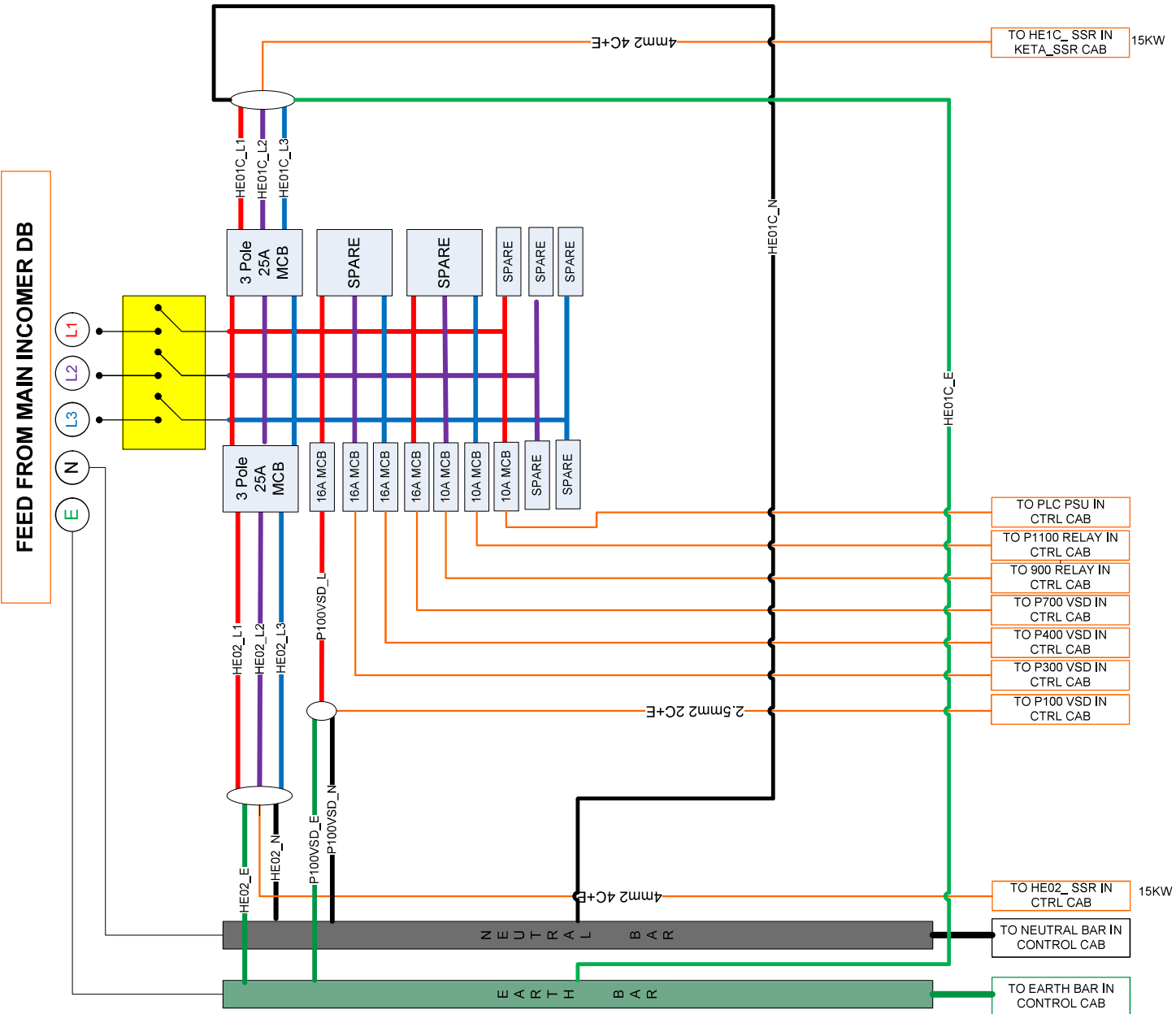


# CONTROL CABINET HIGH VOLTAGE POWER DISTRIBUTION

EQUIPMENT	WIRE LABEL
HLT02 HEATER	HE02_SSR_L1
	HE02_SSR_L2
	HE02_SSR_L3
P100 VSD	HE02_SSR_N
	HE02_SSR_E
	P100_VSD_U
P300 VSD	P100_VSD_V
	P100_VSD_W
	P100_VSD_E
	P300_VSD_U
P400 VSD	P300_VSD_V
	P300_VSD_W
	P300_VSD_E
	P400_VSD_U
P700 VSD	P400_VSD_V
	P400_VSD_W
	P400_VSD_E
P900_RELAY	P700_VSD_U
P1100_RELAY	P700_VSD_V
	P700_VSD_W
	P700_VSD_E
	P900_L_S
	P1100_L_S



