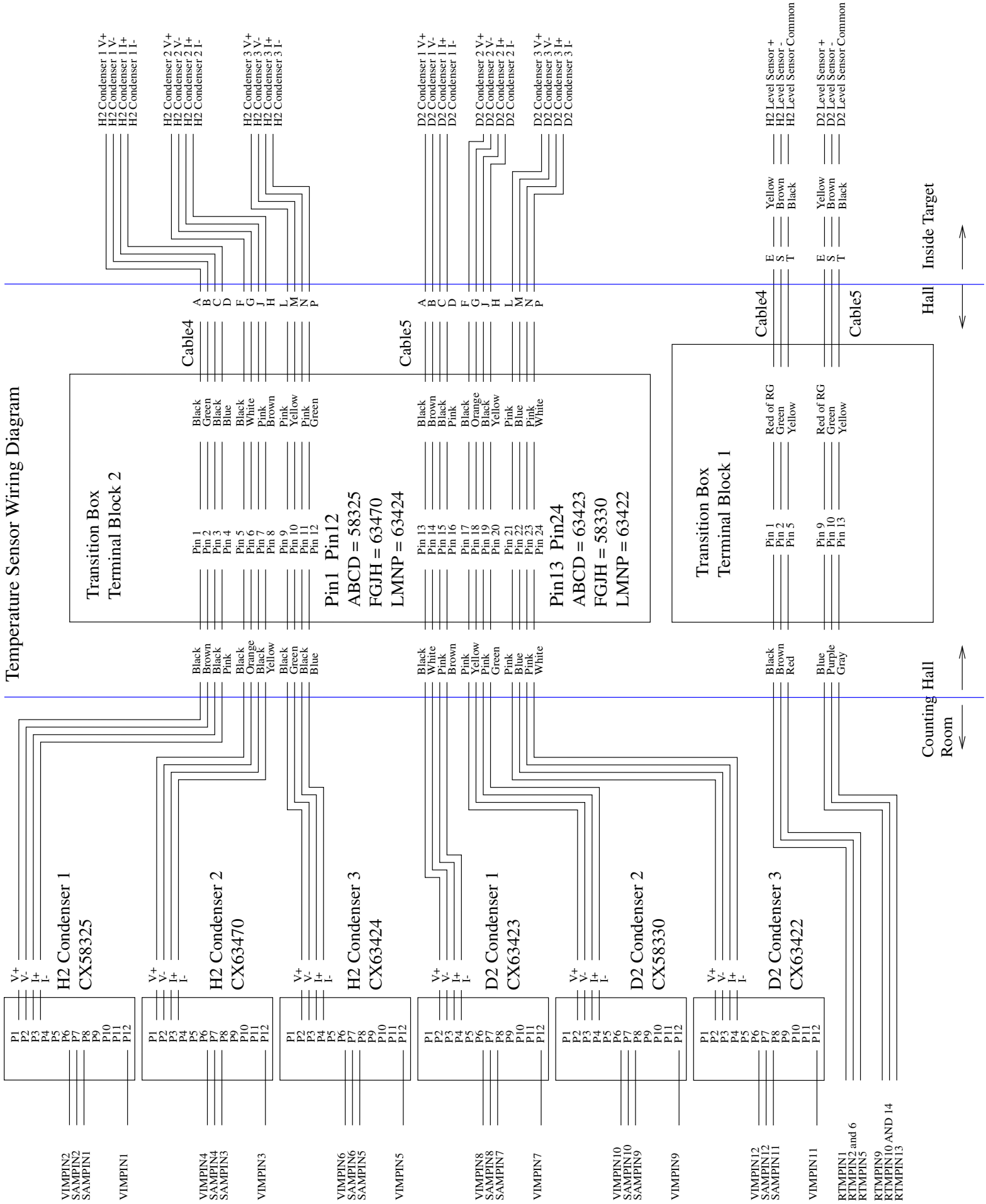
