

4 Door Stack (Curb Side)



Power Supply: CN 10

24 Vac/dc (+/- 10%) 50/60 Hz
Max power consumption: 25 VA

Analog Input: CN 5 & CN 13

AIL 1 : Top Left RF Temp
AIL 2 : Top Left RFEvap Temp
AIL 3 : Top Right Refrigerate Temp
AIL 4 : Top Right RefrigEvap Temp
AIL 5 : Bottom Left RH Temp
AIL 6 : Bottom Left RHEvap Temp
AIL 7 : Bottom Right RH Temp
AIL 8 : Bottom Right RHEvap Temp
AIL 9 : Top Discharge Pressure
AIL 10: Top Suction Pressure
AIL 11: Bottom Discharge Pressure
AIL 12: Bottom Suction Pressure

Digital Output: CN 14 & CN 15 & CN 9 & CN 8 & CN 7 & CN 6

DOL 1 : Top Left RF Solenoid
DOL 2 : Top Right Refrig. Solenoid
DOL 3 : Top Compressor Out
DOL 4 : Top Left Hot Gas
DOL 5 : Top Left Evap Fan
DOL 6 : Bottom Left Refrig. Solenoid
DOL 7 : Bottom Right Refrig. Solenoid
DOL 8 : Bottom Compressor Out
DOL 9 : Bottom Left Evap Fan
DOL10: Bottom Right Evap Fan
DOL11: Bottom Left Heater
DOL12: Bottom Right Heater

Digital Input: CN 3 & CN 4

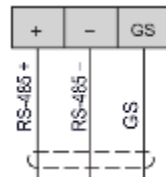
DIL 1 : Top Left Door
DIL 2 : Top Right Door
DIL 3 : Bottom Left Door
DIL 4 : Bottom Right Door

Analog Output: CN 2

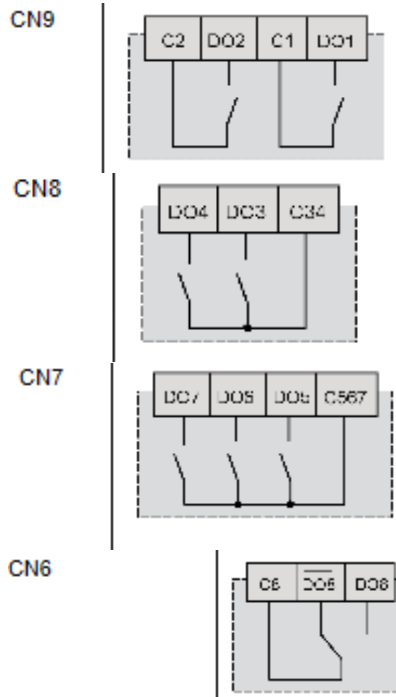
AOL 1 : Top Compressor AO
AOL 2 : Bottom Compressor AO
AOL 3 : Bottom Left Heater Fan
AOL 4 : Bottom Right Heater Fan

RS485-1: CN 19

Modbus Slave: Connect (+ - GS) to **Street Side** RS485-2 CN1

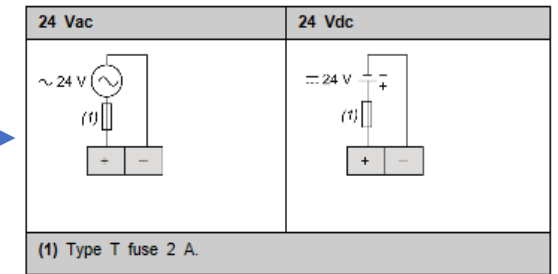


4 Door Stack (Curb Side)

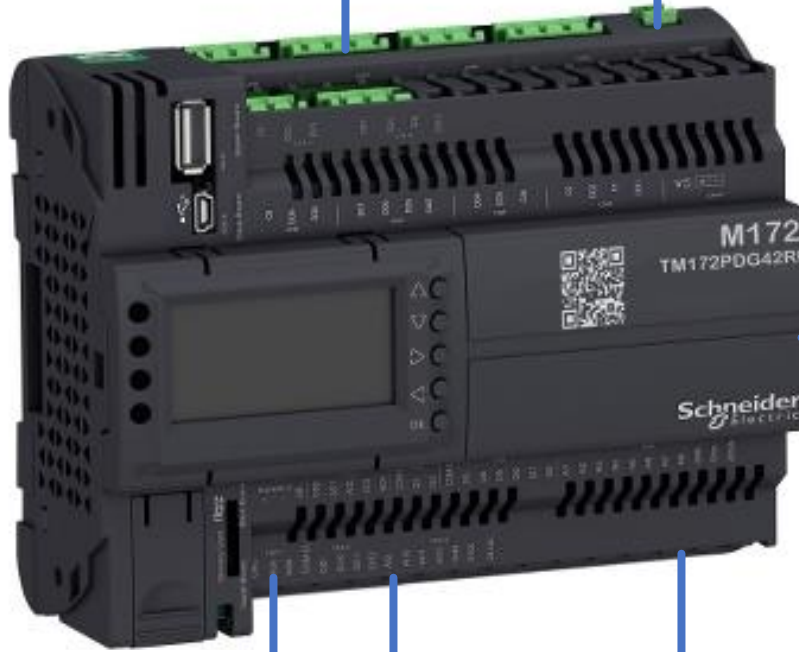


CN 9, CN 8, CN 7, CN 6, CN 14, CN 15 Terminal Digital Output

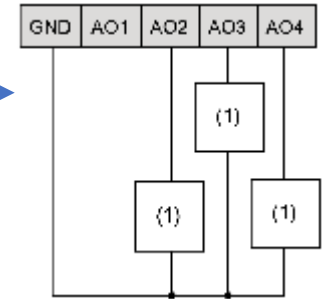
Power supply wiring diagram:



CN 10 Terminal Power Supply

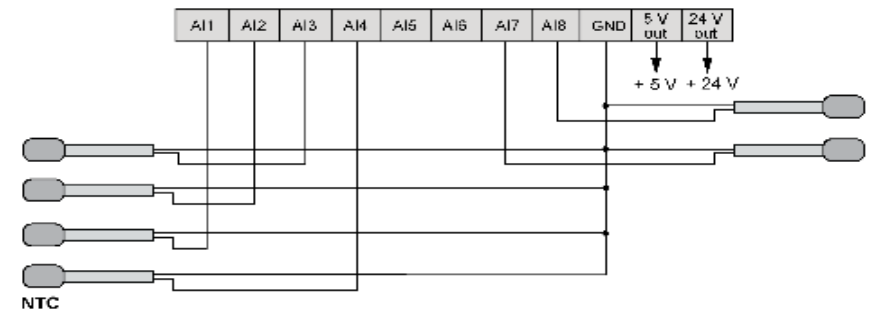


CN 2 Terminal Analog Output

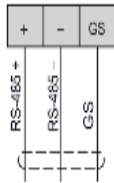


CN 5 & CN 13 Terminal Analog Input

TM172...28.. / TM172...42.. CN5 NTC input connection:

