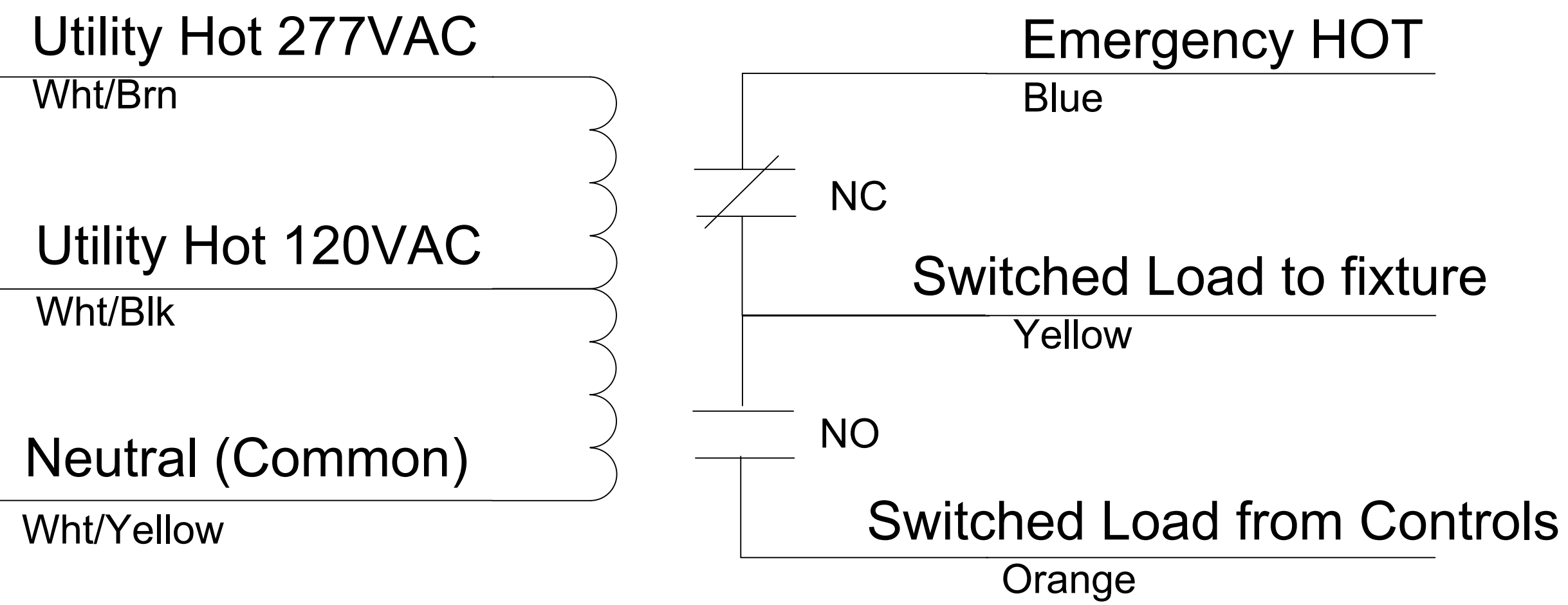


**Up to 8,092 Nexus-8**  
One Uplink, One downlink, 6 gateways

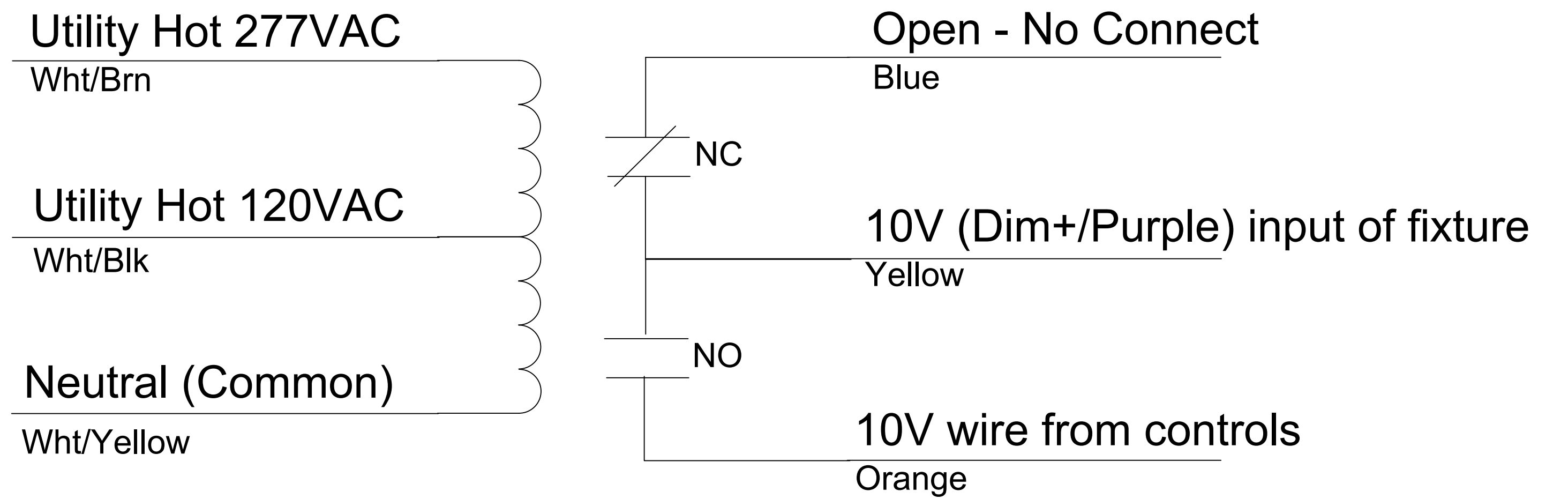
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by Joe Herbst	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
Date 12/25/2017		Scale N/A	
rNET Controls		rNET Network Example	
Edition 1		Sheet 1/1	

# rNET-EM-TS (RIB2421B / RIB2401D)



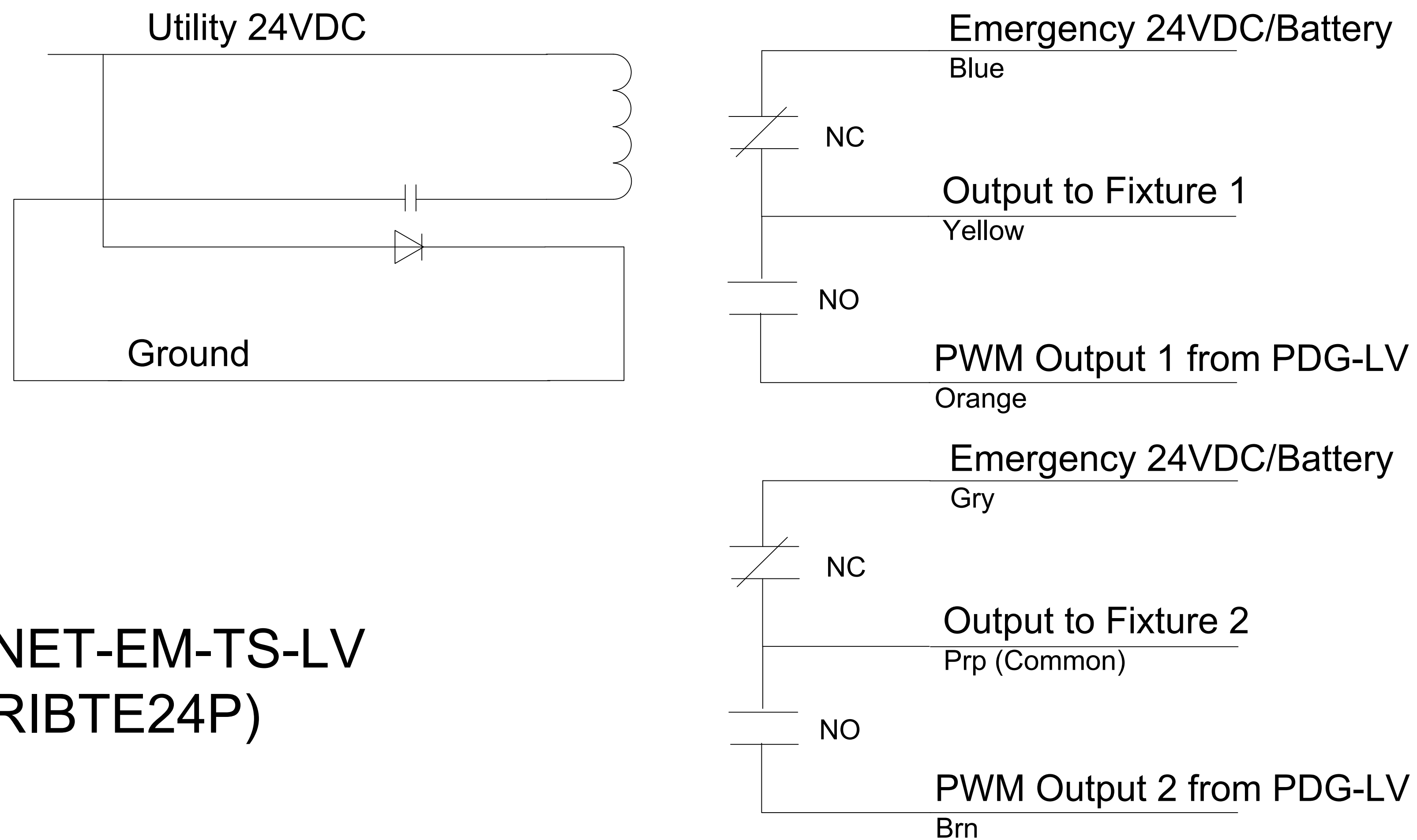
When Utility is active, the Load will be connected to the Utility HOT feed.

When Utility is lost the NC path will connect the load to the EMERGENCY HOT

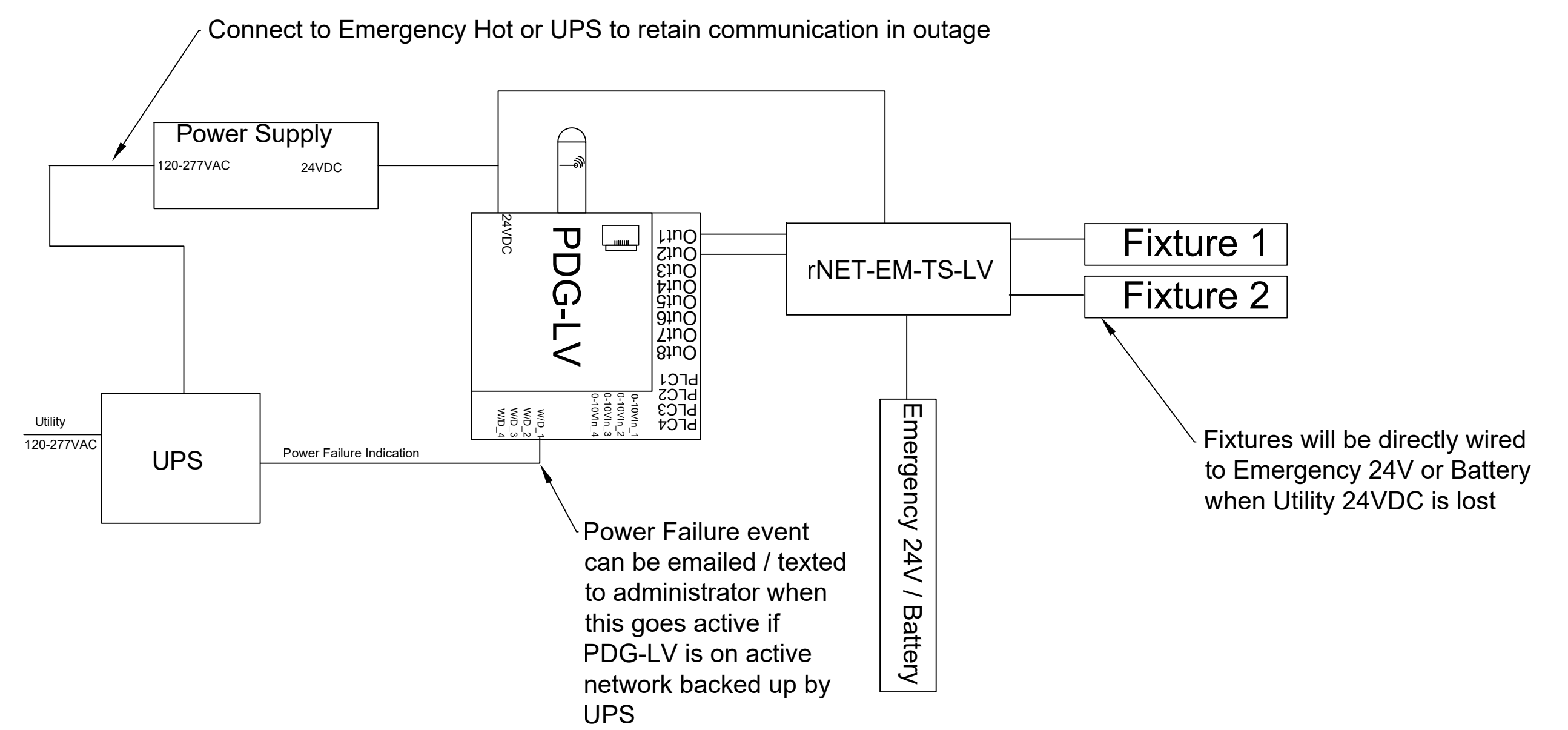


When Utility is active, the Load will be connected to the 10v wire feed from the controls/controller.