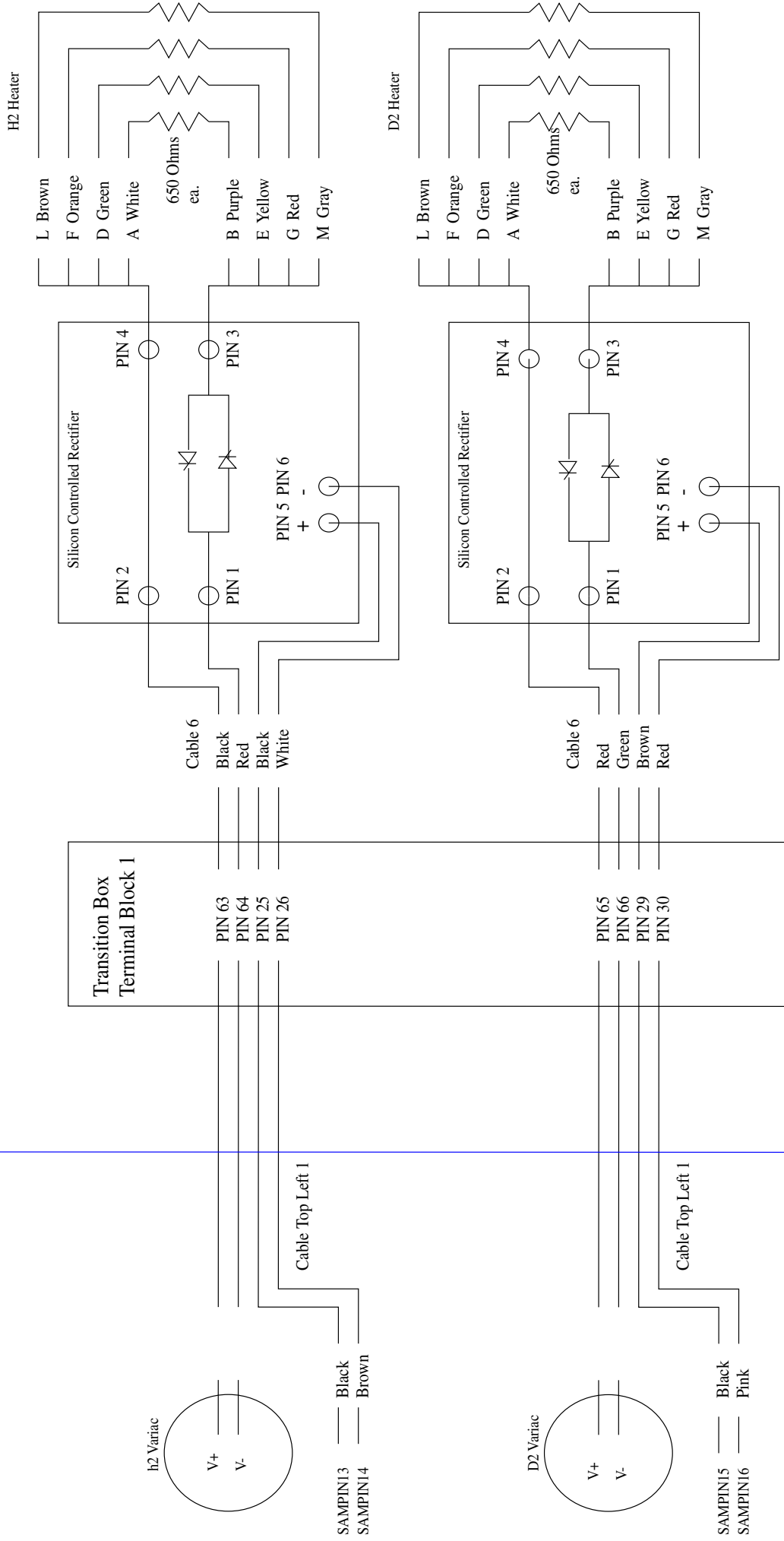