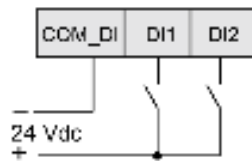


RS485-1: CN 19
Modbus Slave:
Connect (+ - GS) to
Street Side RS485-2
CN1

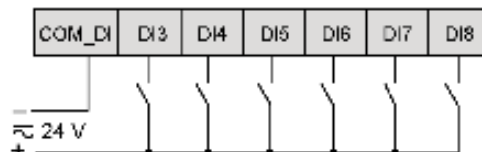


***USE External Power Supply for Digital Input**

CN 3 Terminal Digital Input Fast



CN 4 Terminal Digital Input Regular



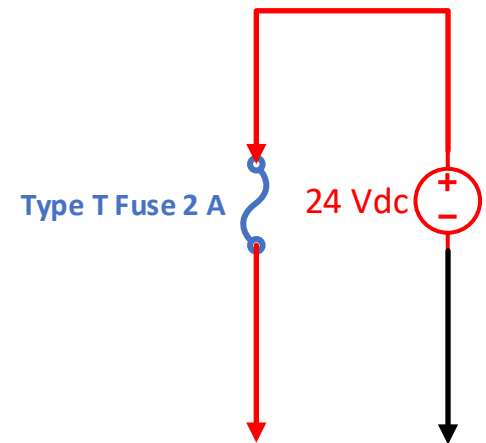
Power Supply

Power Supply

Controllers and Expansion Modules Power Supply

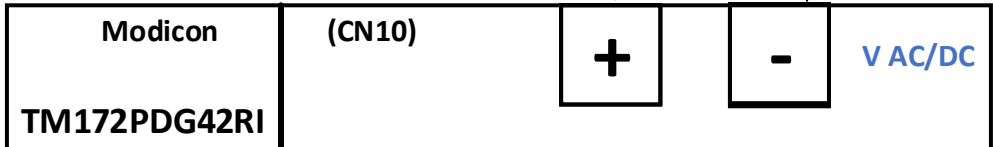
References	Power supply characteristics		Maximum power consumption
TM172P•G07R controller	Isolated	24 Vac (+/- 10 %) - 50/60 Hz	20 VA
		20...38 Vdc	10 W
TM172P•G18• / TM172O•M18R controllers	Isolated	24 Vac (+/- 10 %) - 50/60 Hz	21 VA
		20...38 Vdc	11 W
TM172P••28•I / TM172O••28R controllers	Isolated	24 Vac (+/- 10 %) - 50/60 Hz	23 VA
		20...38 Vdc	12 W
TM172P••42•I / TM172O••42R controllers	Isolated	24 Vac (+/- 10 %) - 50/60 Hz	25 VA
		20...38 Vdc	14 W
TM172P••28• / TM172P••42• controllers	Non-isolated	24 Vac (+/- 10 %) - 50/60 Hz	35 VA
		20...38 Vdc	15 W
TM172E12R expansion module	Non-isolated	24 Vac (+/- 10 %) - 50/60 Hz	20 VA
20...38 Vdc		10 W	
TM172E28R expansion module	Non-isolated	24 Vac (+/- 10 %) - 50/60 Hz	24 VA
		20...38 Vdc	15 W

***Refer to Hardware Guide**



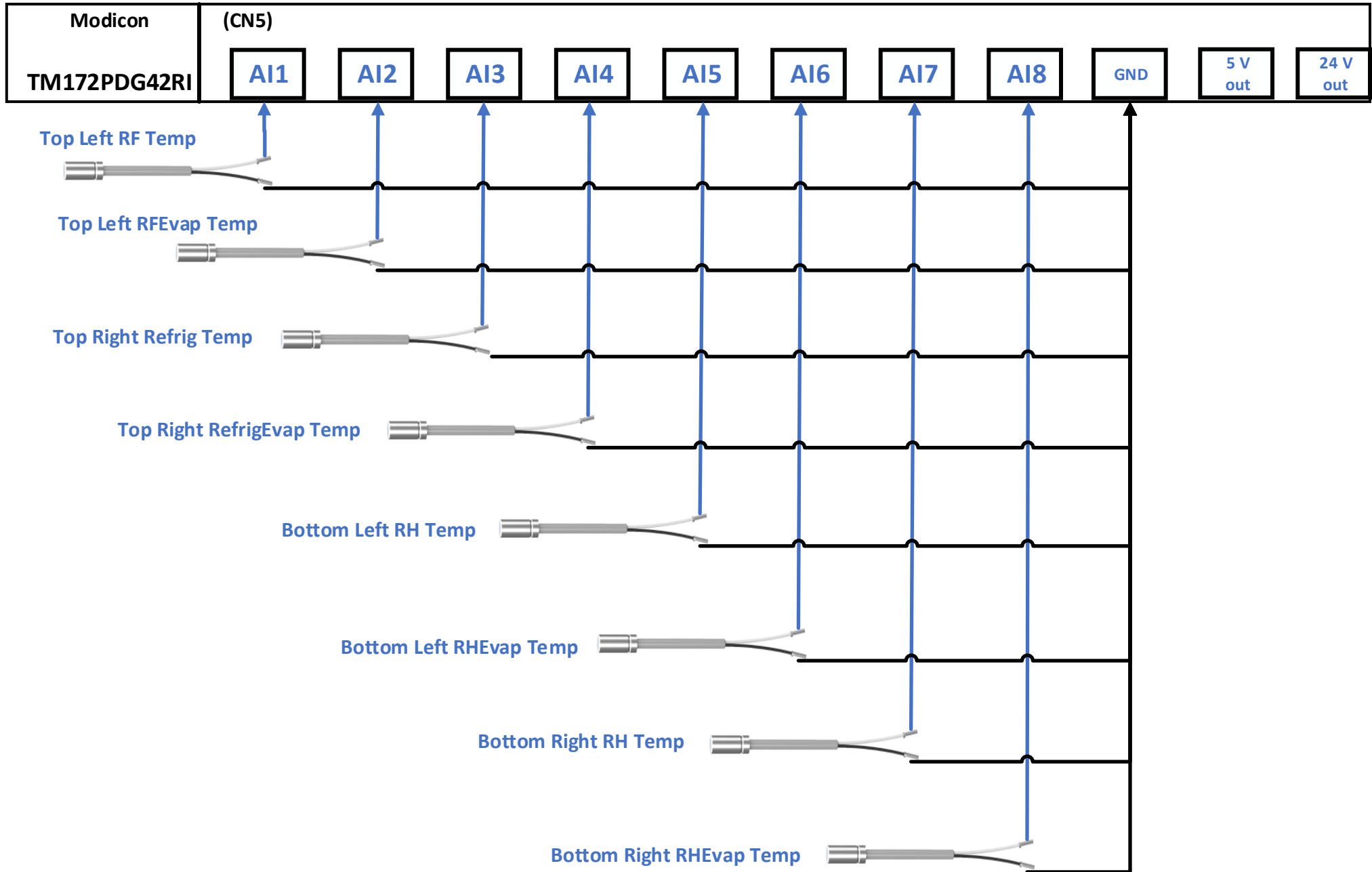
Power supply wiring diagram:

24 Vac	24 Vdc
(1) Type T fuse 2 A.	

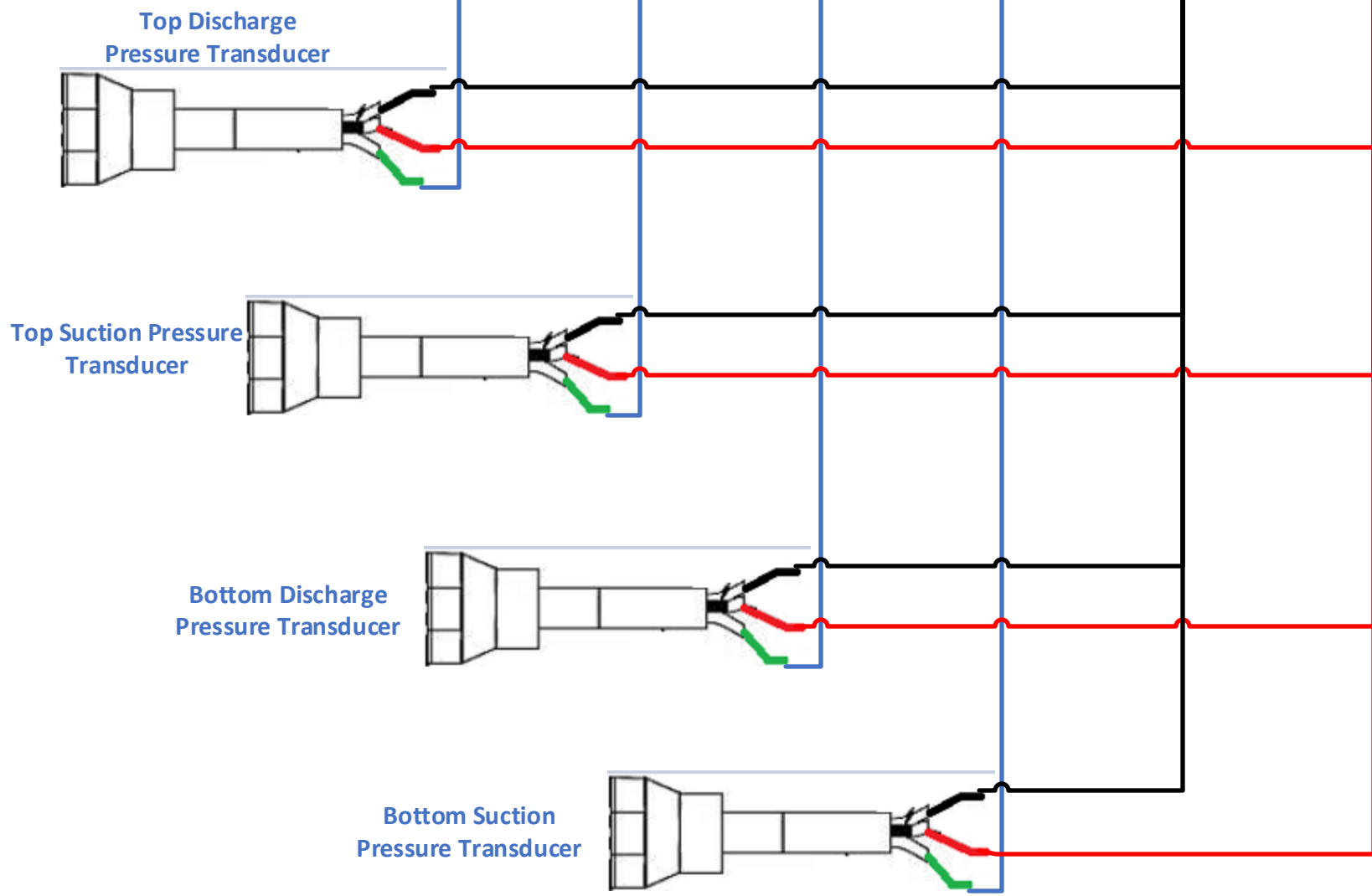


Pitch of the terminal block	Cabling length
3.50 mm (0.14 in.)	10 m (32.8 ft)

Analog Input

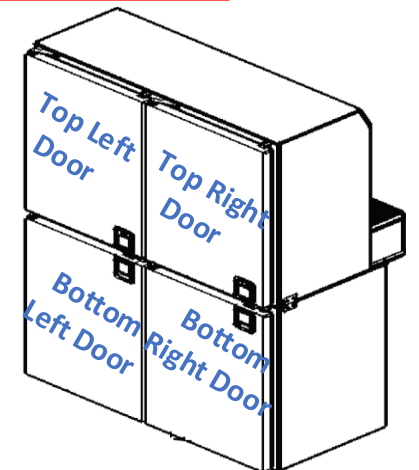
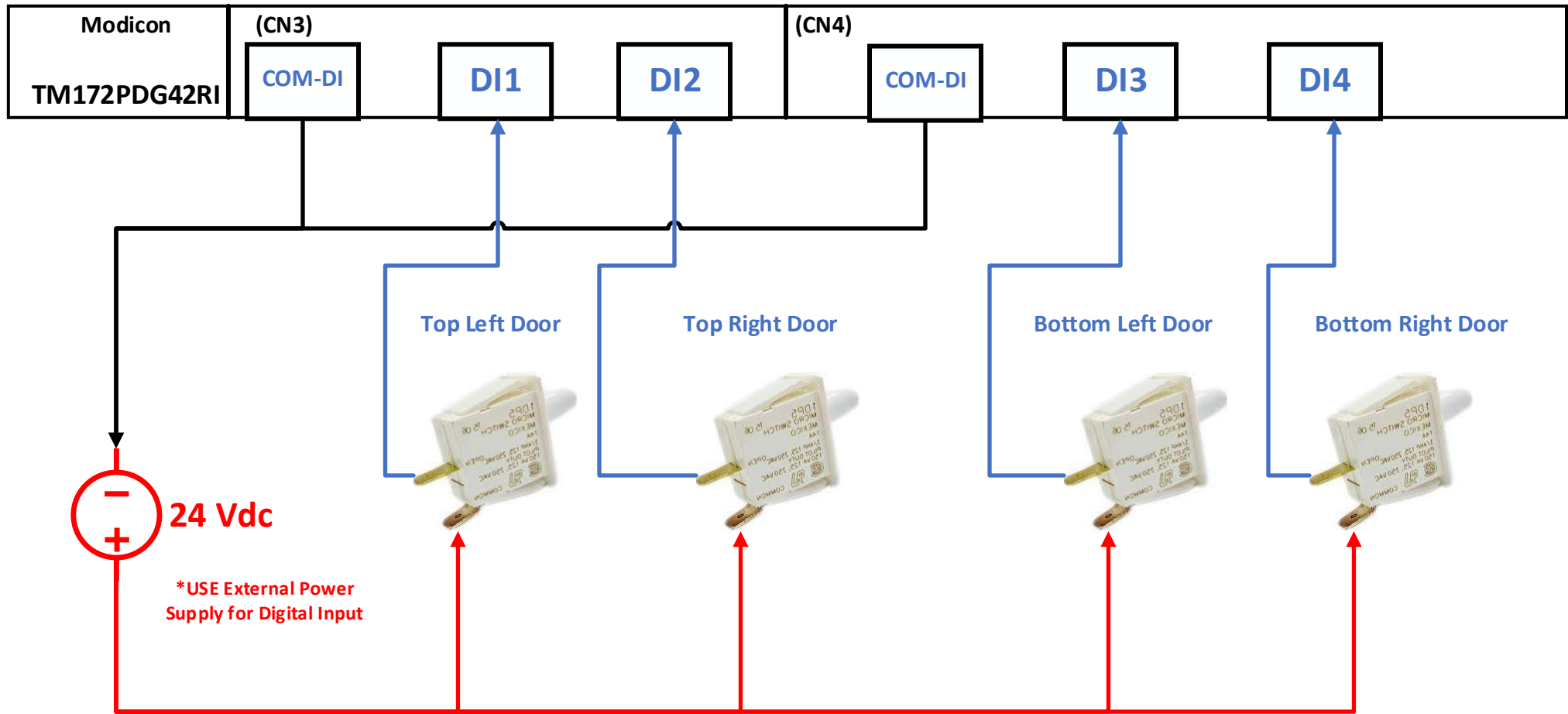