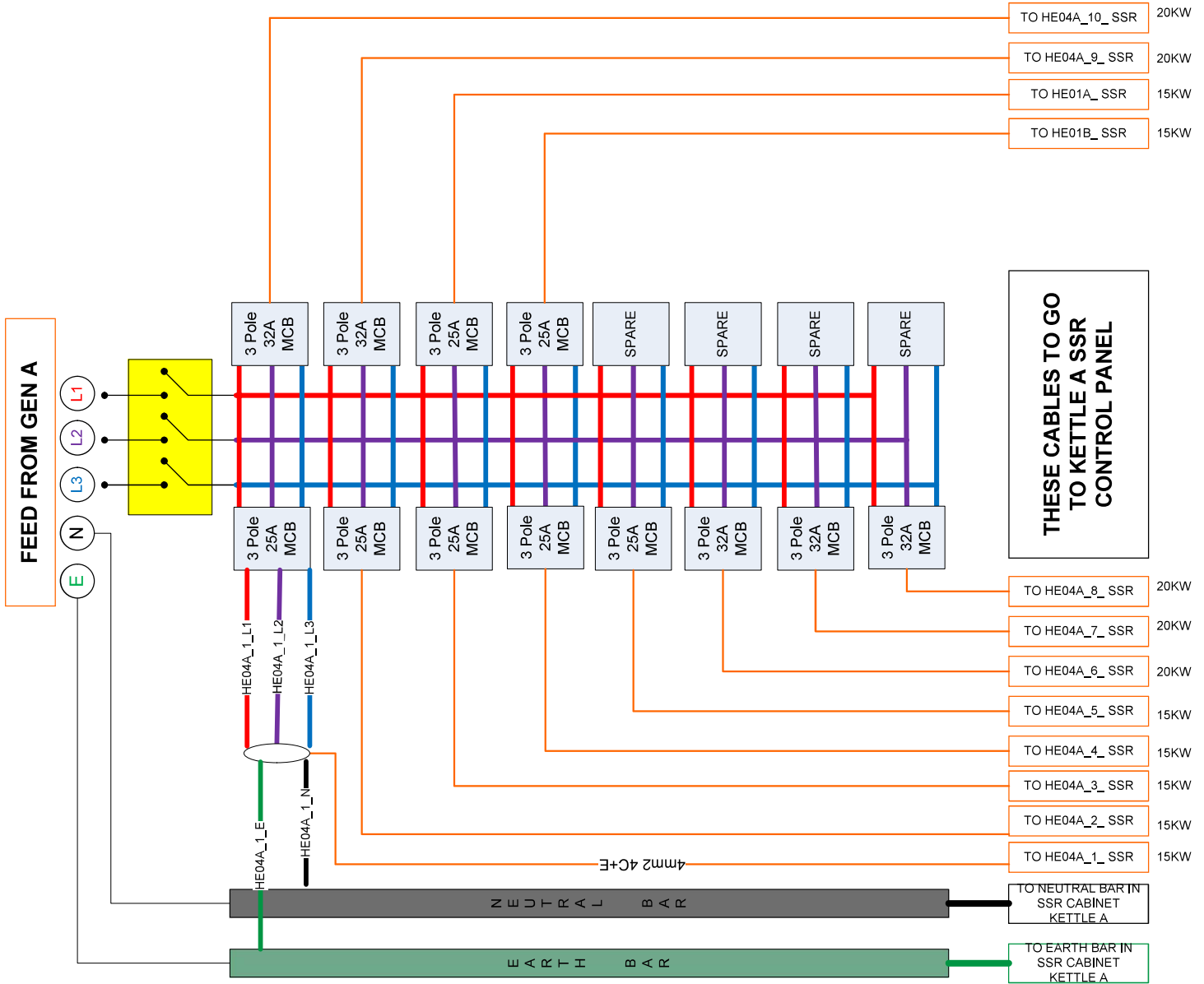
# CONTROL CABINET DISTRIBUTION BOARD



24 POLE DB FOR CONTROL			
EQUIPMENT	WIRE LABEL	EQUIPMENT	WIRE LABEL
FEED FROM MAIN DB	MAIN_L1	HLT01C HEATING ELEMENT	HE01C_L1
	MAIN_L2		HE01C_L2
	MAIN_L3		HE01C_L3
	MAIN_N		HE01C_N
	MAIN_E		HE01C_E
HLT02 HEATING ELEMENT	HE02_L1		
	HE02_L2		
	HE02_L3		
	HE02_N		
P100 VSD FEED	HE02_E		
	P100_L		
	P100_N		
P300 VSD FEED	P100_E		
	P300_L		
	P300_N		
P400 VSD FEED	P300_E		
	P400_L		
	P400_N		
P700 VSD FEED	P400_E		
	P700_L		
	P700_N		
P900 VSD FEED	P700_E		
	P900_L		
	P900_N		
P1100 VSD FEED	P900_E		
	P1100_L		
	P1100_N		
PLC PSU FEED	P1100_E		
	PLC_PSU_L		
	PLC_PSU_N		
	PLC_PSU_E		