# Temperature Sensor Wiring Diagram



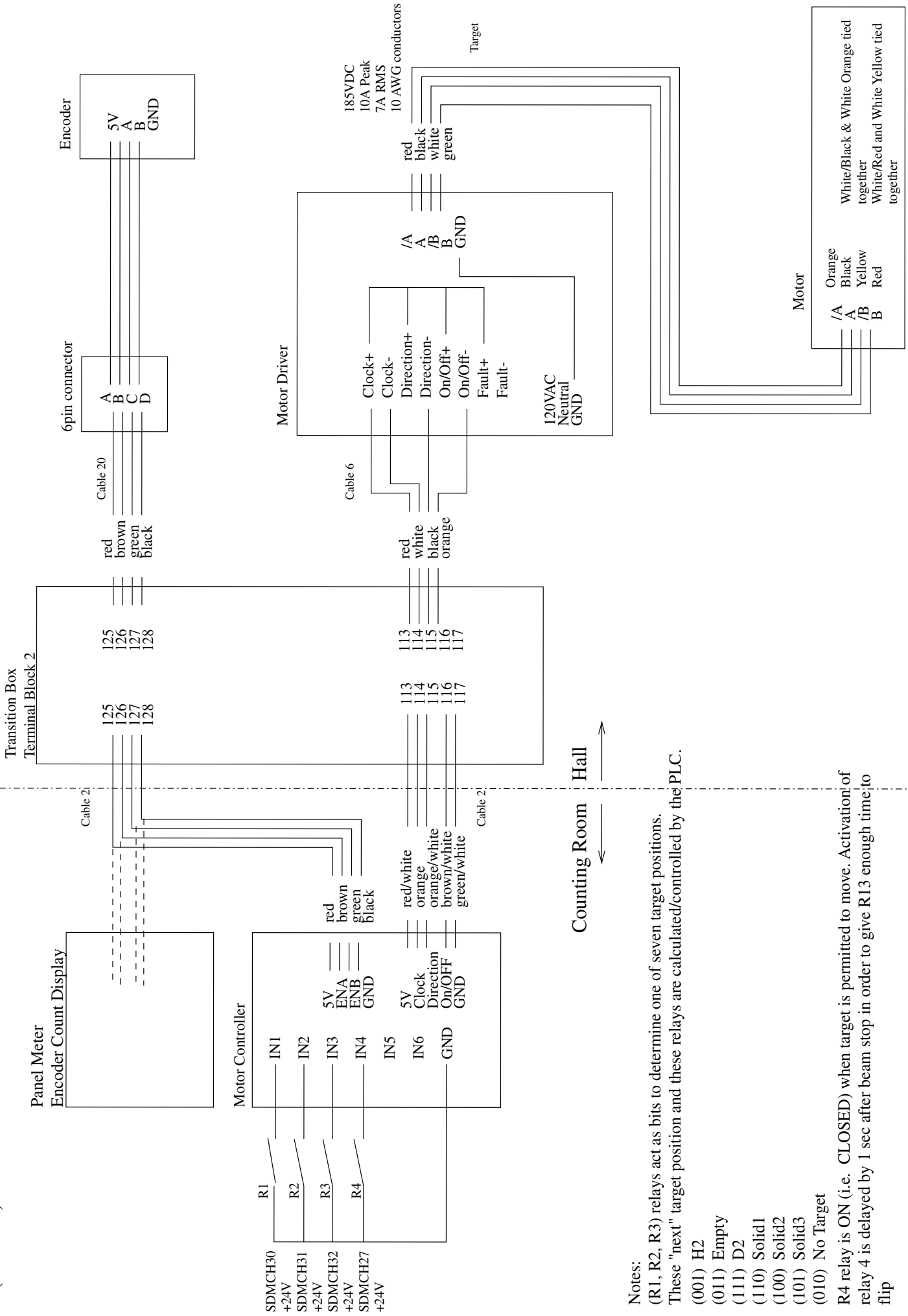
# Heater Wiring Diagram



Counting Room ← → Hall