Analog Input

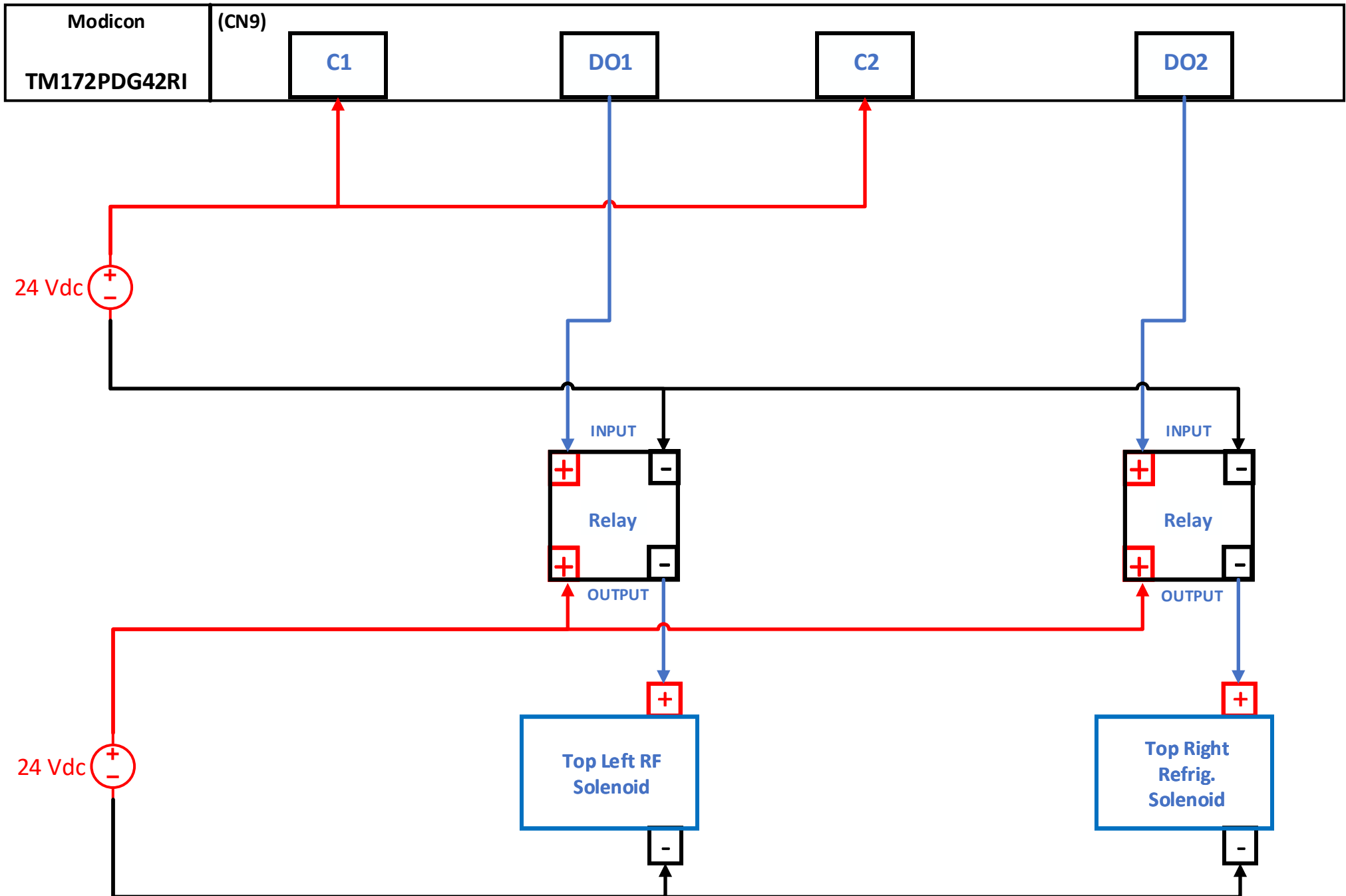


CABLE WIRE # DESIGNATION	
WIRE COLOR	FUNCTION
RED	Vs
BLACK	GND
GREEN	Vout

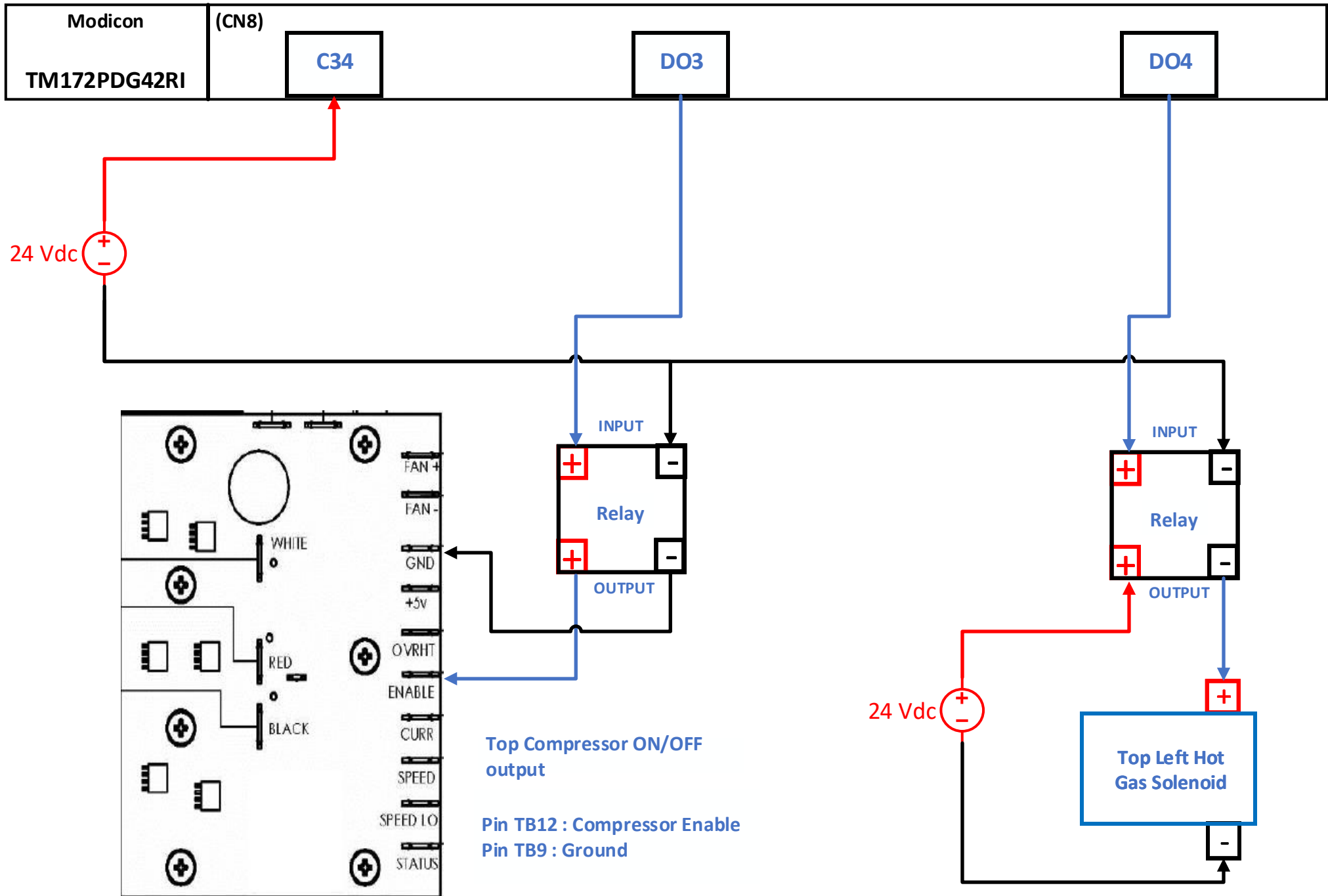
