



## **ViTrox V510**

### **Advanced Optical Inspection System**

**Electrical Drawing**

*Thank you for using ViTrox<sup>®</sup> Product.....*

*“... innovating vision!”*

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## **Revision**

Revision B, July 2009

Printed in Malaysia

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**ViTrox V510 Advanced Optical Inspection System Electrical Drawing <Revision B>****Revision History**

Revision	Type Of Change	Date	Author
A	First Release	15 <sup>th</sup> June 2009	Venus Ooi Hong Kee
B	Content Updated	2 <sup>nd</sup> Dec2009	Peter Khoo Say Peng

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## Legal Information

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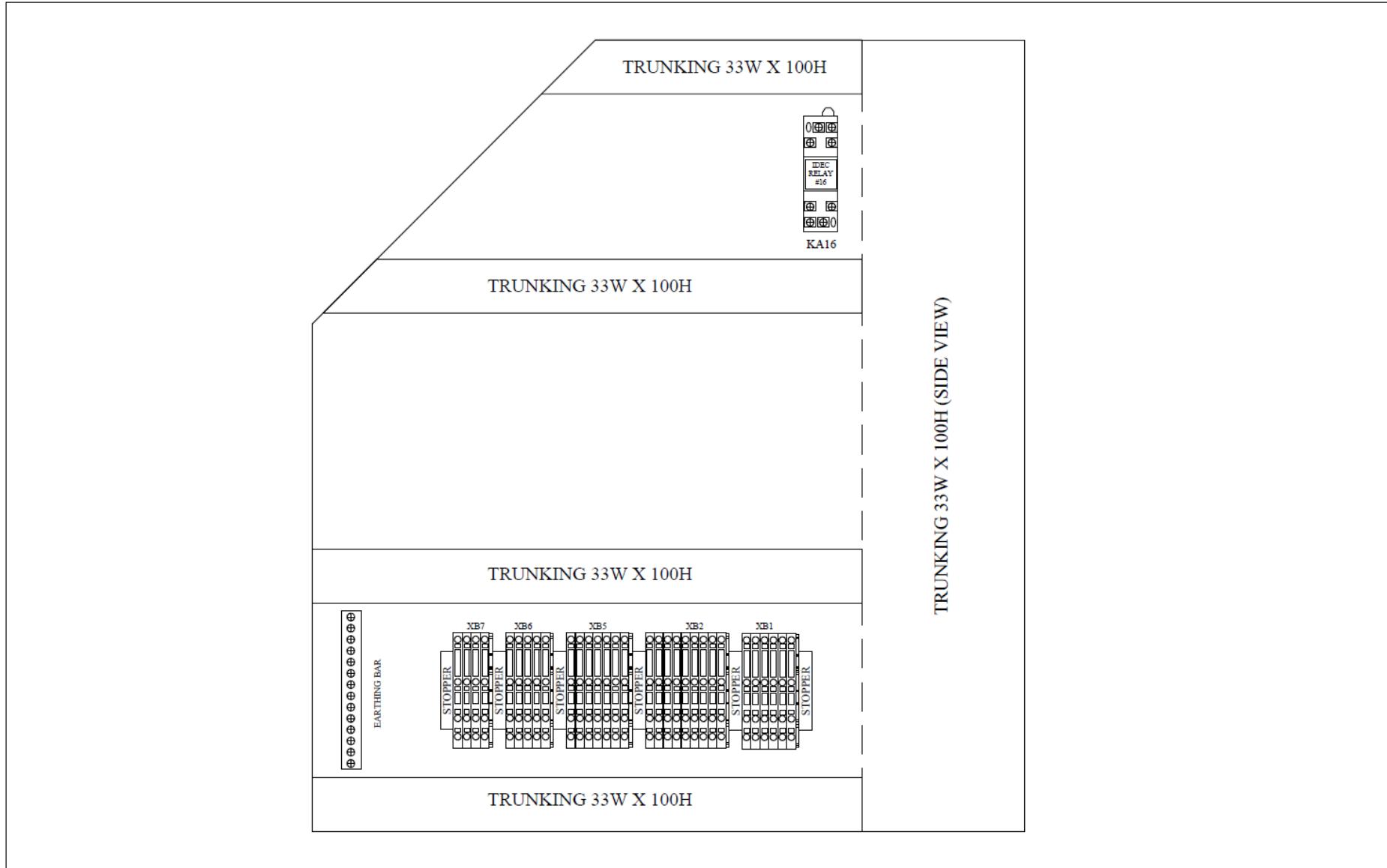
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## **Electrical Drawing**

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**Figure 2- 1 Single Lane Cont Panel Layout Left Hand Side**

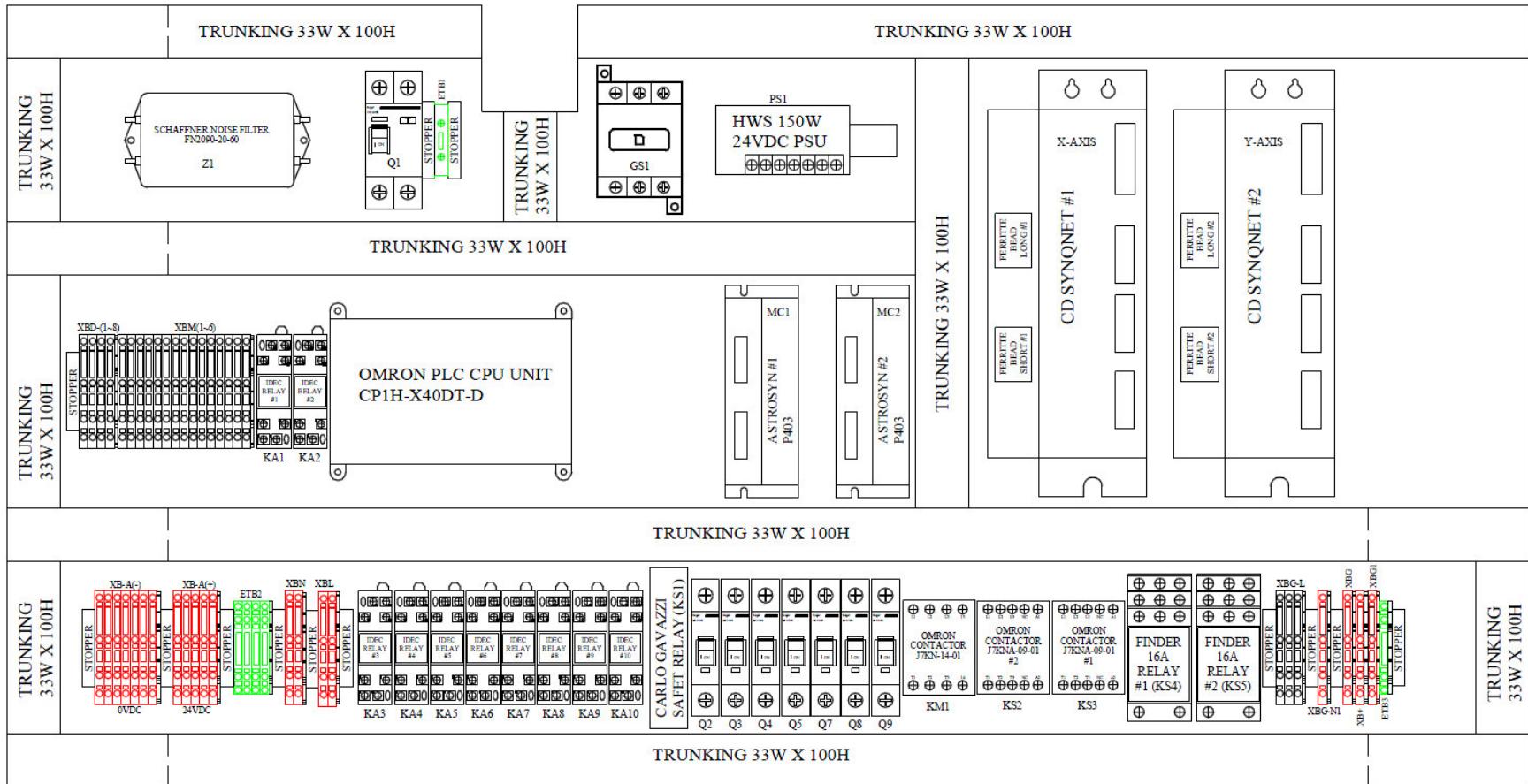
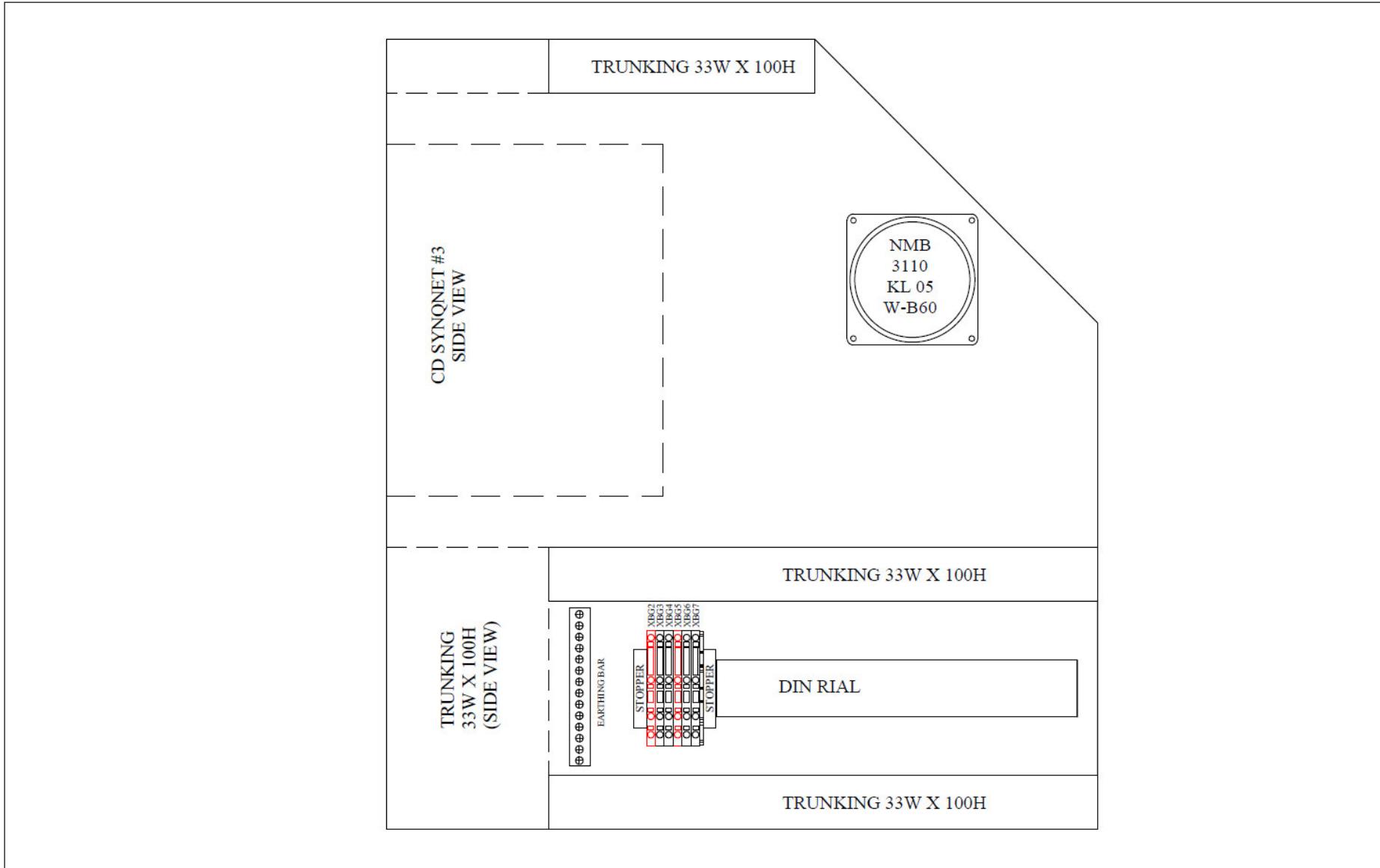