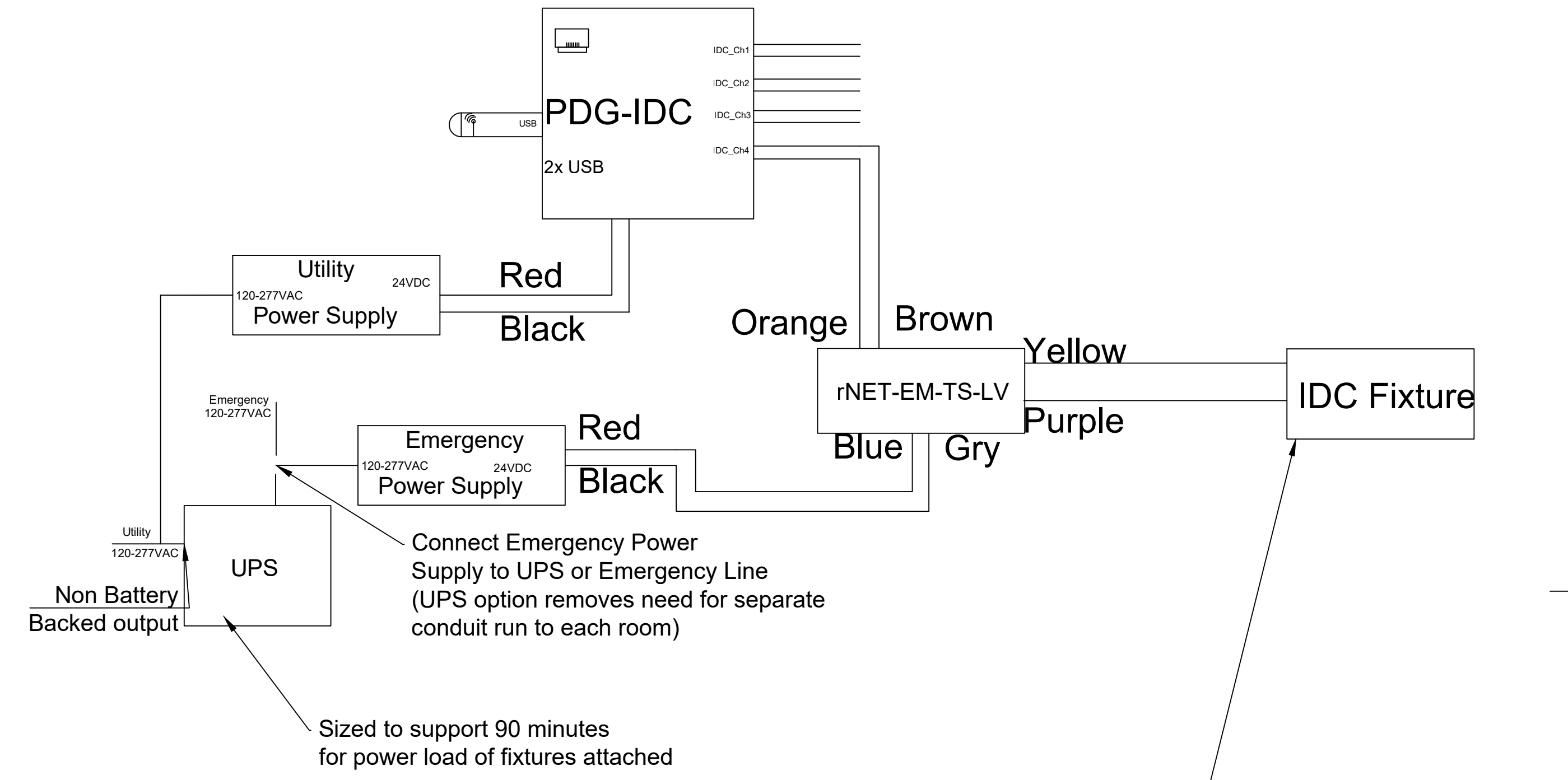
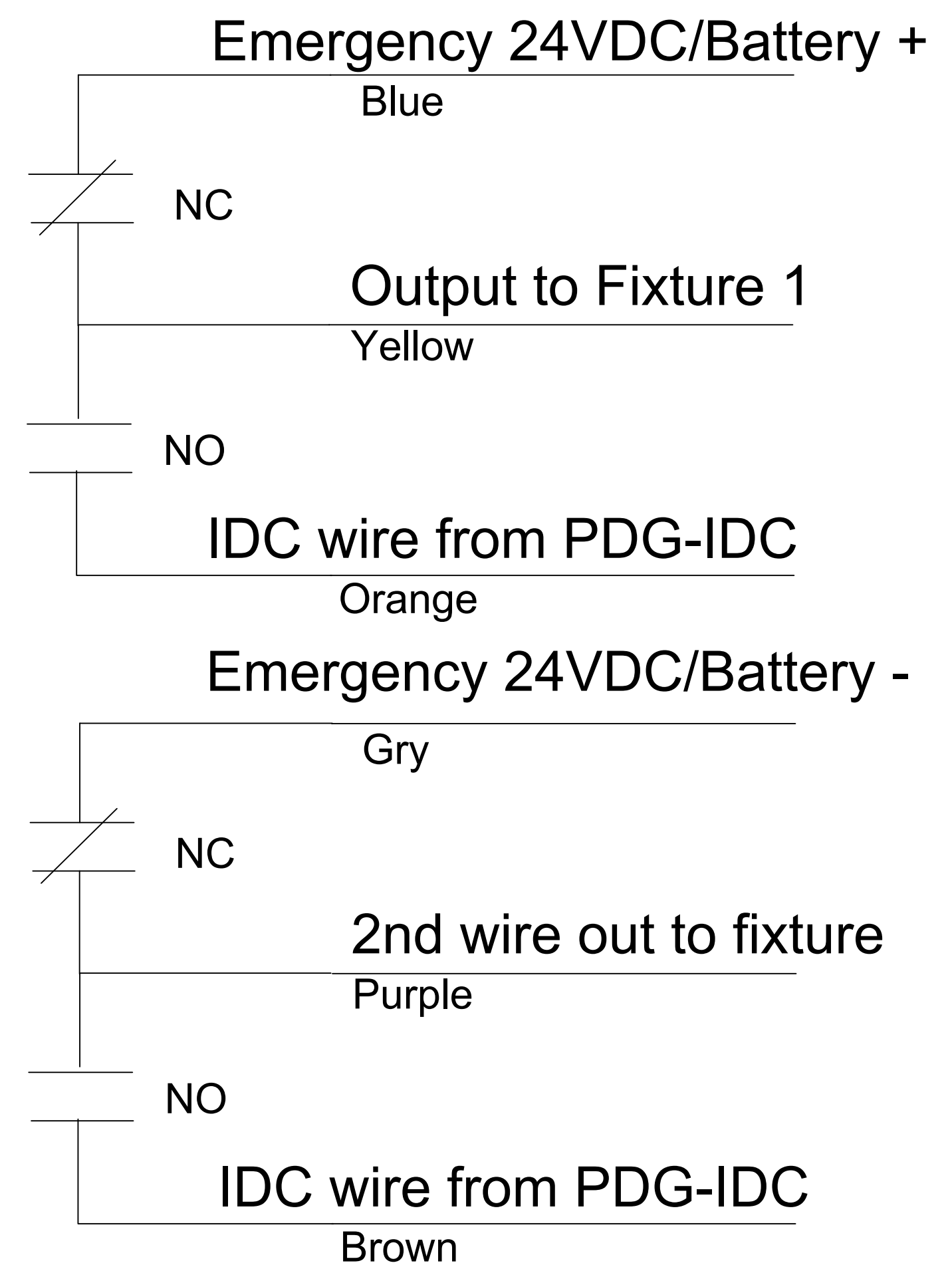
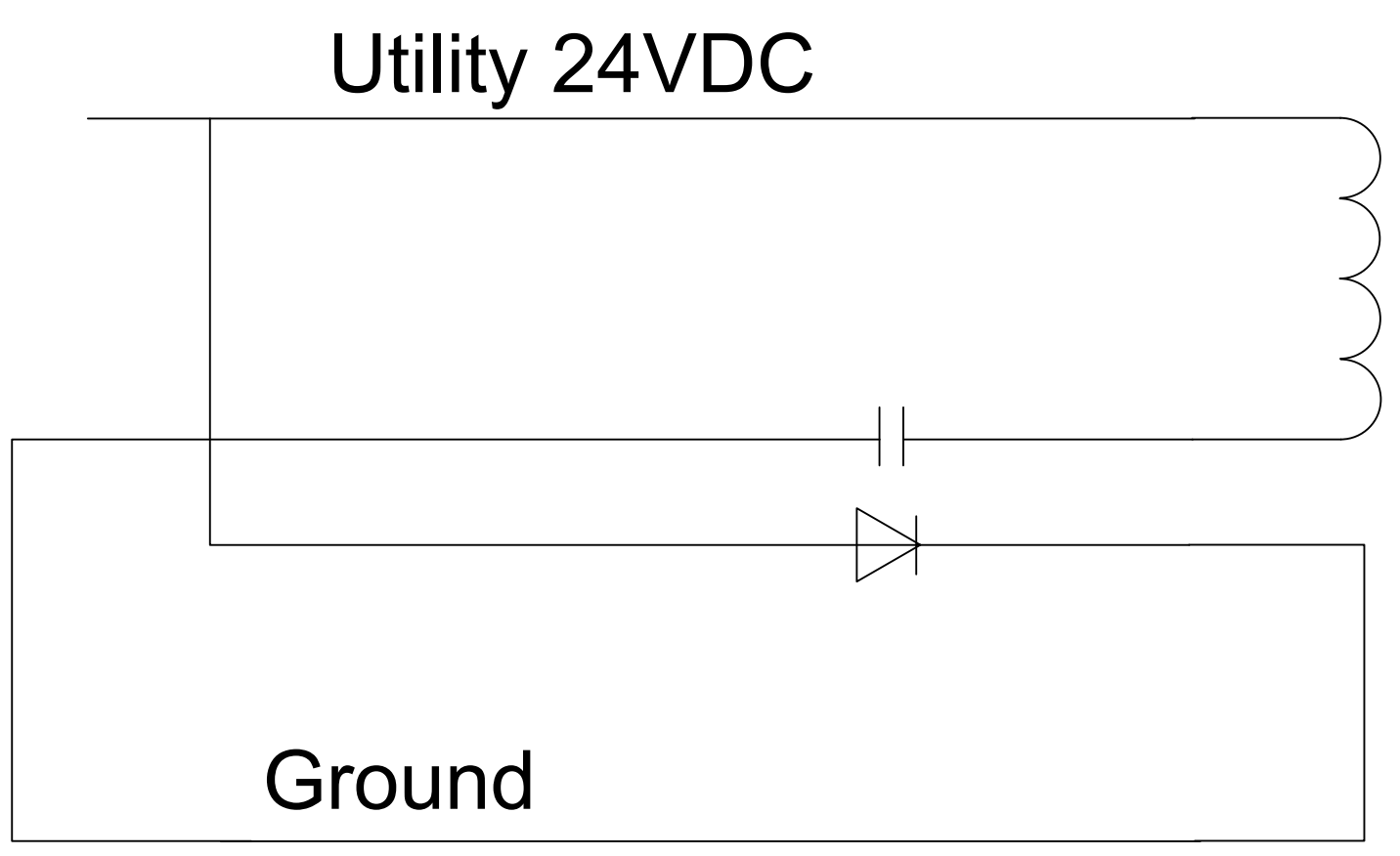
When Utility is lost the NC path will float the 10V line open causing the fixture to go to 100%



# rNET-EM-TS-LV (RIBTE24P)



Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
rNET Controls		Emergency Wiring	
Edition 0		Sheet 1/1	

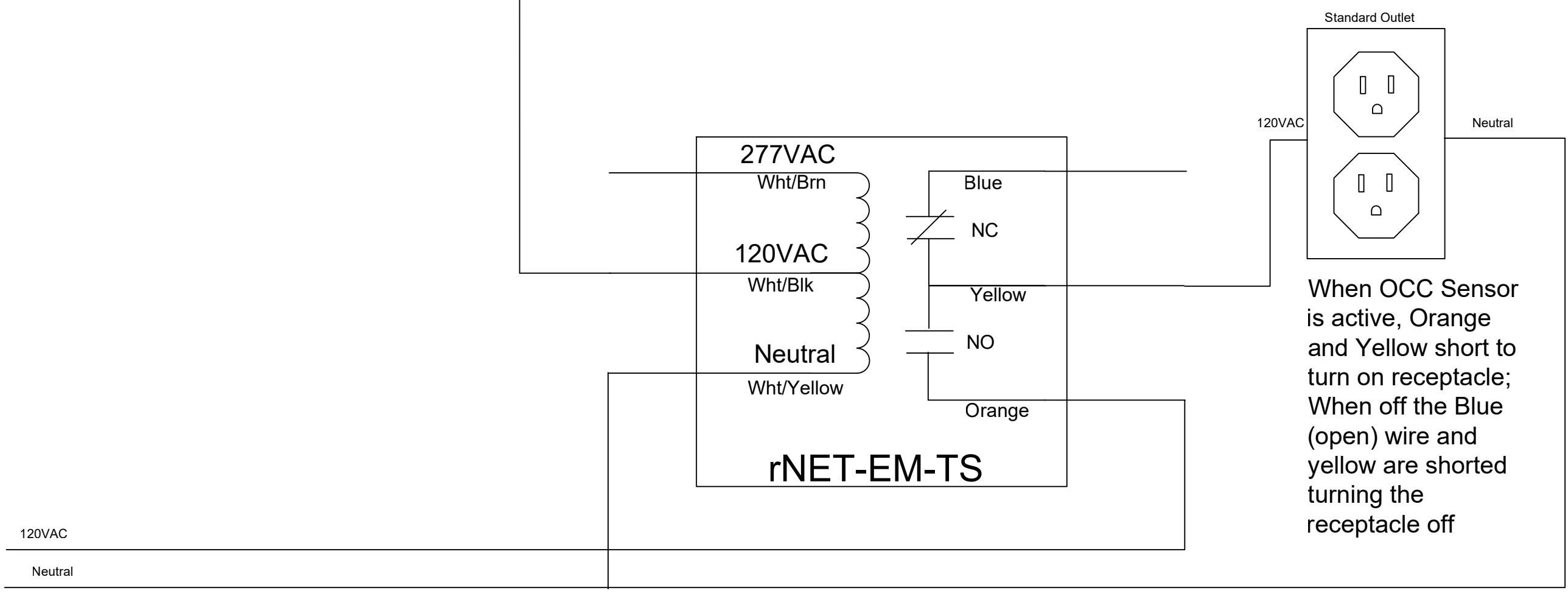
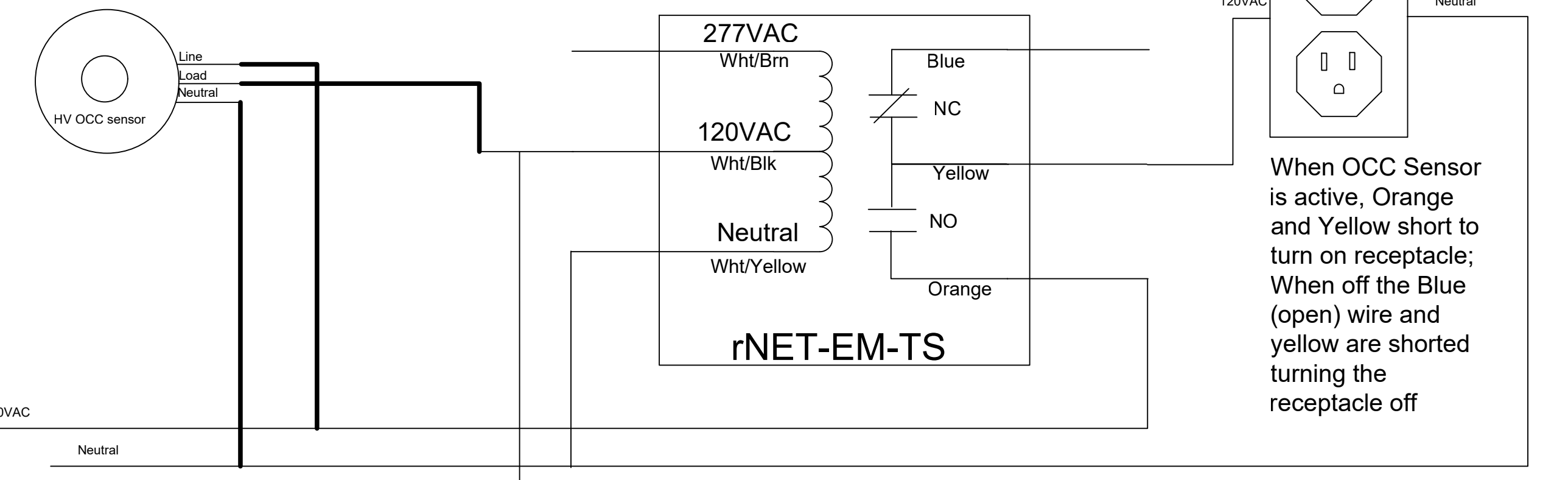
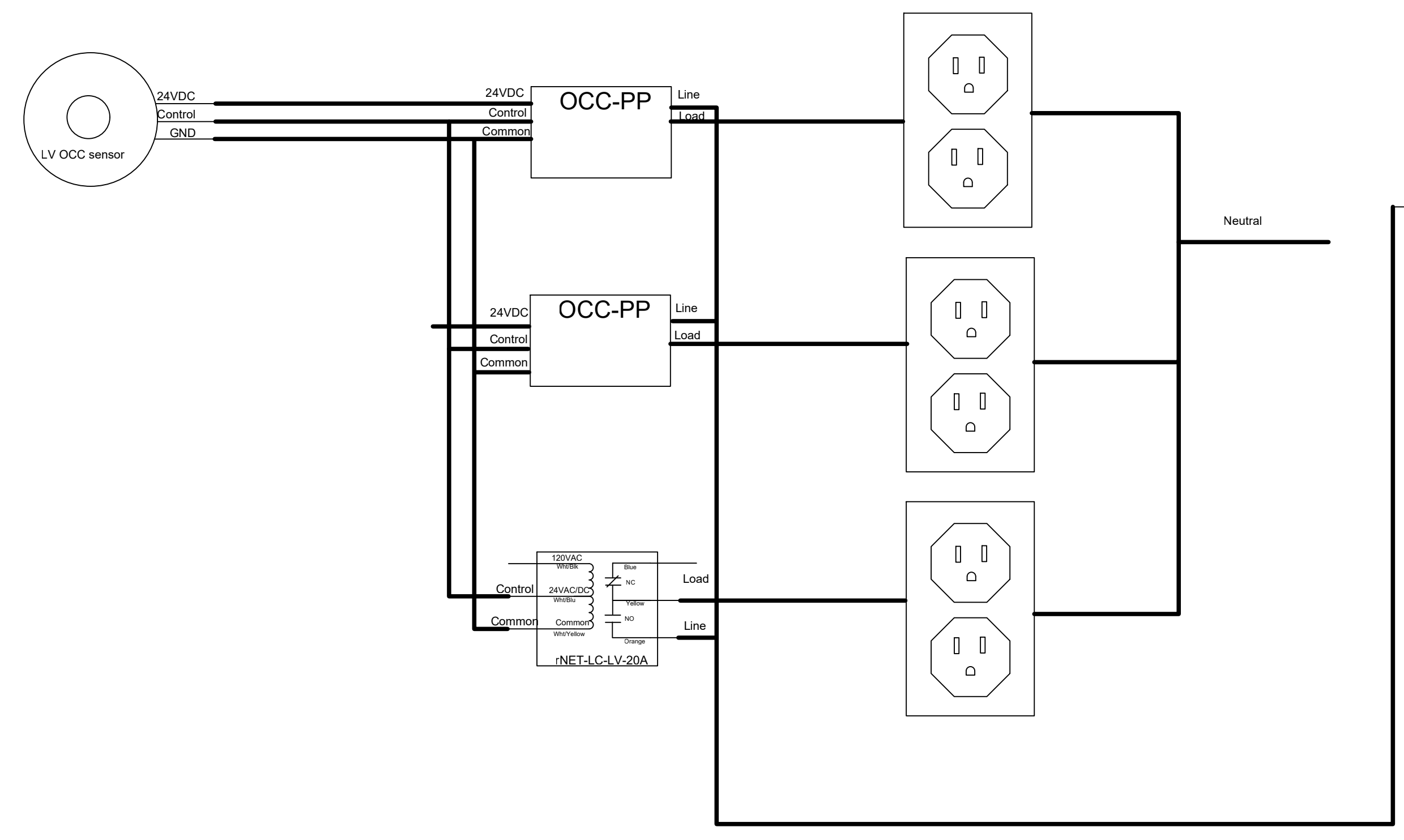
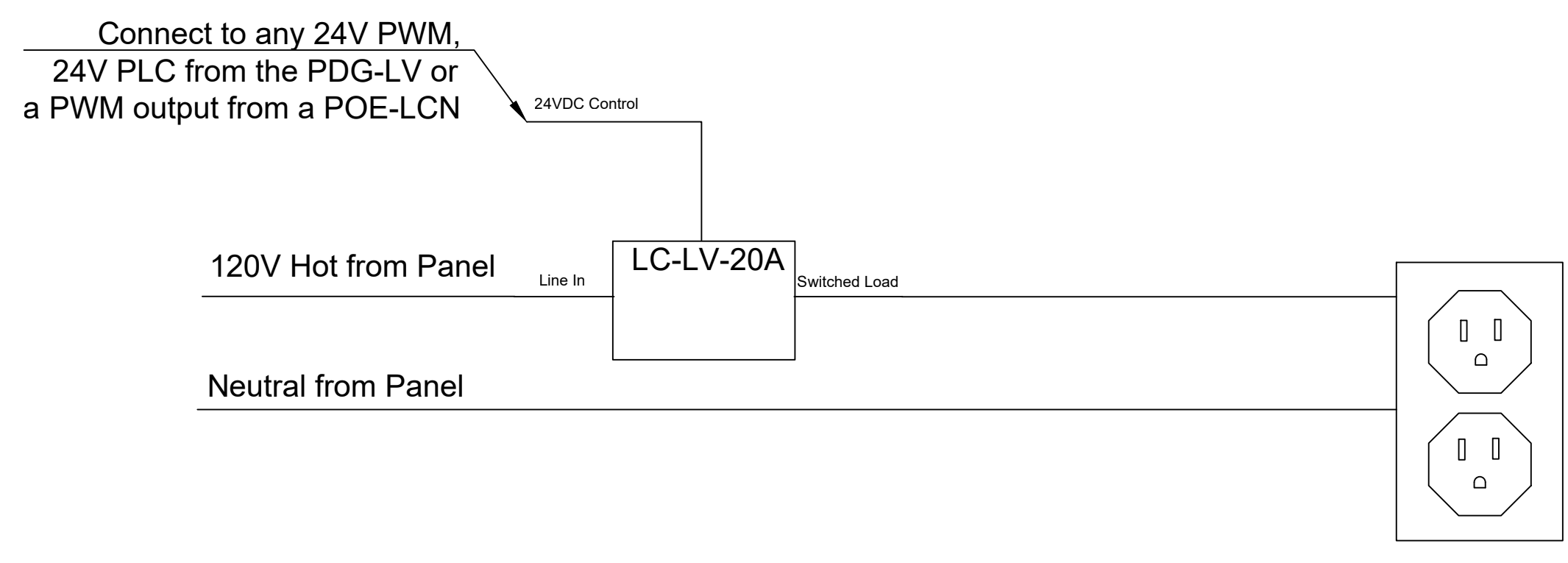