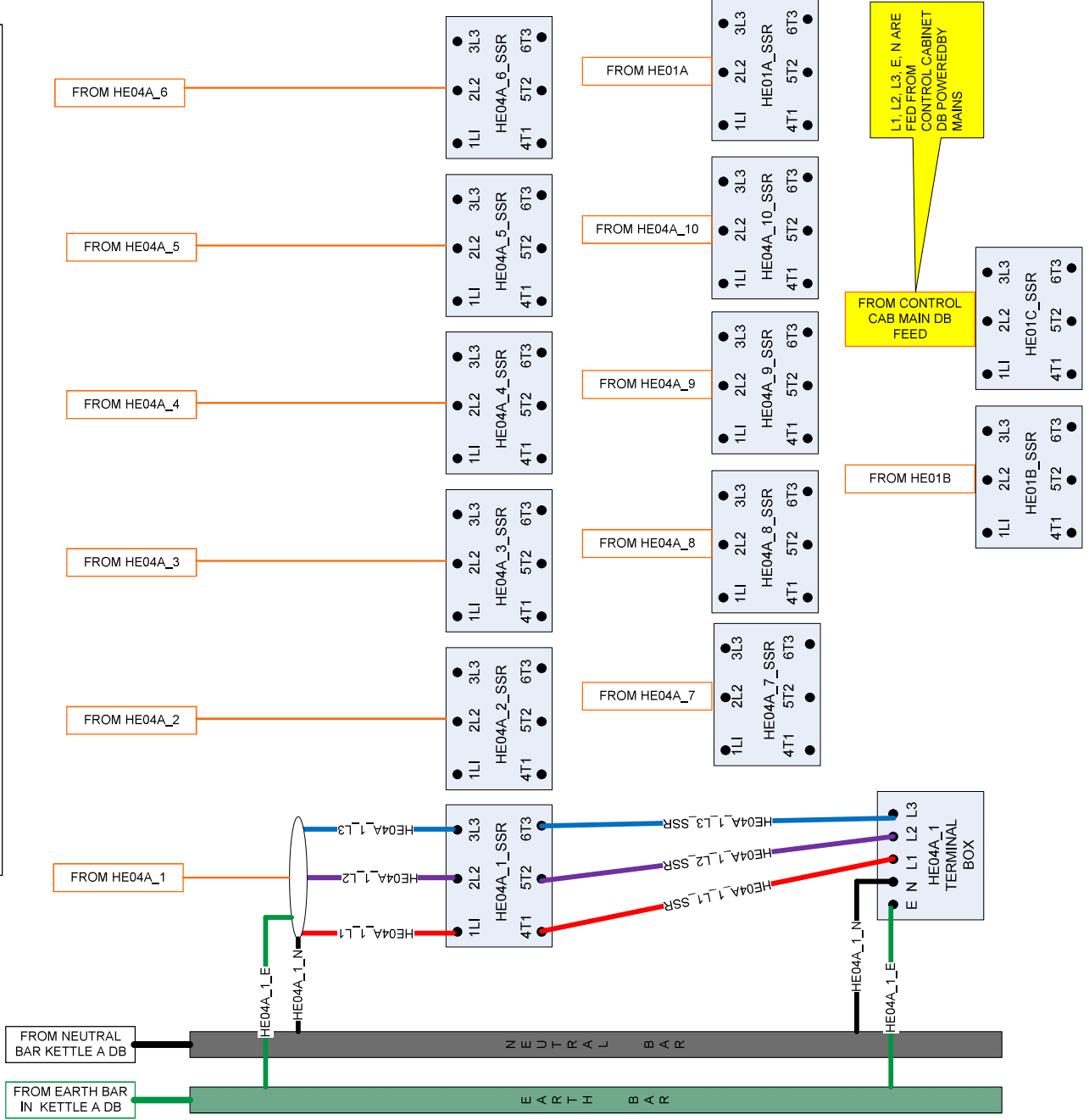
# GENERATOR A DISTRIBUTION BOARD

48 POLE DB FOR KETTLE A			
EQUIPMENT	WIRE LABEL	EQUIPMENT	WIRE LABEL
GEN A FEED	GEN_A_L1	KETTLE A HEATING ELEMENT 07	HE04A_7_L1
	GEN_A_L2		HE04A_7_L2
	GEN_A_L3		HE04A_7_L3
	GEN_A_N		HE04A_7_N
KETTLE A HEATING ELEMENT 01	GEN_A_E	KETTLE A HEATING ELEMENT 08	HE04A_7_E
	HE04A_1_L1		HE04A_8_L1
	HE04A_1_L2		HE04A_8_L2
	HE04A_1_L3		HE04A_8_L3
KETTLE A HEATING ELEMENT 02	HE04A_1_N	KETTLE A HEATING ELEMENT 09	HE04A_8_N
	HE04A_1_E		HE04A_8_E
	HE04A_2_L1		HE04A_9_L1
	HE04A_2_L2		HE04A_9_L2
KETTLE A HEATING ELEMENT 03	HE04A_2_L3	KETTLE A HEATING ELEMENT 10	HE04A_9_L3
	HE04A_2_N		HE04A_9_N
	HE04A_2_E		HE04A_9_E
	HE04A_3_L1		HE04A_10_L1
KETTLE A HEATING ELEMENT 04	HE04A_3_L2	HLT1 HEATING ELEMENT A	HE04A_10_L2
	HE04A_3_L3		HE04A_10_L3
	HE04A_3_N		HE04A_10_N
	HE04A_3_E		HE04A_10_E
KETTLE A HEATING ELEMENT 05	HE04A_4_L1	HLT1 HEATING ELEMENT B	HE01A_L1
	HE04A_4_L2		HE01A_L2
	HE04A_4_L3		HE01A_L3
	HE04A_4_N		HE01A_N
KETTLE A HEATING ELEMENT 06	HE04A_4_E		HE01A_E
	HE04A_5_L1		HE01B_L1
	HE04A_5_L2		HE01B_L2
	HE04A_5_L3		HE01B_L3
	HE04A_5_N		HE01B_N
	HE04A_5_E		HE01B_E
	HE04A_6_L1		
	HE04A_6_L2		
	HE04A_6_L3		
	HE04A_6_N		
	HE04A_6_E		