Figure 2- 2 Single Lane Cont Panel Layout Center



**Figure 2- 3      Single Lane Cont Panel Layout Right Hand Side**

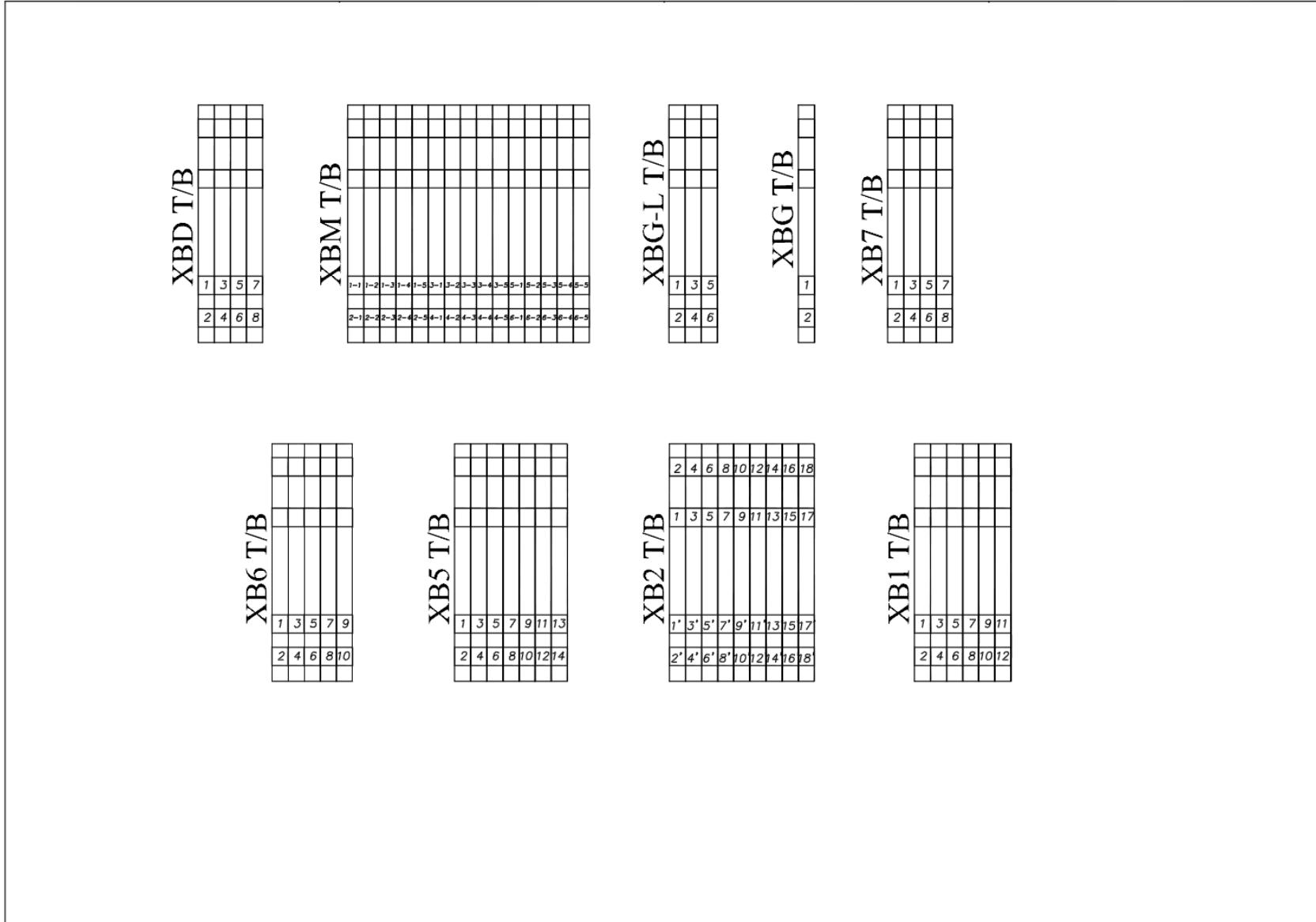


Figure 2- 4      Single Lane Cont Panel Layout

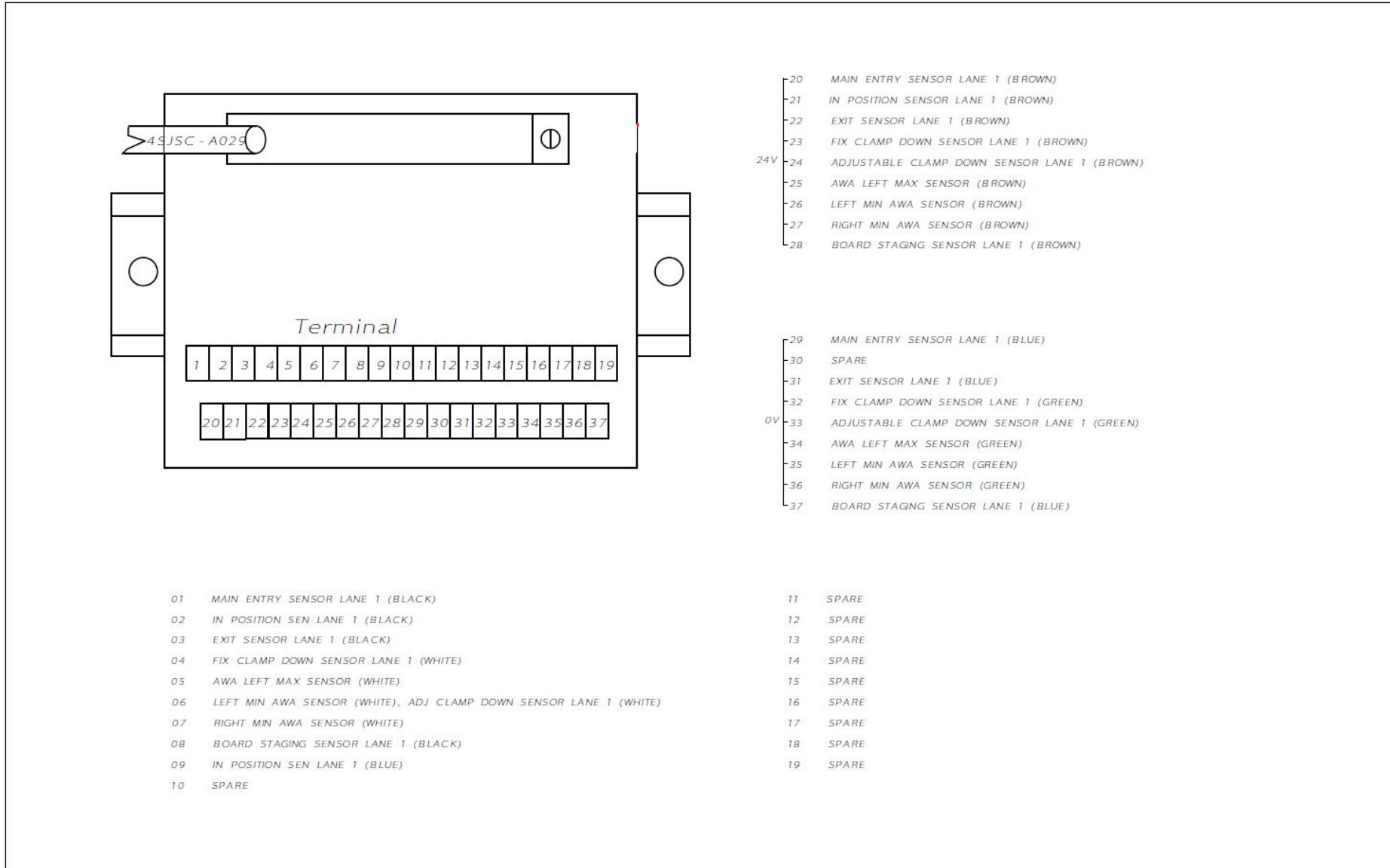


Figure 2- 5 Single Lane Terminal Layout

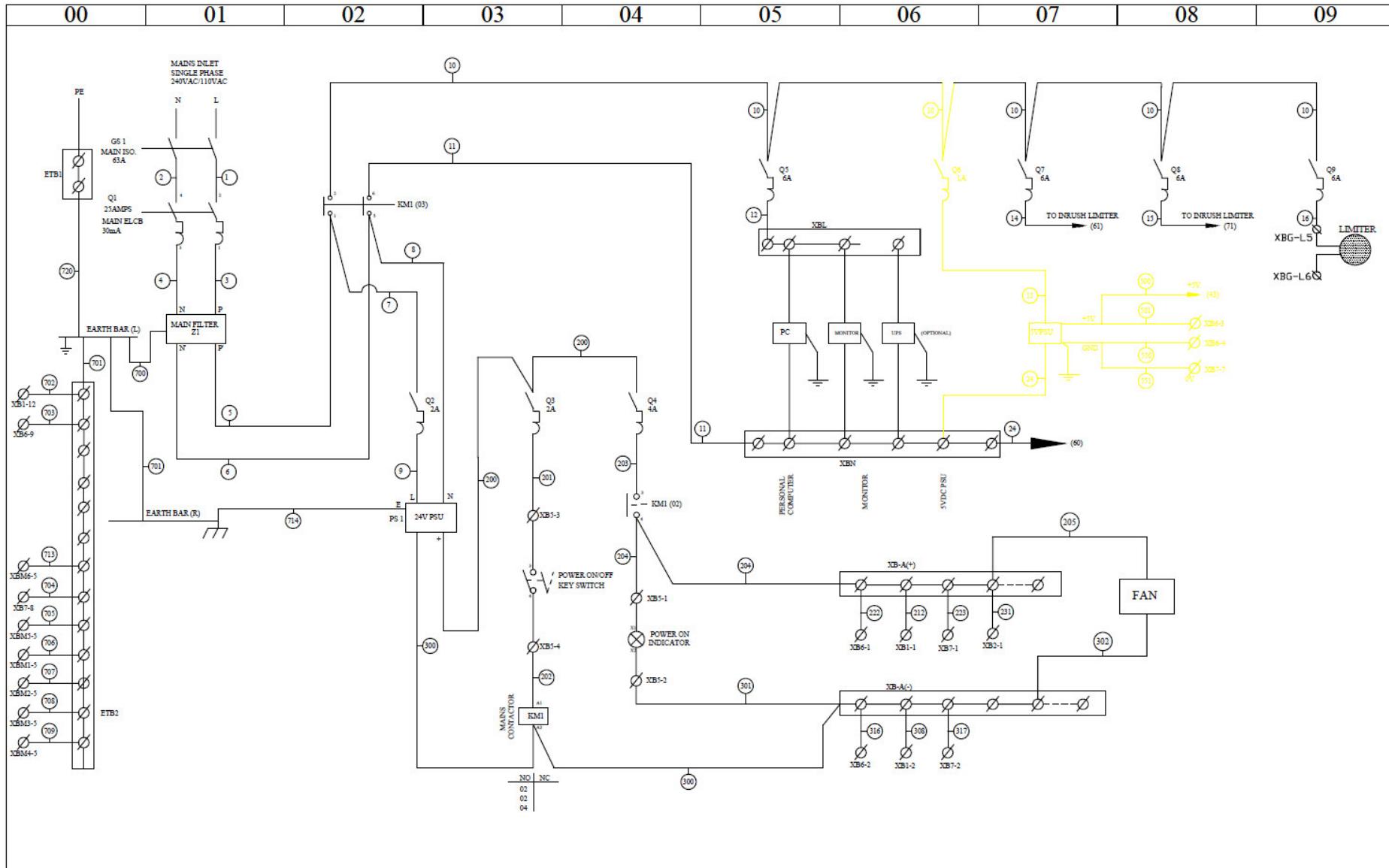


Figure 2- 6 Single Lane Cont Panel Mains 200\_110 Power

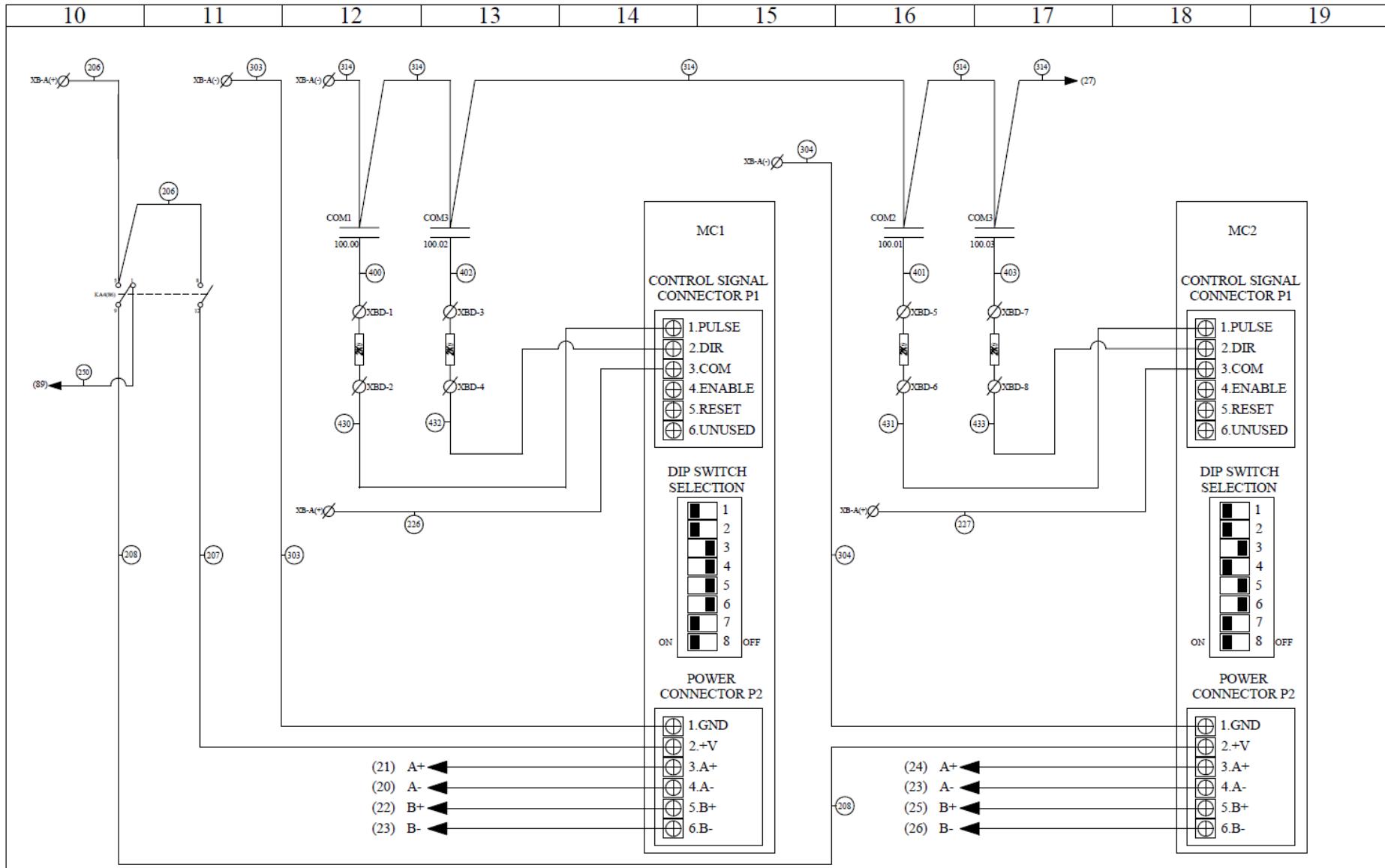


Figure 2- 7 Single Lane Cont Panel Conveyor\_Clamping\_AutoWidthAdjust

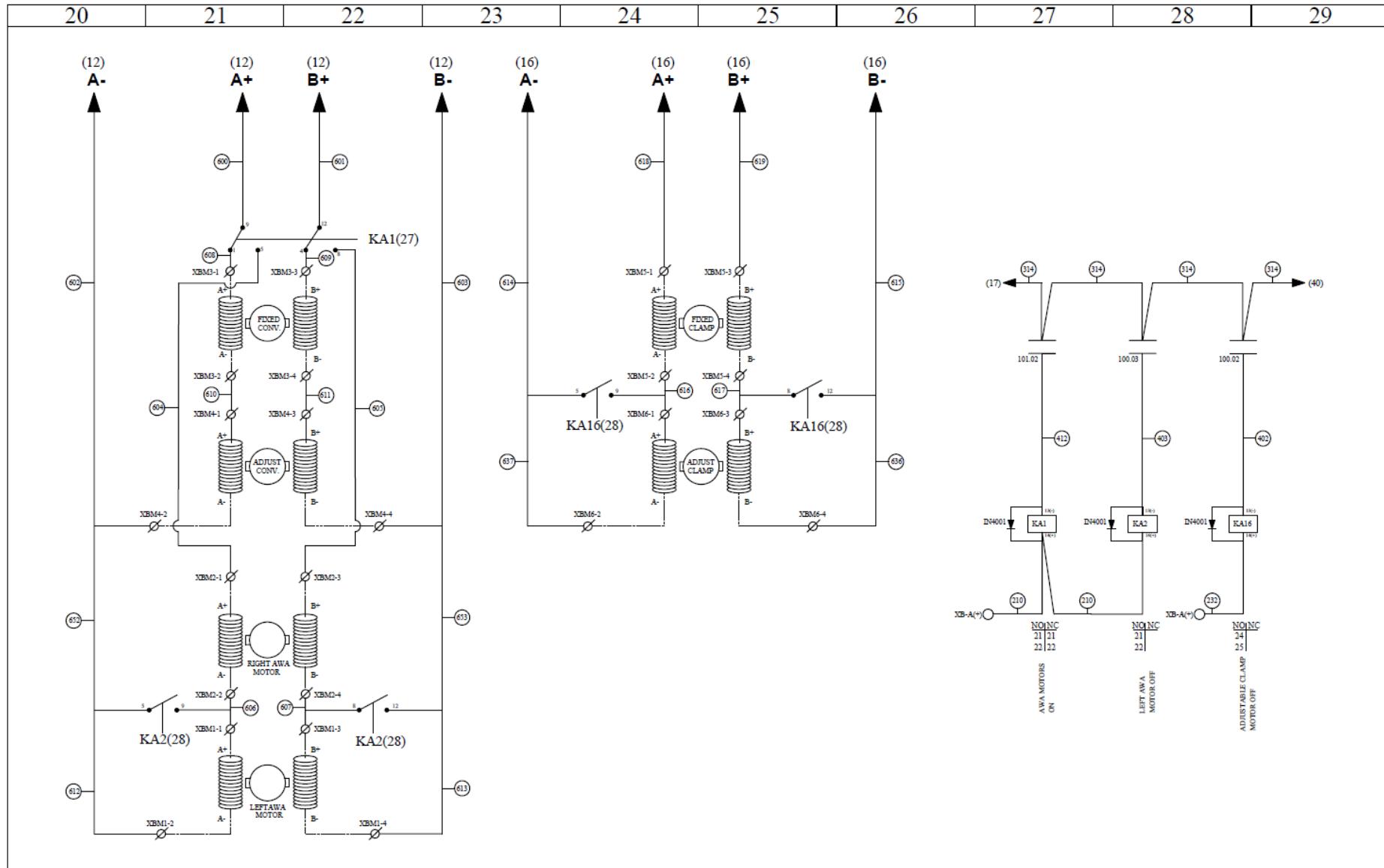


Figure 2- 8 Single Lane Cont Panel Conveyor\_Clamping\_AutoWidthAdjust Motors

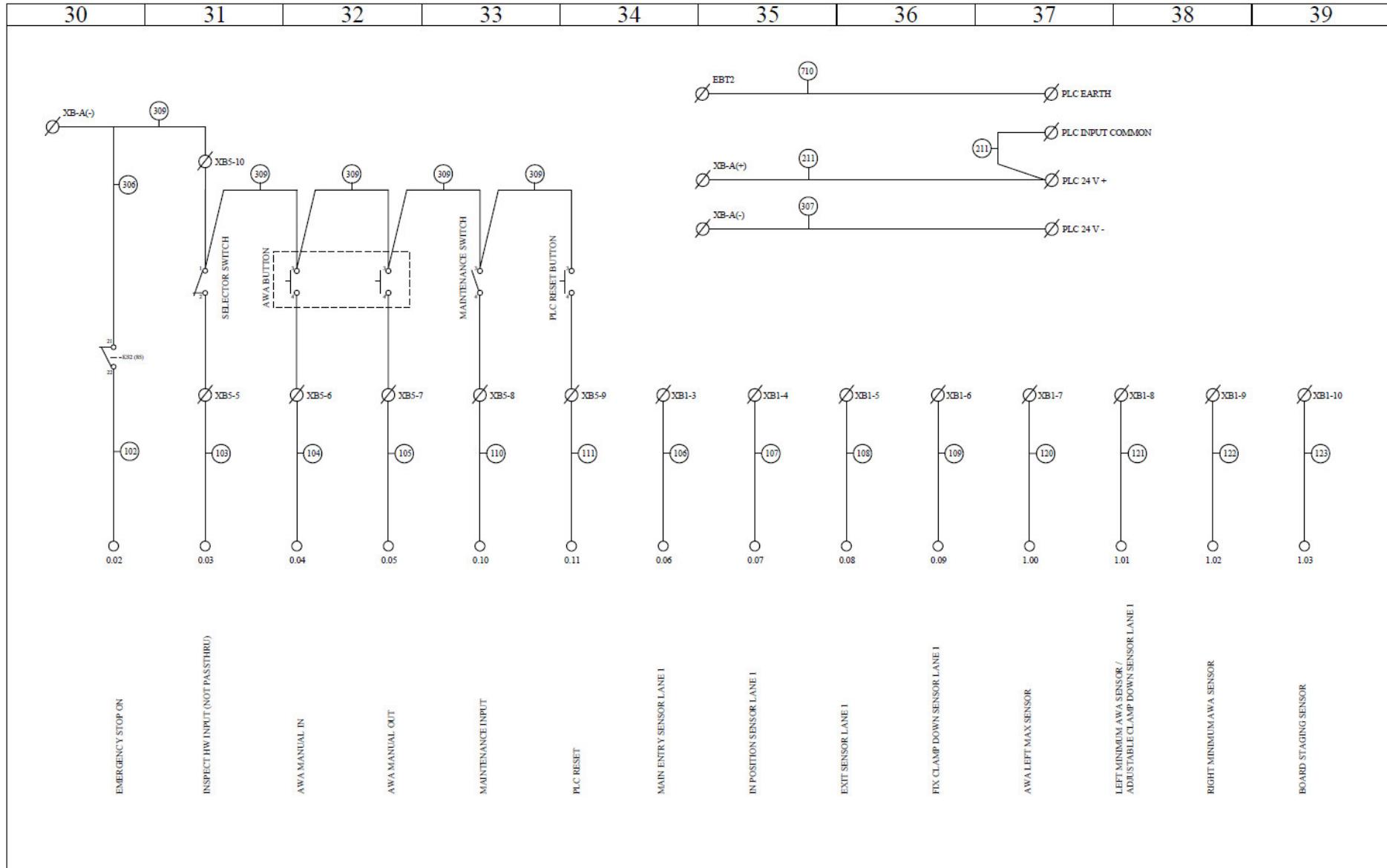


Figure 2- 9 Single Lane Cont Panel 24V PLC Inputs

40	41	42	43	44	45	46	47	48	49
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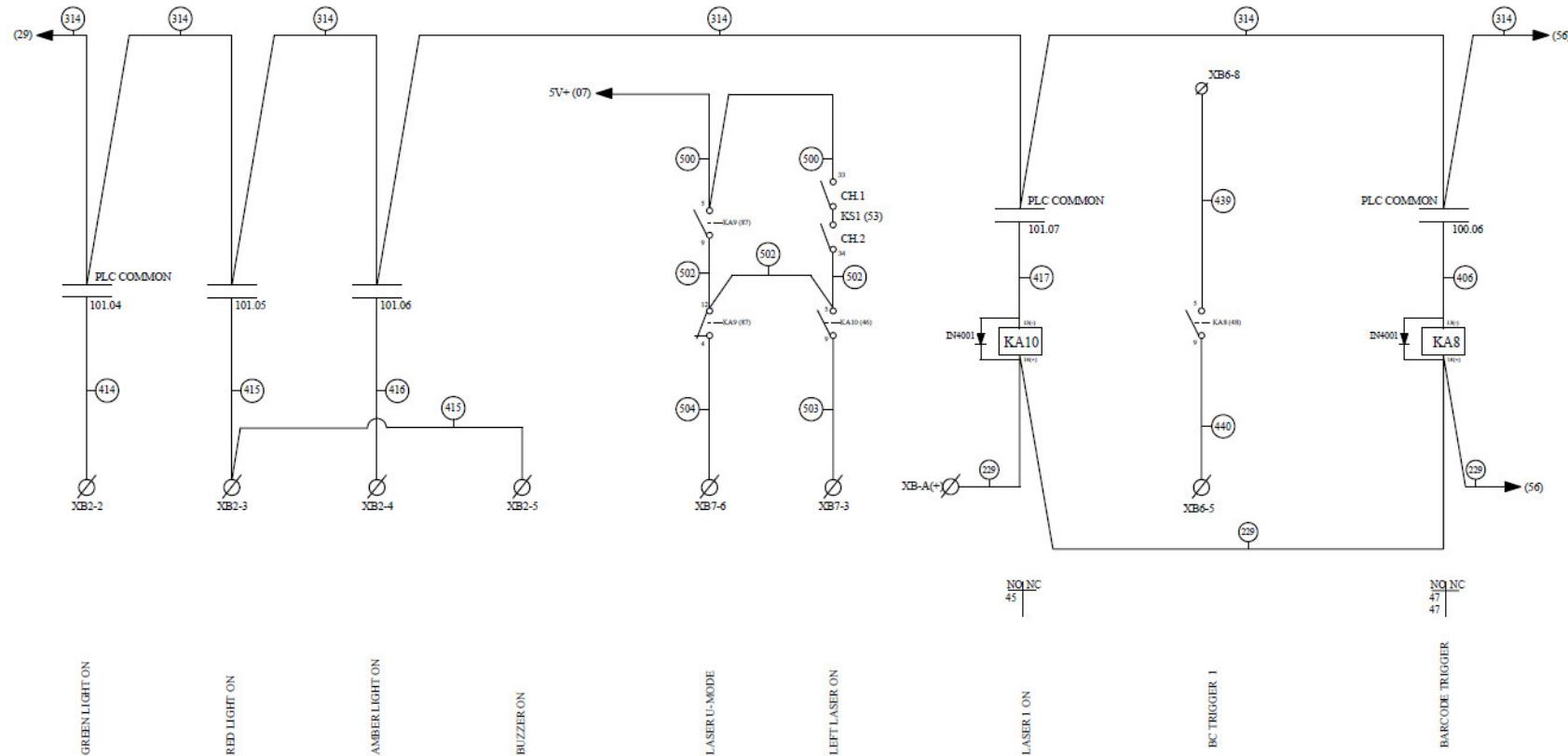