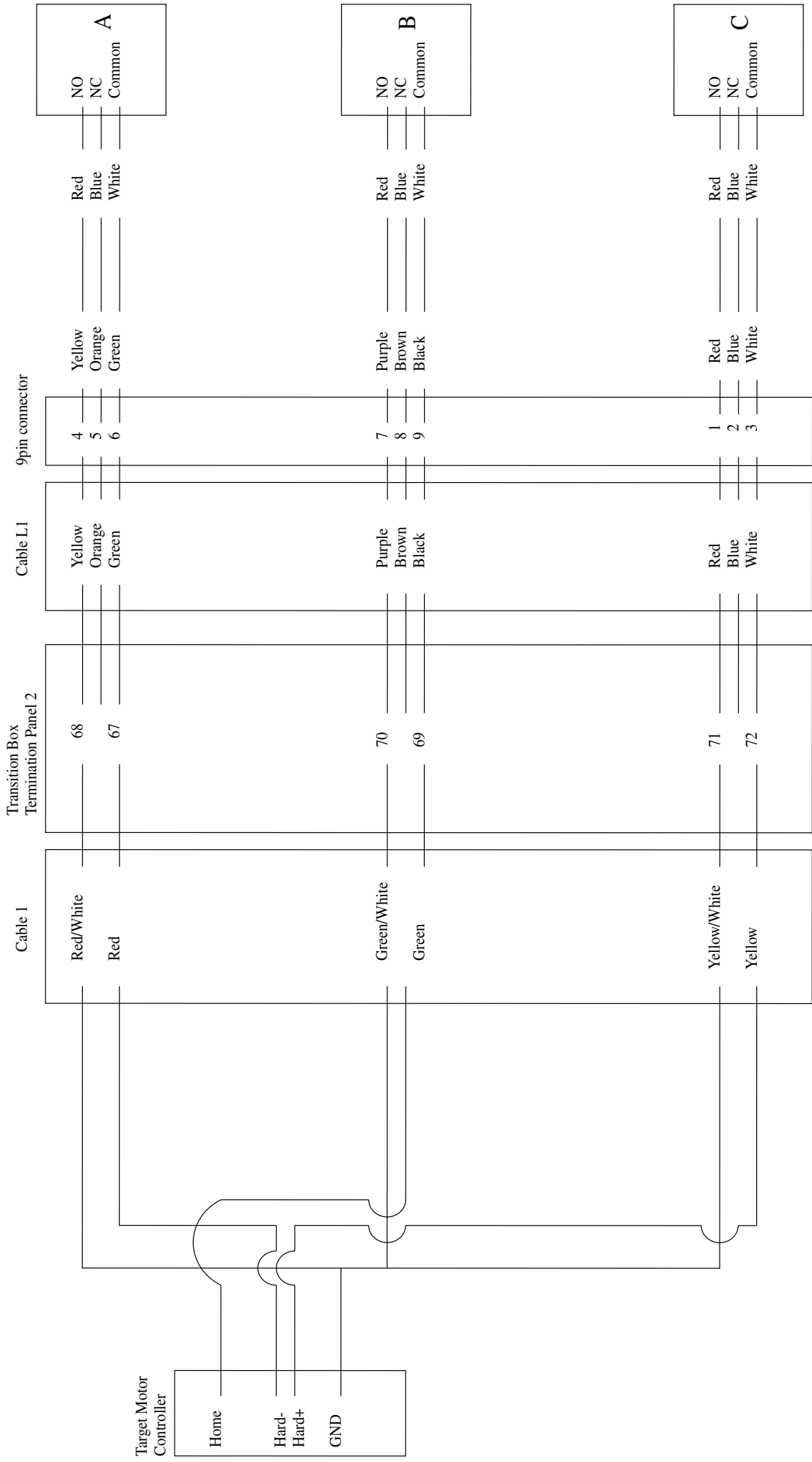
# Table Motor and Encoder Wiring Diagram

(4/1/2011)