Fixtures are connected to PDG-IDC in normal/utility mode and UPS 24VDC output in Emergency Mode

# rNET-EM-TS-LV (RIBTE24P)

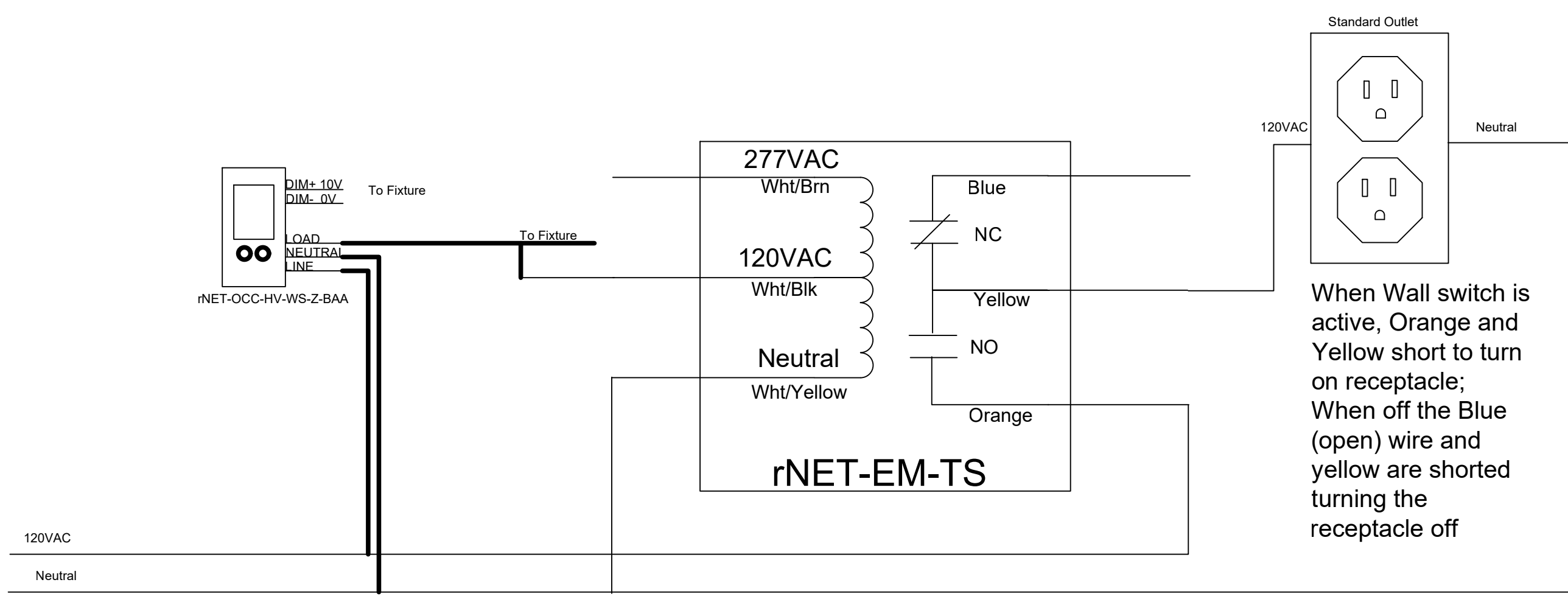
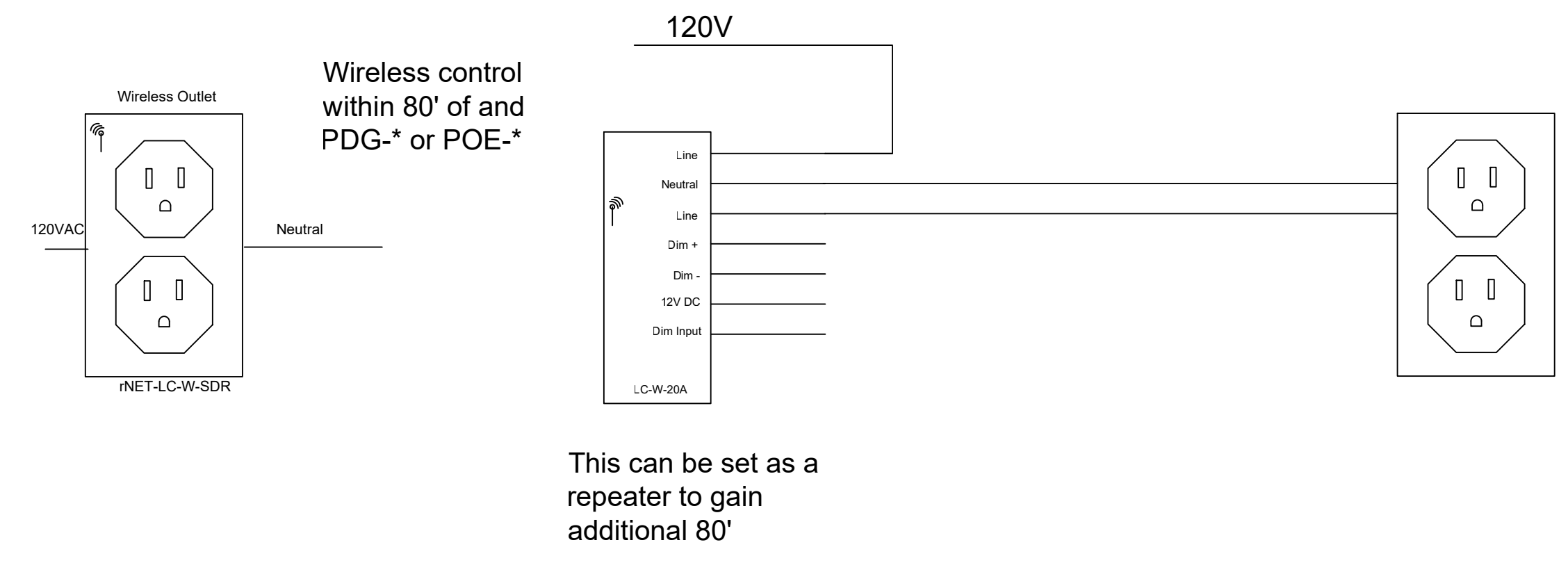
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
Date 00/00/00		Scale 1:1	
rNET Controls		Emergency Wiring	
X		Edition 0	Sheet 1/1

# Non Networked Wired control



# Wireless control

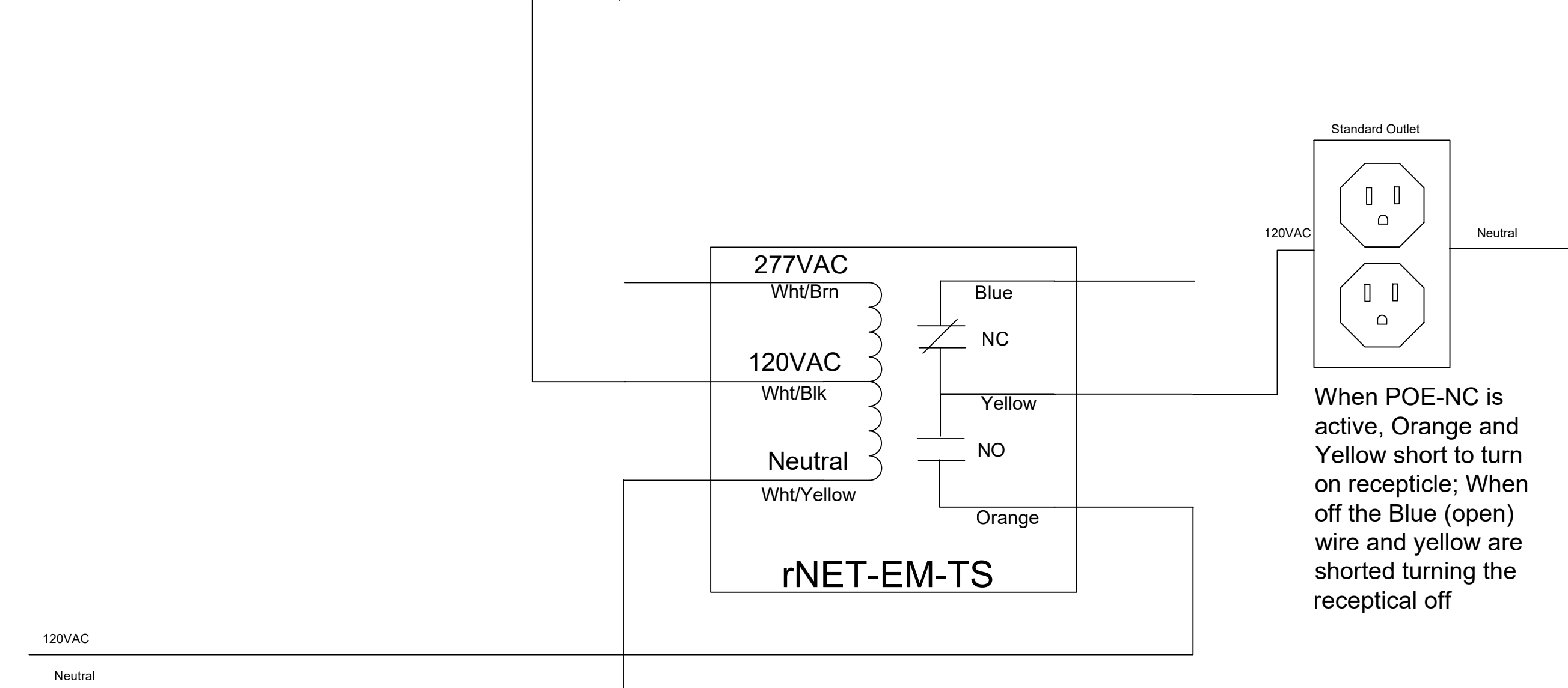
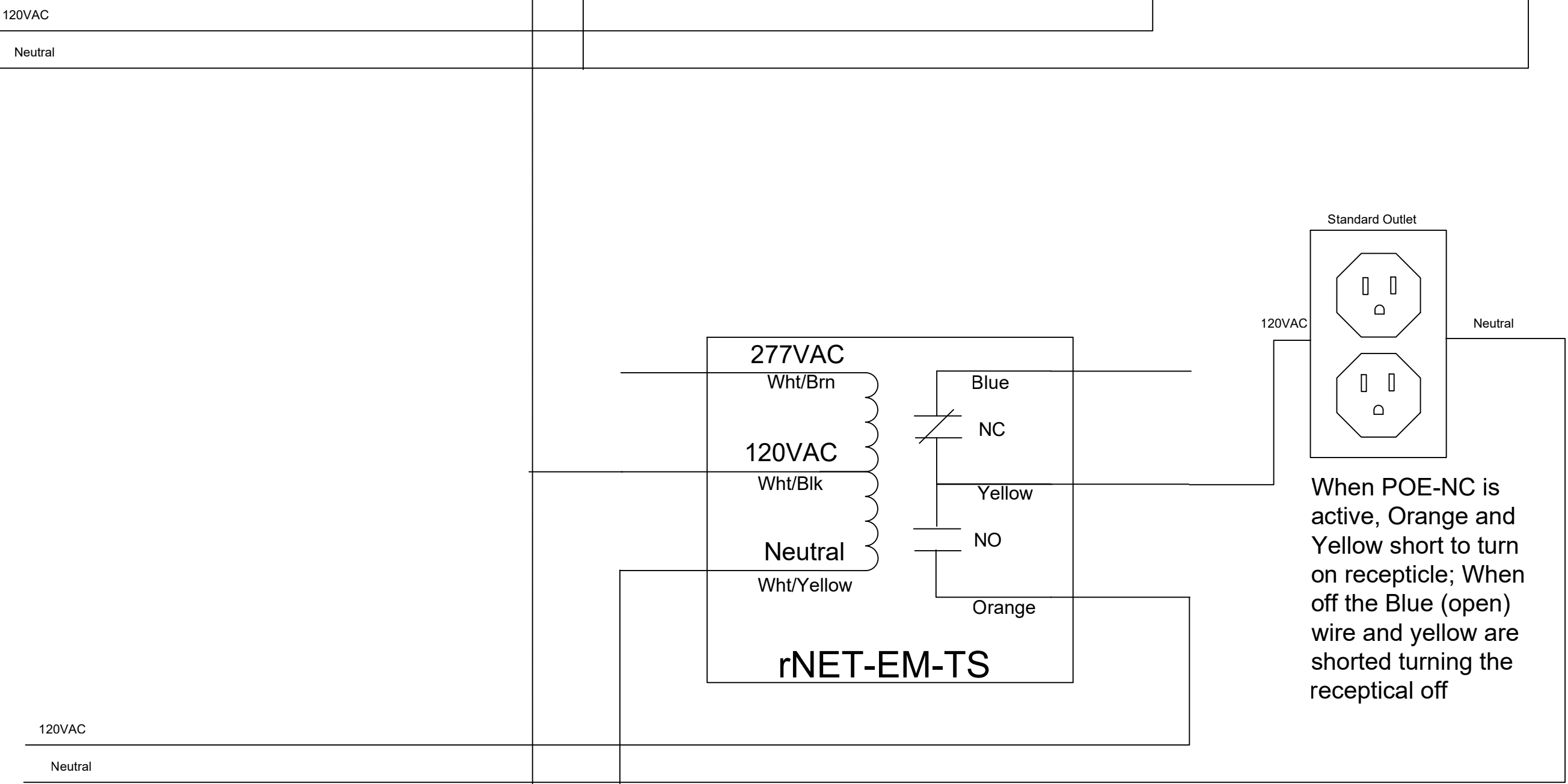
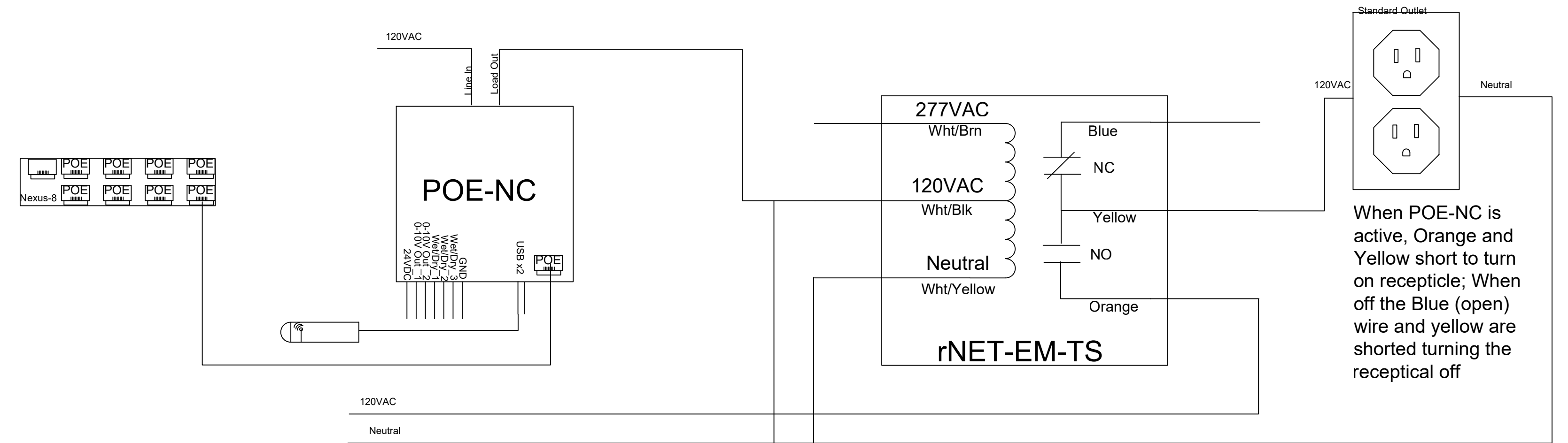
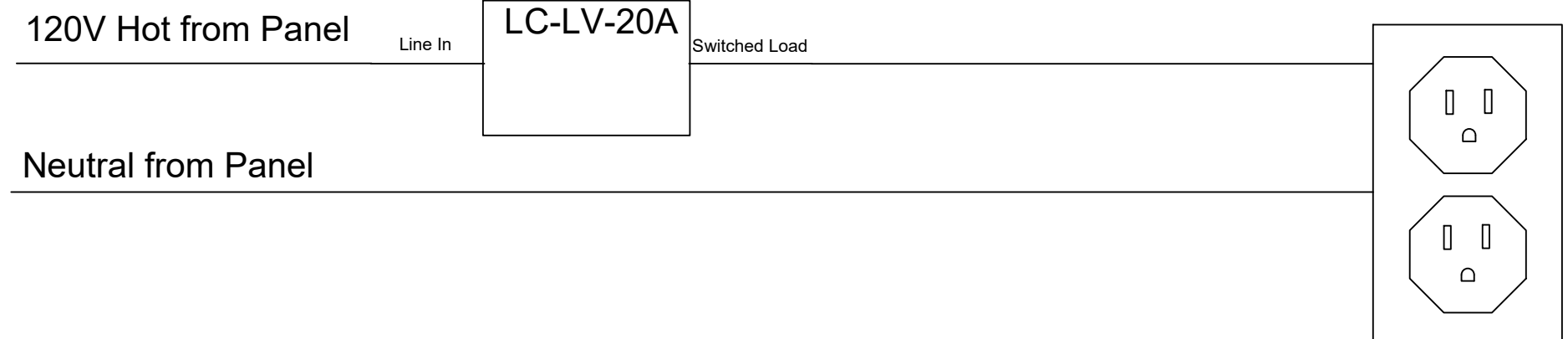
Multiple receptacles are controlled off the same wireless network, each individually controllable



Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
rNET Controls		Plug Load	
X		Edition 0	Sheet 1/1

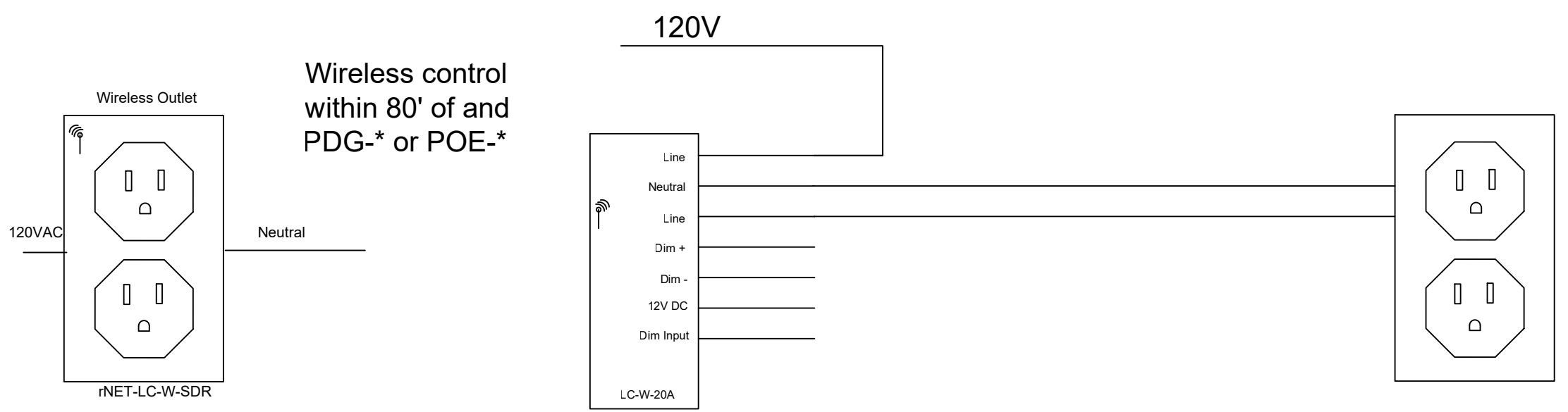
# Networked Wired control

Connect to any 24V PWM,  
24V PLC from the PDG-LV or  
a PWM output from a POE-LCN



# Wireless control

Multiple receptacles  
are controlled off  
the same wireless  
network, each  
individually  
controllable



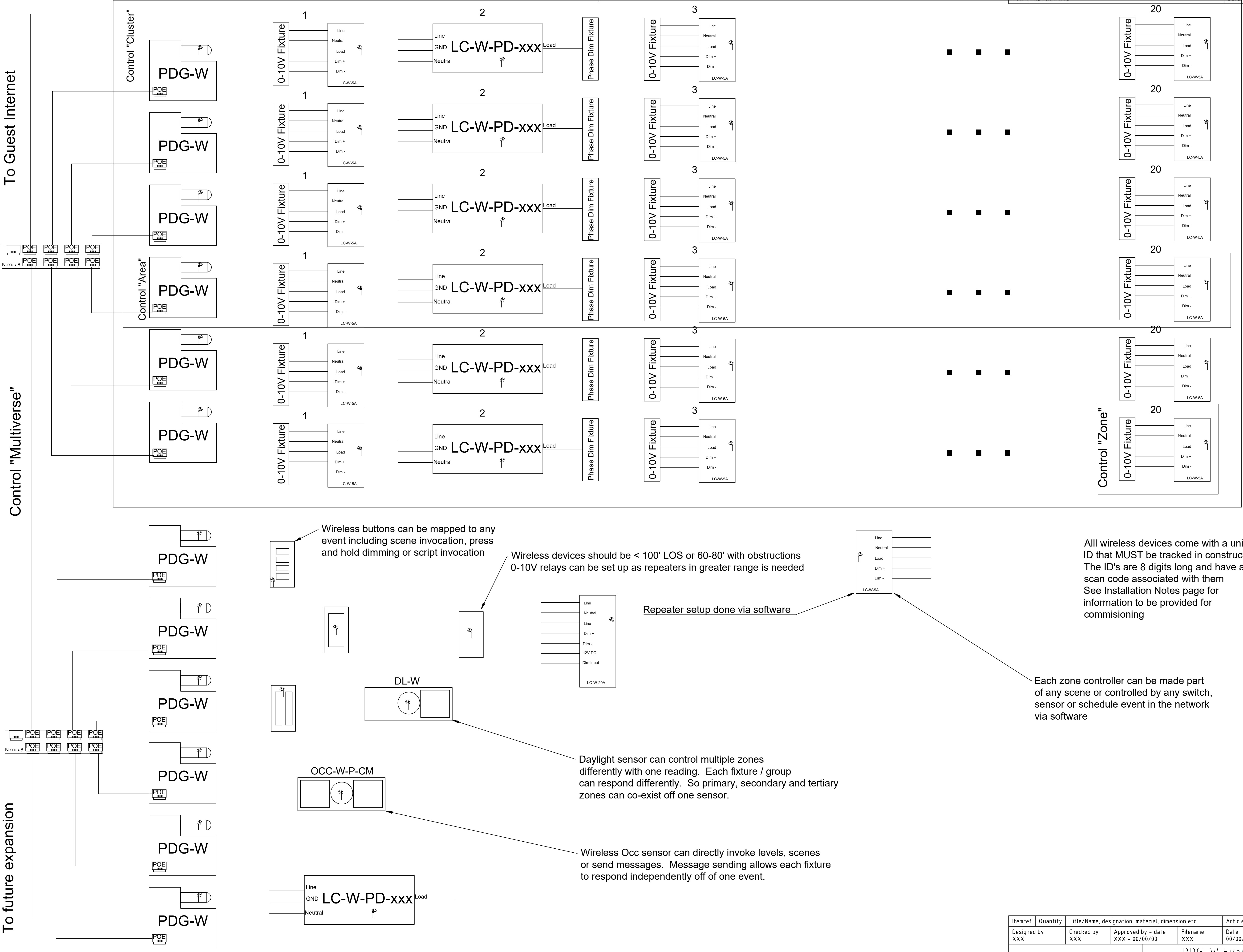
This can be set as a  
repeater to gain  
additional 80'

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
rNET Controls		Plug Load	
Edition 0		Sheet 1/1	

To Guest Internet

Control "Multiverse"

To future expansion



Wireless buttons can be mapped to any event including scene invocation, press and hold dimming or script invocation

Wireless devices should be < 100' LOS or 60-80' with obstructions  
0-10V relays can be set up as repeaters in greater range is needed

Repeater setup done via software

Daylight sensor can control multiple zones differently with one reading. Each fixture / group can respond differently. So primary, secondary and tertiary zones can co-exist off one sensor.