Figure 2- 10 Single Lane Cont Panel PLC Outputs

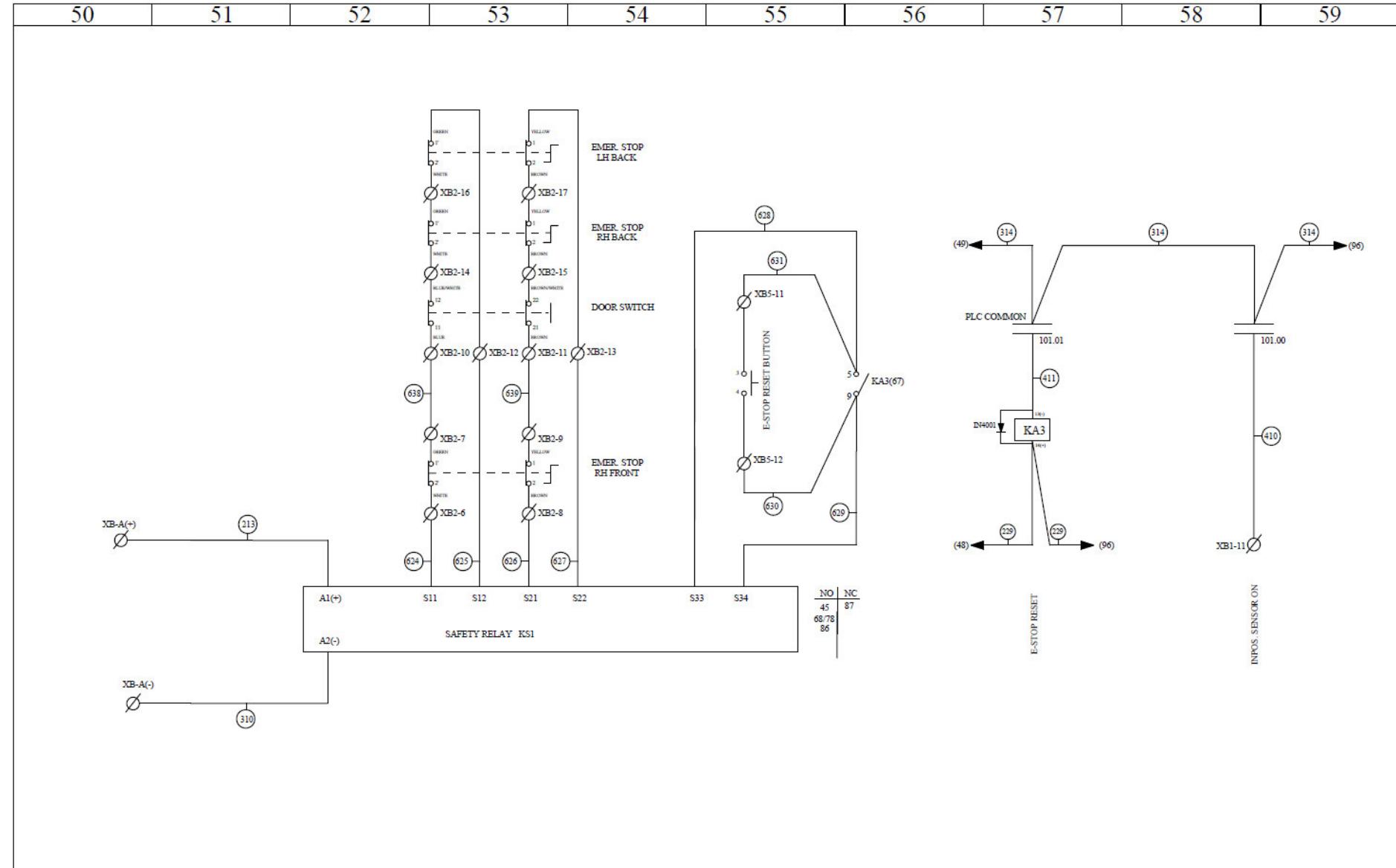


Figure 2- 11 Single Lane Cont Panel 24V Safety Relay

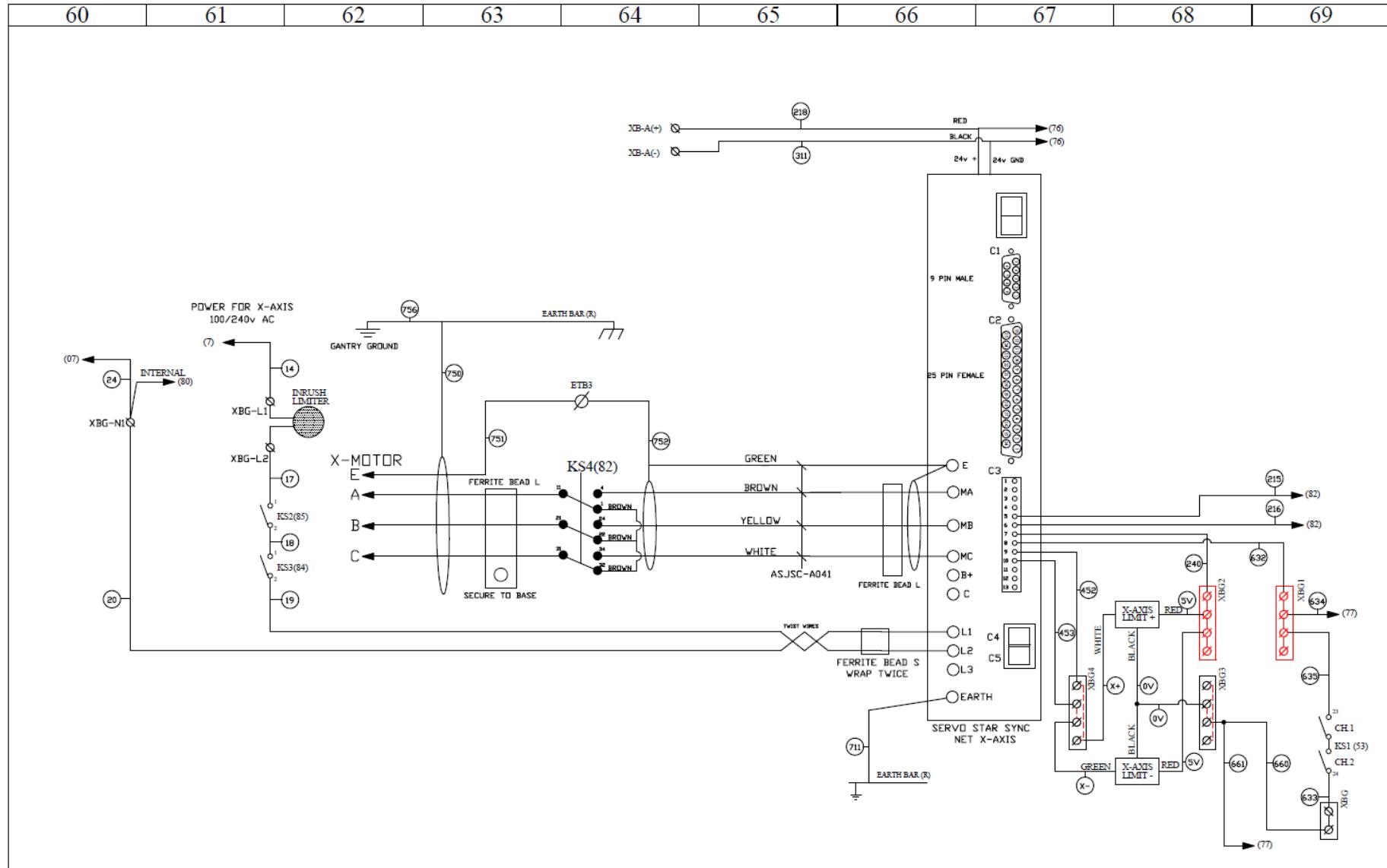


Figure 2- 12 Single Lane Cont Panel Gantry X Axis Control

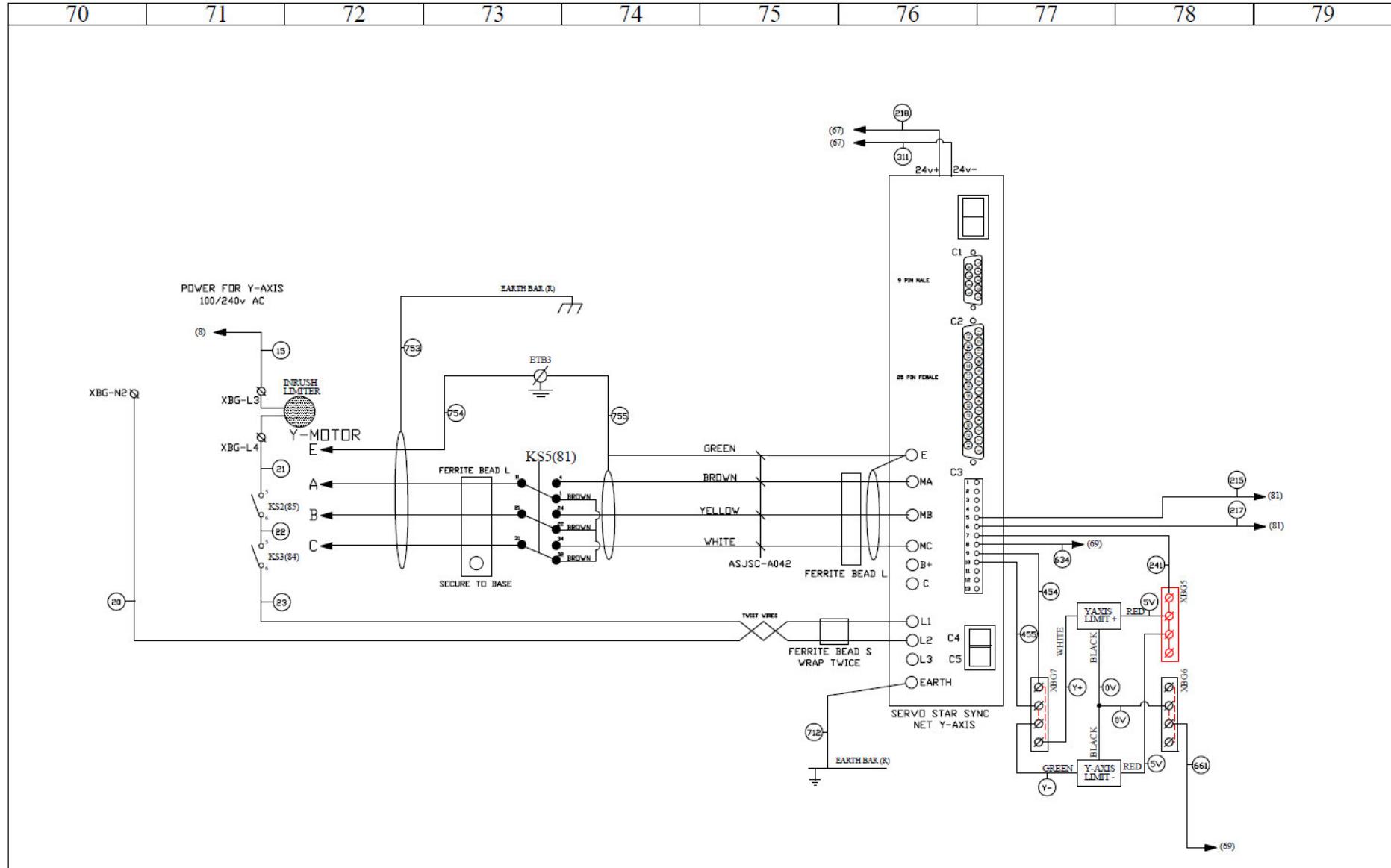


Figure 2- 13 Single Lane Cont Panel Gantry Y Axis Control

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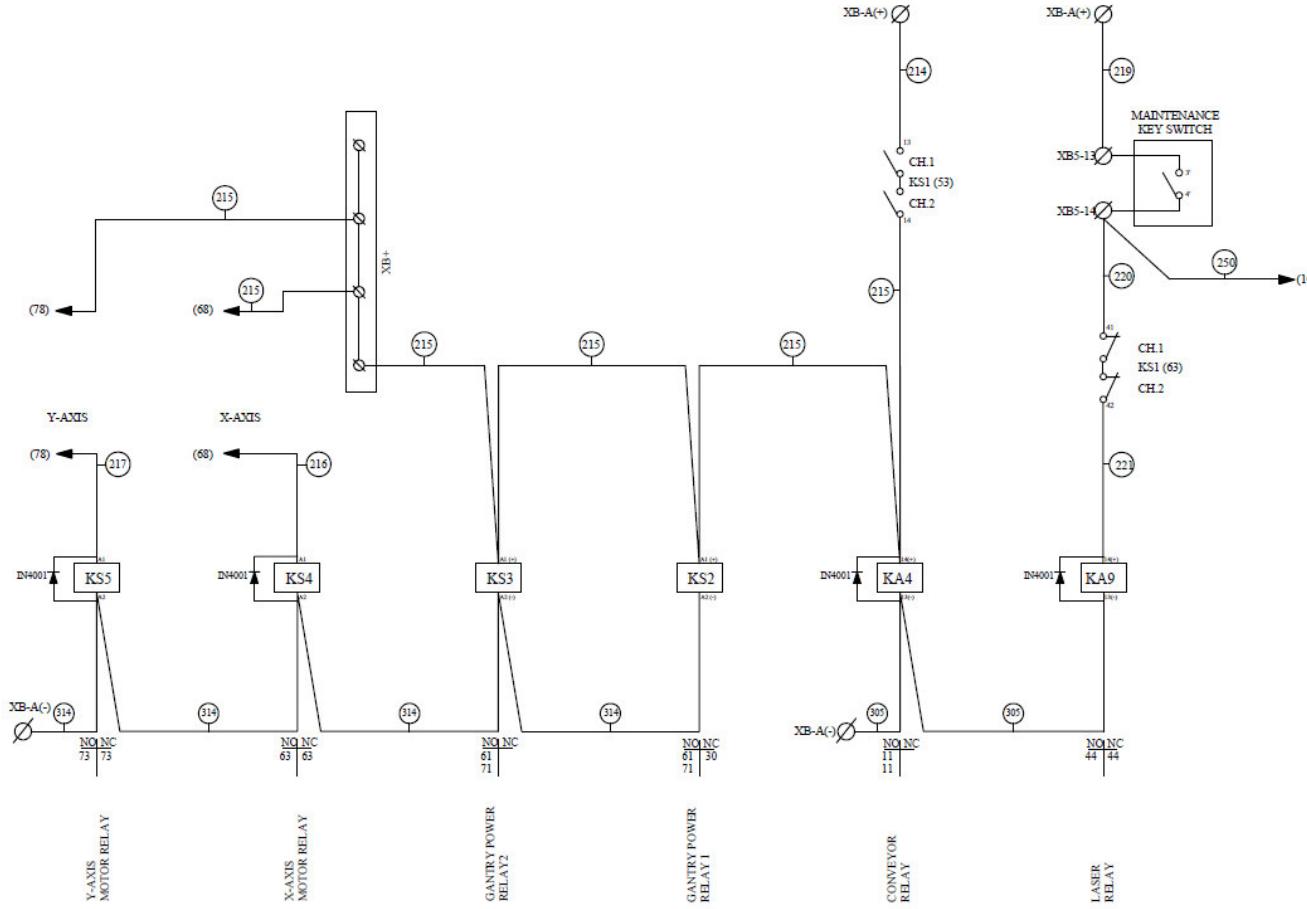


Figure 2- 14 Single Lane Cont Panel Relay

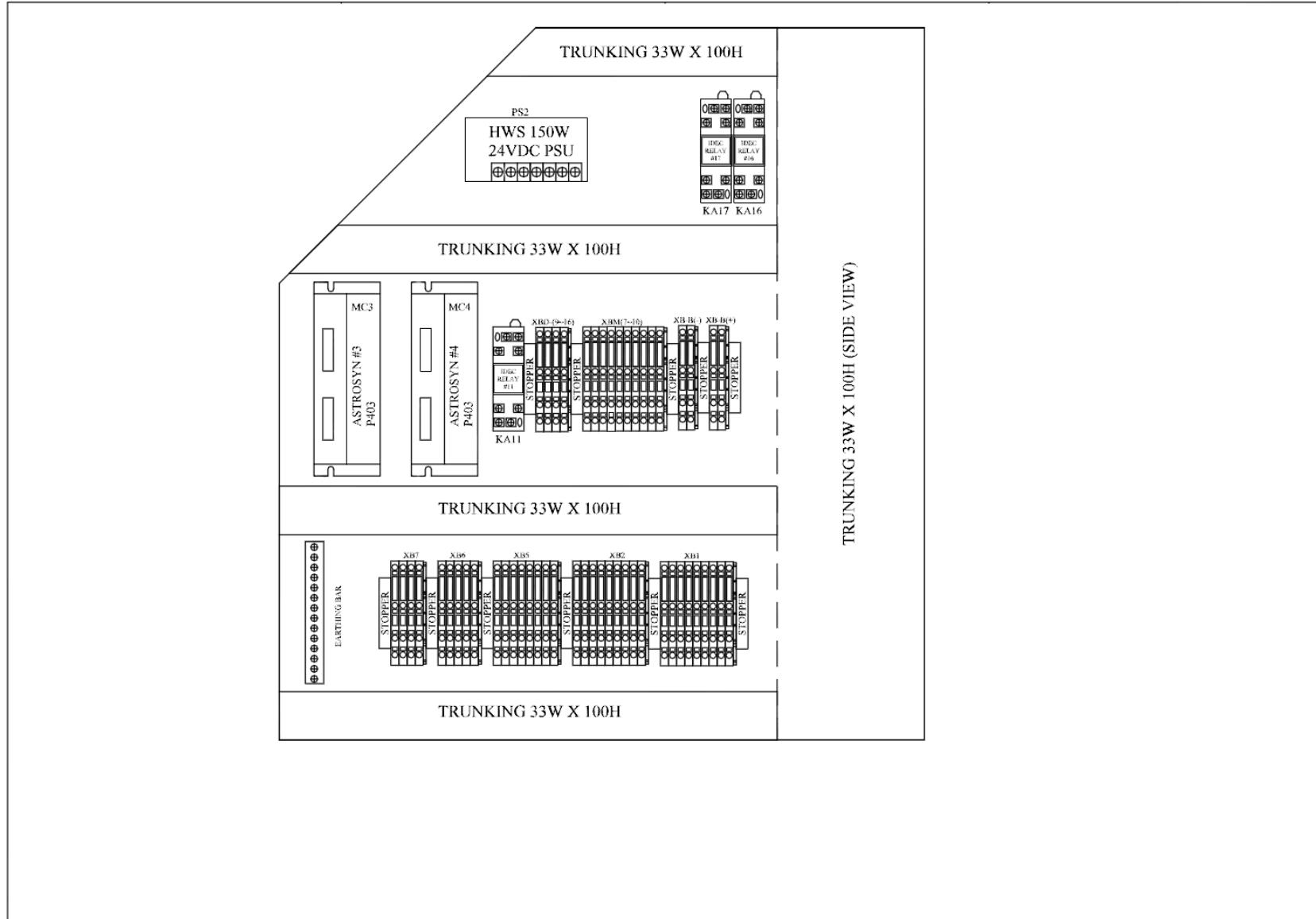


Figure 2- 15    Dual Lane Cont Panel Layout Left Hand Side

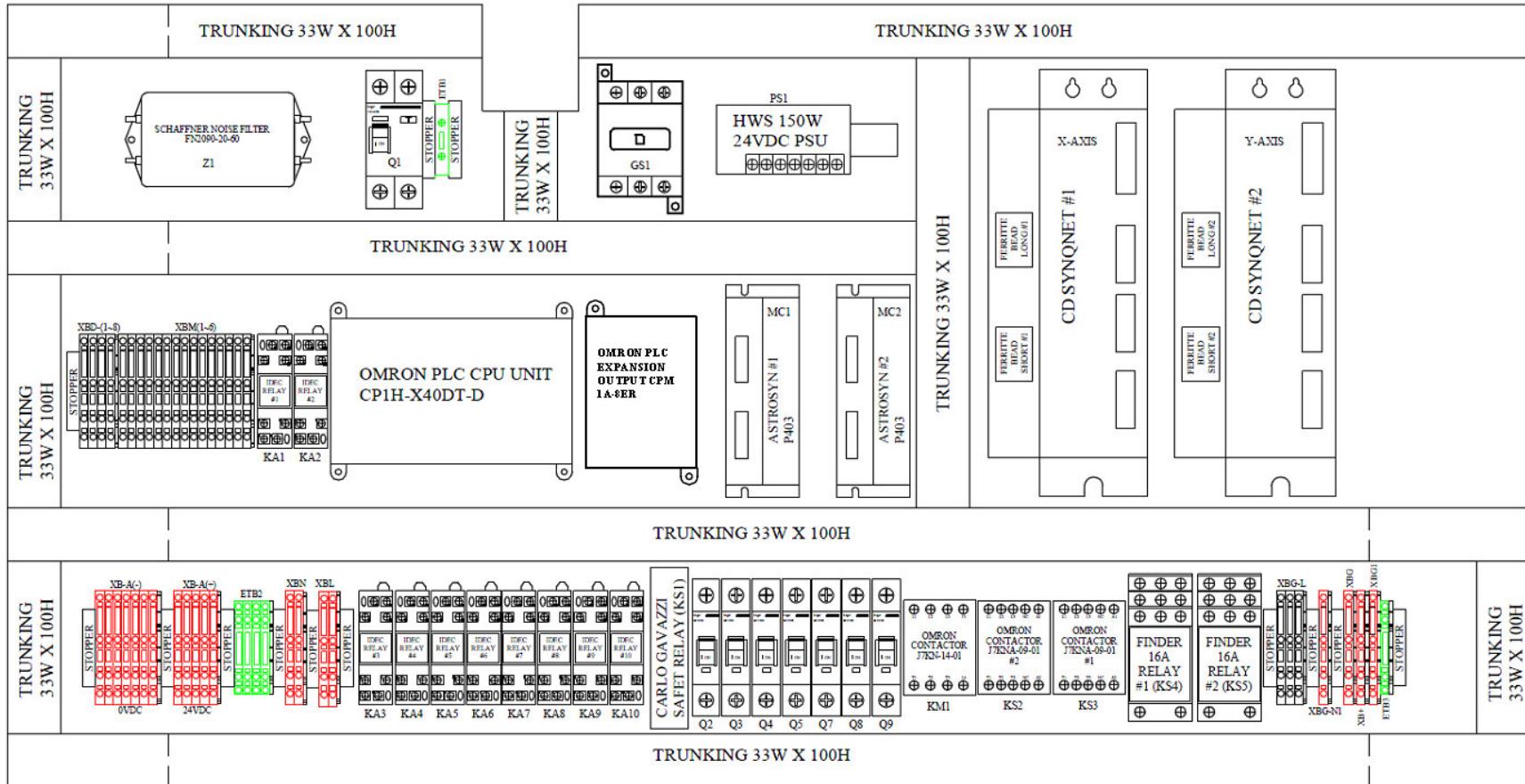
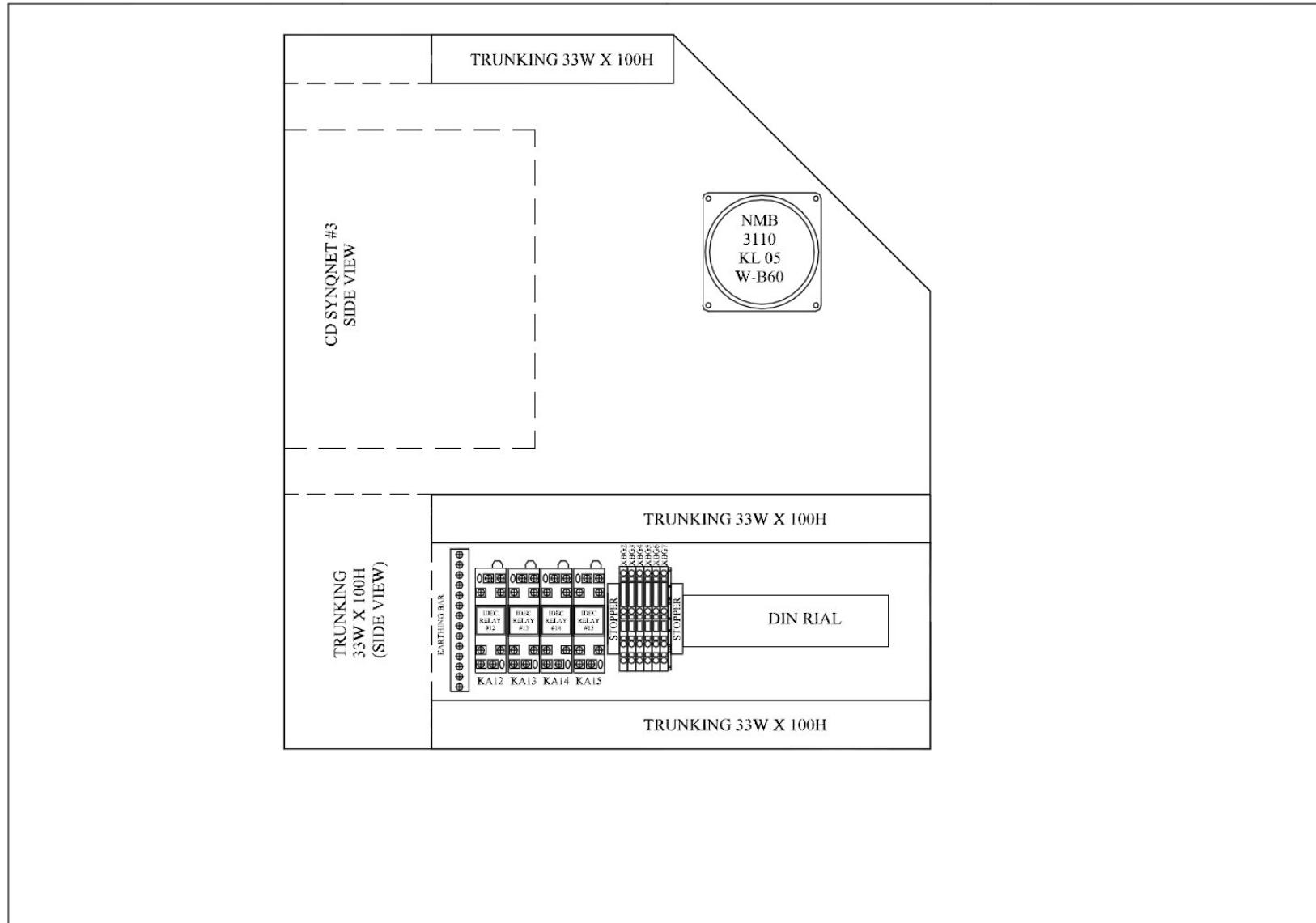