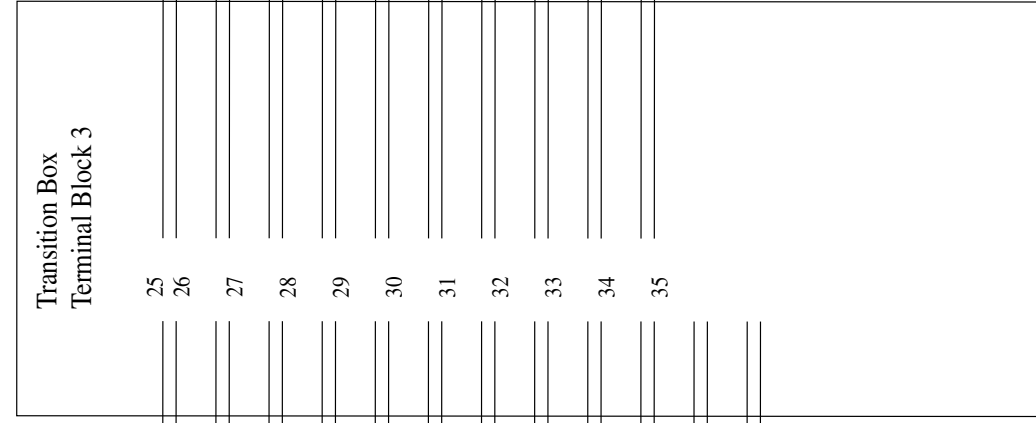
- Notes:
- (R1, R2, R3) relays act as bits to determine one of seven target positions. These "next" target position and these relays are calculated/controlled by the PLC.
  - (001) H2
  - (011) Empty
  - (111) D2
  - (110) Solid1
  - (100) Solid2
  - (101) Solid3
  - (010) No Target
- R4 relay is ON (i.e. CLOSED) when target is permitted to move. Activation of relay 4 is delayed by 1 sec after beam stop in order to give R13 enough time to flip
- The Motor Controller to Motor Driver connection is in current sinking mode:

# Target Table Limit Switch Wiring Diagram



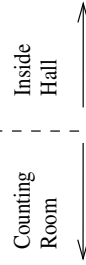
## H2 Pumpcart Wiring Map (4/1/2011)

### Signal Map

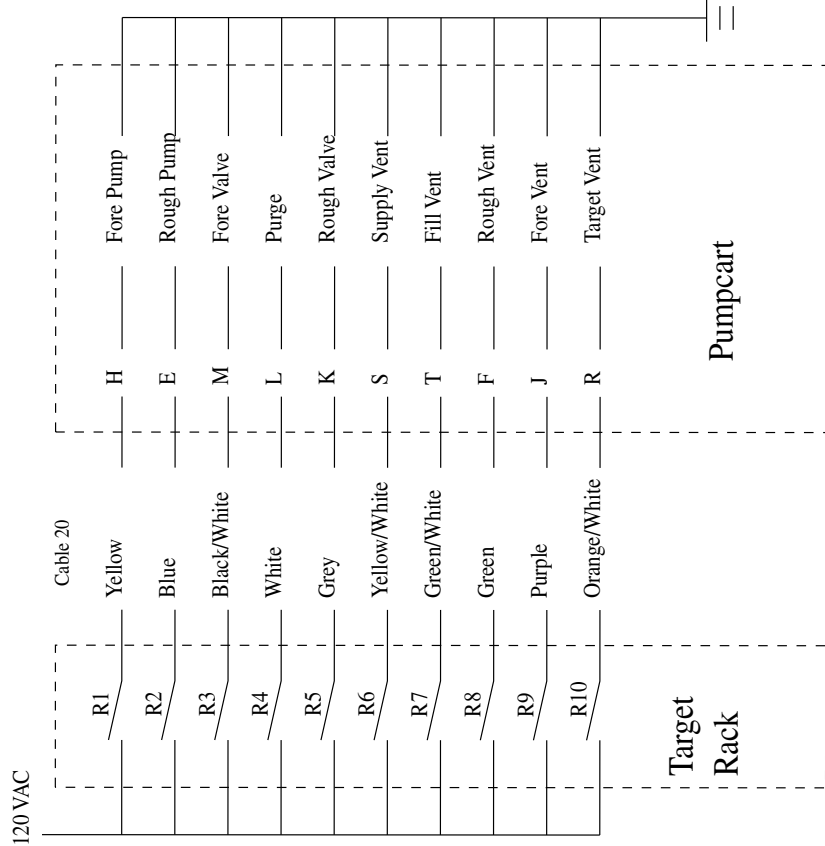


Cable 4

Common	Black
SDMCH1	Red
+24V	Black
SDMCH2	Orange
+24V	Black
SDMCH3	White
+24V	Black
SDMCH4	Green
+24V	Black
SDMCH5	Brown
+24V	Black
SDMCH6	Blue
+24V	Black
SDMCH7	Yellow
+24V	Red
SDMCH8	White
+24V	Red
SDMCH9	Green
+24V	Red
SDMCH10	Brown
+24V	Red
SDMCH11	Blue
+24V	Red
SDMCH12	Yellow
+24V	