# GENERATOR A SSR CABINET HIGH VOLTAGE POWER DISTRIBUTION

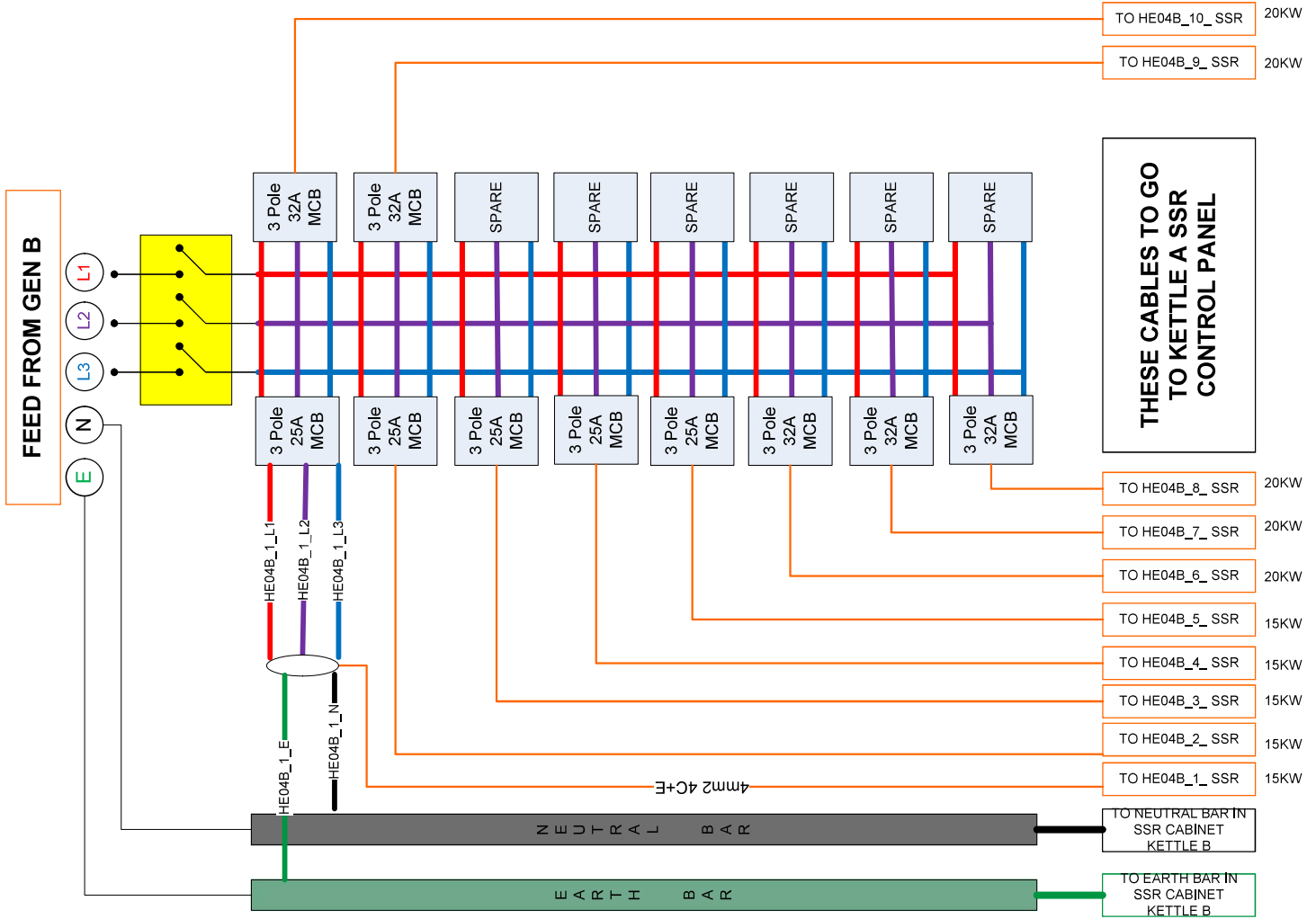
THESE CABLES ARE FROM KETTLE A DB (EXCEPT FOR HE01C WHICH IS FROM CONTROL CAB DB)



KETTLE A SSR CABINET			
EQUIPMENT	WIRE LABEL	EQUIPMENT	WIRE LABEL
KETTLE A HEATER 1	HE04A_1_SSR_L1	KETTLE A HEATER 8	HE04A_8_SSR_L1
	HE04A_1_SSR_L2		HE04A_8_SSR_L2
	HE04A_1_SSR_L3		HE04A_8_SSR_L3
	HE04A_1_N		HE04A_8_N
	HE04A_1_E		HE04A_8_E
KETTLE A HEATER 2	HE04A_2_SSR_L1	KETTLE A HEATER 9	HE04A_9_SSR_L1
	HE04A_2_SSR_L2		HE04A_9_SSR_L2
	HE04A_2_SSR_L3		HE04A_9_SSR_L3
	HE04A_2_N		HE04A_9_N
	HE04A_2_E		HE04A_9_E
KETTLE A HEATER 3	HE04A_3_SSR_L1	KETTLE A HEATER 10	HE04A_10_SSR_L1
	HE04A_3_SSR_L2		HE04A_10_SSR_L2
	HE04A_3_SSR_L3		HE04A_10_SSR_L3
	HE04A_3_N		HE04A_10_N
	HE04A_3_E		HE04A_10_E
KETTLE A HEATER 4	HE04A_4_SSR_L1	HLT01A	HE01A_1_SSR_L1
	HE04A_4_SSR_L2		HE01A_1_SSR_L2
	HE04A_4_SSR_L3		HE01A_1_SSR_L3
	HE04A_4_N		HE01A_1_N
	HE04A_4_E		HE01A_1_E
KETTLE A HEATER 5	HE04A_5_SSR_L1	HLT01B	HE01B_1_SSR_L1
	HE04A_5_SSR_L2		HE01B_1_SSR_L2
	HE04A_5_SSR_L3		HE01B_1_SSR_L3
	HE04A_5_N		HE01B_1_N
	HE04A_5_E		HE01B_1_E
KETTLE A HEATER 6	HE04A_6_SSR_L1	HLT01C	HE01C_1_SSR_L1
	HE04A_6_SSR_L2		HE01C_1_SSR_L2
	HE04A_6_SSR_L3		HE01C_1_SSR_L3
	HE04A_6_N		HE01C_1_N
	HE04A_6_E		HE01C_1_E
KETTLE A HEATER 7	HE04A_7_SSR_L1		
	HE04A_7_SSR_L2		
	HE04A_7_SSR_L3		
	HE04A_7_N		
	HE04A_7_E		