Figure 2- 16    Dual Lane Cont Panel Layout Center



**Figure 2- 17    Dual Lane Cont Panel Layout Right Hand Side**

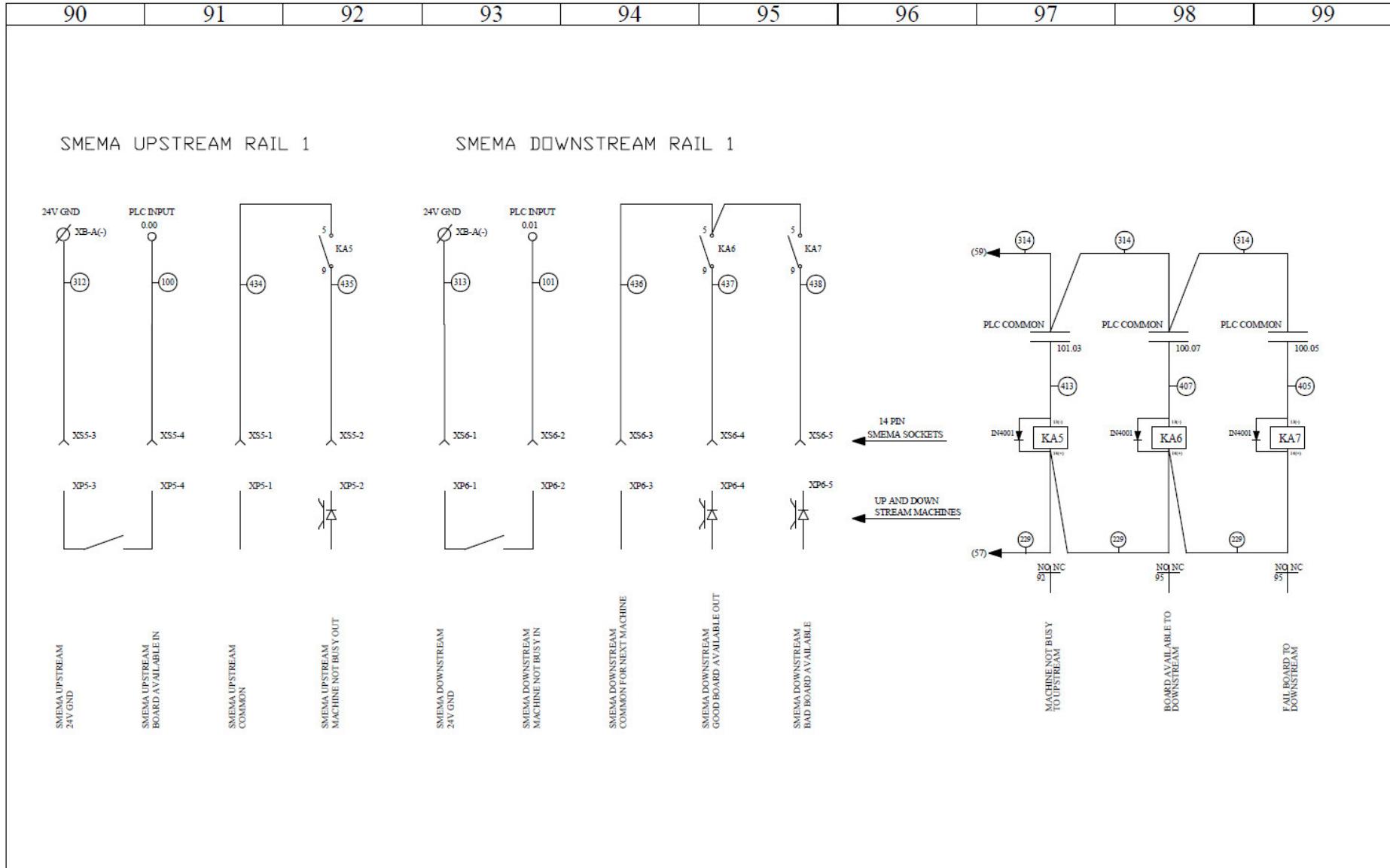


Figure 2- 18 SMEMA Upstream/Downstream Rail 1 Layout

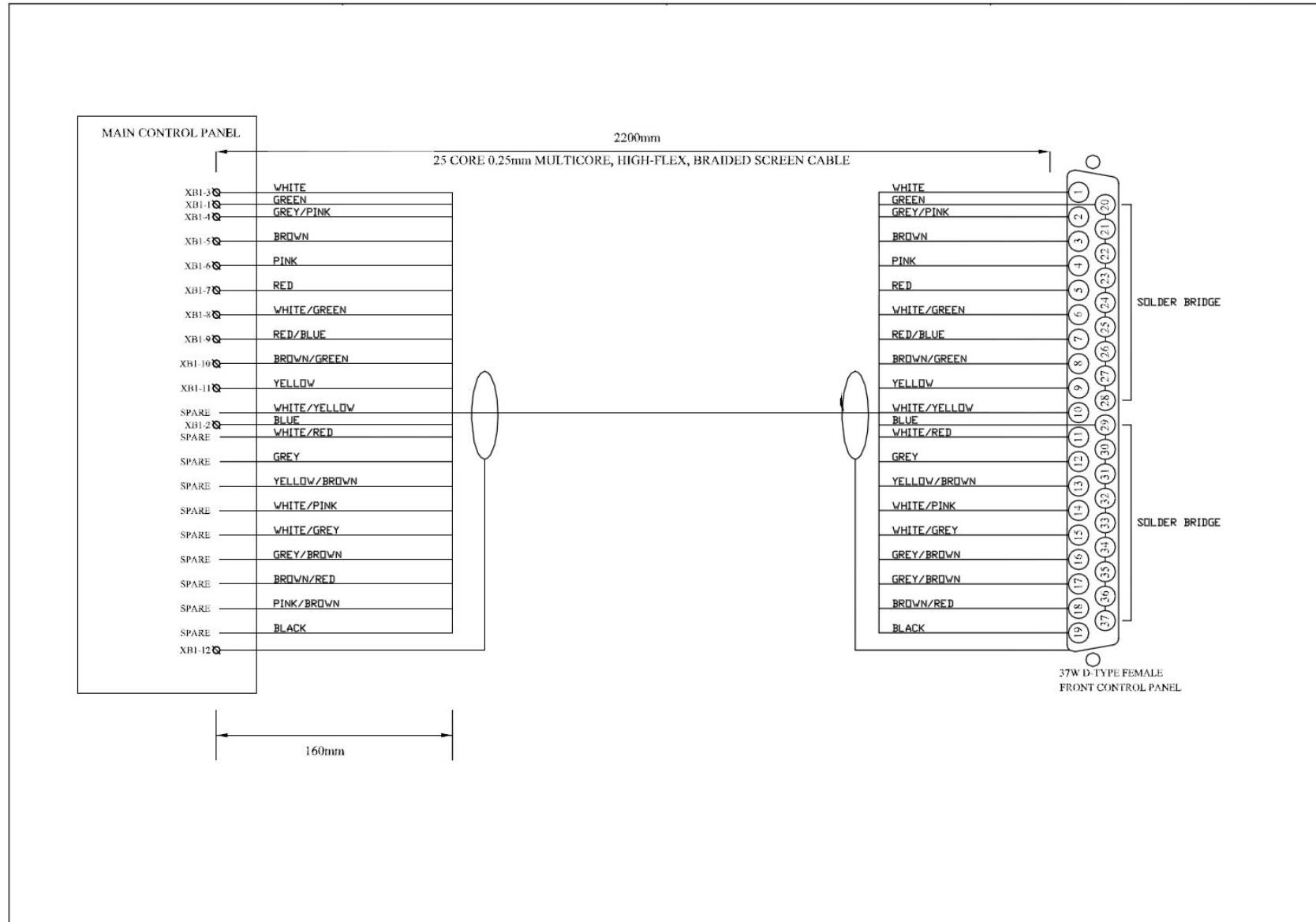
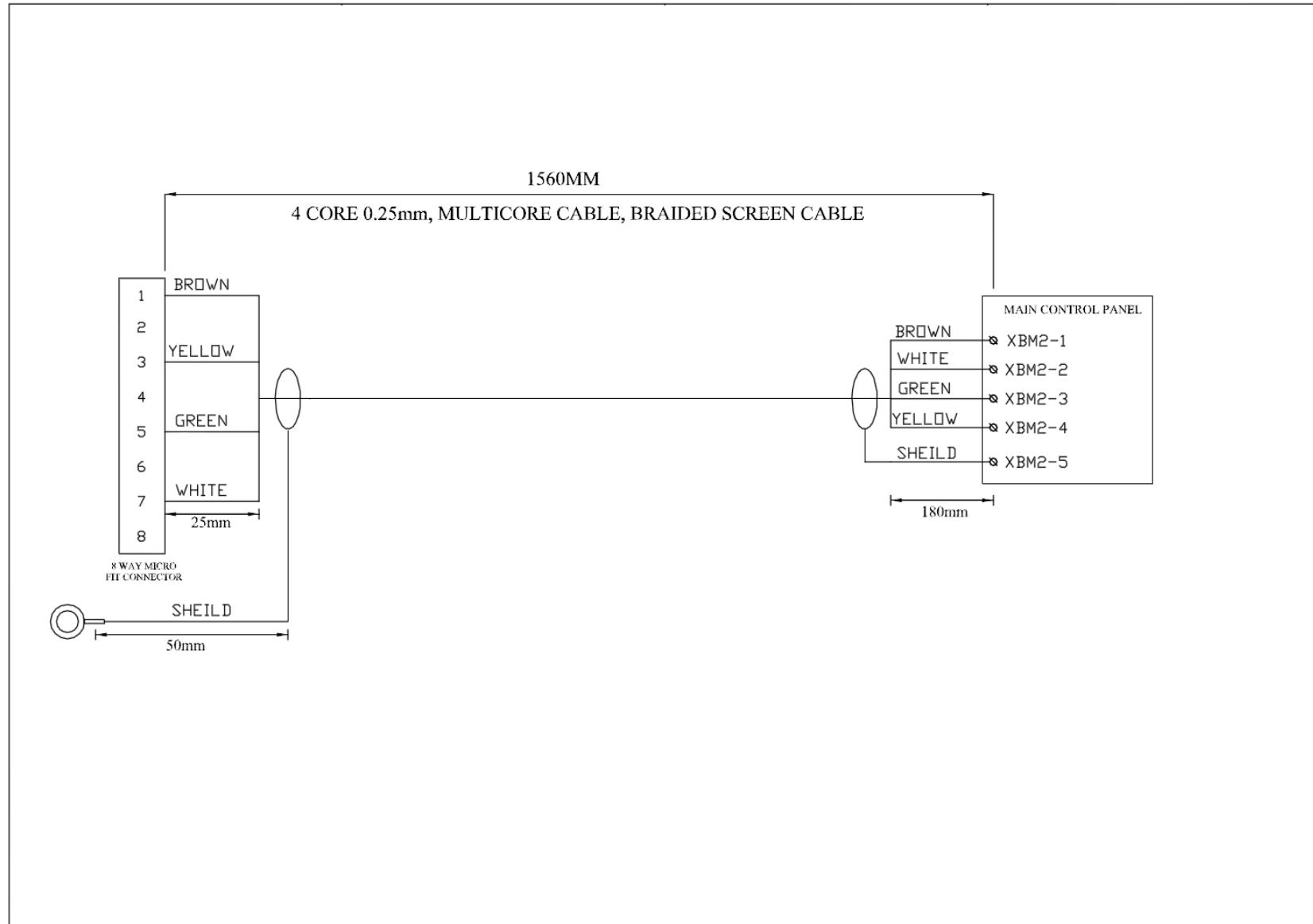


Figure 2- 19 Conveyor to Panel Cable



**Figure 2- 20    RH AWA Motor Cable**

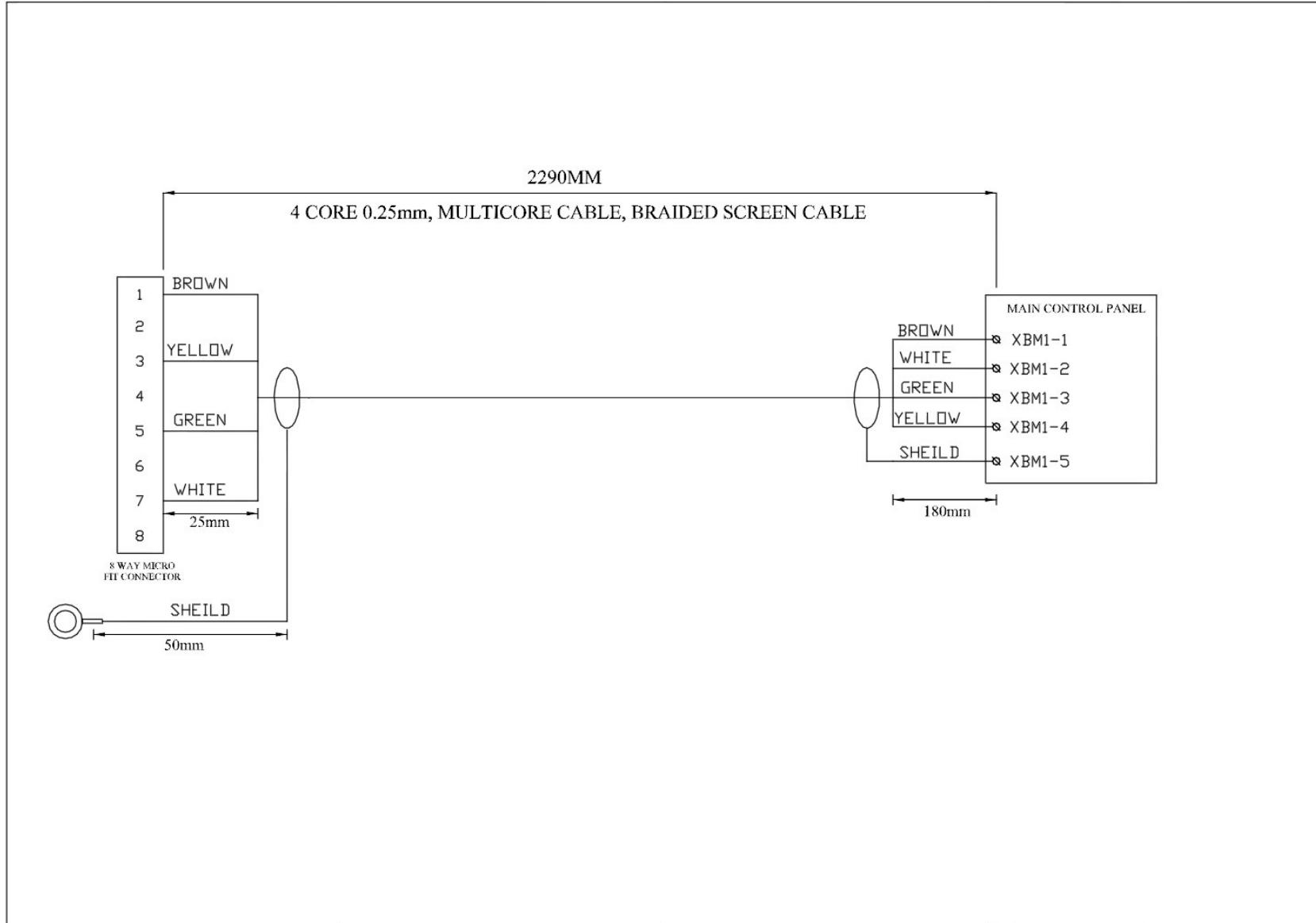


Figure 2- 21 LH AWA Motor Cable

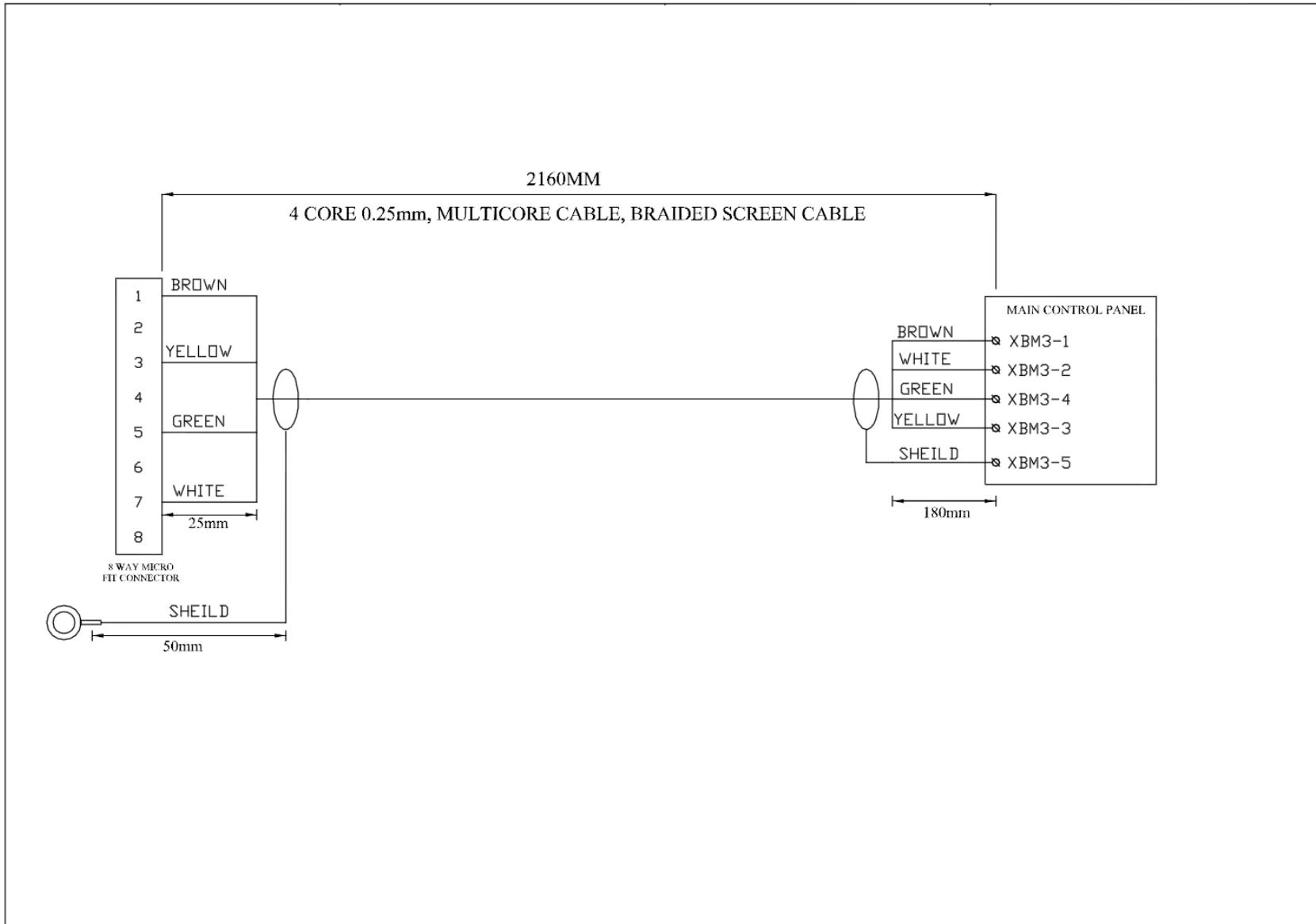
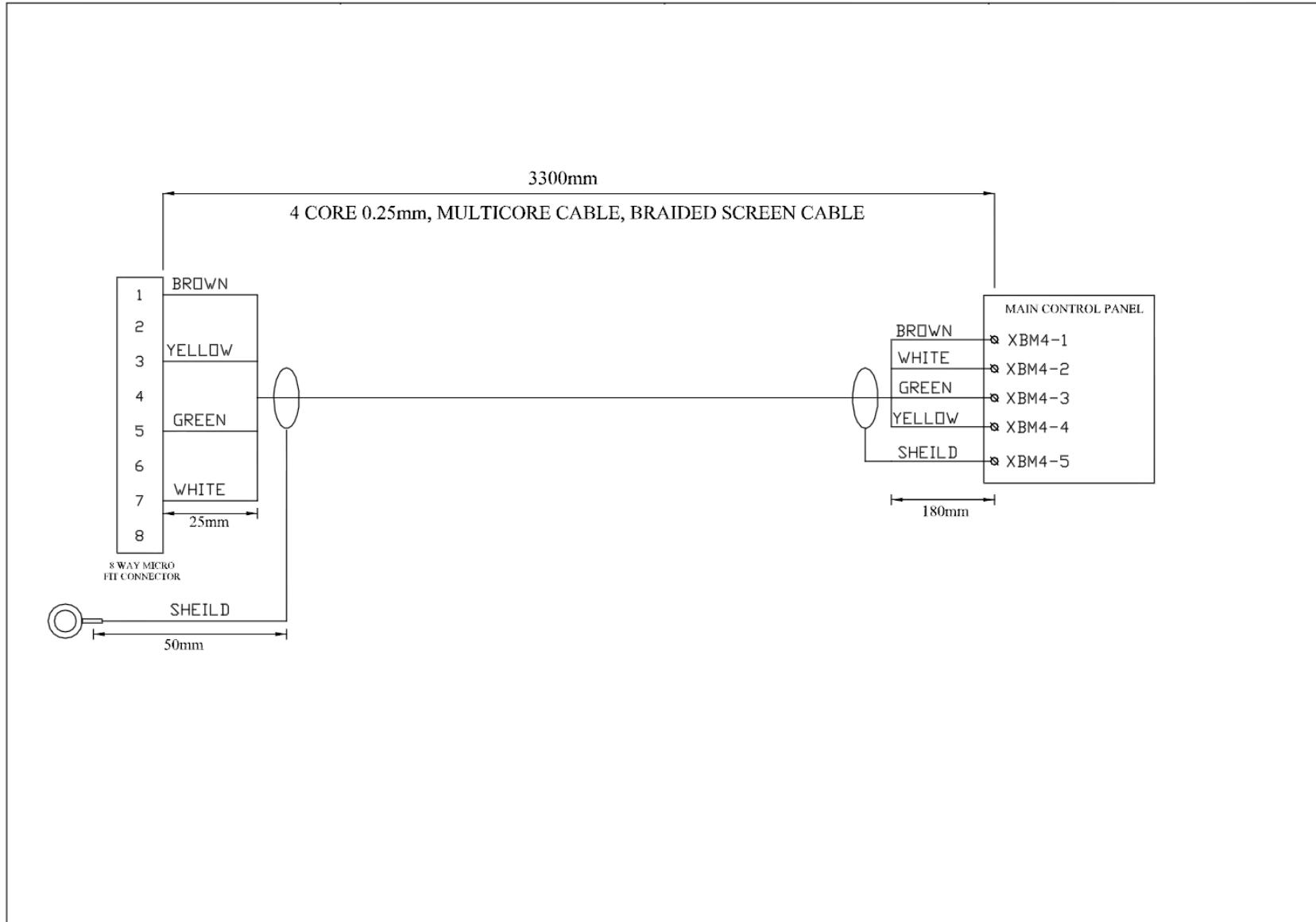
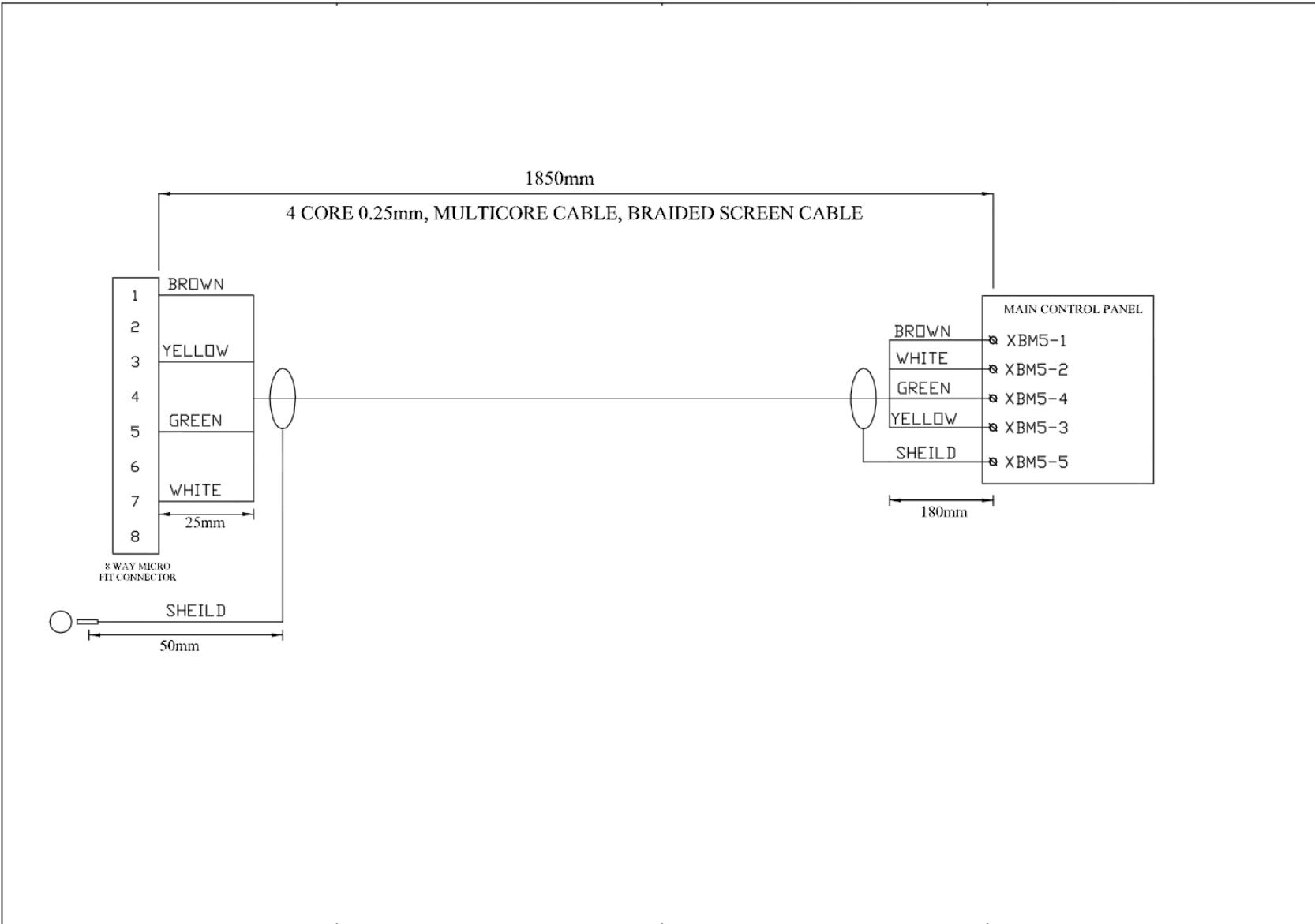
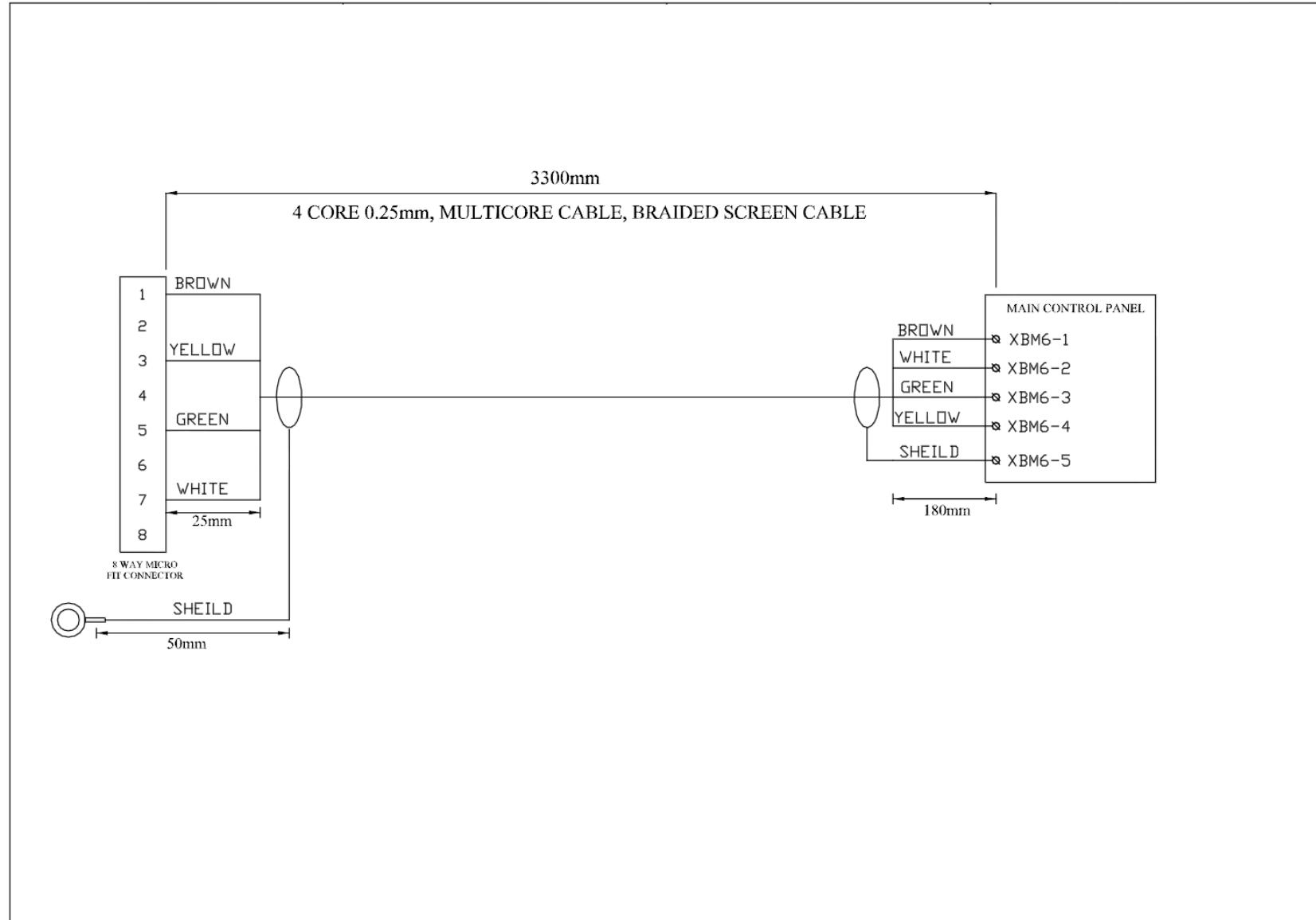