Digital Input



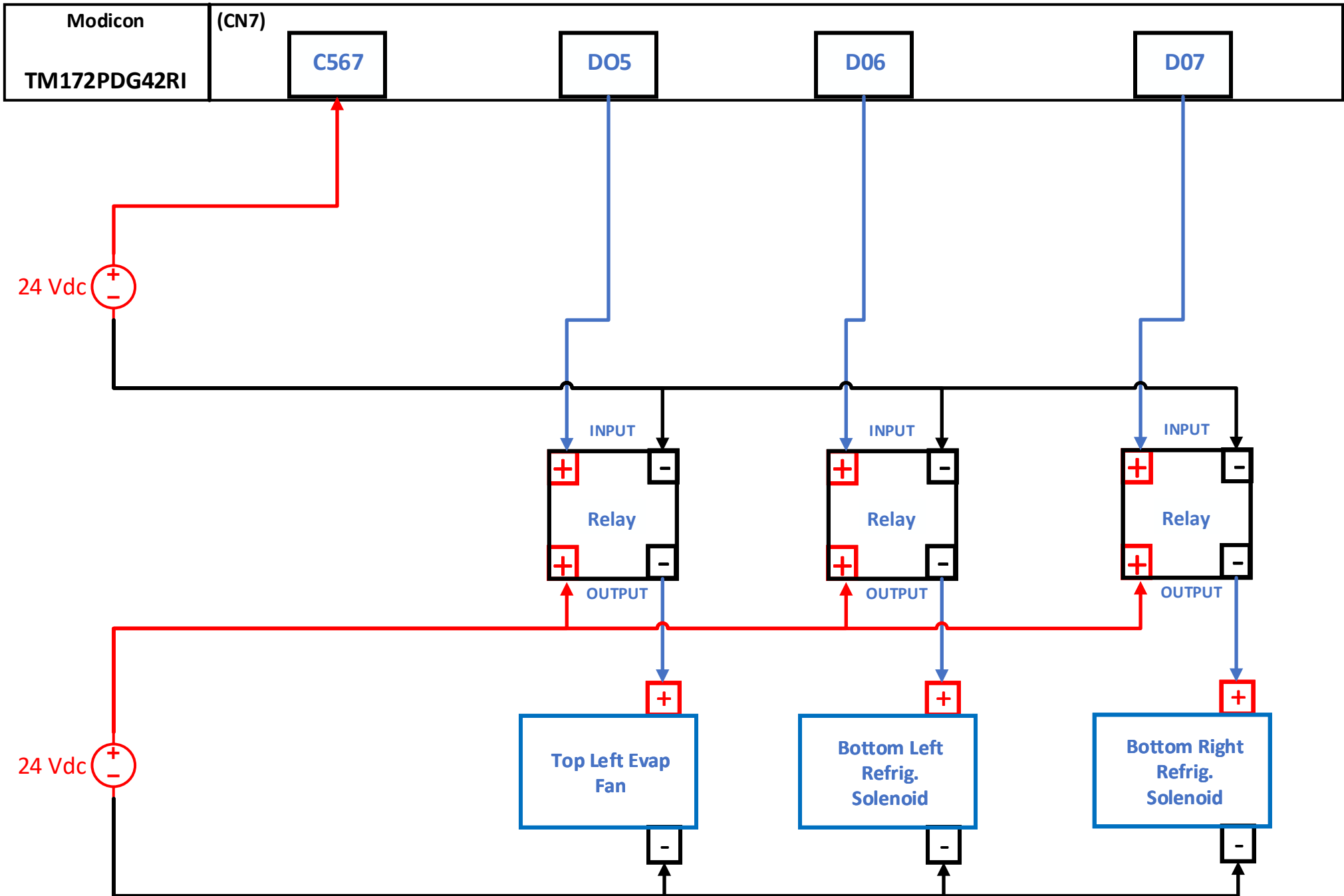
Digital Output



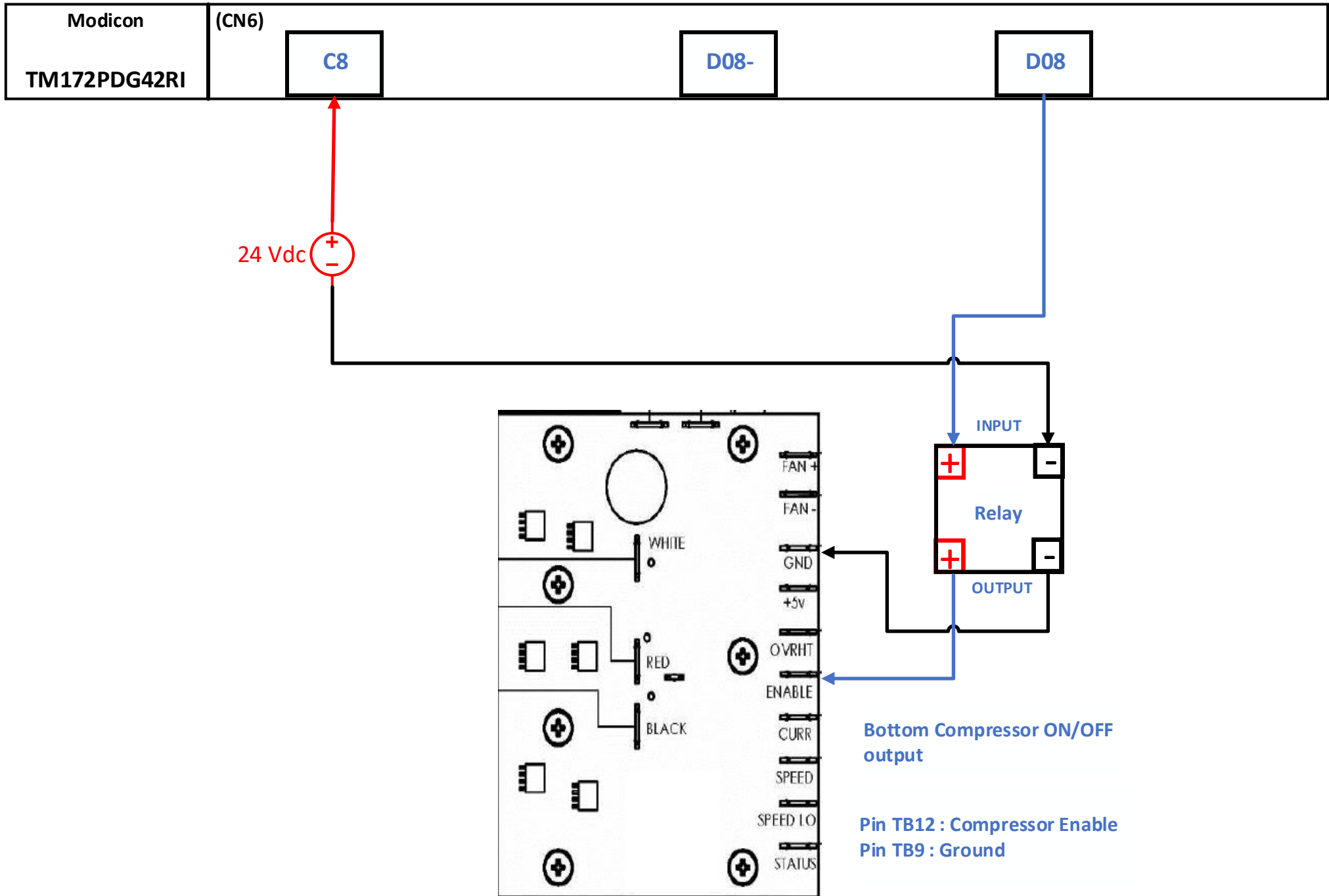
Digital Output



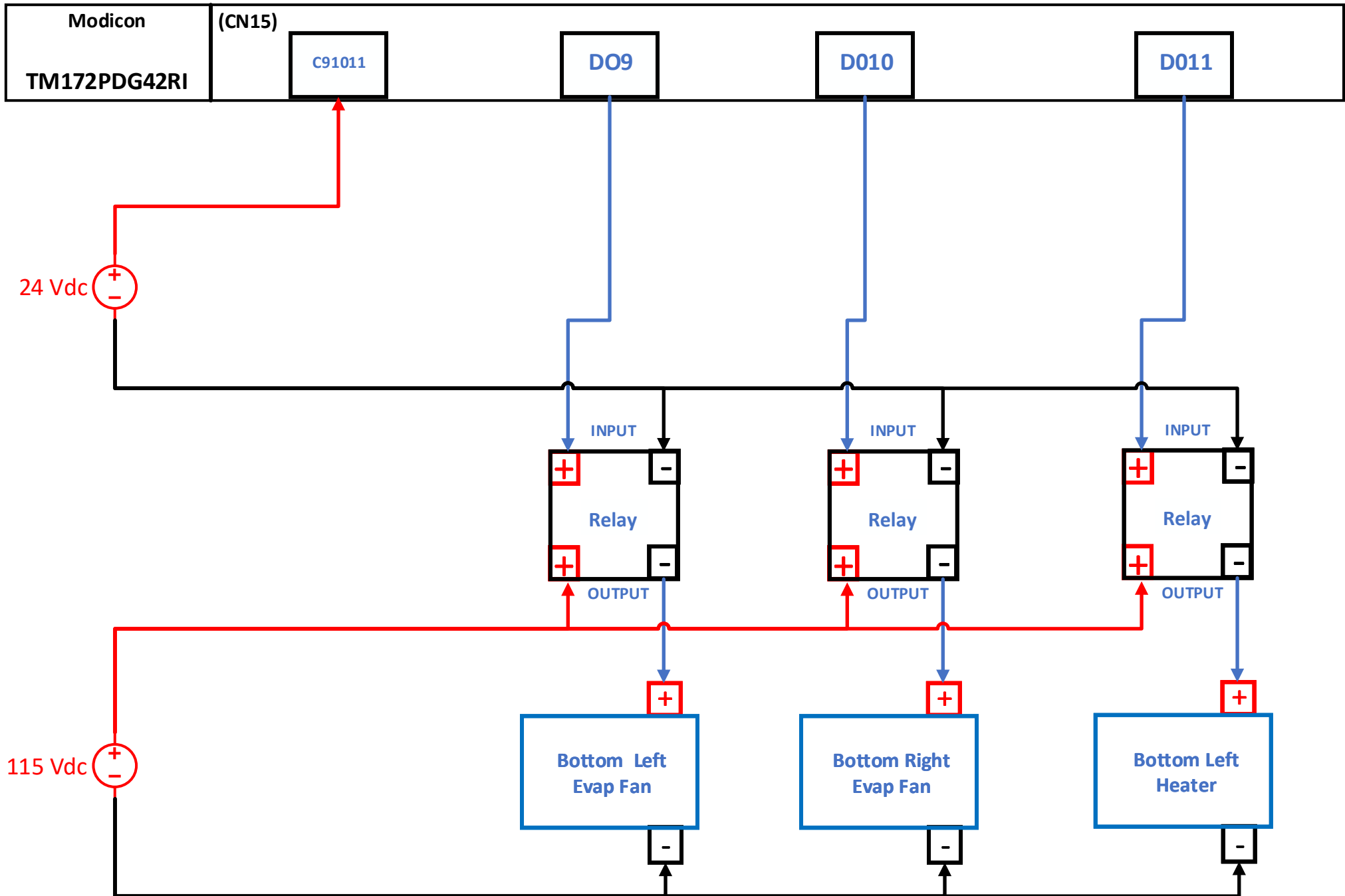