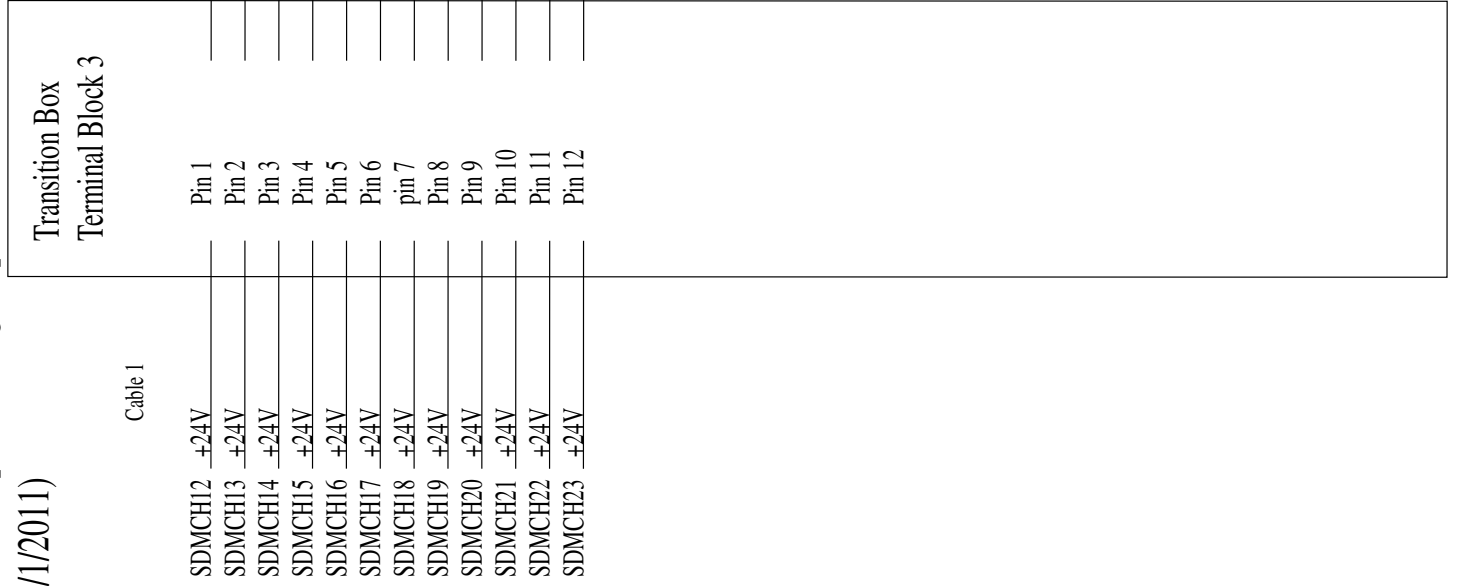
### Power Map



All Power connections are inside the hall  
 120VAC generated from one of the phases of 208 3ph  
 All relays are located on target rack.