Figure 2- 22 Fix Conv Motor Cable



**Figure 2- 23    Adj Conv Motor Cable**

**Figure 2- 24 Fix Clamp Motor Cable**

**Figure 2- 25 Adj Clamp Motor Cable**

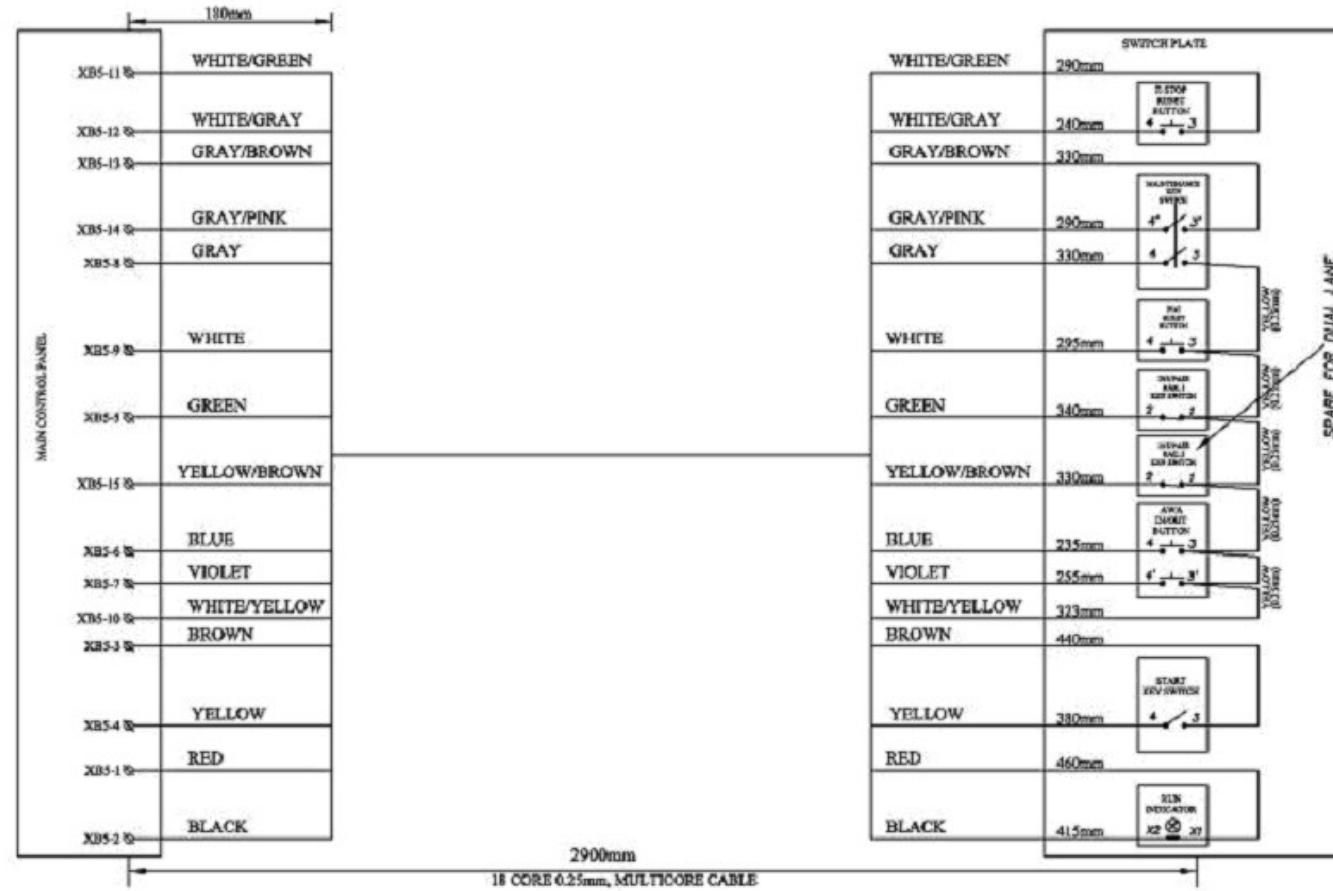


Figure 2- 26    Switch Plate Cable

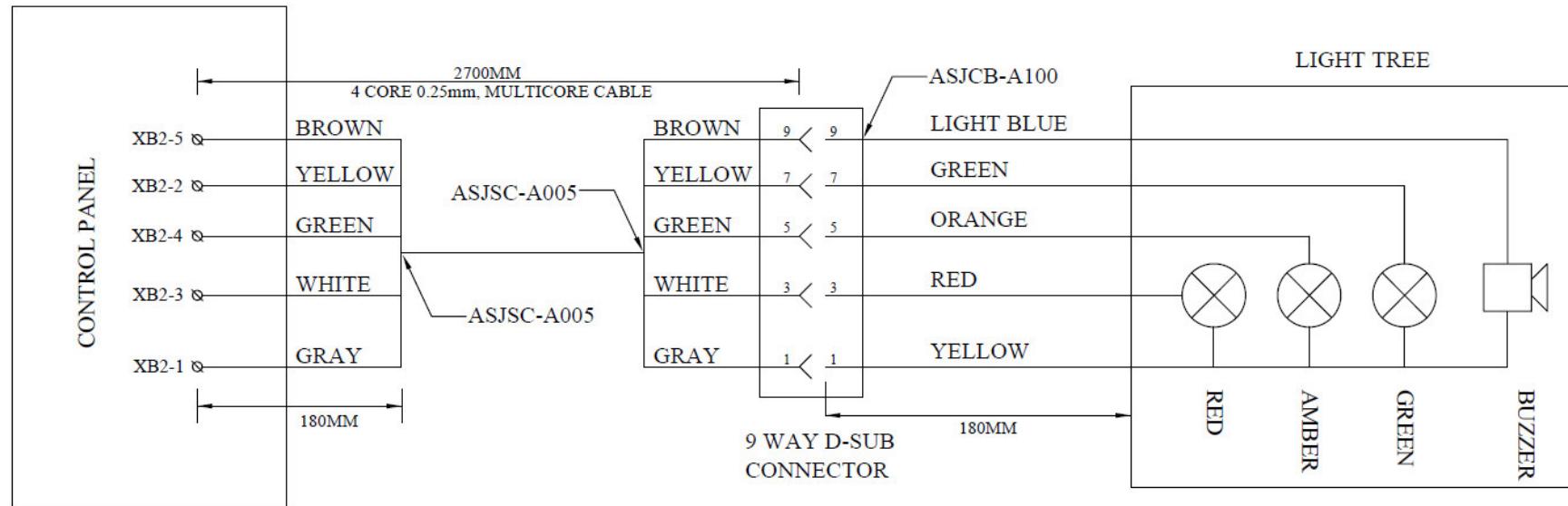
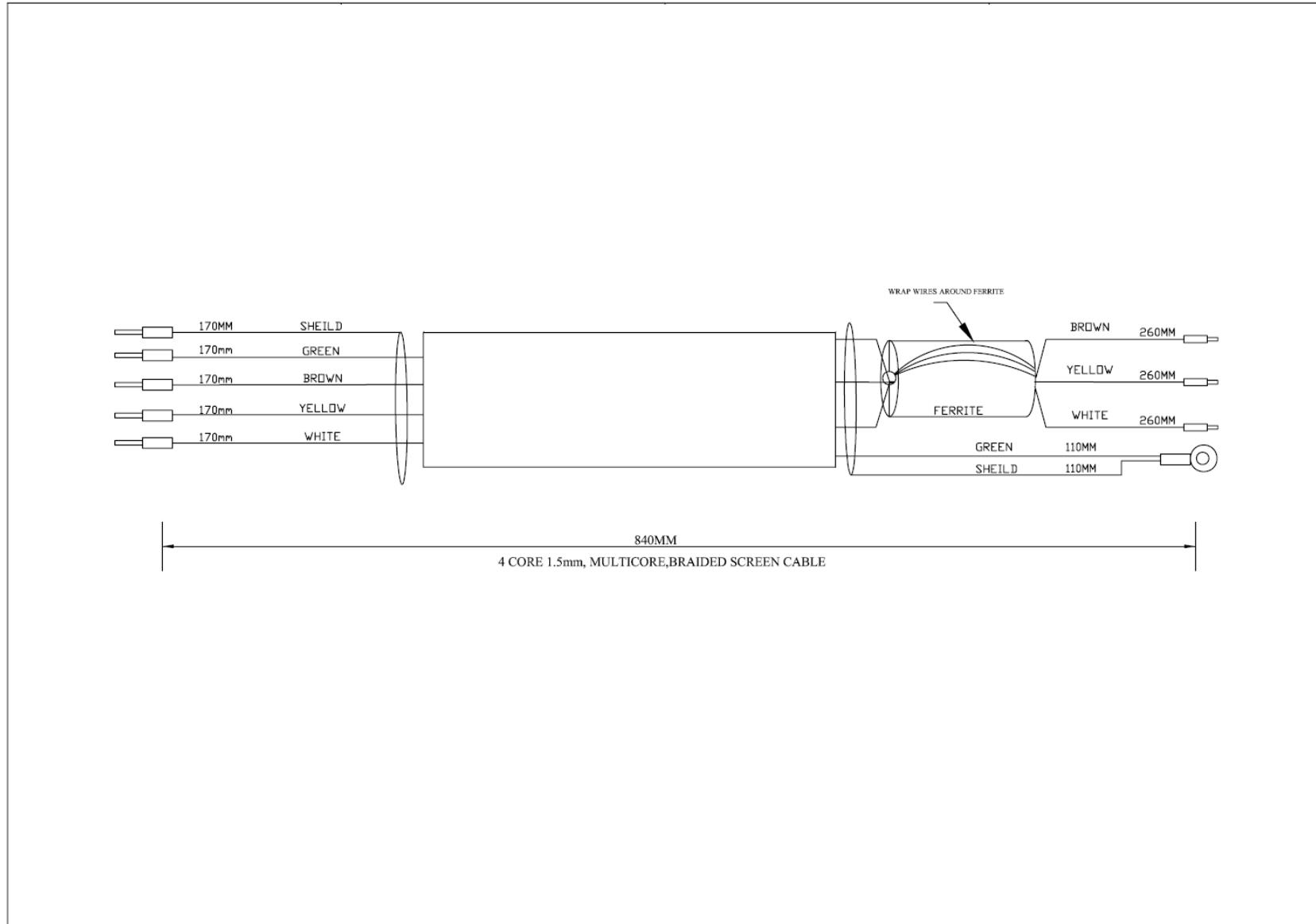
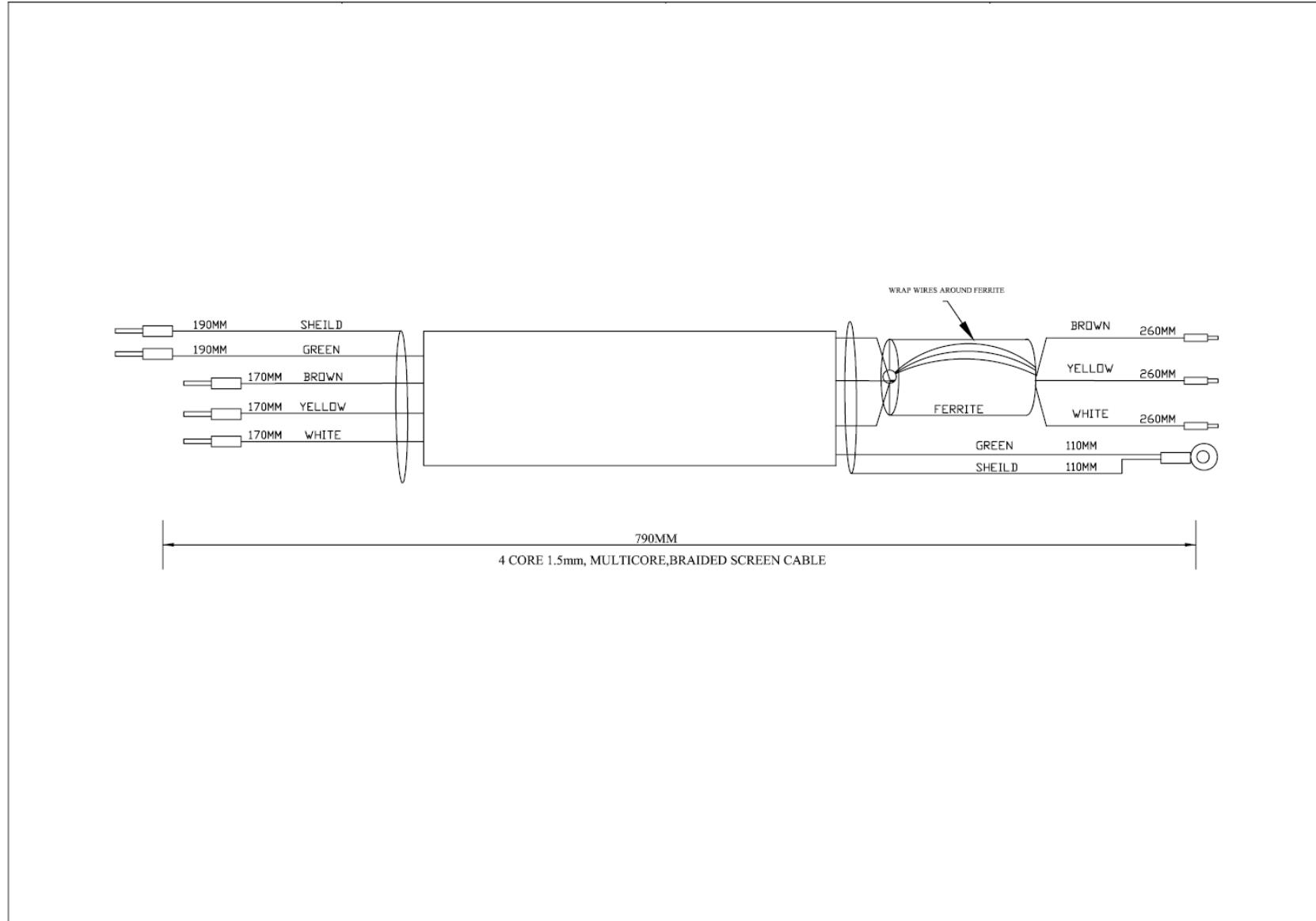


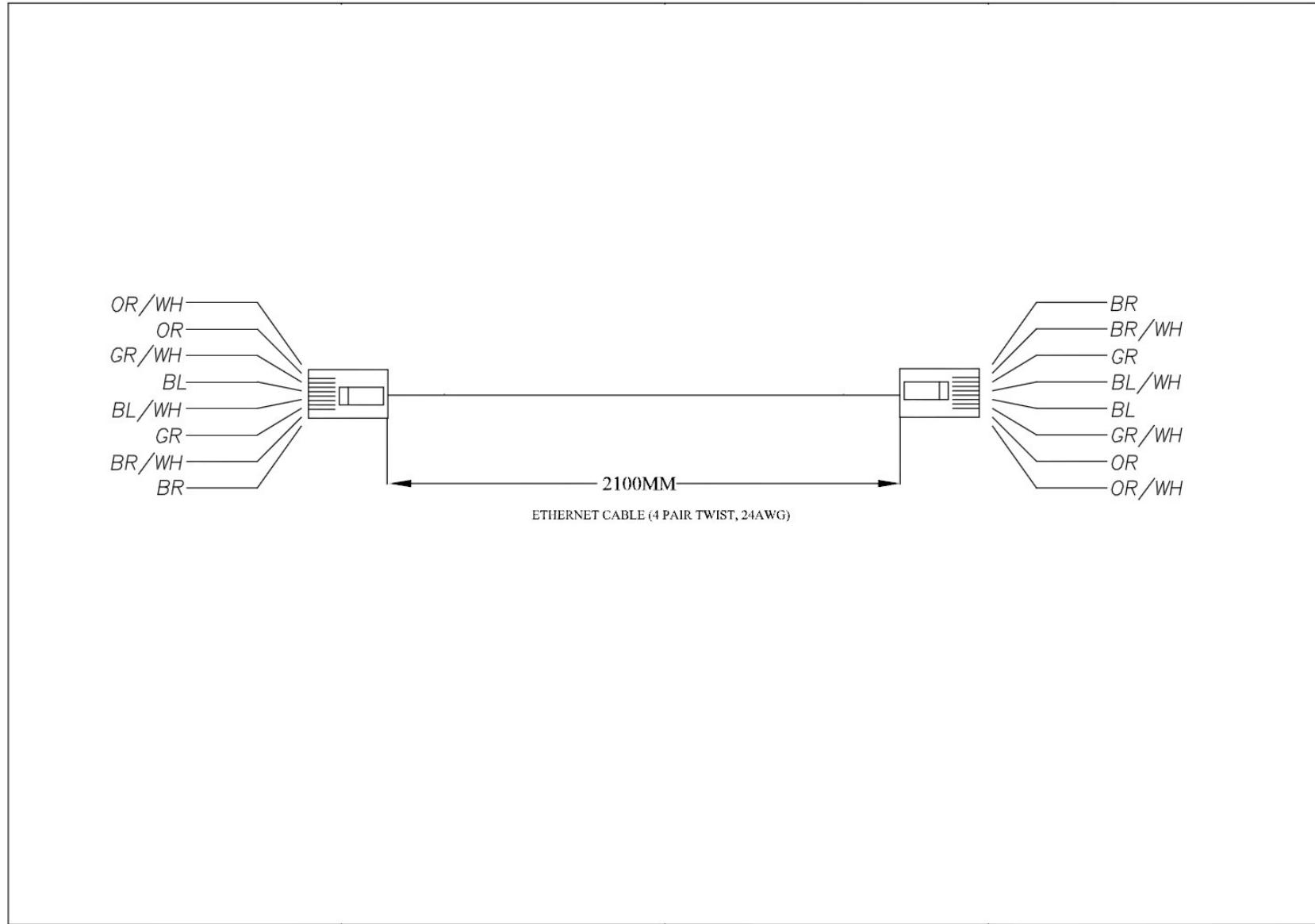
Figure 2- 27    Tower Light Cable



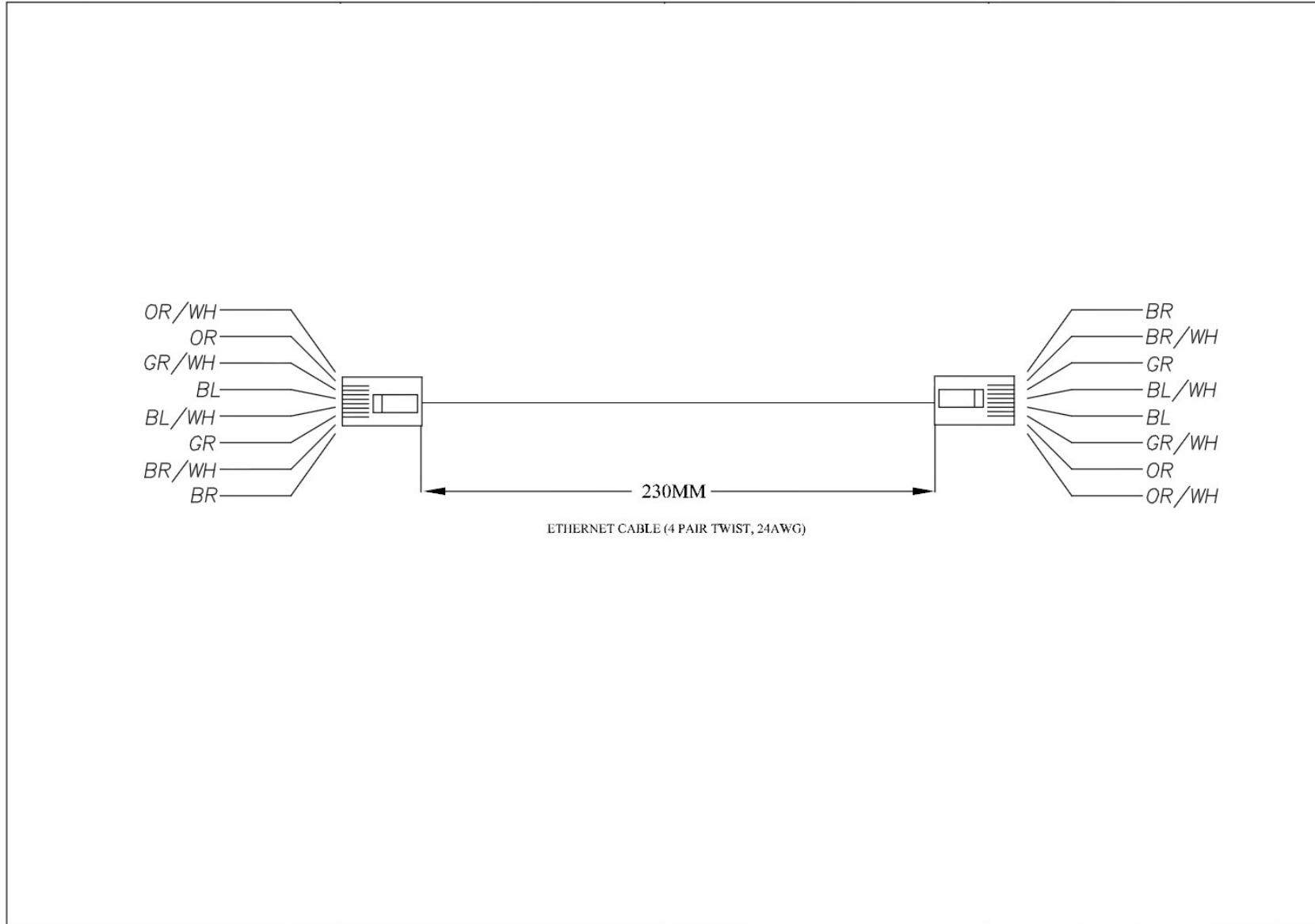
**Figure 2- 28    X-Axis Phase Motor Cable**