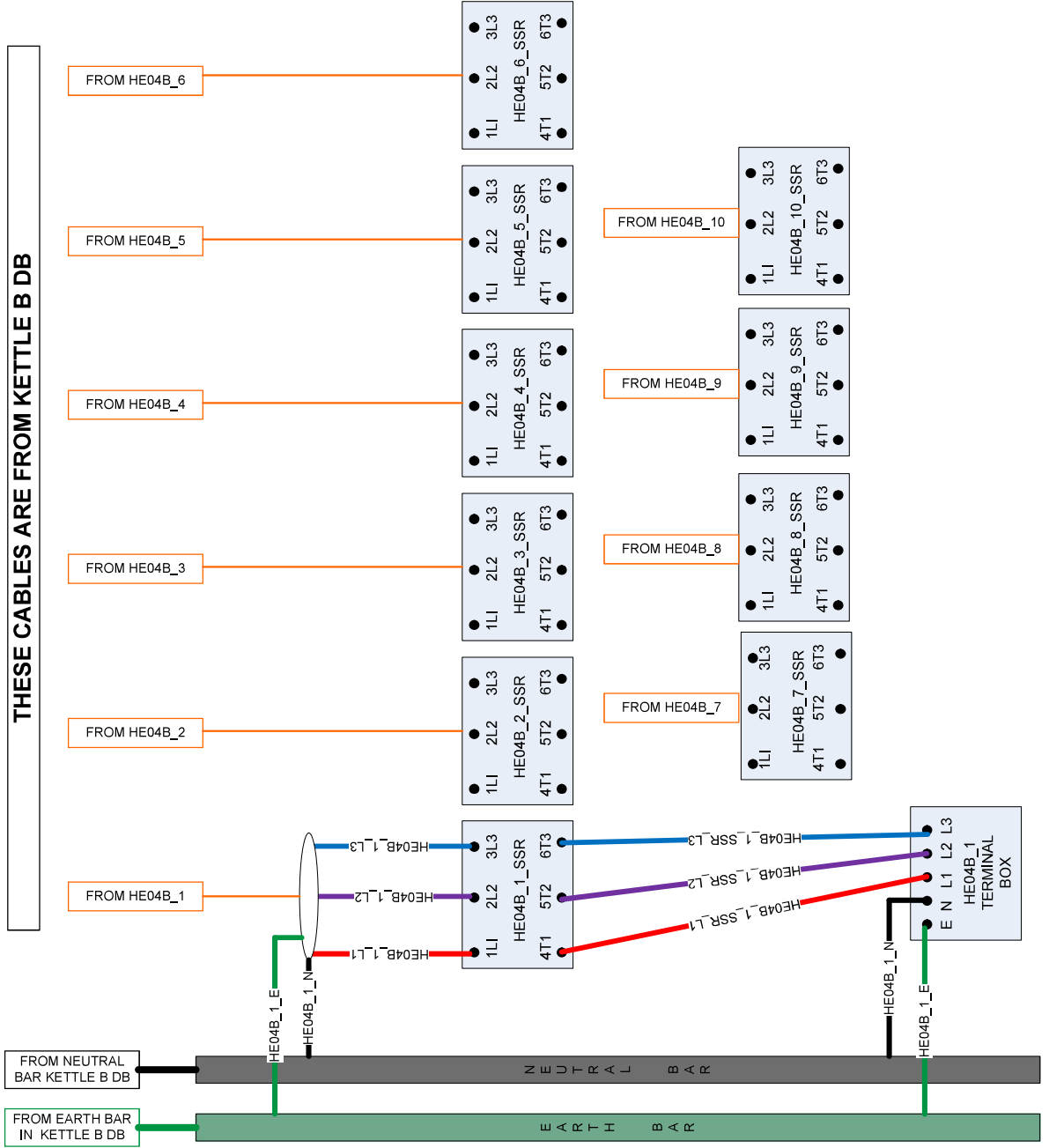
# GENERATOR B DISTRIBUTION BOARD

48 POLE DB FOR KETTLE B			
EQUIPMENT	WIRE LABEL	EQUIPMENT	WIRE LABEL
GEN B FEED	GEN_B_L1	KETTLE A HEATING ELEMENT 06	HE04B_6_L1
	GEN_B_L2		HE04B_6_L2
	GEN_B_L3		HE04B_6_L3
	GEN_B_N		HE04B_6_N
	GEN_B_E		HE04B_6_E
KETTLE A HEATING ELEMENT 01	HE04B_1_L1	KETTLE A HEATING ELEMENT 07	HE04B_7_L1
	HE04B_1_L2		HE04B_7_L2
	HE04B_1_L3		HE04B_7_L3
	HE04B_1_N		HE04B_7_N
	HE04B_1_E		HE04B_7_E
KETTLE A HEATING ELEMENT 02	HE04B_2_L1	KETTLE A HEATING ELEMENT 08	HE04B_8_L1
	HE04B_2_L2		HE04B_8_L2
	HE04B_2_L3		HE04B_8_L3
	HE04B_2_N		HE04B_8_N
	HE04B_2_E		HE04B_8_E
KETTLE A HEATING ELEMENT 03	HE04B_3_L1	KETTLE A HEATING ELEMENT 09	HE04B_9_L1
	HE04B_3_L2		HE04B_9_L2
	HE04B_3_L3		HE04B_9_L3
	HE04B_3_N		HE04B_9_N
	HE04B_3_E		HE04B_9_E
KETTLE A HEATING ELEMENT 04	HE04B_4_L1	KETTLE A HEATING ELEMENT 10	HE04B_10_L1
	HE04B_4_L2		HE04B_10_L2
	HE04B_4_L3		HE04B_10_L3
	HE04B_4_N		HE04B_10_N
	HE04B_4_E		HE04B_10_E
KETTLE A HEATING ELEMENT 05	HE04B_5_L1		
	HE04B_5_L2		
	HE04B_5_L3		
	HE04B_5_N		
	HE04B_5_E		