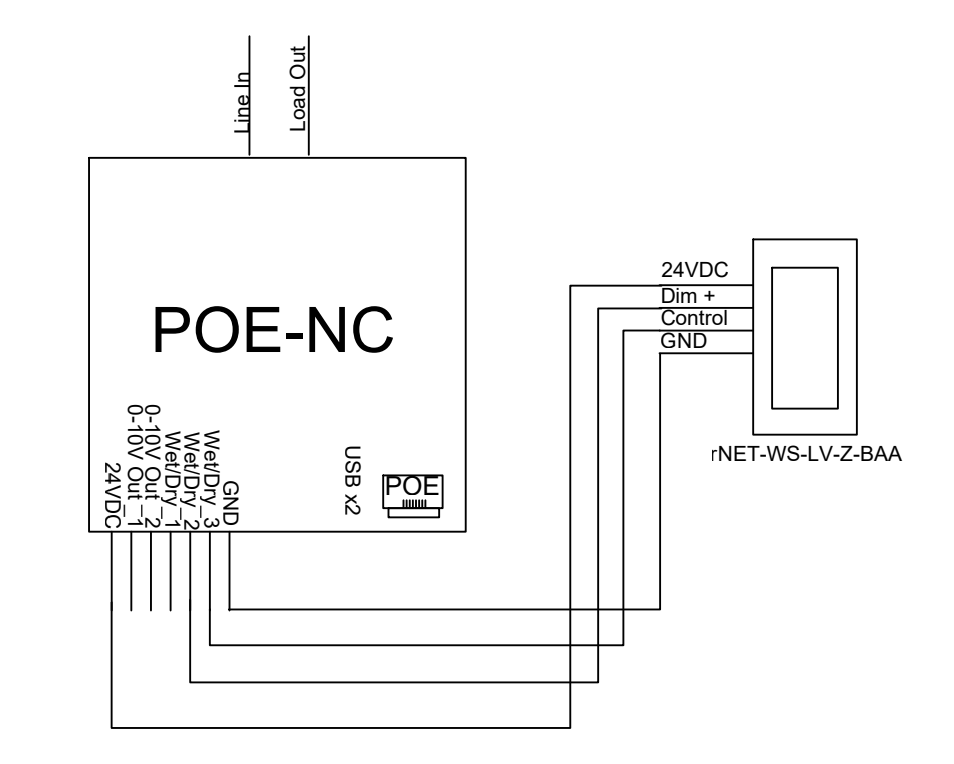
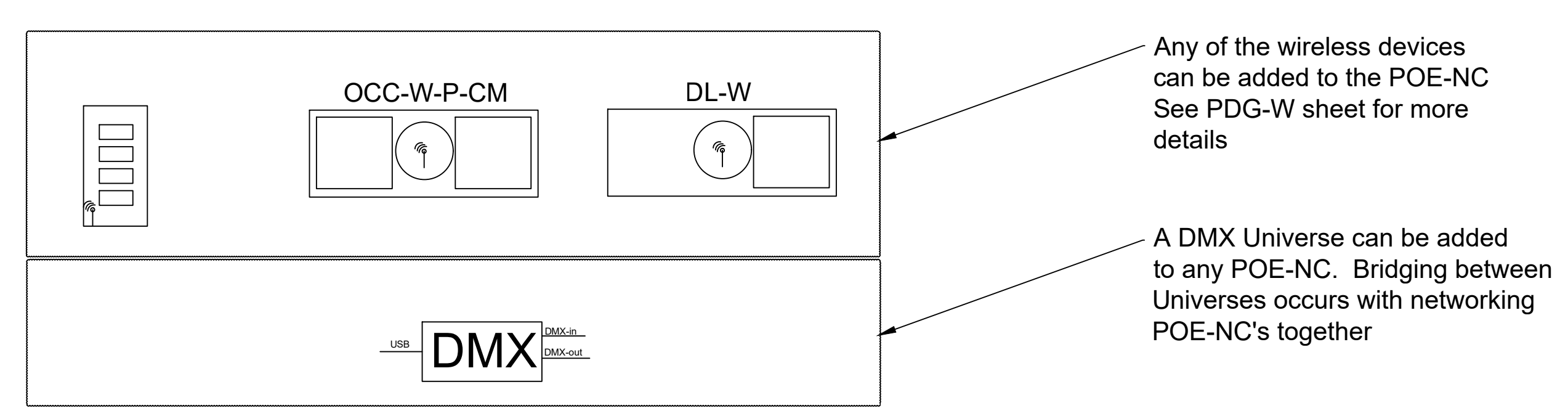
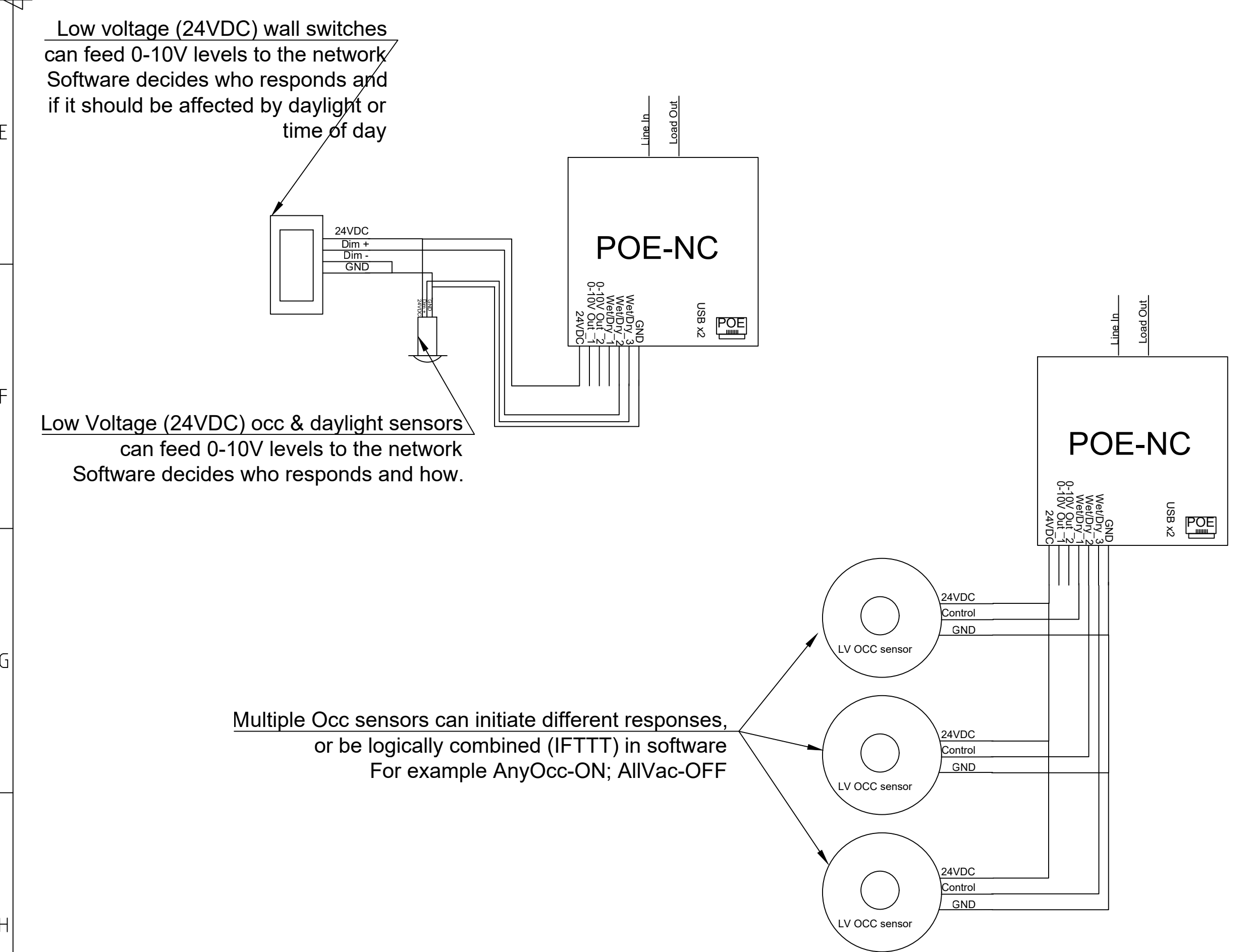
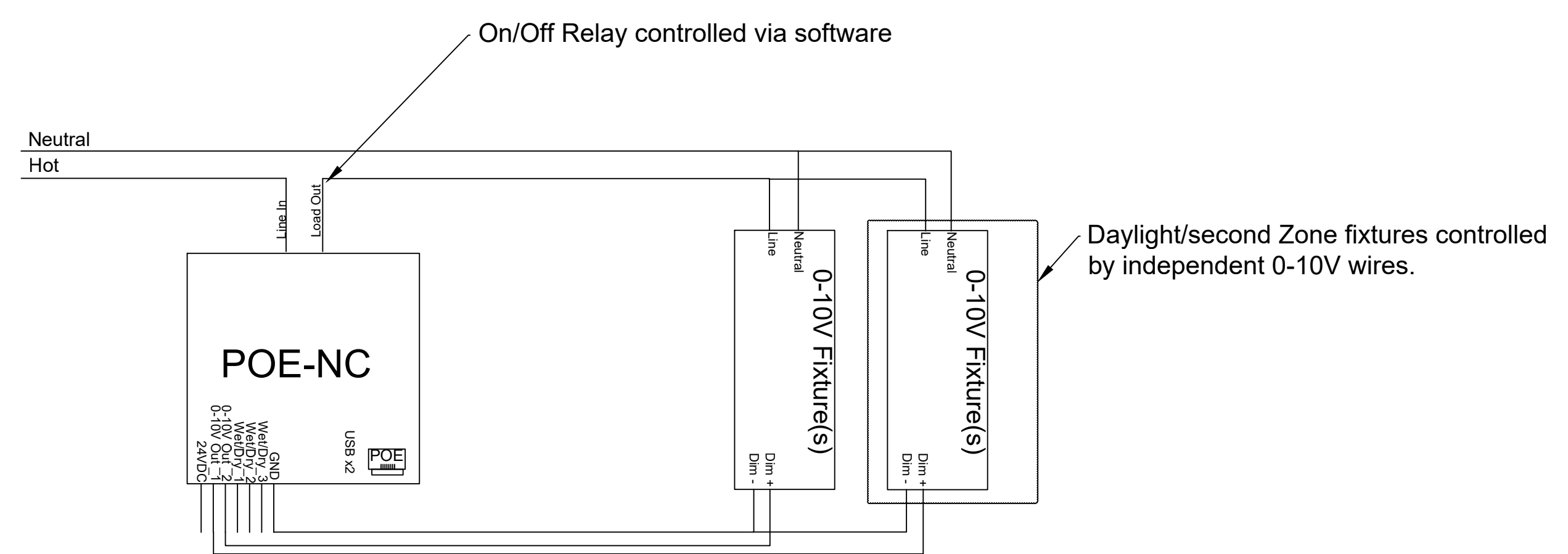
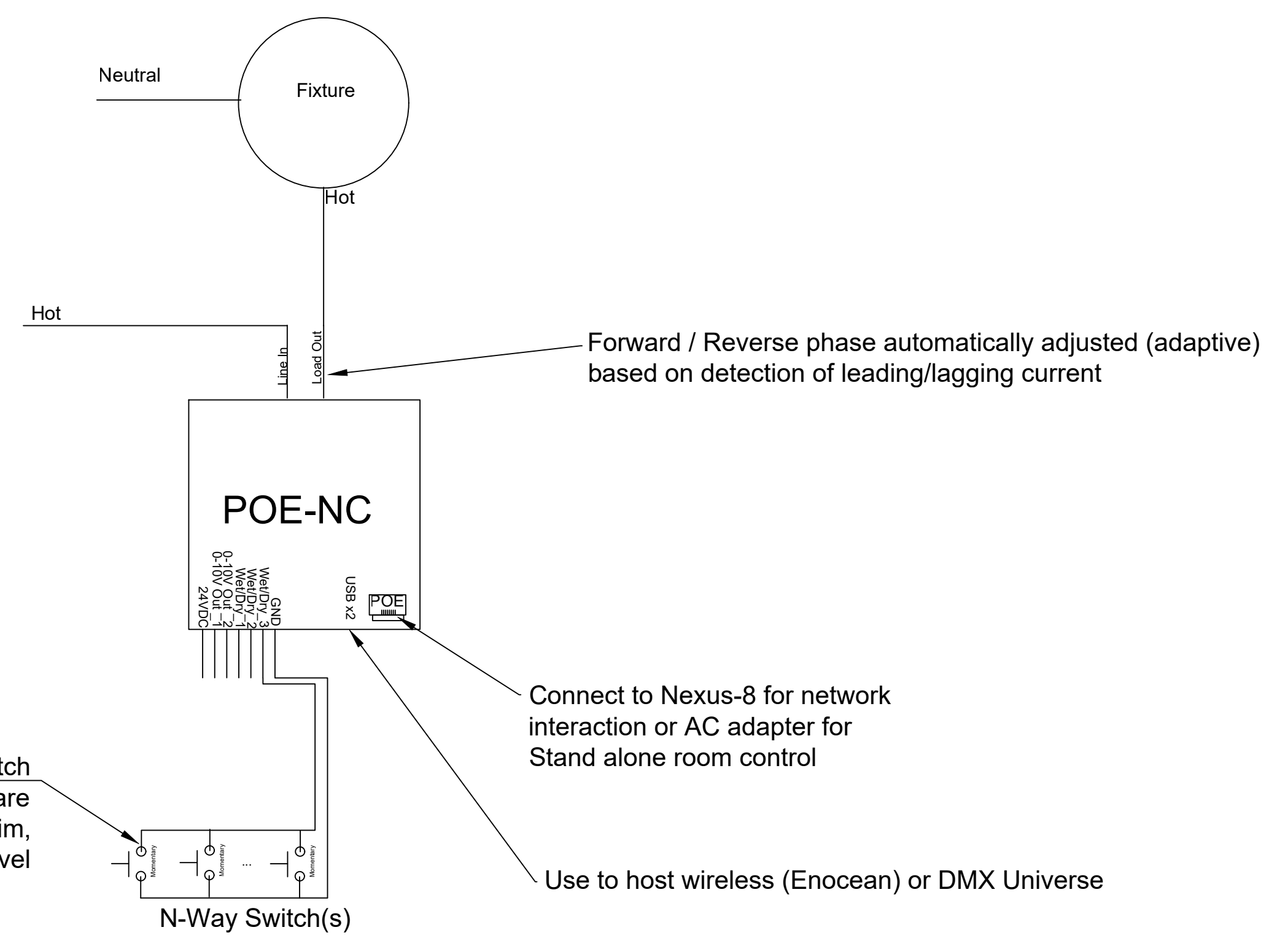
Wireless Occ sensor can directly invoke levels, scenes or send messages. Message sending allows each fixture to respond independently off of one event.

All wireless devices come with a unique ID that MUST be tracked in construction. The ID's are 8 digits long and have a QR scan code associated with them See Installation Notes page for information to be provided for commissioning

Each zone controller can be made part of any scene or controlled by any switch, sensor or schedule event in the network via software

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
Date 00/00/00		Scale 1:1	
Edition 0		Sheet 1/1	

rNET Controls PDG-W Examples X



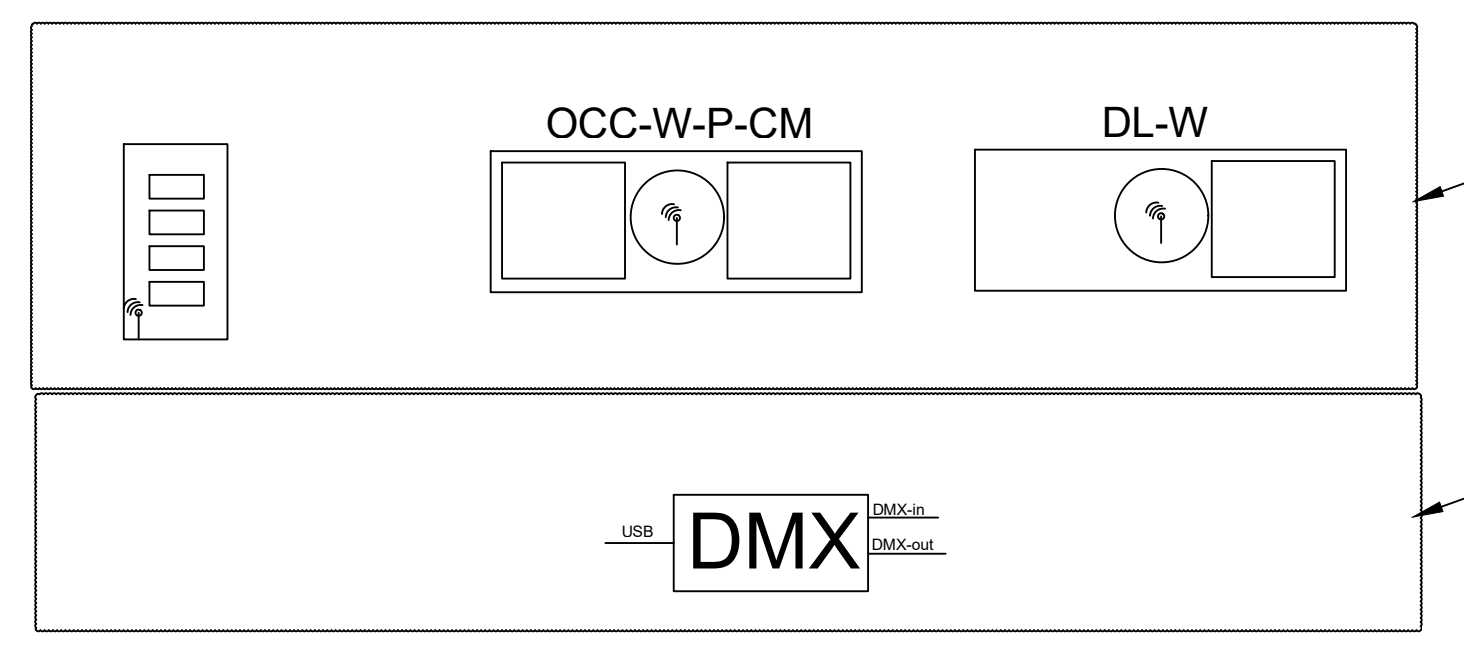
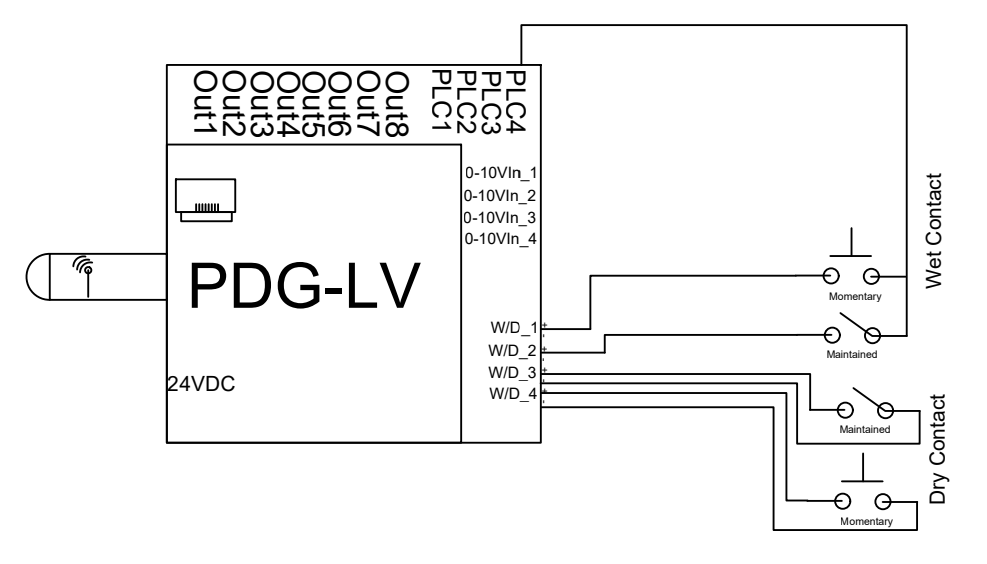
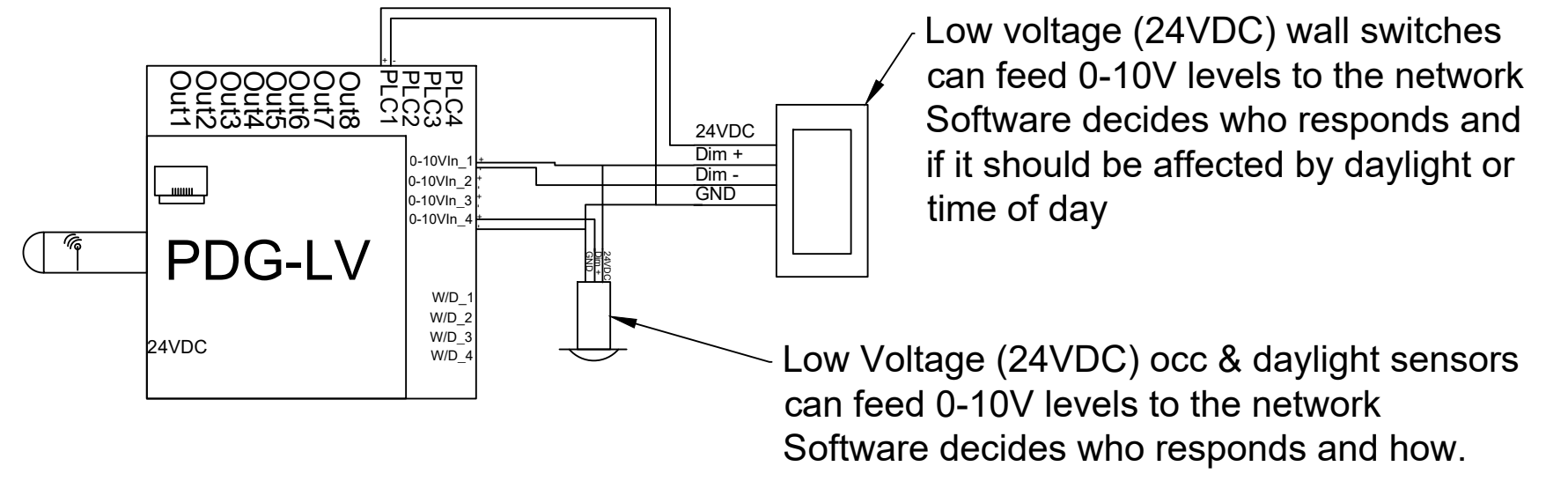
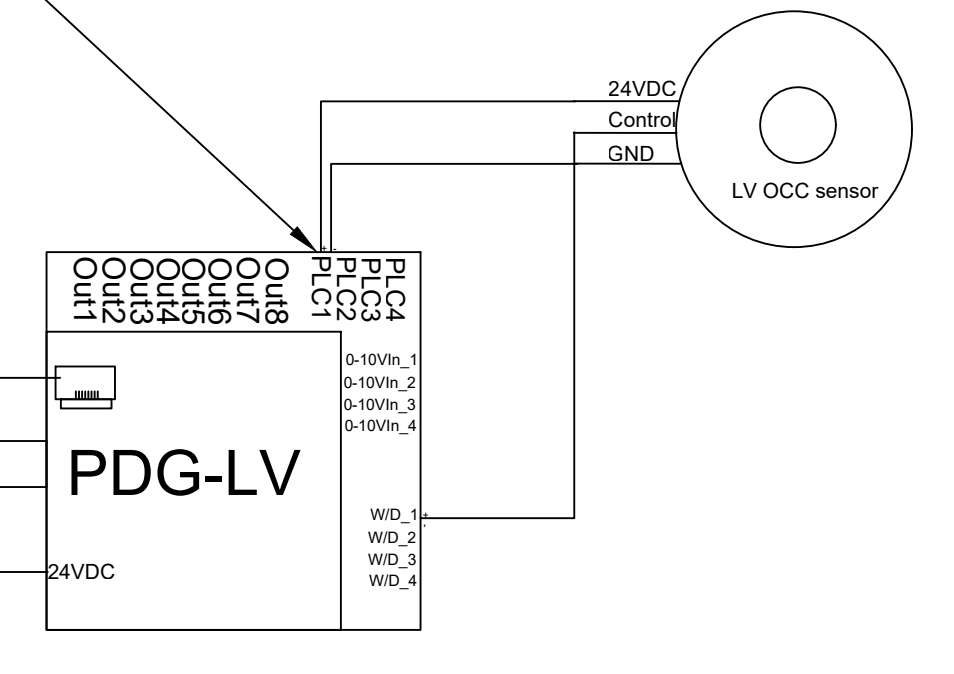
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Date 00/00/00
rNET Controls		POE-NC	
X		Edition 0	Sheet 1/1