# E907 Pumpcart Wiring Map

(4/1/2011)



120VAC

Cable 21

Connector J1

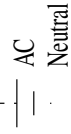
Pumpcart Internal Wiring

Terminal Block 3	Cable 1	Cable 21	Connector J1	Pumpcart Internal Wiring	Fore Pump
SDMCH12 +24V	Pin 1	A Black	A Black	A Black	Fore Pump
SDMCH13 +24V	Pin 2	B Brown	B Brown	B Brown	Rough Pump
SDMCH14 +24V	Pin 3	C Black	C Black	C Red	EP01V
SDMCH15 +24V	Pin 4	D Orange	D Orange	D Orange	EP02V
SDMCH16 +24V	Pin 5	E Black	E Black	E Yellow	EP03V
SDMCH17 +24V	Pin 6	F Yellow	F Yellow	F Green	PV01H
SDMCH18 +24V	Pin 7	G Black	G Black	G Blue	PV02H
SDMCH19 +24V	Pin 8	H Green	H Green	H Violet	EV01V
SDMCH20 +24V	Pin 9	J Black	J Black	J Grey	EV02V
SDMCH21 +24V	Pin 10	K White	K White	K White	EV01He
SDMCH22 +24V	Pin 11	L Black	L Black	L Black/White	EFV01H
SDMCH23 +24V	Pin 12	M Red	M Red	M Brown/White	EP04V
		N Black	N Black	N Red/White	
		P Blue	P Blue	P Orange/White	
		R Red	R Red	R Yellow/White	
		S Yellow	S Yellow	S Green/White	
		T Red	T Red	T Blue/White	
		U Blue	U Blue	U Violet/White	
		V Red	V Red	V Grey/White	
		W Green	W Green	W Black/Brown/White	
		X Red	X Red	X Black/Red/White	
		Y White	Y White	Y Black/Orange/White	
		Z Red	Z Red	Z Black/Yellow/White	
		a Brown	a Brown	a Black/Green/White	

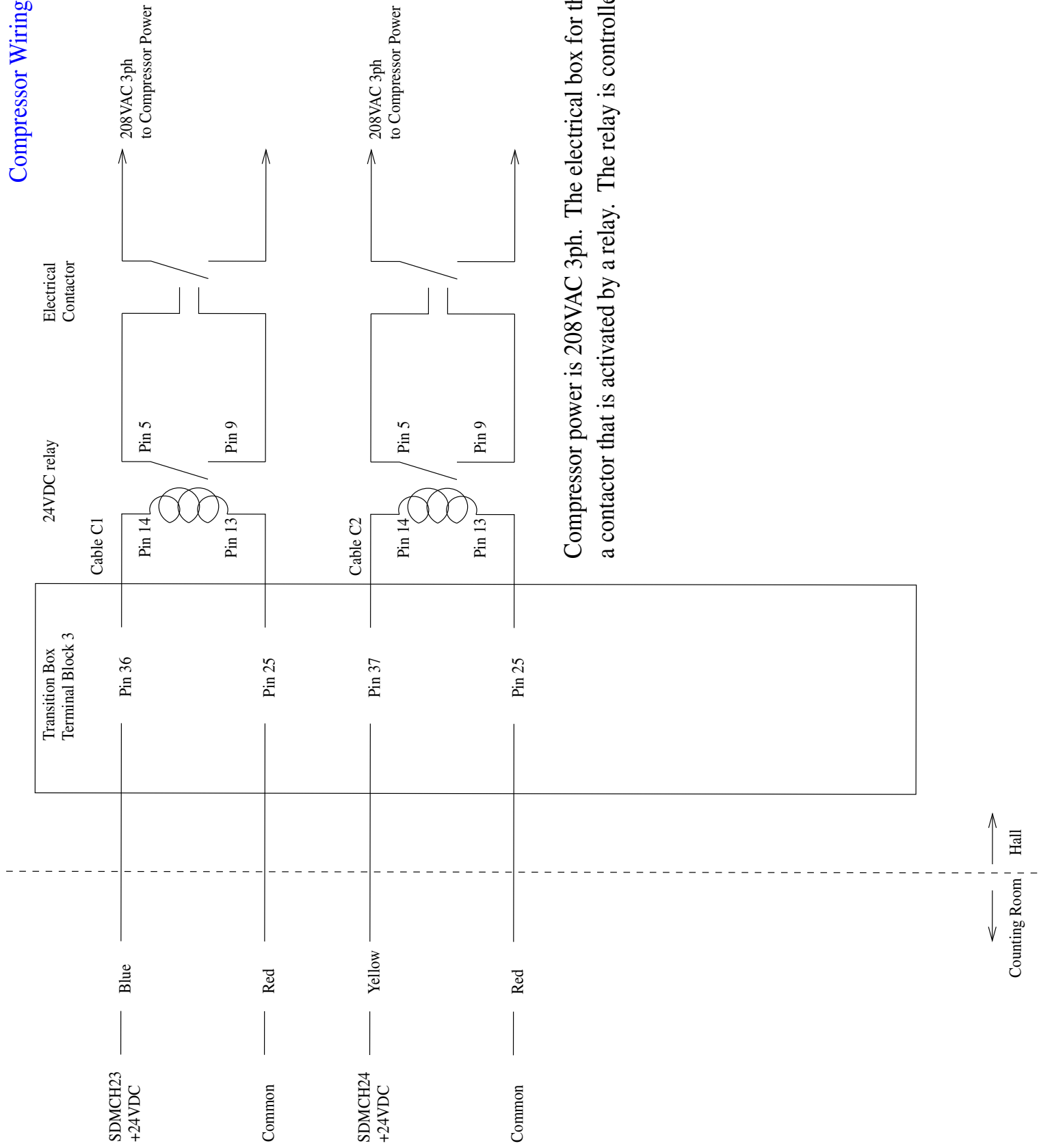
Notes:

120VAC generated internally inside pumpcart by taking one of the phases of 208VAC 3ph power.

All relays are contained inside the pumpcart control box



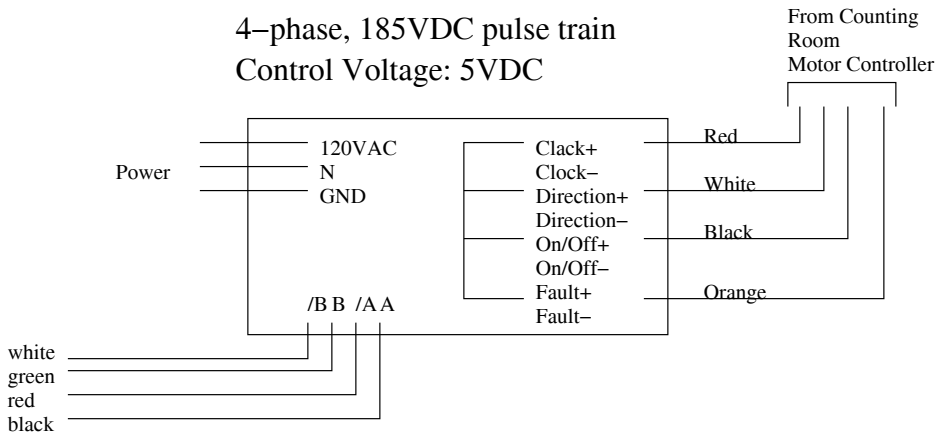
# Compressor Wiring Schematic



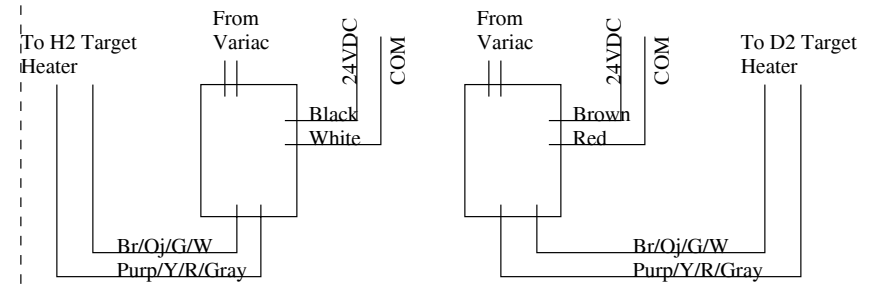
Compressor power is 208VAC 3ph. The electrical box for the power contains a contactor that is activated by a relay. The relay is controlled by the PLC.



**Motor Driver**  
 4-phase, 185VDC pulse train  
 Control Voltage: 5VDC



**Silicon Controlled Rectifiers**  
 Control Voltage: 24VDC, 4-20mA  
 Load Voltage: Variable (< 70VAC)



**H2 Pumpcart control relays**