Digital Output



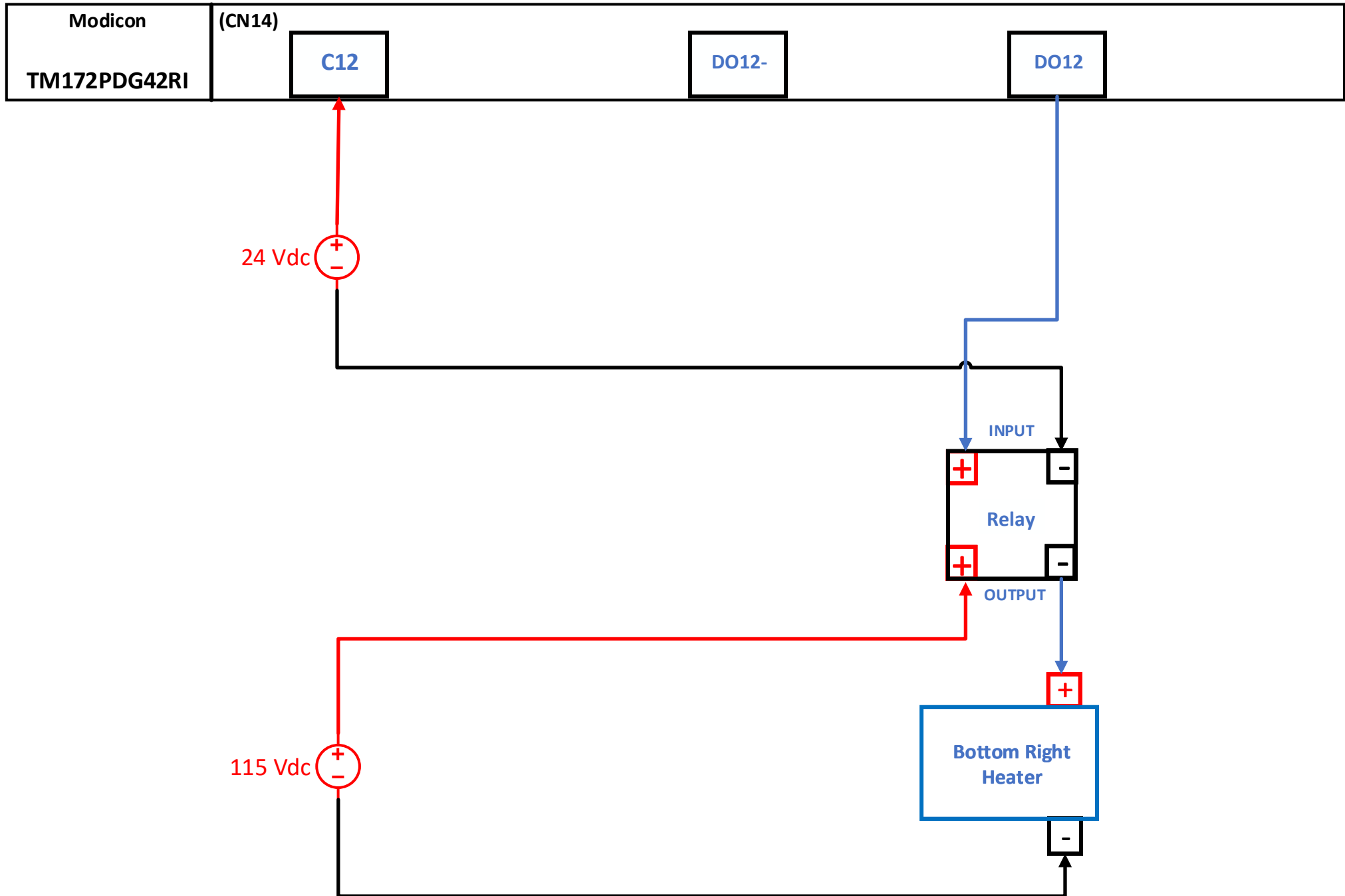
Digital Output



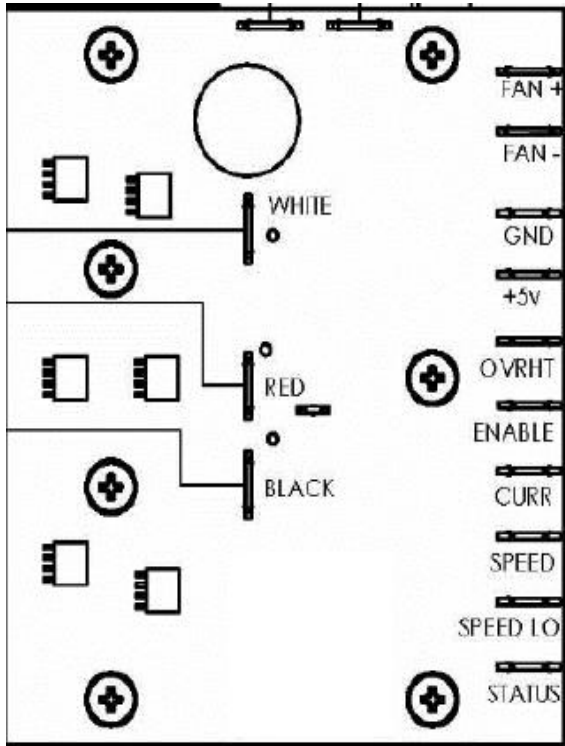
Digital Output



Digital Output

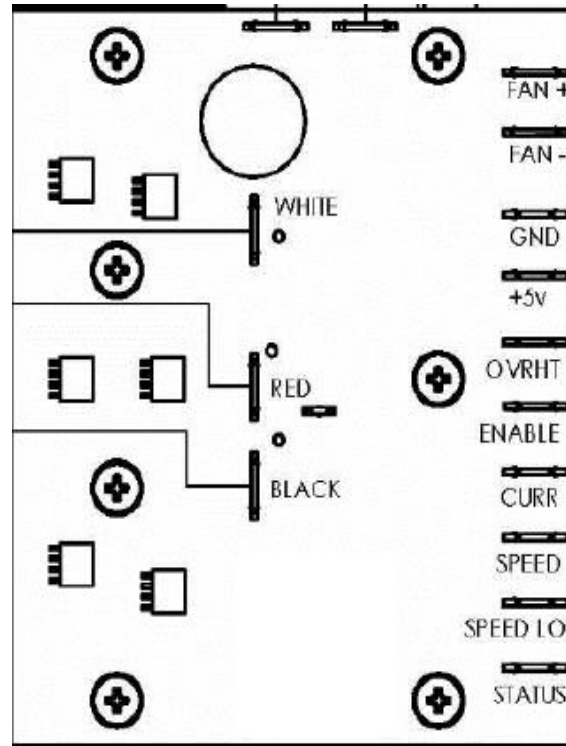