PLC (Power Load Control)  
24V DC outputs can connect to sensors and acts as 4 built in power packs

Connect cat5 ethernet to Nexus-8 if networked or remotely accessible / support (not required for operation)

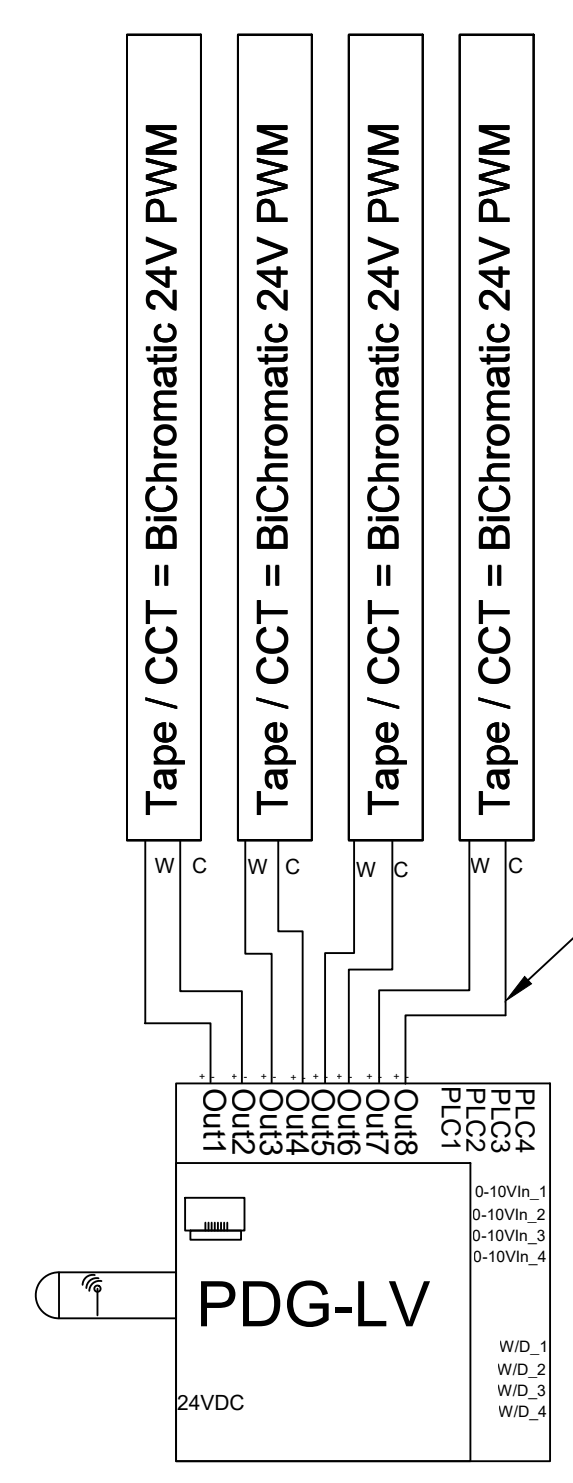
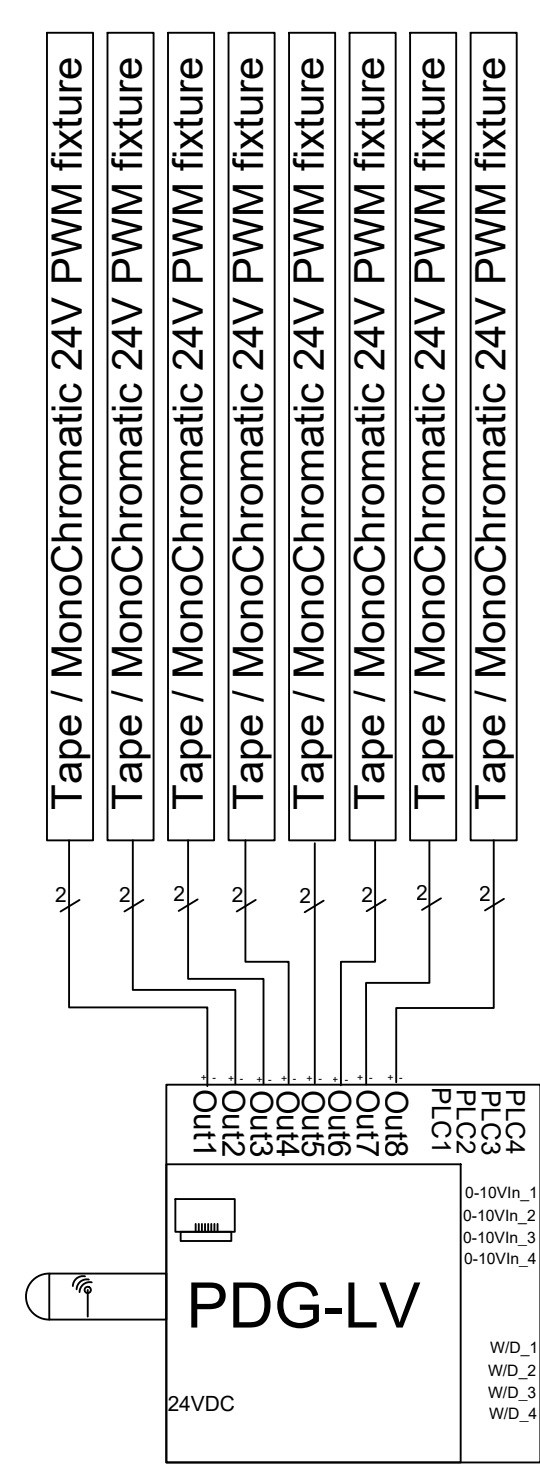
Power Supply  
120-277VAC 24VDC

Size power supply to max load + 8W +10%

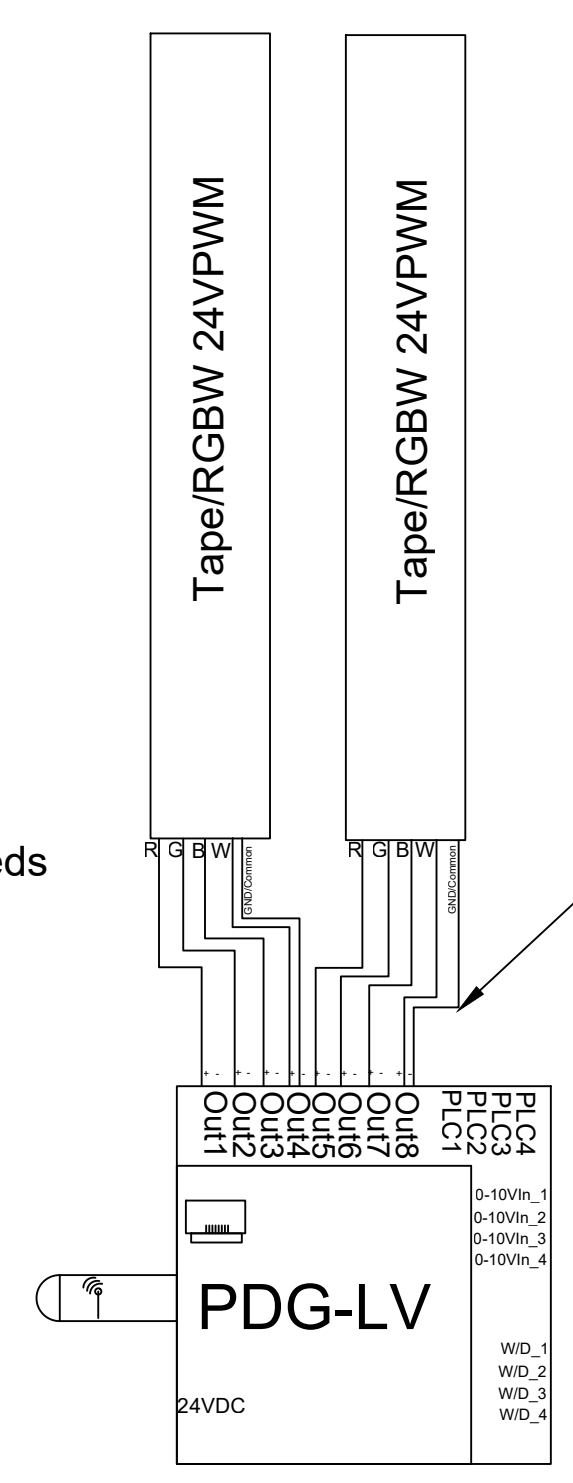


Any of the wireless devices can be added to the PDG-LV See PDG-W sheet for more details

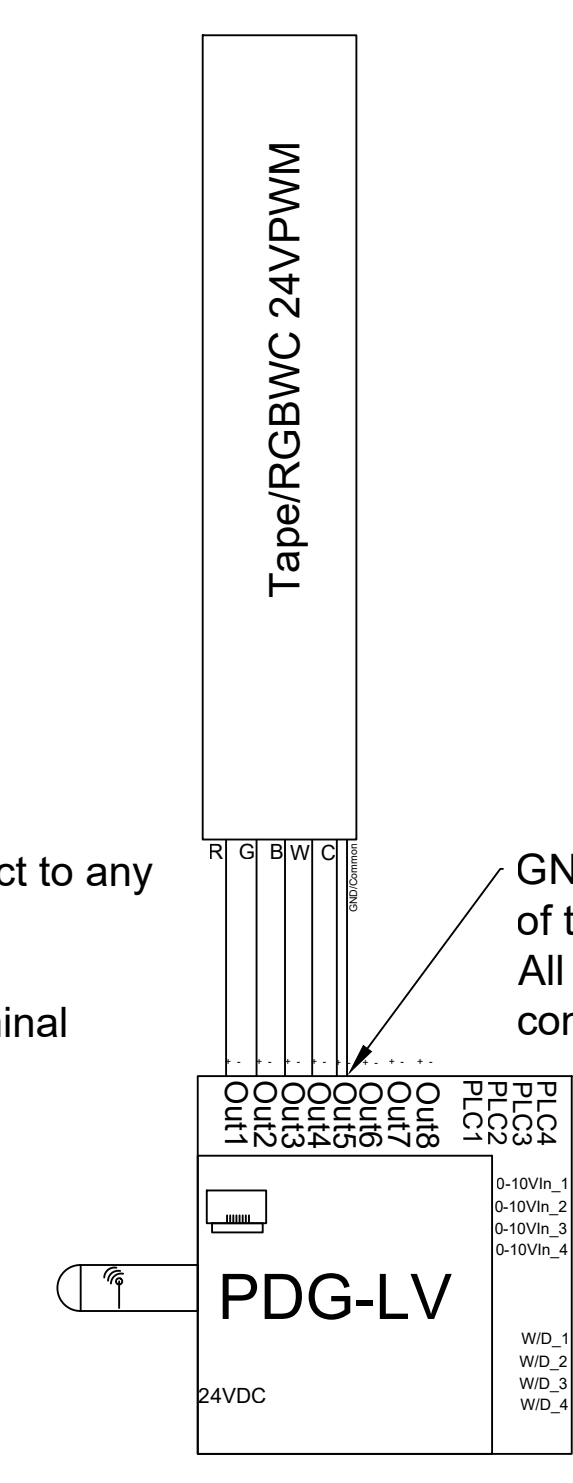
A DMX Universe can be added to any PDG-LV. Bridging between Universes occurs with networking PDG-LV's together



Only one GND wire needs to be connected if a 3 wire interface



GND wire can connect to any of the - terminals All the others connect to the + terminal



GND wire can connect to any of the - terminals All the others connect to the + terminal

Each output channel can support up to 100W (5A)