**Figure 2- 29    Y-Axis Phase Motor Cable**



**Figure 2- 30    Ethernet PC to Kollmogen Cable**



**Figure 2- 31    Ethernet Kollmorgen to Kollmorgen Cable**

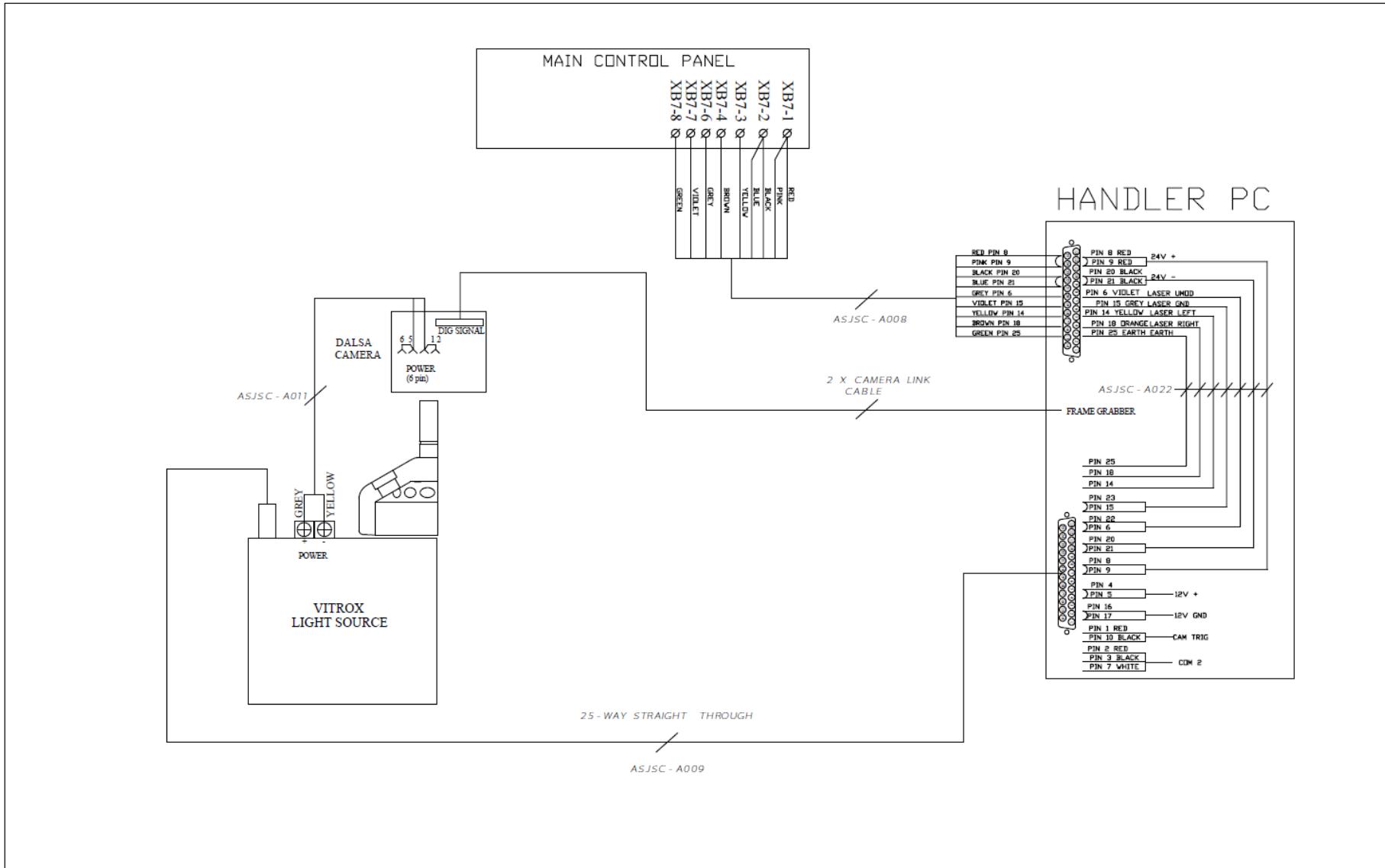


Figure 2- 32 Light Source Cable

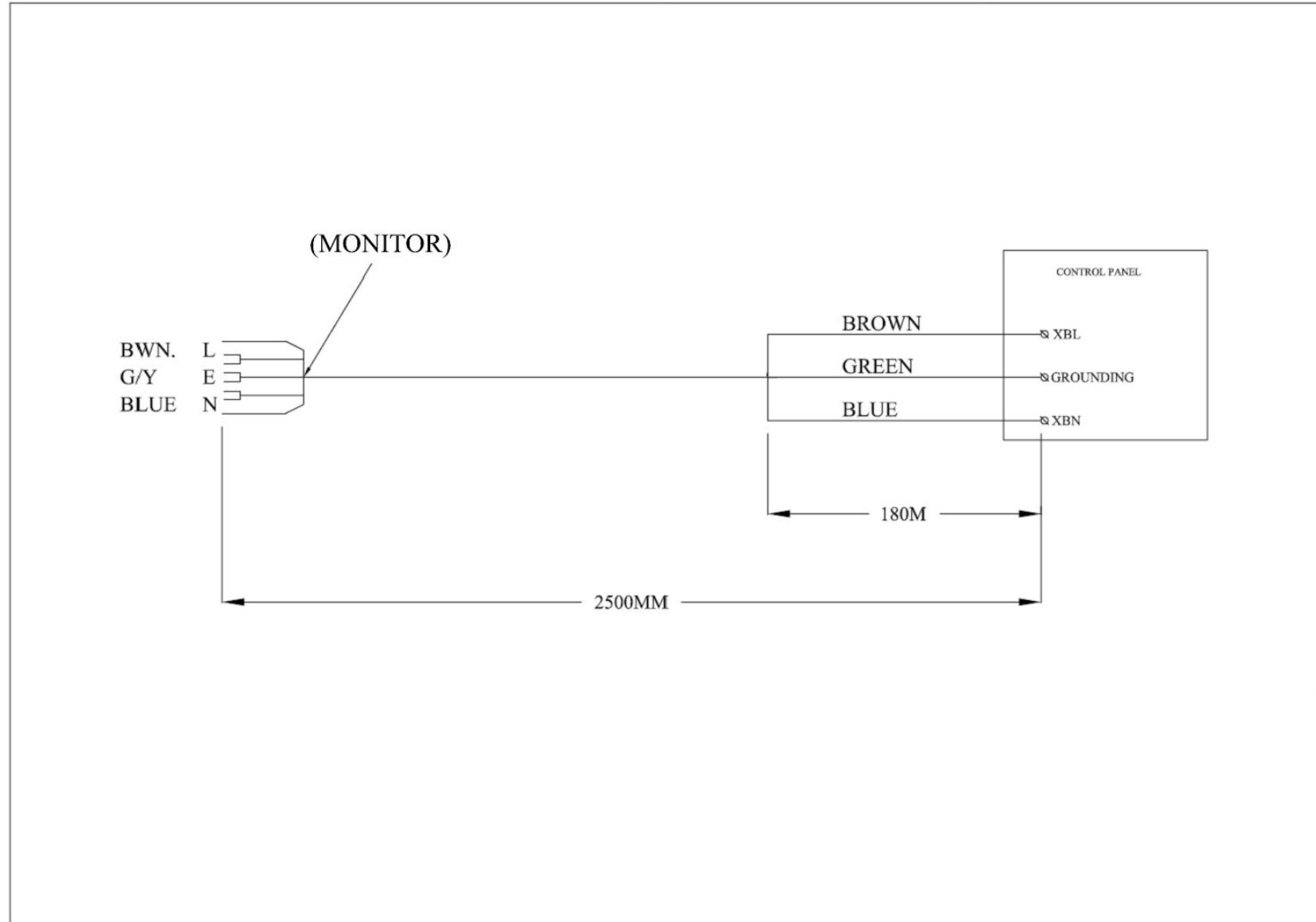


Figure 2- 33 Monitor Power Cable

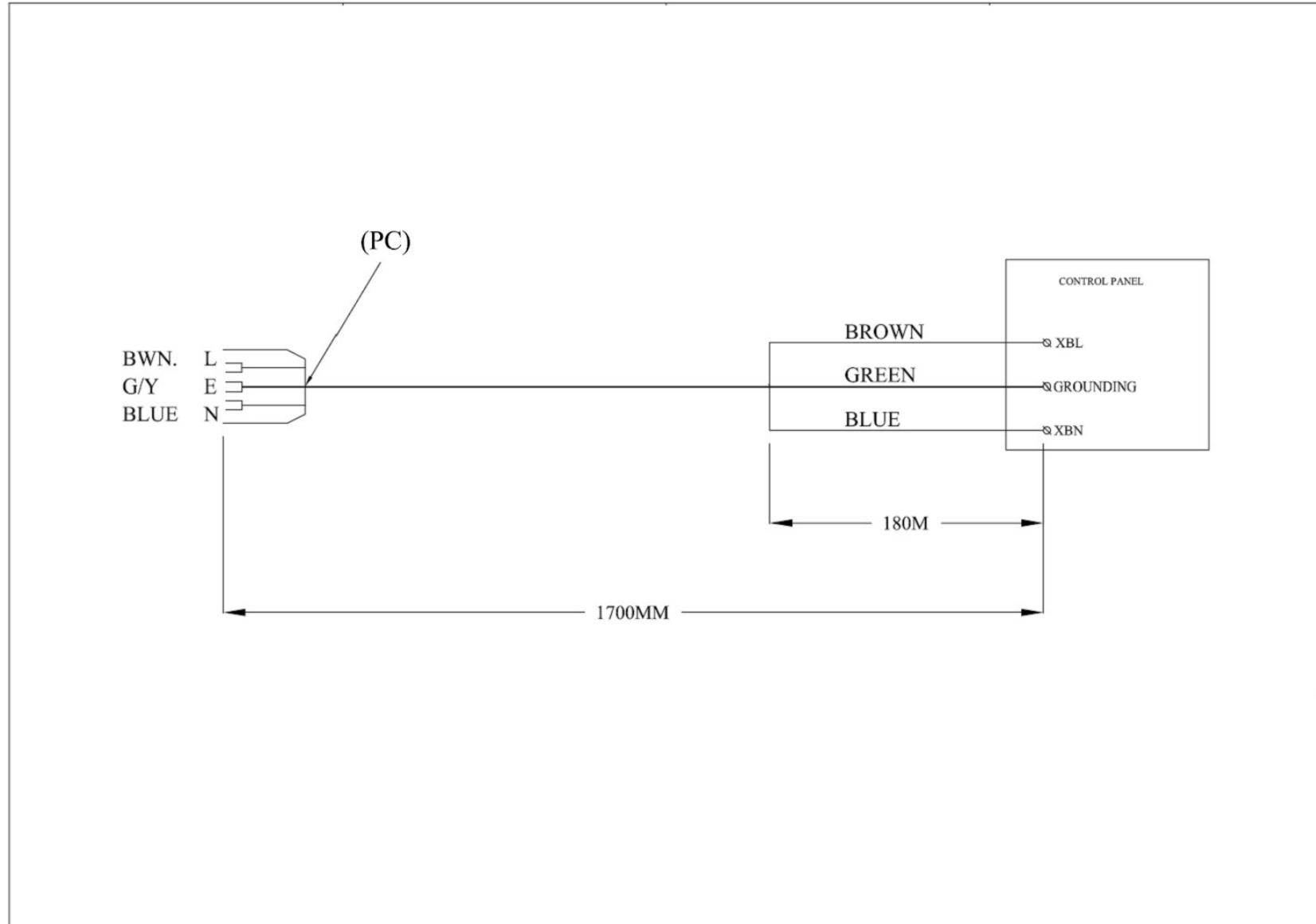
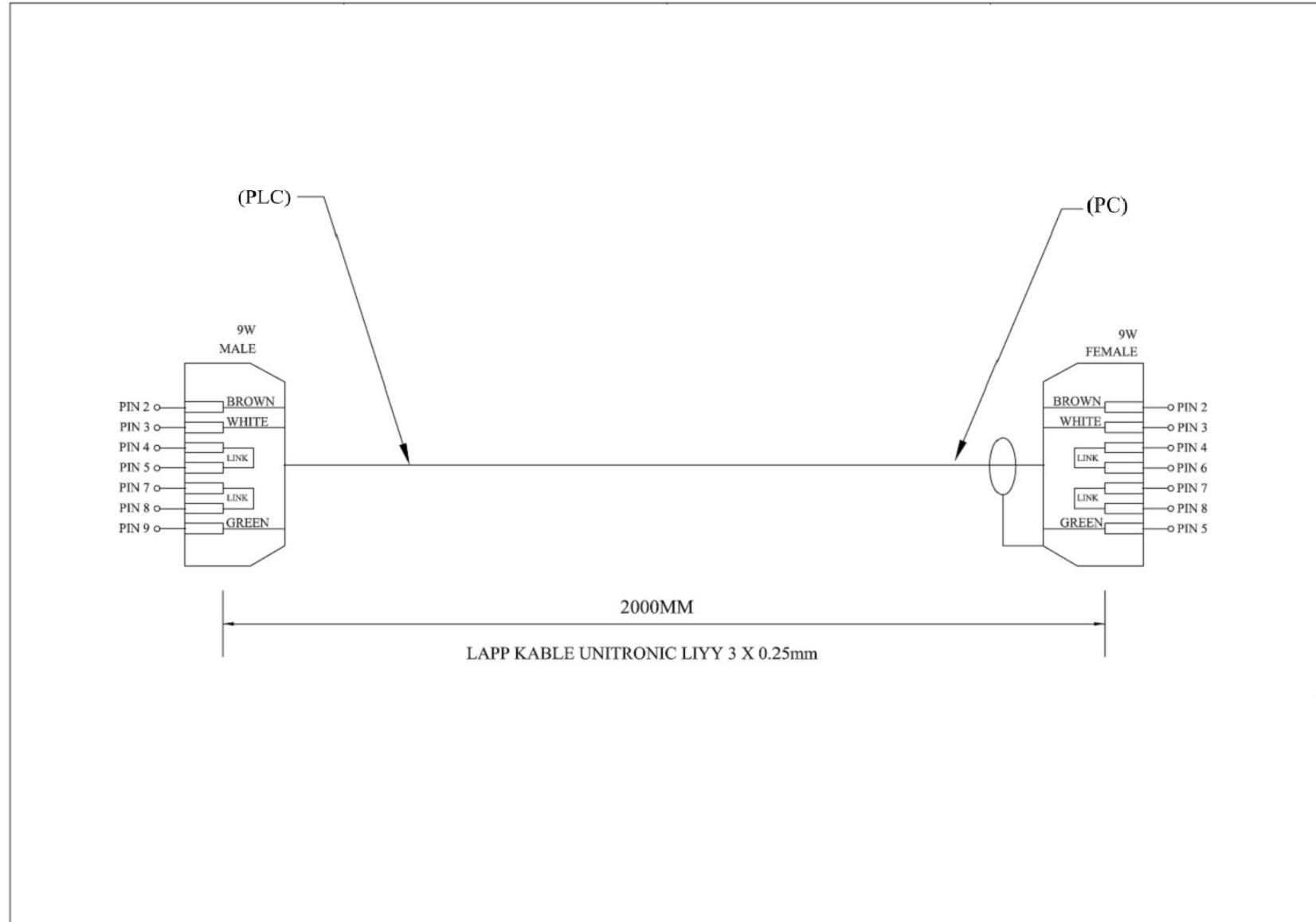
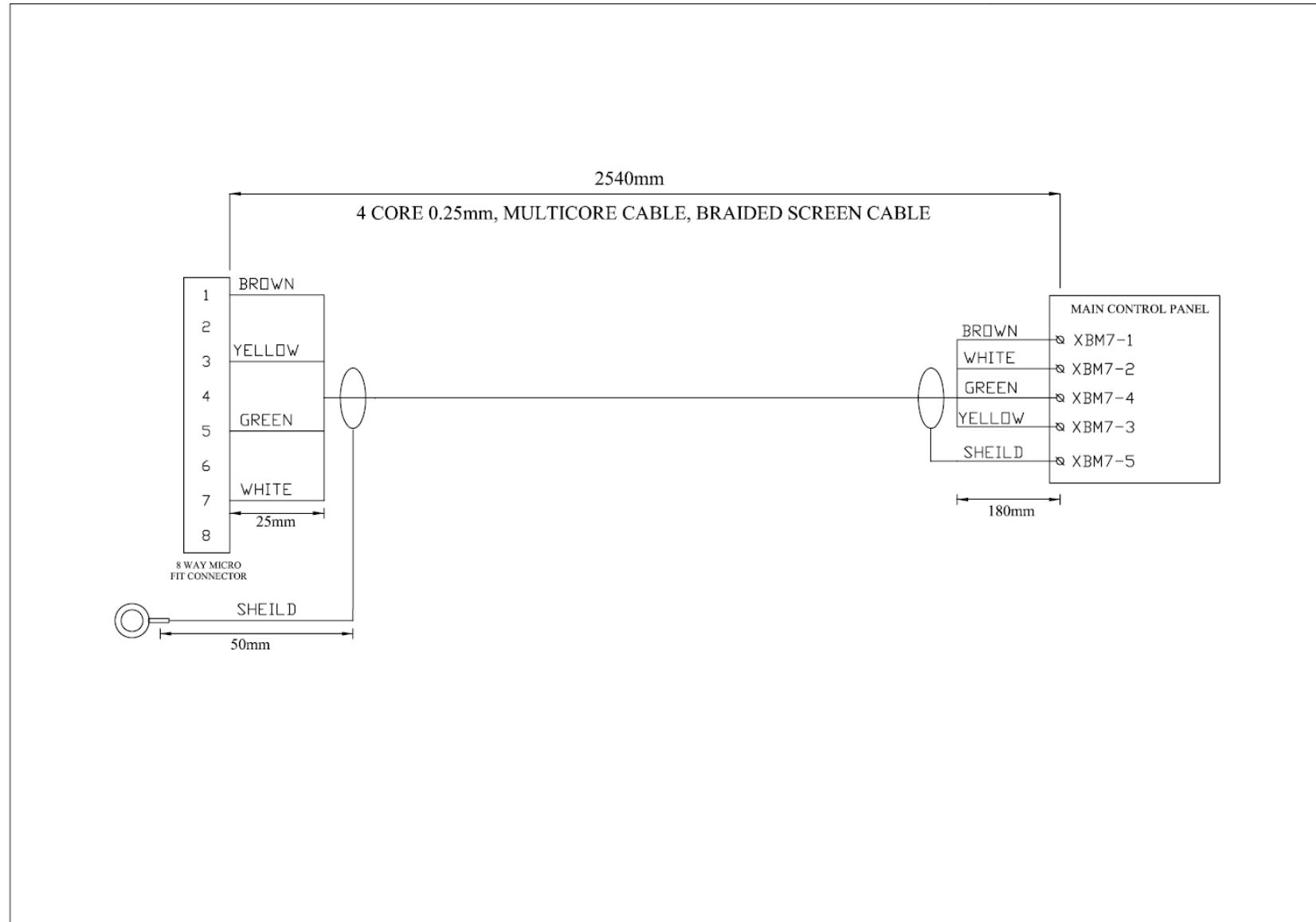