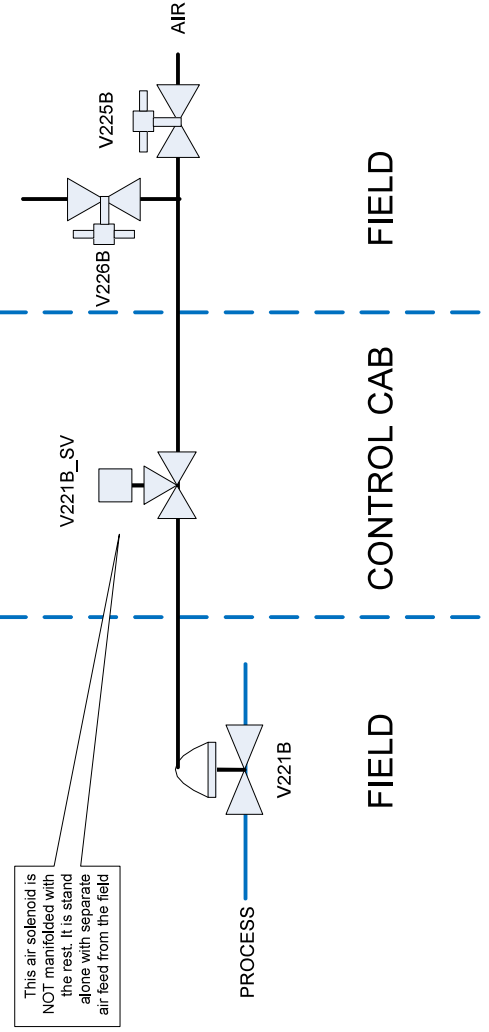
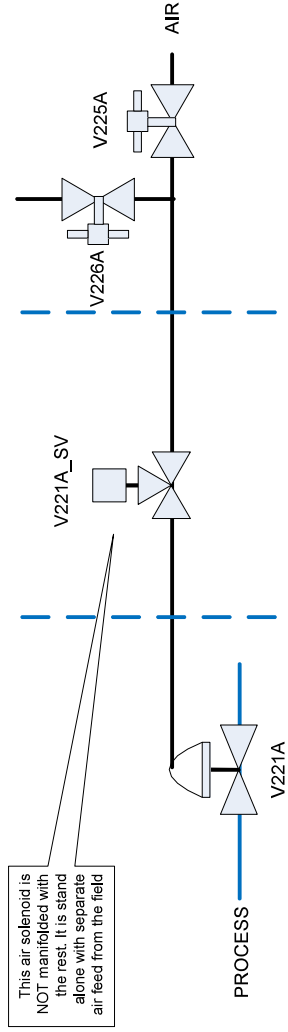
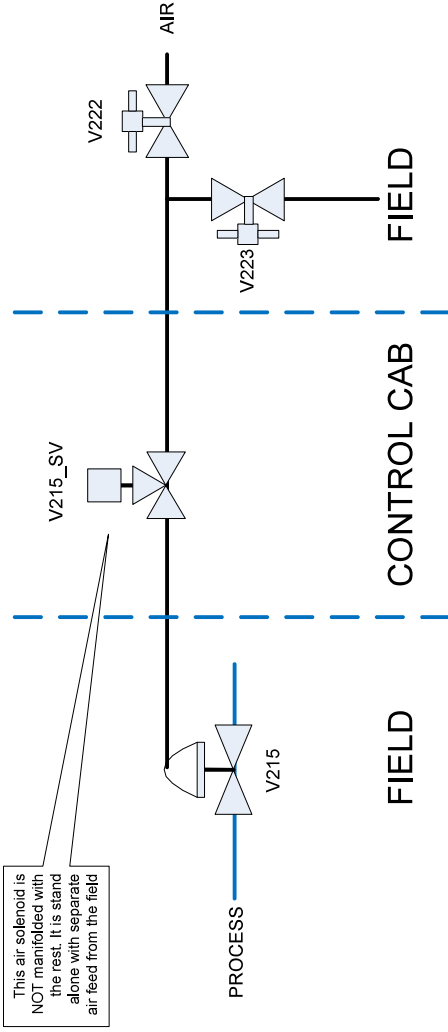