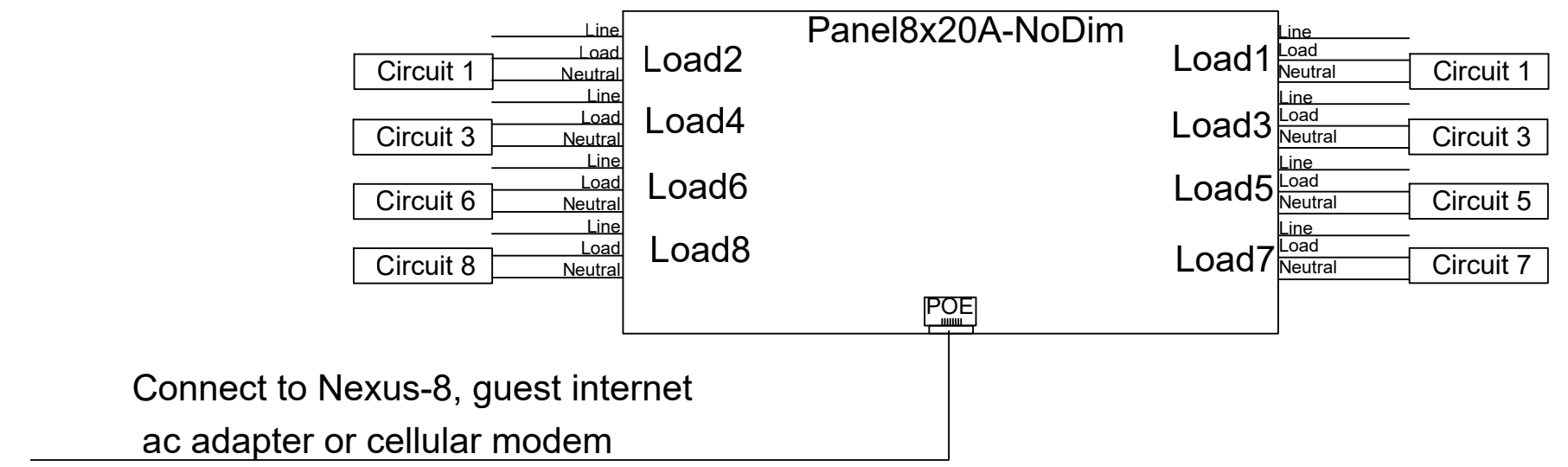
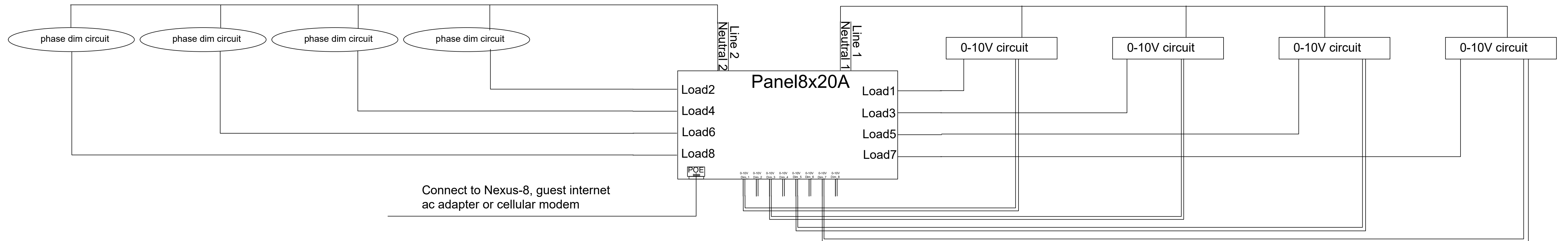
PDG-LV Output Configurations

QTY	Type	Outputs
1	RGBWC	1-5
2	RGBW	1-4 ; 5-8
4	CCT	1-2;3-4;5-6;7-8
8	MonoChromatic	1;2;3;4;5;6;7;8

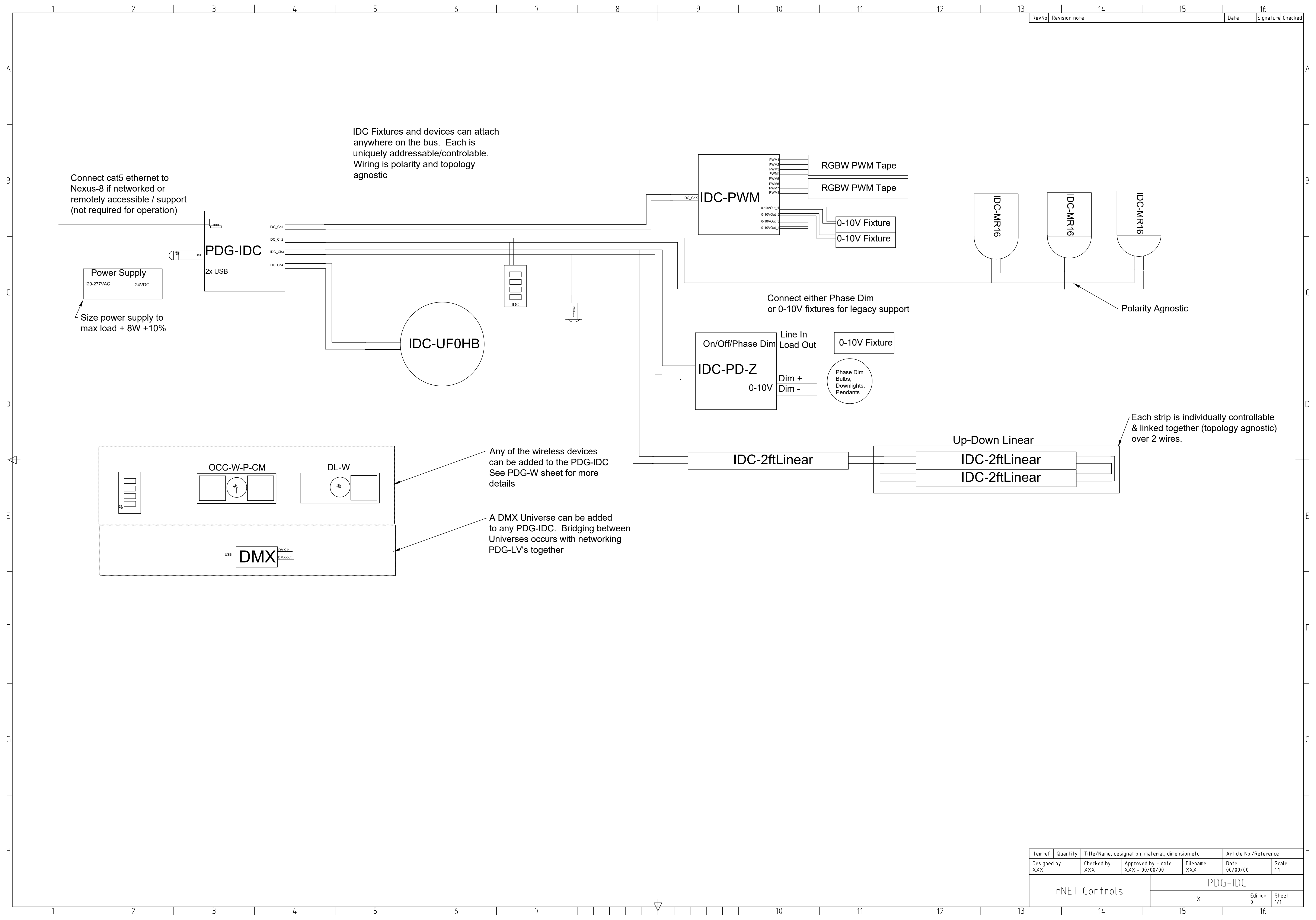
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
Date 00/00/00		Scale 1:1	
rNET Controls		PDG-LV	
Edition 0		Sheet 1/1	



Panels can be customized with up to 6 phase dims per box (3 per side) with the default being 8 0-10V 20A relays @ 120-277VAC. Each box can be programmed locally or remotely and hosts an internal astronomical clock. 0-10V relays can have independent neutrals - below shows common neutral with 5A loads

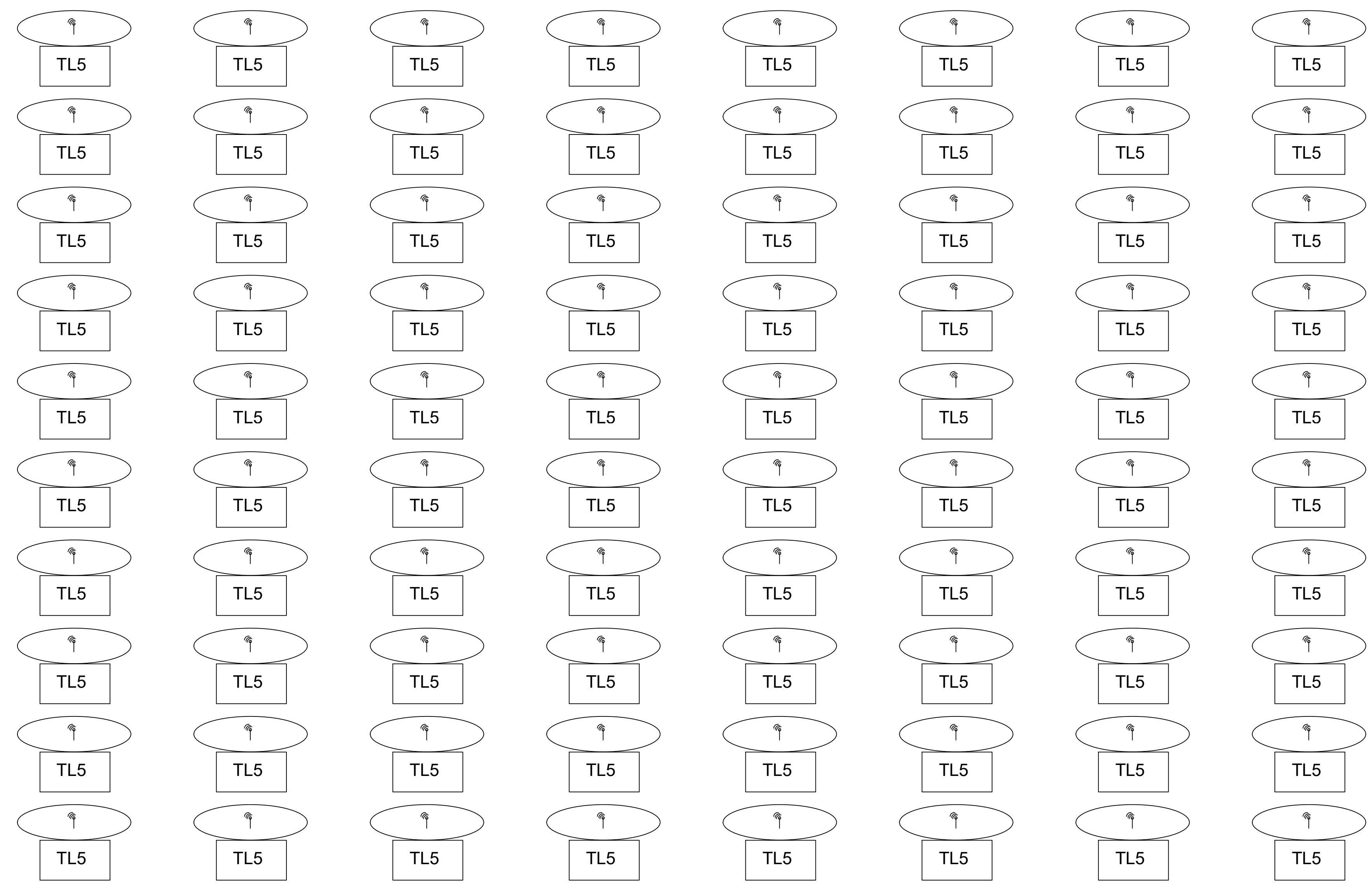
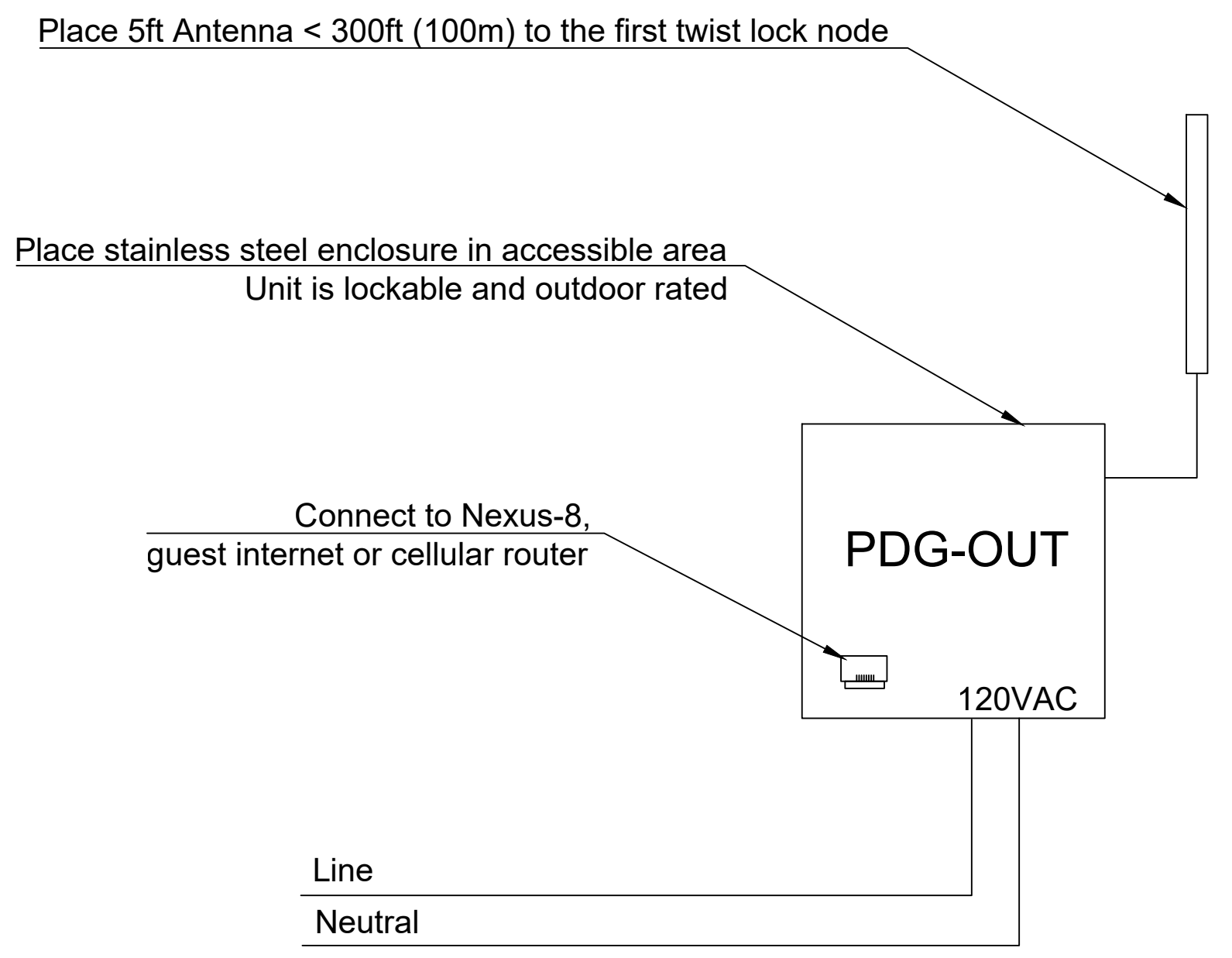


Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX	Date 00/00/00	Scale 1:1	
rNET Controls			Panel8x20A			
			X	Edition 0	Sheet 1/1	