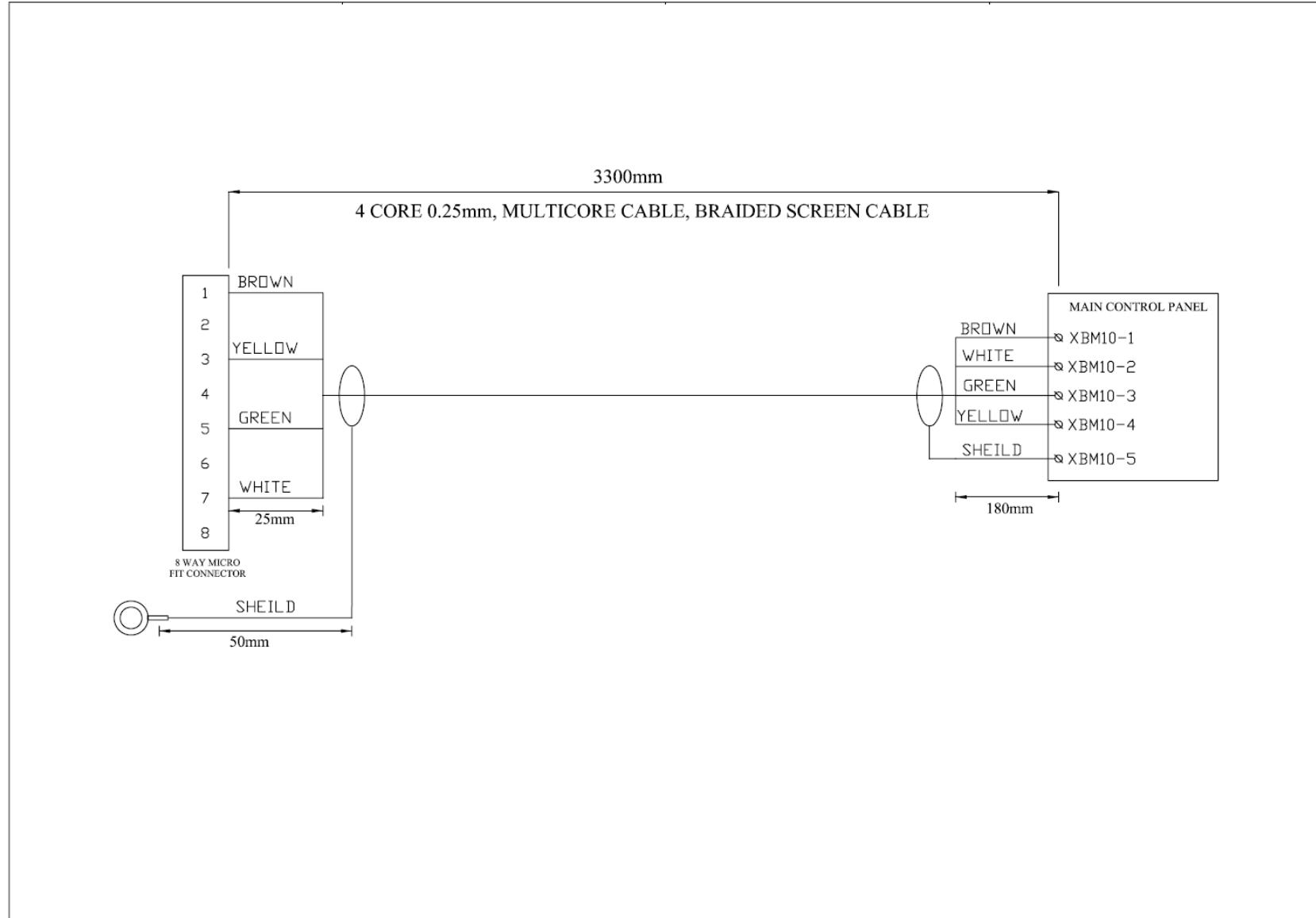
Figure 2- 34 PC Power Cable

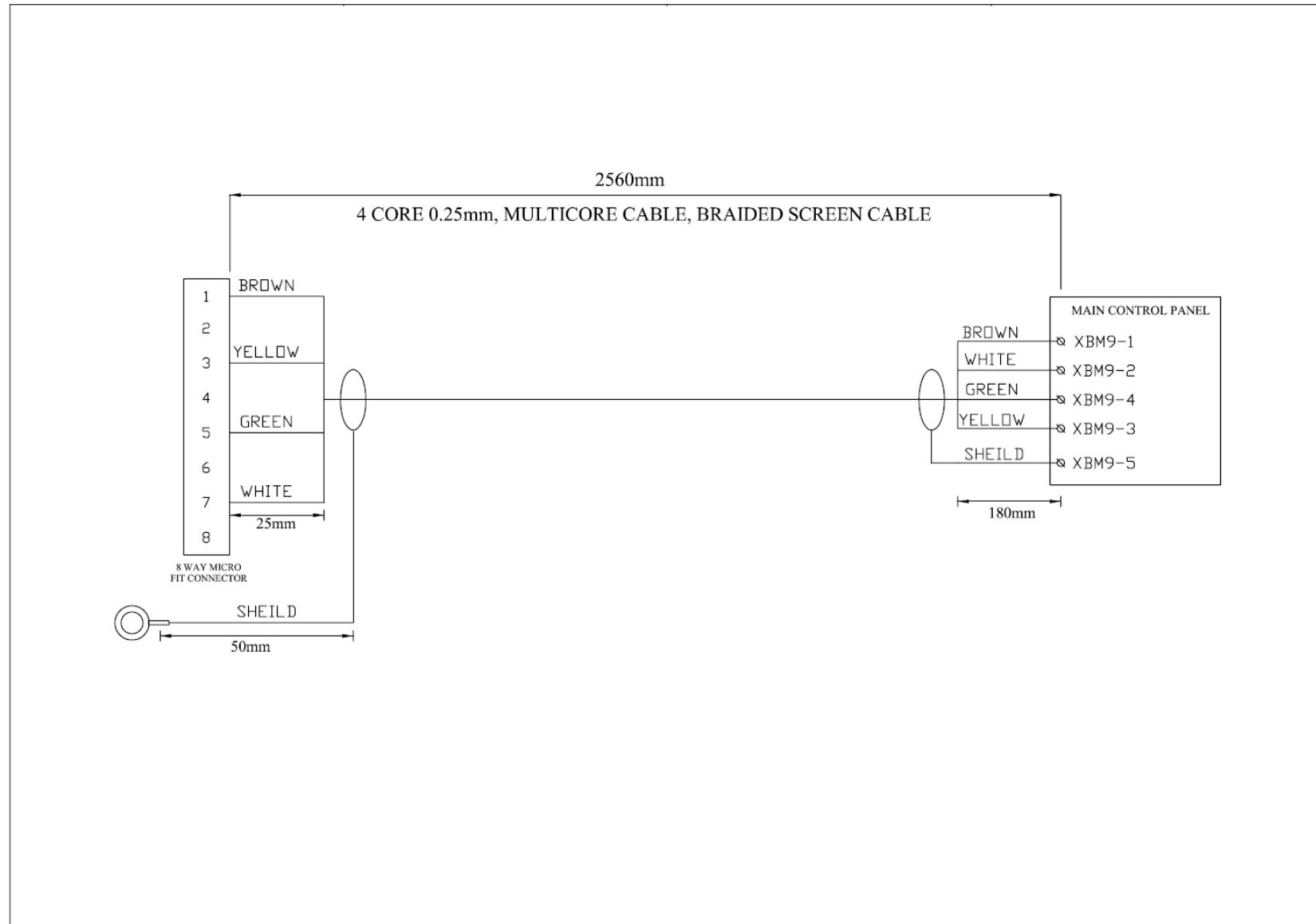


**Figure 2- 35 PLC Com Cable**

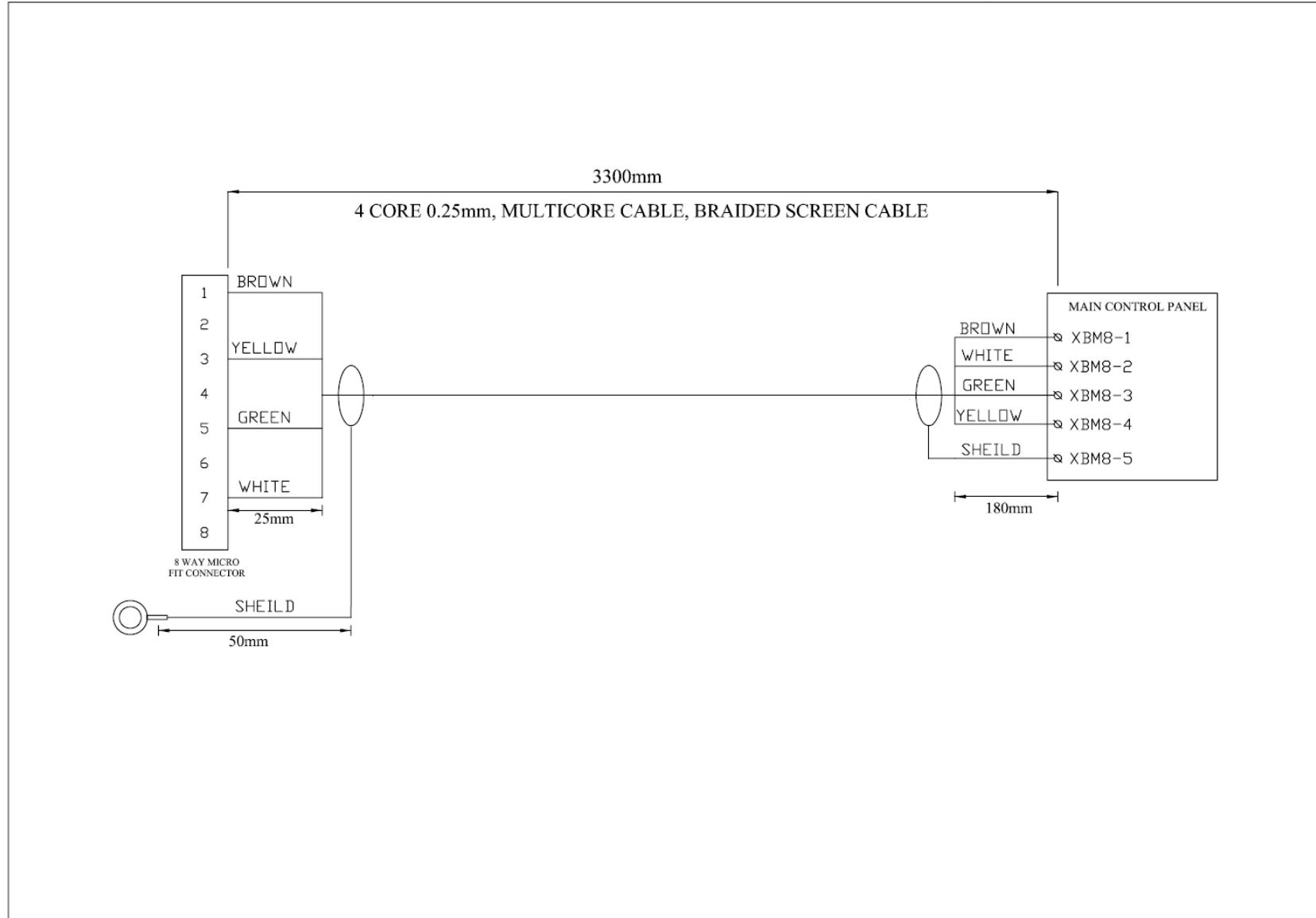


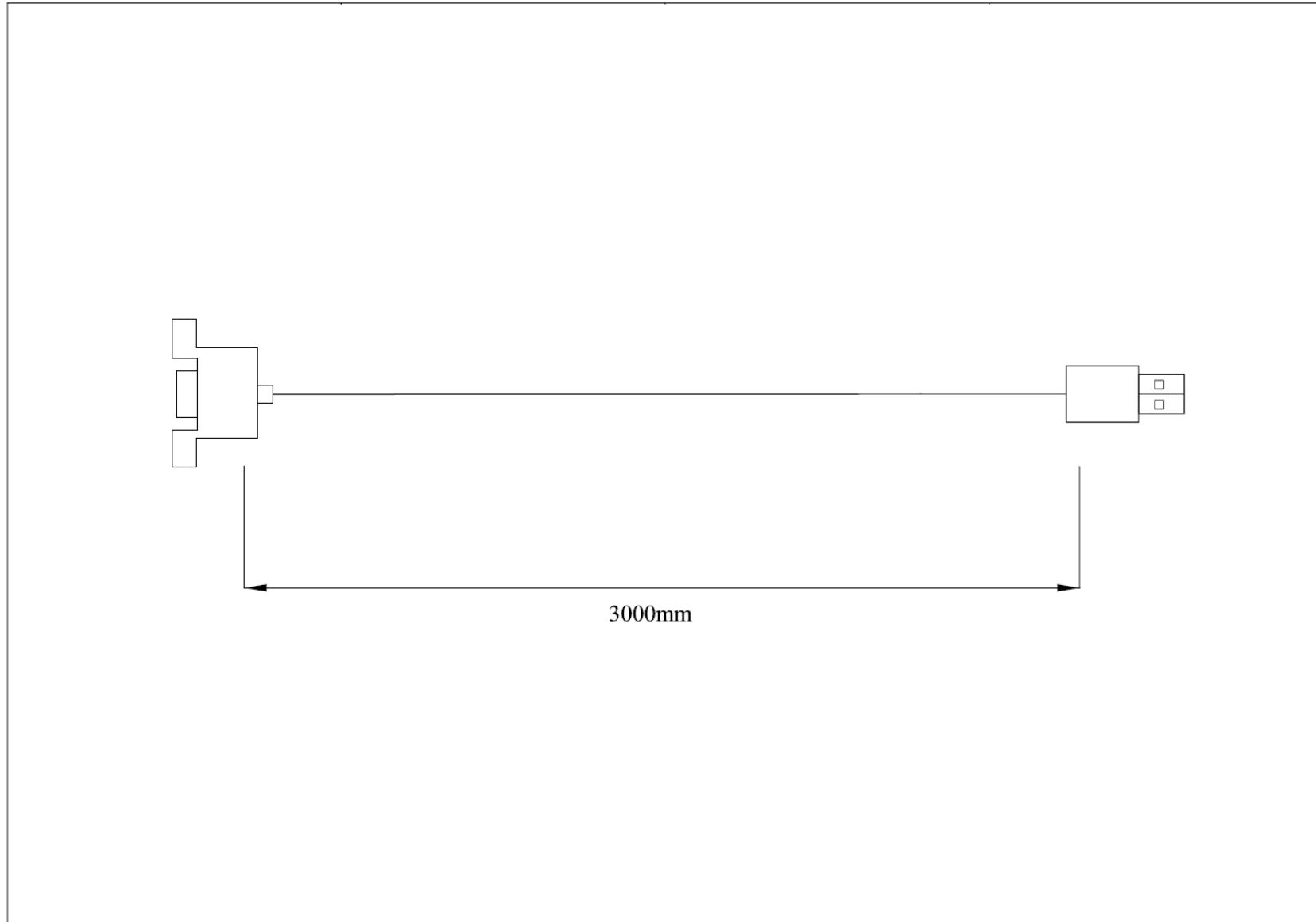
**Figure 2- 36 Fix Conv Motor 2 Cable**

**Figure 2- 37 Adj Conv Motor 2 Cable**

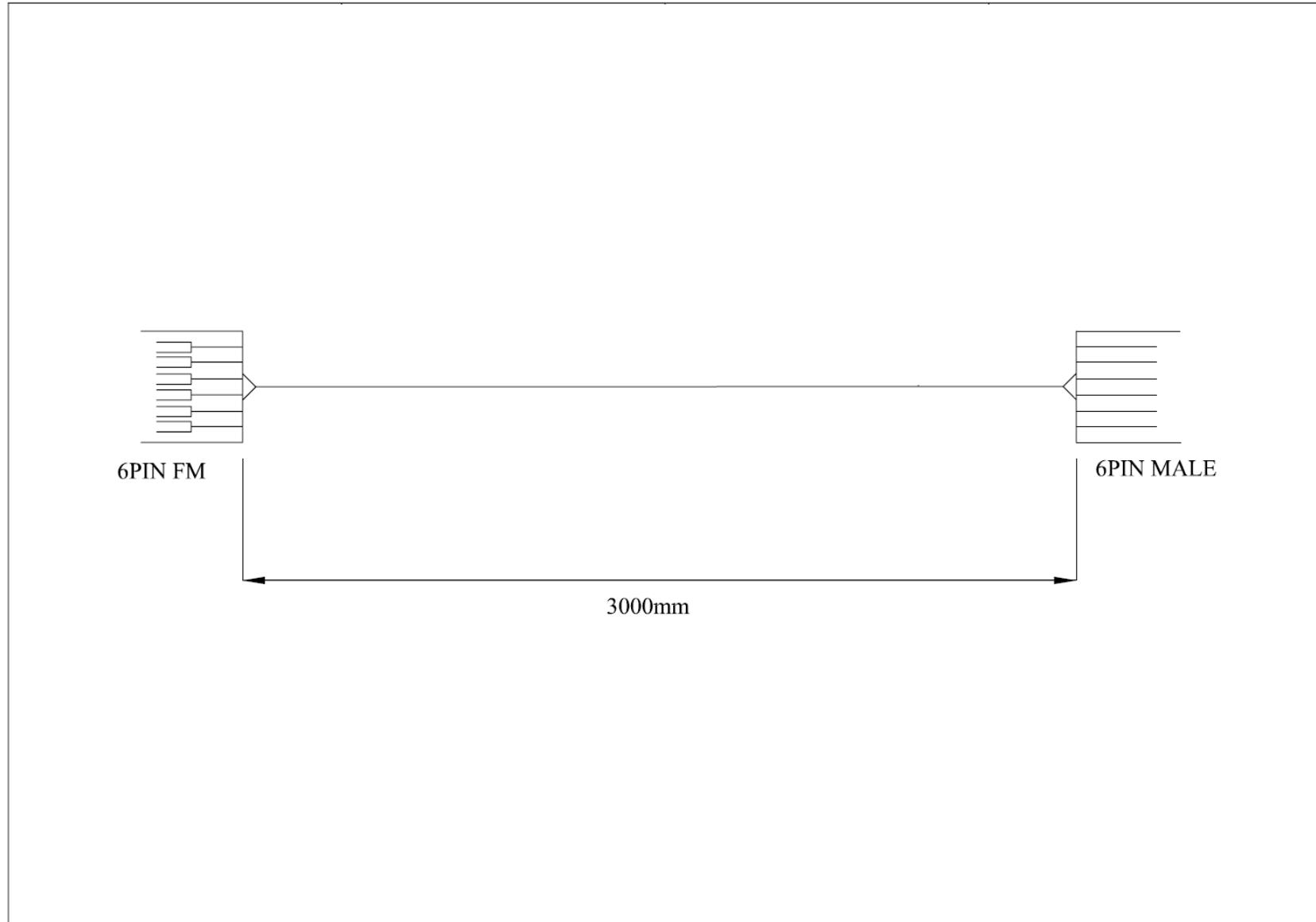


**Figure 2- 38 Fix Clamp Motor 2 Cable**

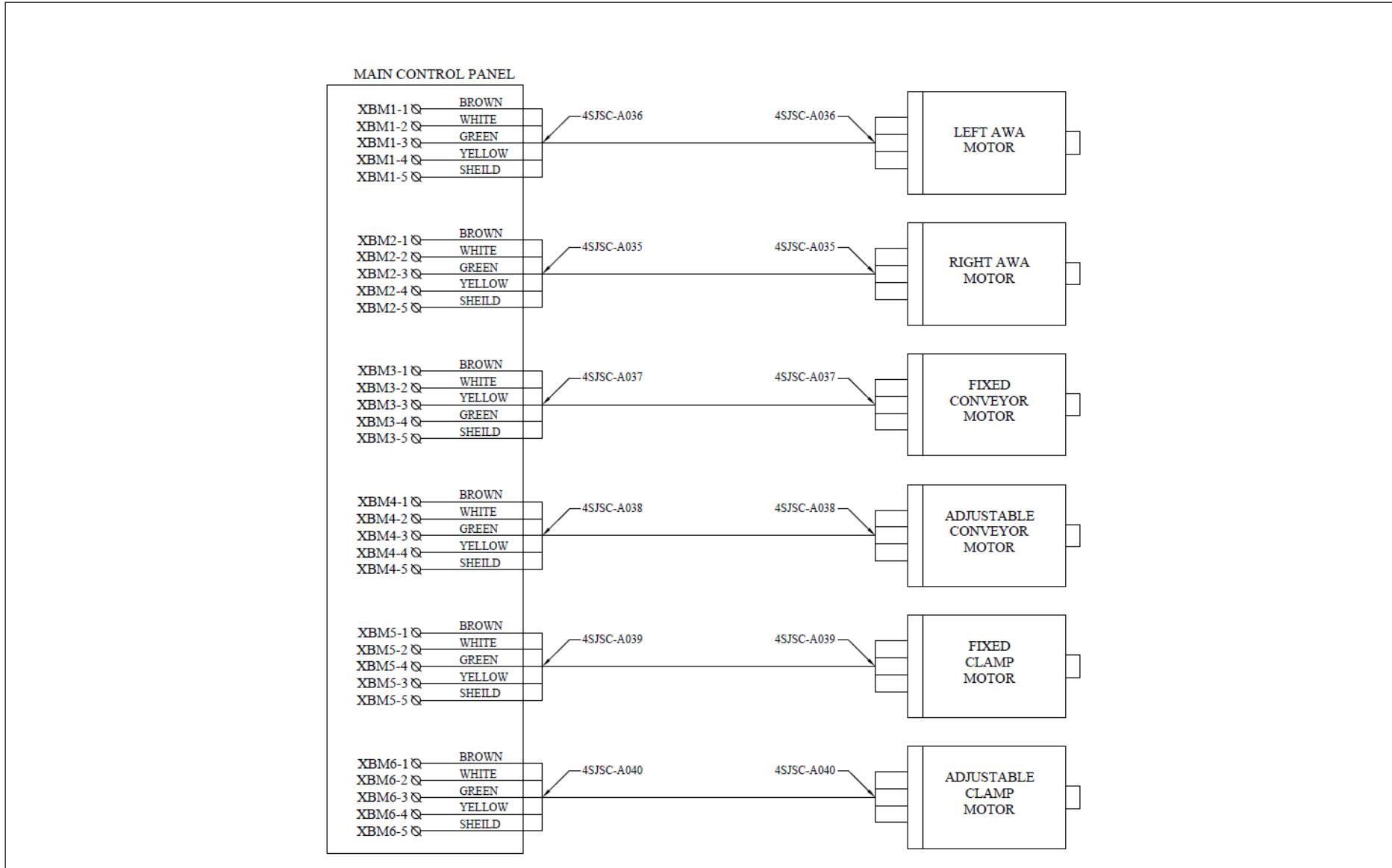
**Figure 2- 39    Adj Conv Motor 2 Cable**