Analog Output



Top Compressor
Analog output -
Speed Input

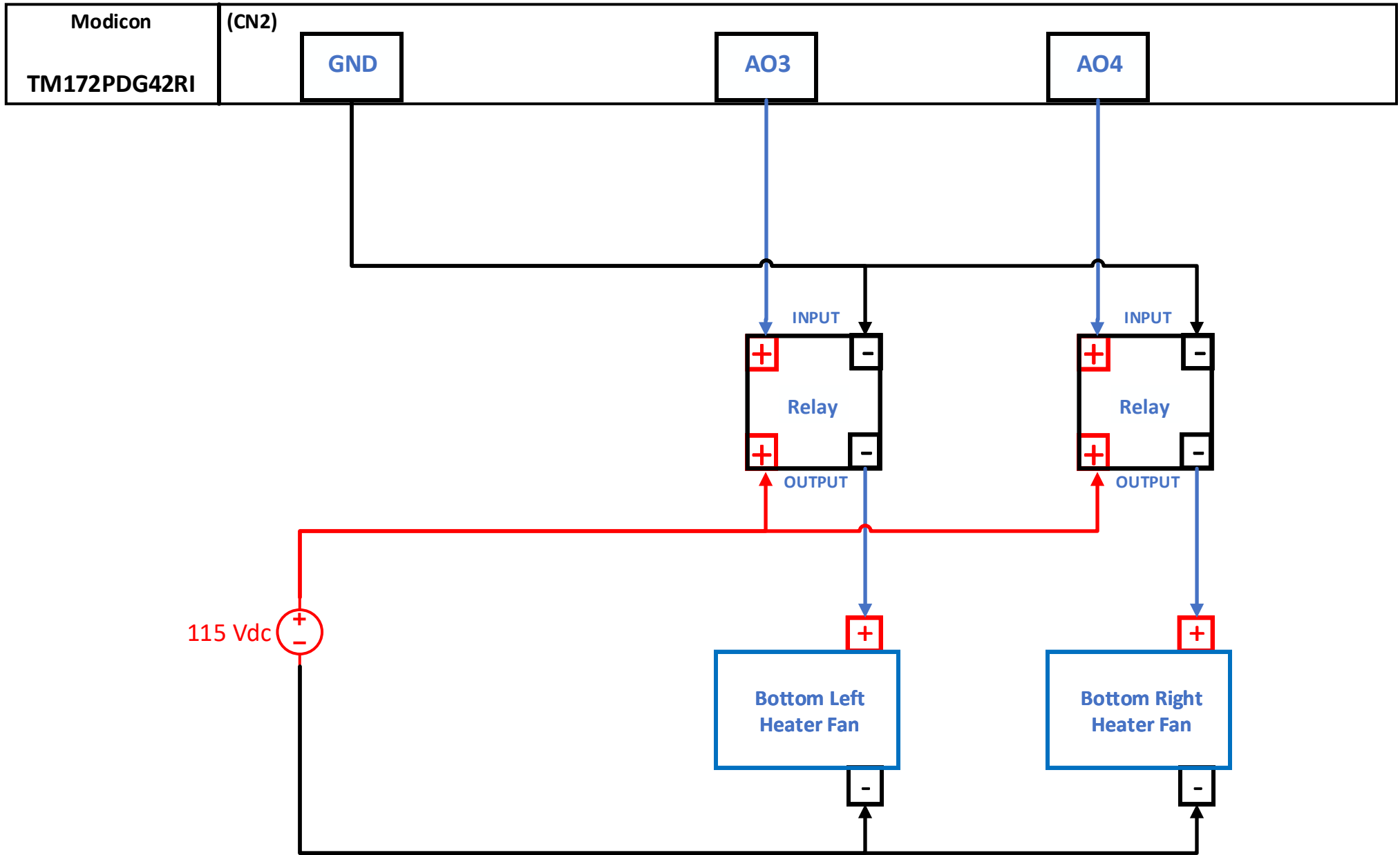
Pin TB14 : Compressor Speed Input
Pin TB9 : Ground