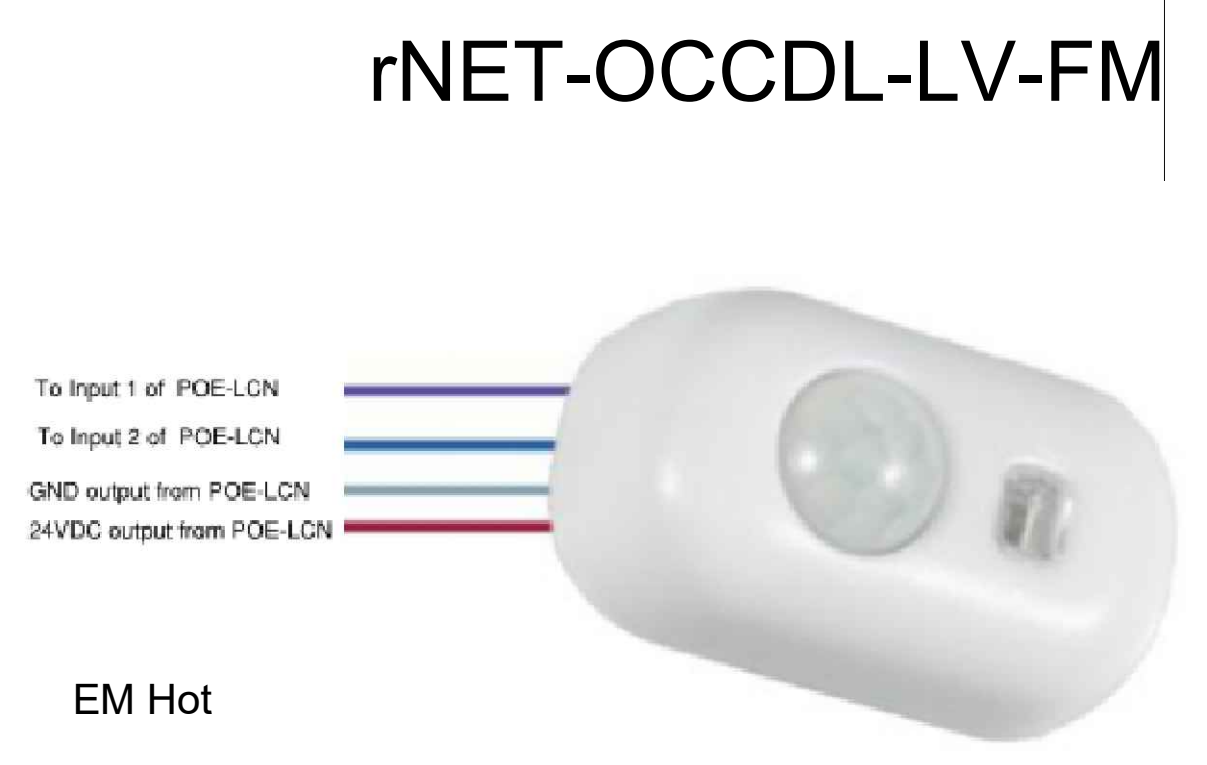
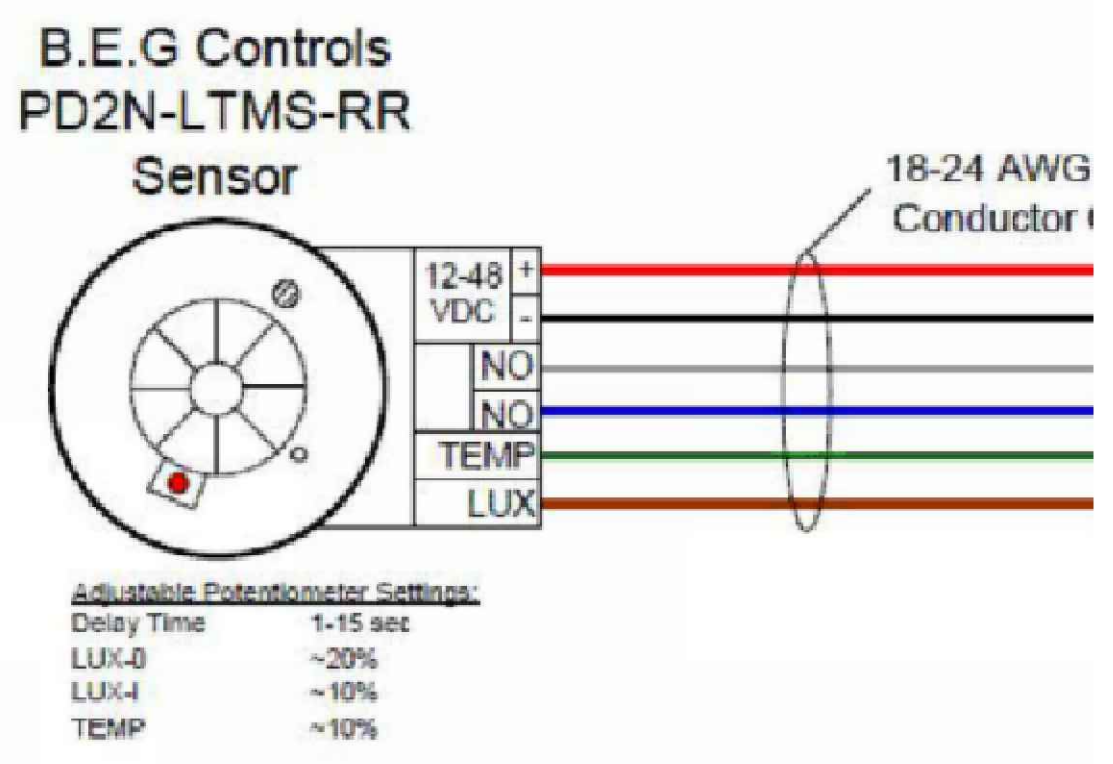
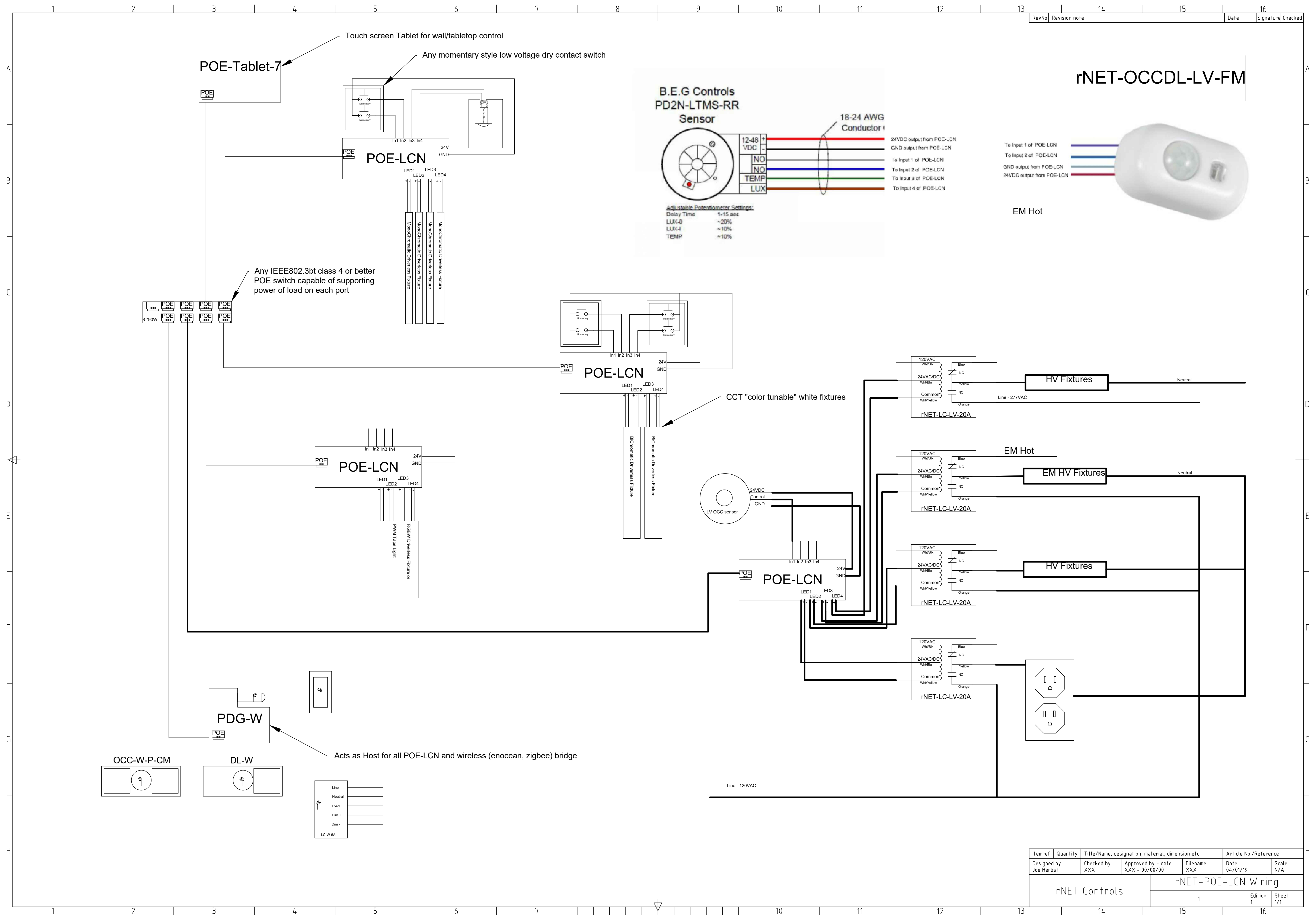
Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Date 00/00/00
rNET Controls		PDG-IDC	
X		Edition 0	Sheet 1/1

Up to 300+ Twist Lock  $\frac{5}{8}$  pin nodes per gateway.  
 Ensure each node is within 300' (100m) to another node



Each Twist Lock node is individually addressable  
 Ensure ID is tracked to each pole /fixture

Itemref	Quantity	Title/Name, designation, material, dimension etc			Article No./Reference	
Designed by XXX	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX	Date 00/00/00	Scale 1:1	
rNET Controls				PDG-OUT		
				X	Edition 0	Sheet 1/1

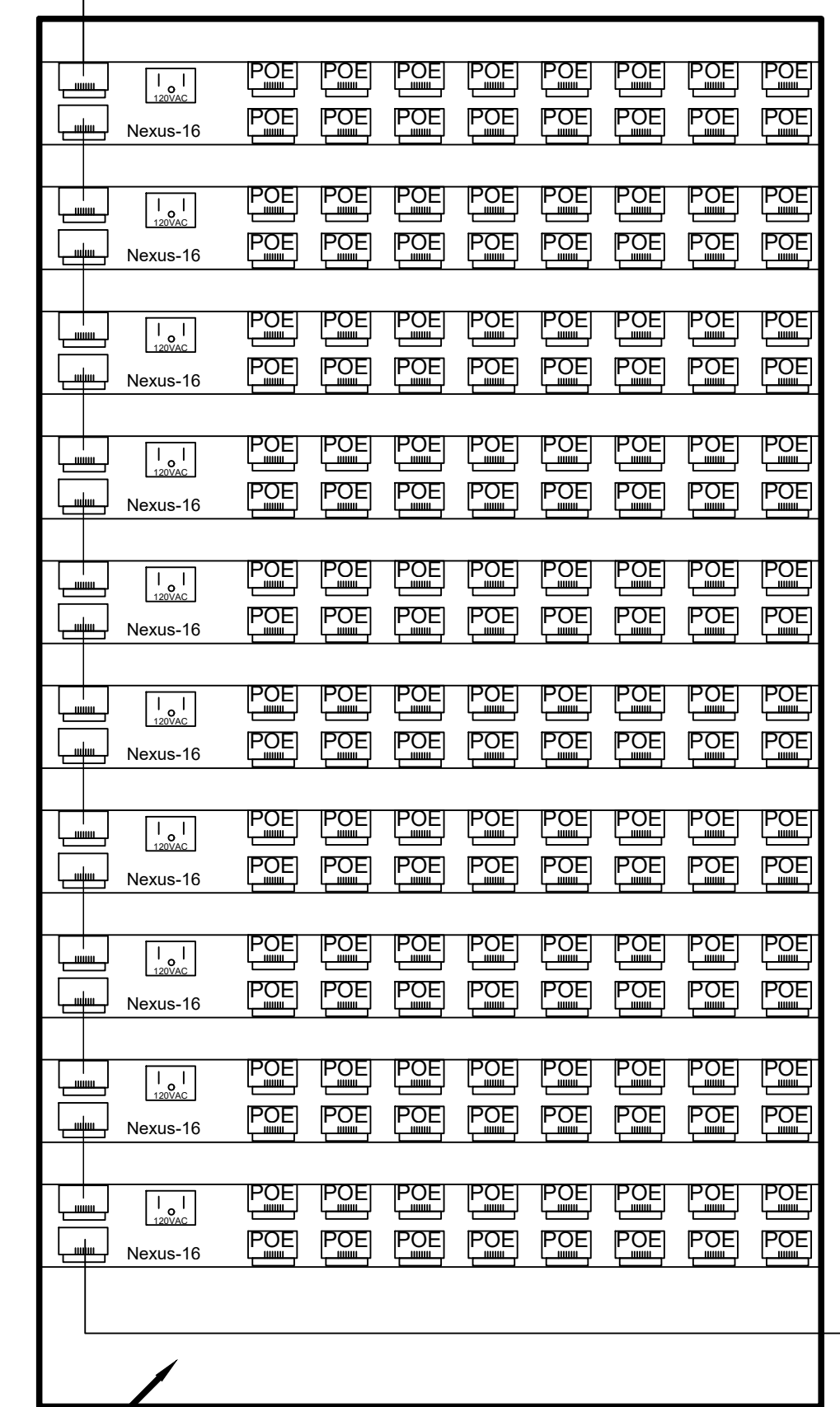


Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by Joe Herbst	Checked by XXX	Approved by - date XXX - 00/00/00	Filename XXX
Date 04/01/19		Scale N/A	
rNET Controls		rNET-POE-LCN Wiring	
Edition 1		Sheet 1/1	

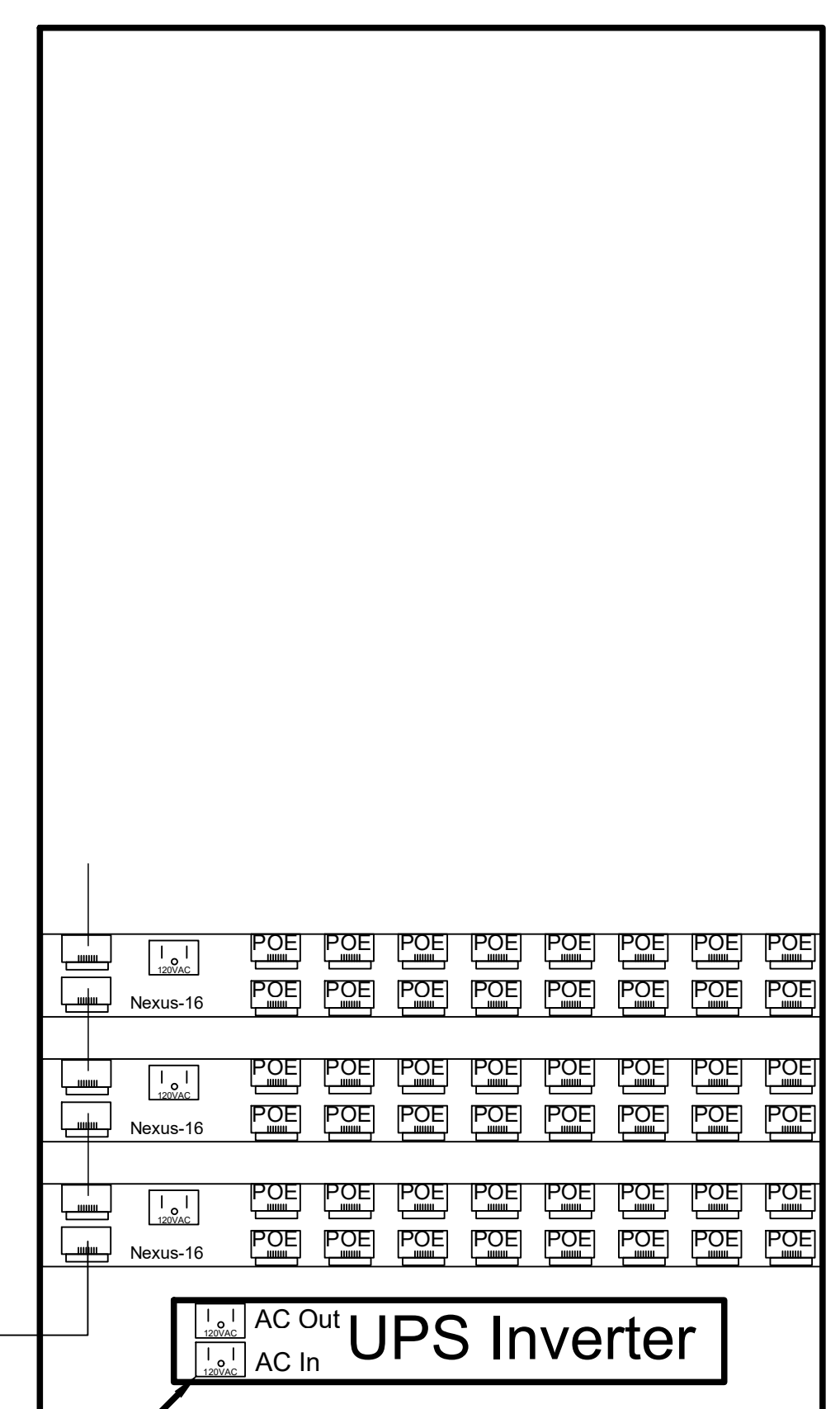
Guest Internet



Non UPS Stack



UPS Stack



**NOTES:**  
 EM fixtures can be made by simply moving their cat5 cable to the UPS stack.  
 Ensure UPS Inverter has ability to support 90 minutes @ full load

Connect AC In to Utility Power

Connect AC In to Emergency Power  
 Connect AC Out to array of switches (Nexus-16)

Itemref	Quantity	Title/Name, designation, material, dimension etc	Article No./Reference
Designed by Joe Herbst	Checked by XXX	Approved by - date XXX - 00/00/00	Date 04/01/19
rNET Controls		rNET-POE-LCN Wiring	
Edition 1		Sheet 1/1	