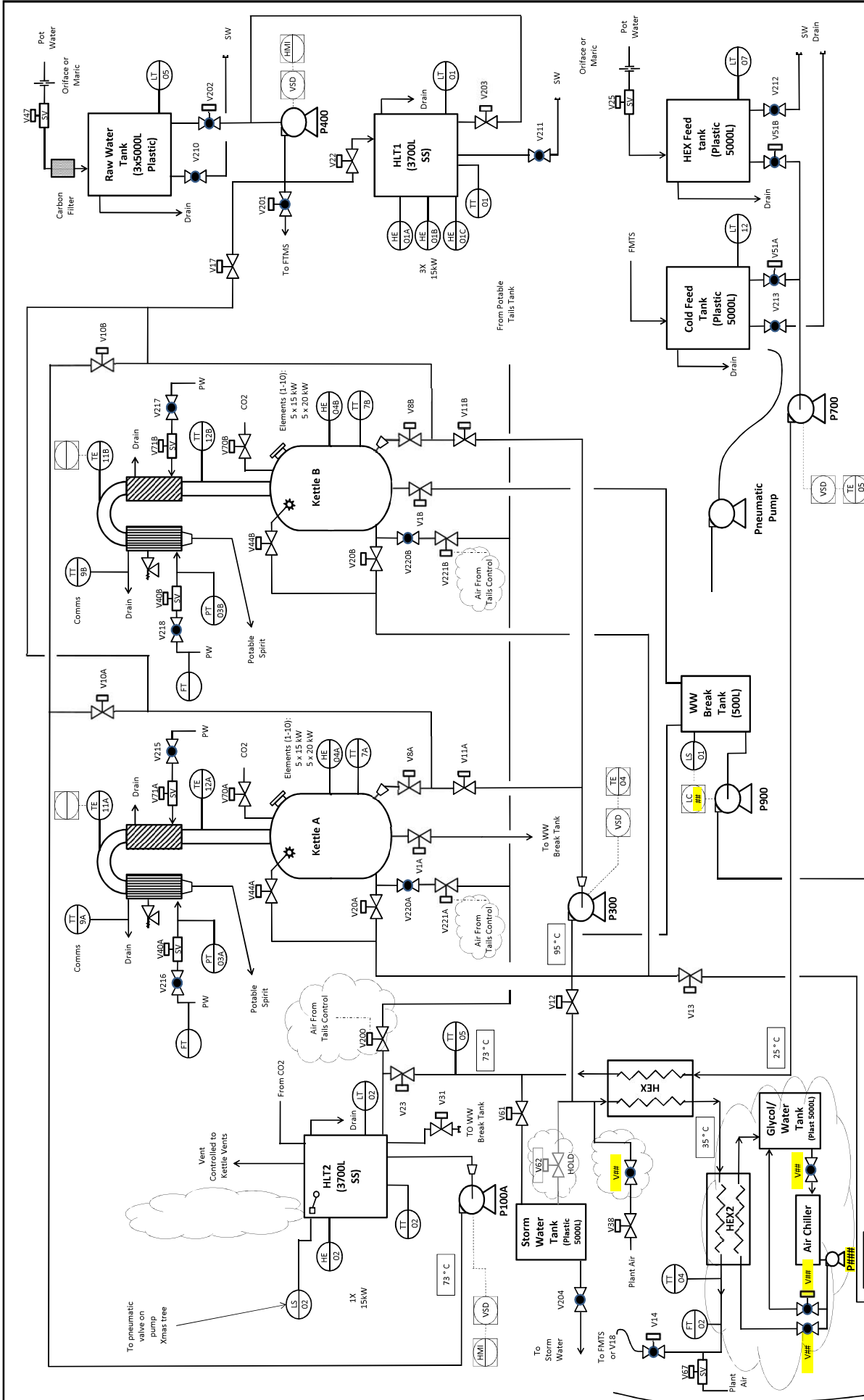
# GENERATOR B SSR CABINET HIGH VOLTAGE POWER DISTRIBUTION

KETTLE B SSR CABINET			
EQUIPMENT	WIRE LABEL	EQUIPMENT	WIRE LABEL
KETTLE B HEATER 1	HE04B_1_SSR_L1	KETTLE B HEATER 9	HE04B_9_SSR_L1
	HE04B_1_SSR_L2		HE04B_9_SSR_L2
	HE04B_1_SSR_L3		HE04B_9_SSR_L3
	HE04B_1_N		HE04B_9_N
	HE04B_1_E		HE04B_9_E
KETTLE B HEATER 2	HE04B_2_SSR_L1	KETTLE B HEATER 10	HE04B_10_SSR_L1
	HE04B_2_SSR_L2		HE04B_10_SSR_L2
	HE04B_2_SSR_L3		HE04B_10_SSR_L3
	HE04B_2_N		HE04B_10_N
	HE04B_2_E		HE04B_10_E
KETTLE B HEATER 3	HE04B_3_SSR_L1		
	HE04B_3_SSR_L2		
	HE04B_3_SSR_L3		
	HE04B_3_N		
	HE04B_3_E		
KETTLE B HEATER 4	HE04B_4_SSR_L1		
	HE04B_4_SSR_L2		
	HE04B_4_SSR_L3		
	HE04B_4_N		
	HE04B_4_E		
KETTLE B HEATER 5	HE04B_5_SSR_L1		
	HE04B_5_SSR_L2		
	HE04B_5_SSR_L3		
	HE04B_5_N		
	HE04B_5_E		
KETTLE B HEATER 6	HE04B_6_SSR_L1		
	HE04B_6_SSR_L2		
	HE04B_6_SSR_L3		
	HE04B_6_N		
	HE04B_6_E		
KETTLE B HEATER 7	HE04B_7_SSR_L1		
	HE04B_7_SSR_L2		
	HE04B_7_SSR_L3		
	HE04B_7_N		
	HE04B_7_E		
KETTLE B HEATER 8	HE04B_8_SSR_L1		
	HE04B_8_SSR_L2		
	HE04B_8_SSR_L3		
	HE04B_8_N		
	HE04B_8_E		