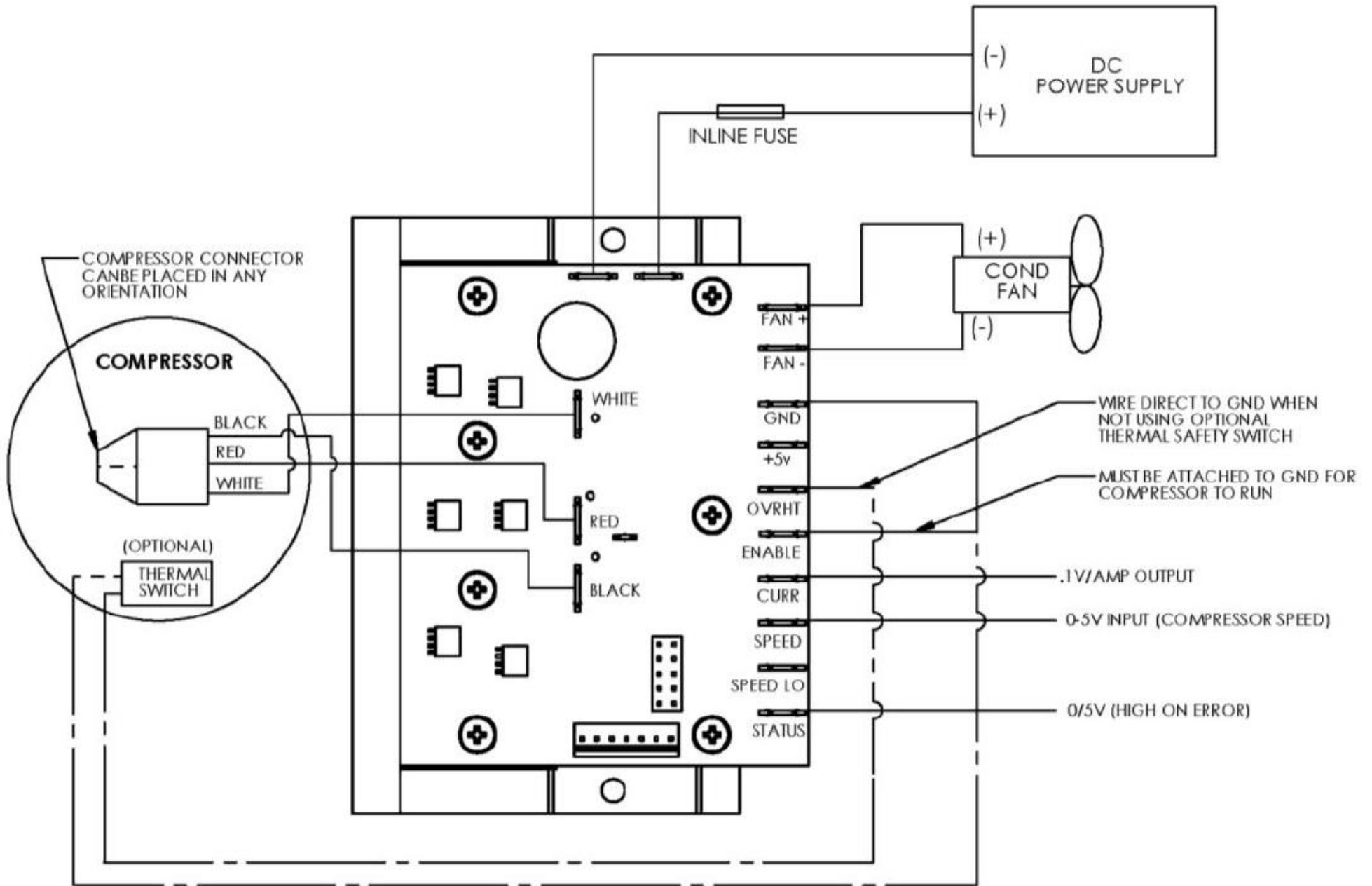
Bottom Compressor
Analog output -
Speed Input

Pin TB14 : Compressor Speed Input
Pin TB9 : Ground

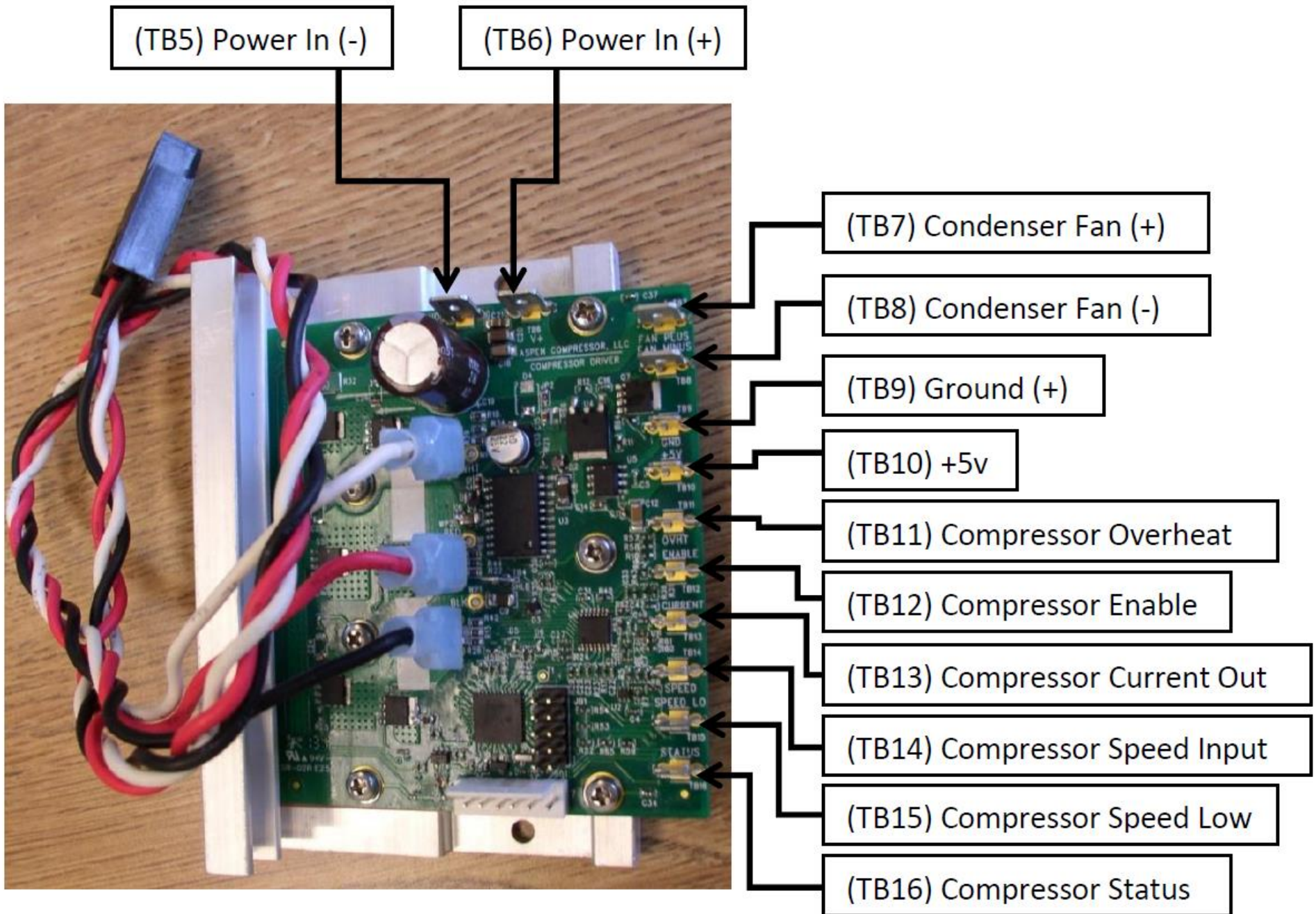
Analog Output



Compressor Details

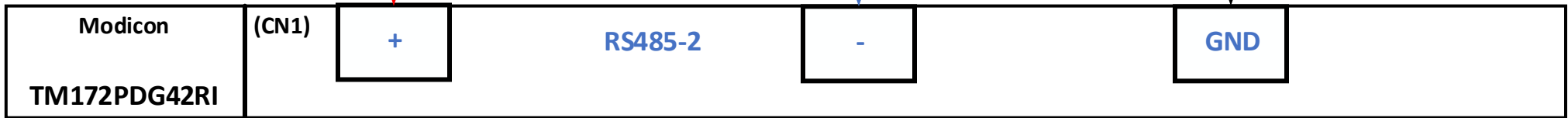
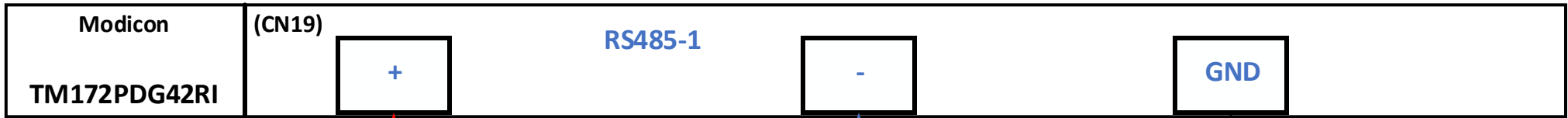


Compressor Details



RS485 Communication

Curb Side M172 Slave



Street Side M172 Master

Street Side M172 PLC is Master Controller.
Curb Side M172 PLC is Slave Controller.

Make a connection as shown above for the temperature reading
and door alarm reading from Curb Side PLC to Street Side PLC.