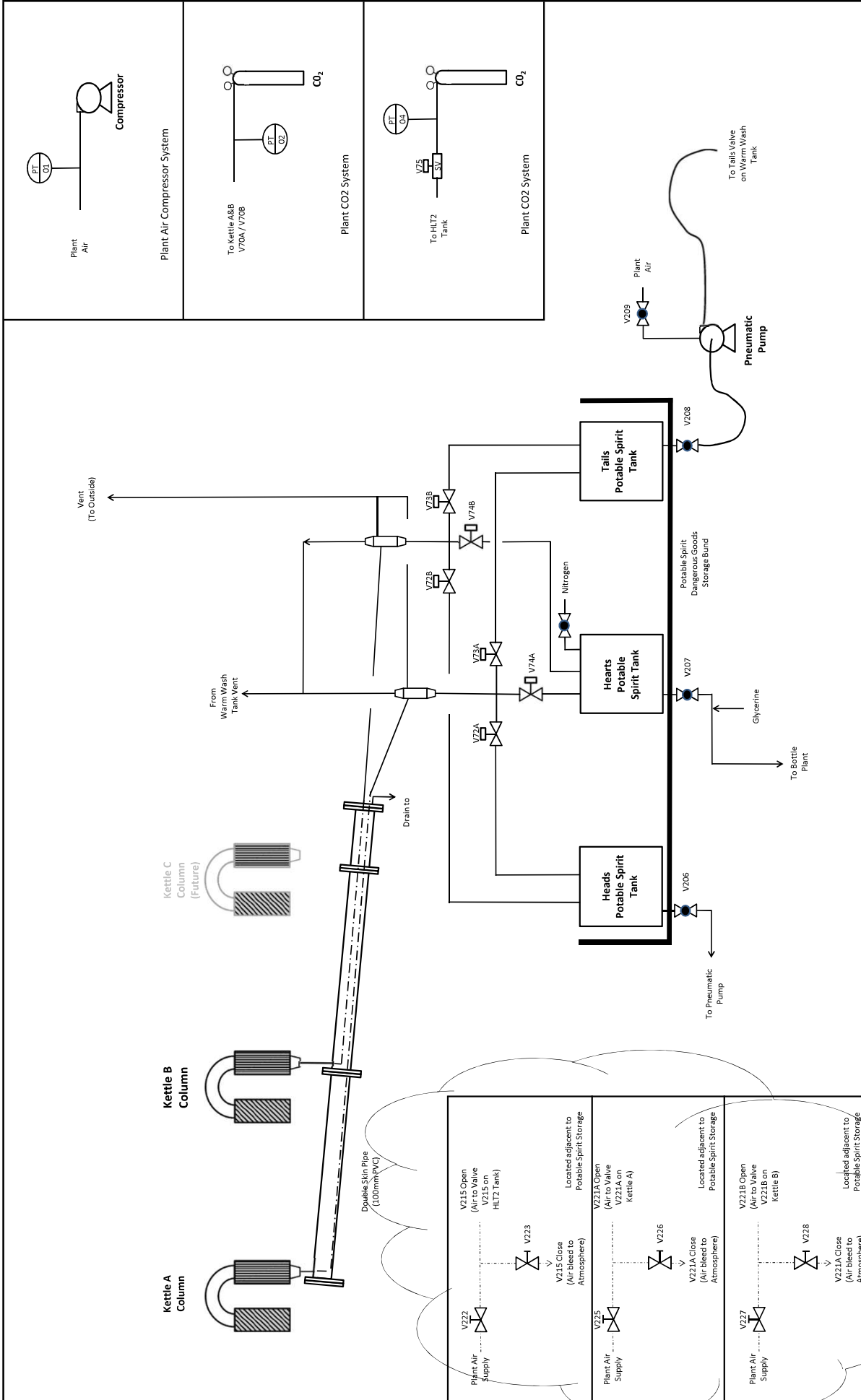




Revision History				Design		Draft		Approved	
Rev No	Revision	Date	Design	Draft	Approved	Client	Client	Client	Client
0	Issued for Construction	19/5/20	N.J.	N.J.					
1	Potabile Tails Feed Line Added	30/5/20	N.J.	N.J.					
2	Tails return Air added/Chiller, HEX2 Added	9/6/20	N.J.	N.J.					

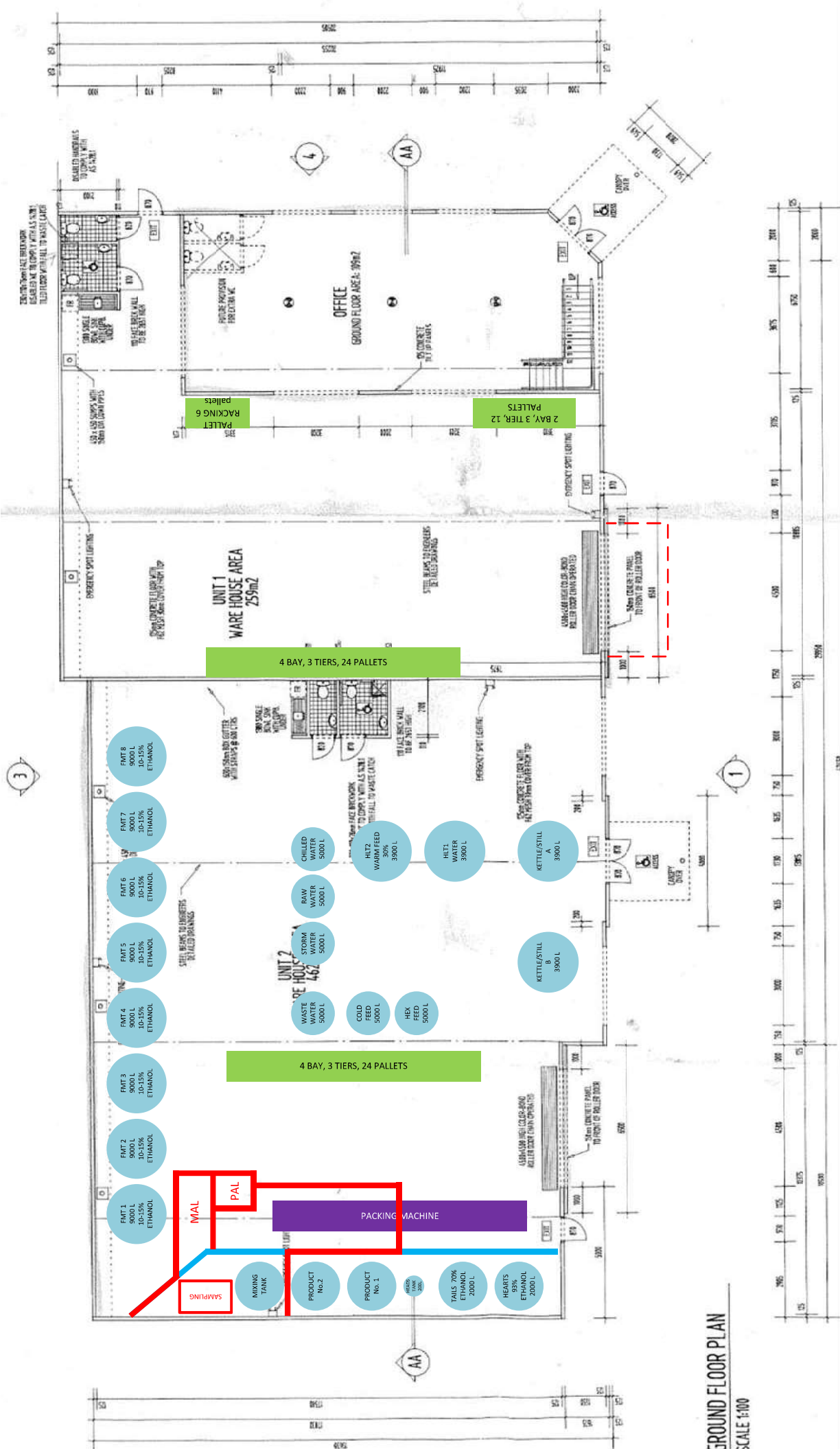
<b>MediHANDS Australia</b>		
Ethanol Plant		
P&ID Sheet 1		
Drawing No	LB-EP1-PR-001	2



Revision History		Design				Client	
Rev No	Revision	Date	Design	Draft	Approved	N. Jameson	19/5/20
0	Issued for Construction	19/5/20	N.J.	N.J.		N. Jameson	19/5/20
1	HLT2 Co2 Pressure sensor added	30/5/20	N.J.	N.J.			
2	Potable Spirit Return Control Air Added	9/6/20	N.J.	N.J.			

<b>Medihands Australia</b>	
Ethanol Plant	
P&ID Sheet 2	
Drawing No	LB-EP1-PR-002
	2



**GROUND FLOOR PLAN**  
SCALE 1:100