**Figure 2- 40    Mouse Ext Cable**



**Figure 2- 41    Keyboard Ext Cable**



**Figure 2- 42    Conveyor Motor Front Rail Fix Left to Right Configuration Wiring**

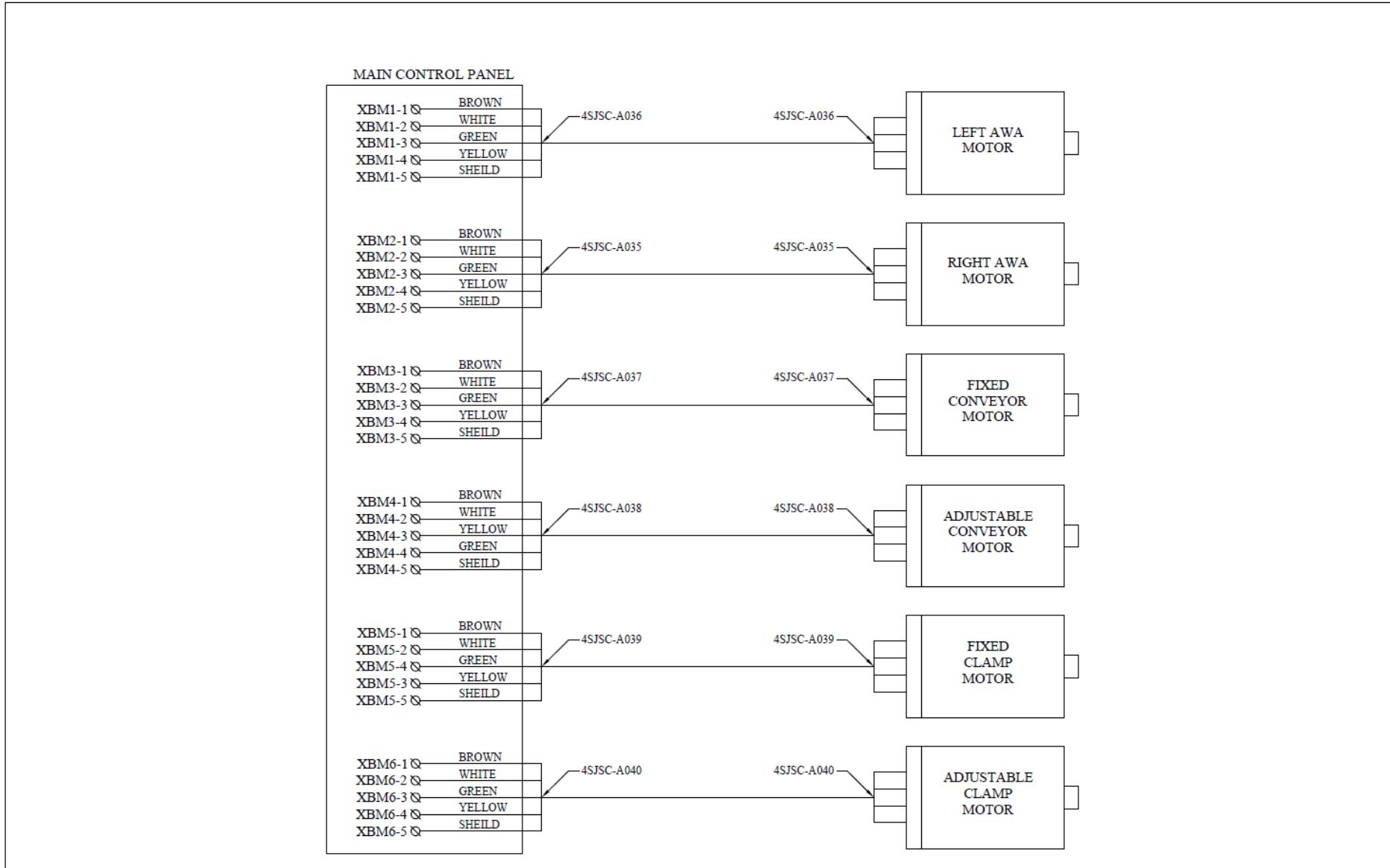
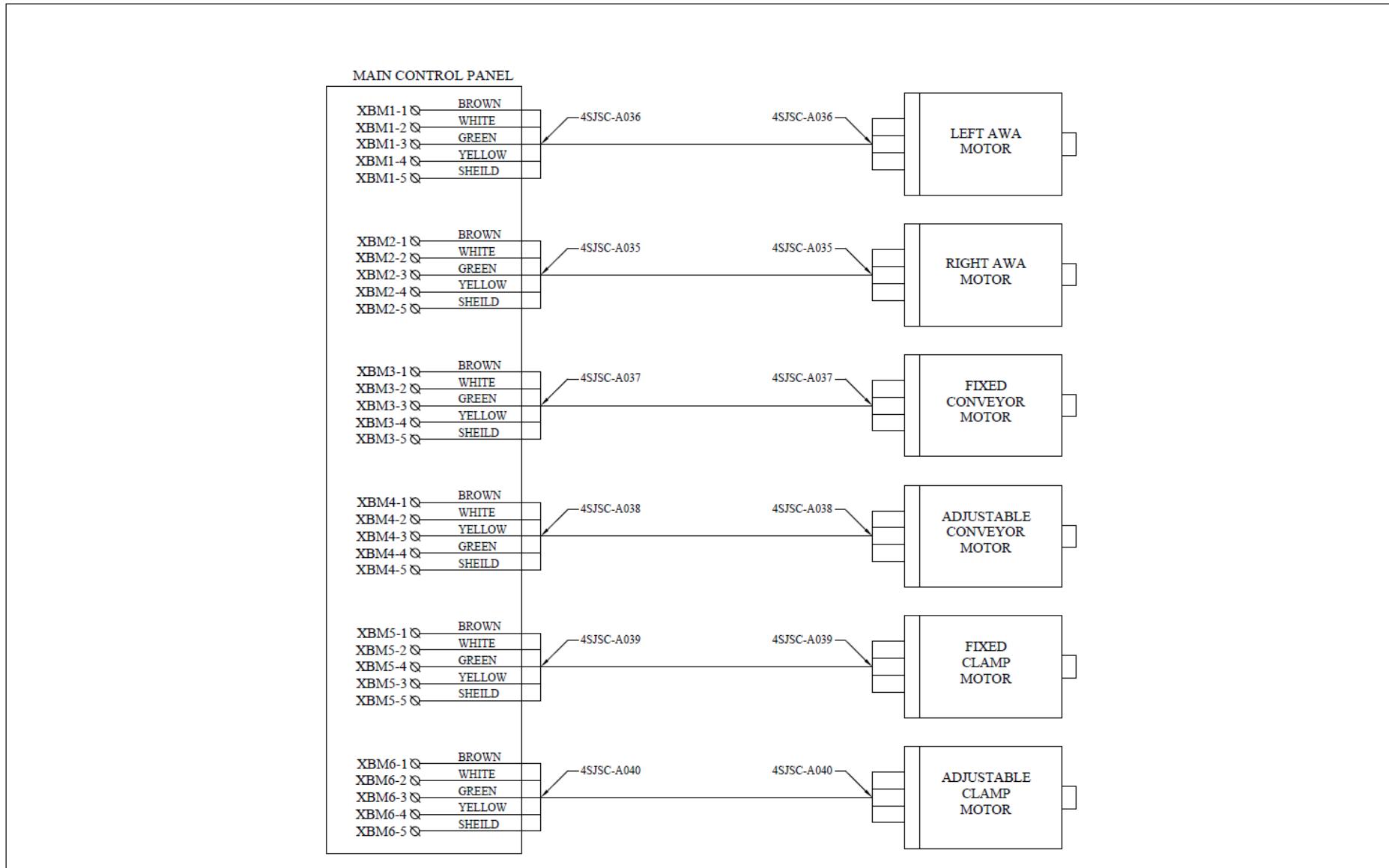
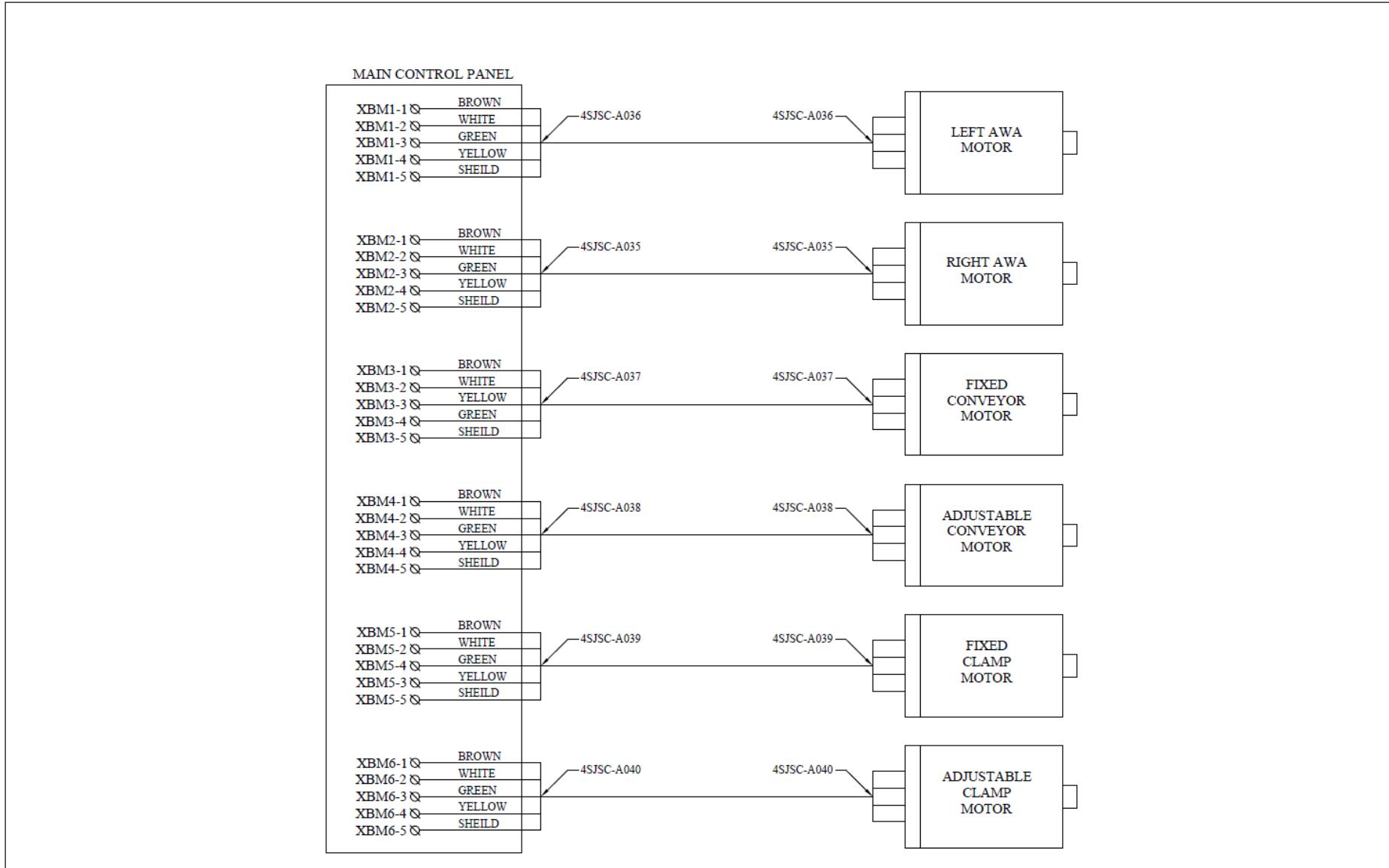


Figure 2- 43    Conveyor Motor Front Rail Fix Right to Left Configuration Wiring



**Figure 2- 44      Conveyor Motor Rear Rail Fix Left to Right Configuration Wiring**



**Figure 2- 45 Conveyor Motor Rear Rail Fix Right to Left Configuration Wiring**

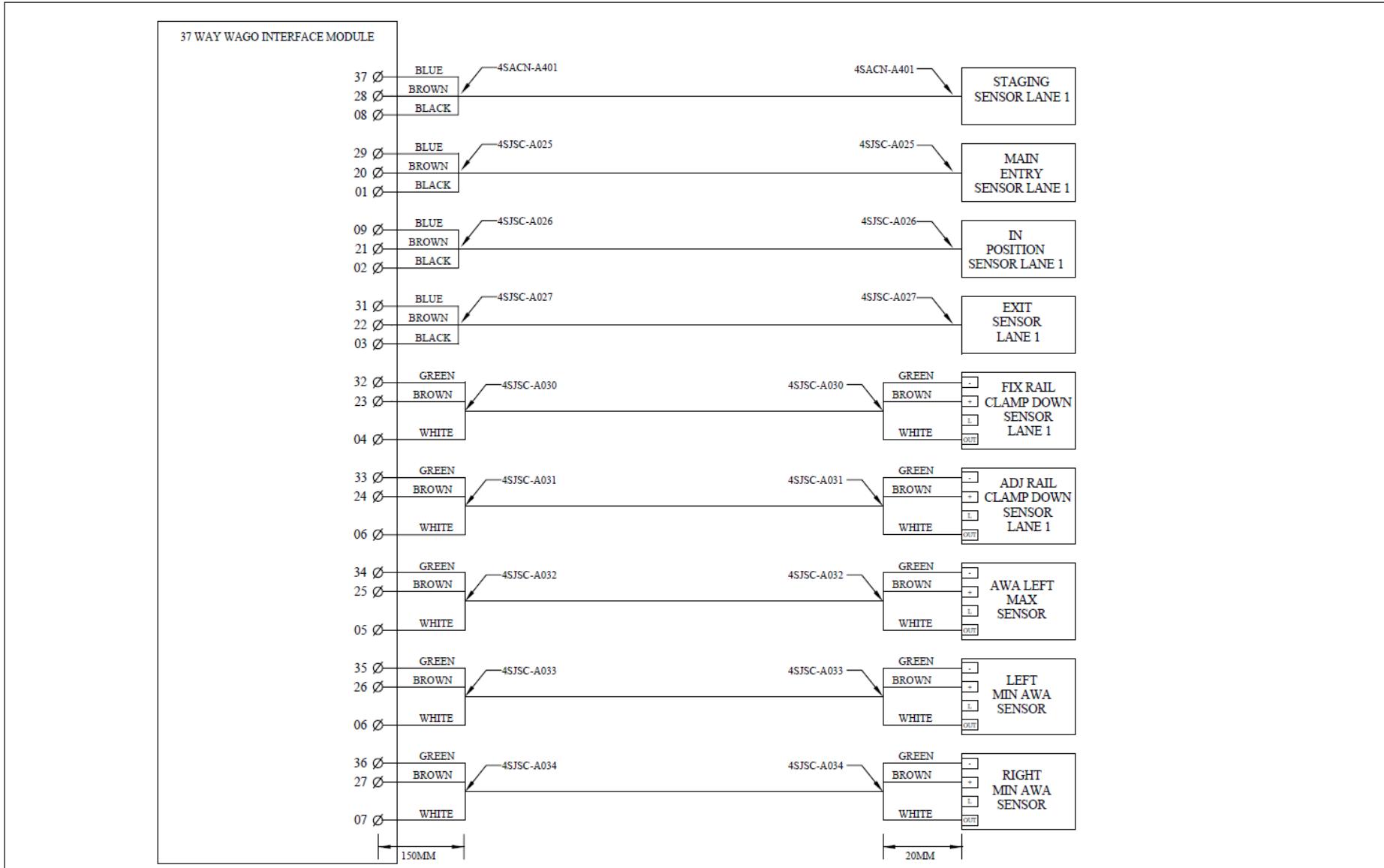


Figure 2- 46 Conveyor Sensor Wiring

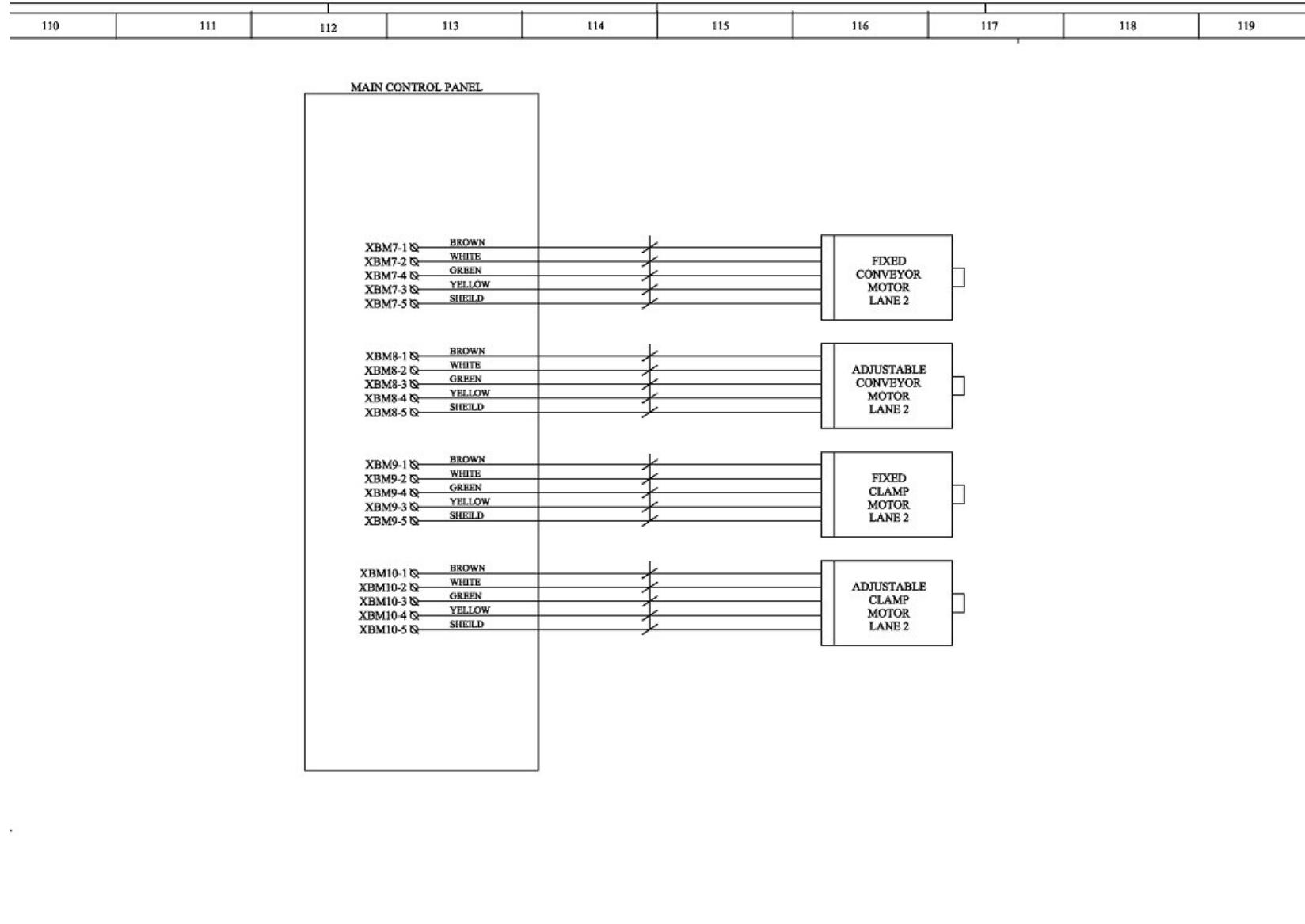


Figure 2- 47 Conveyor Motor 2 Wiring

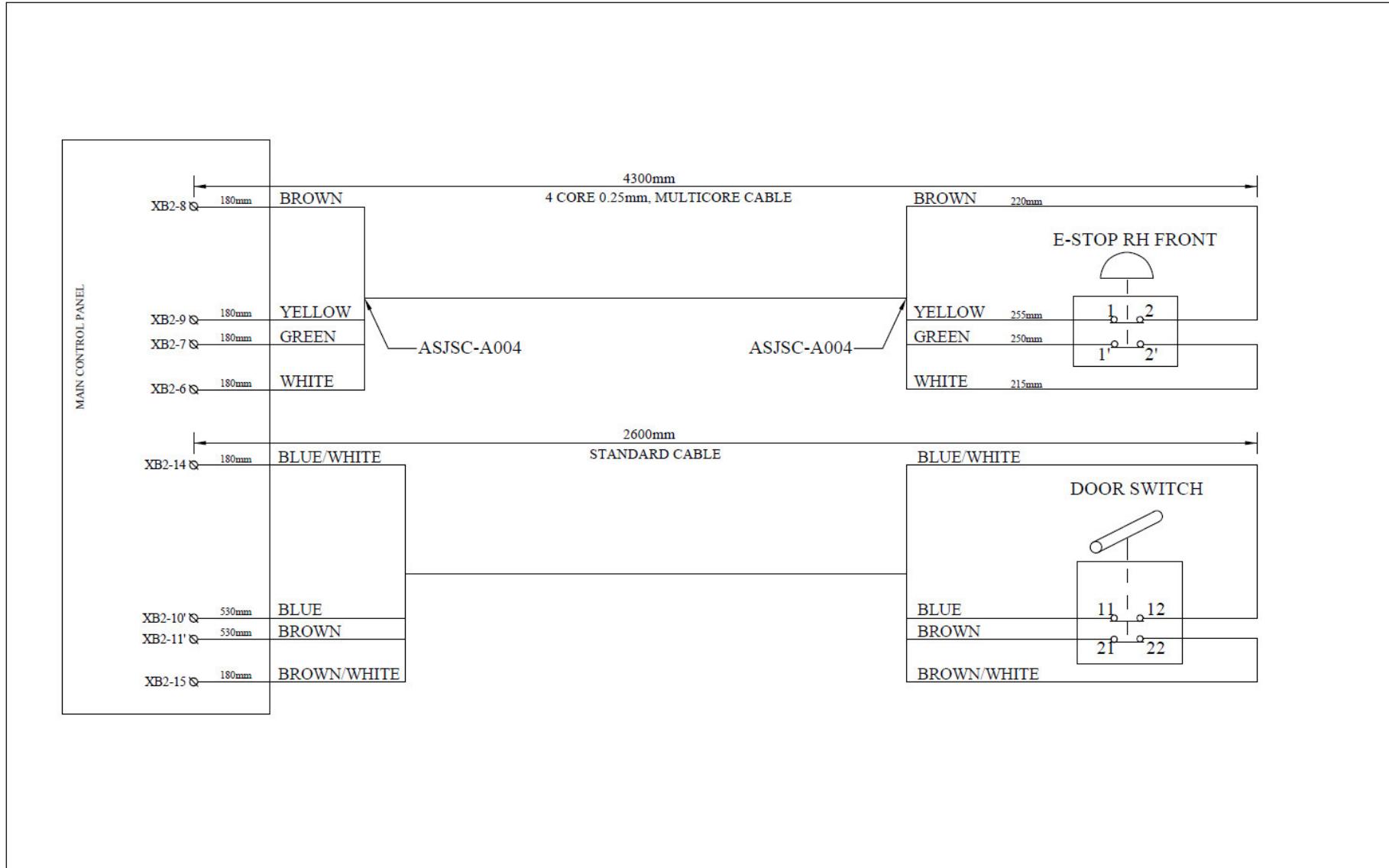
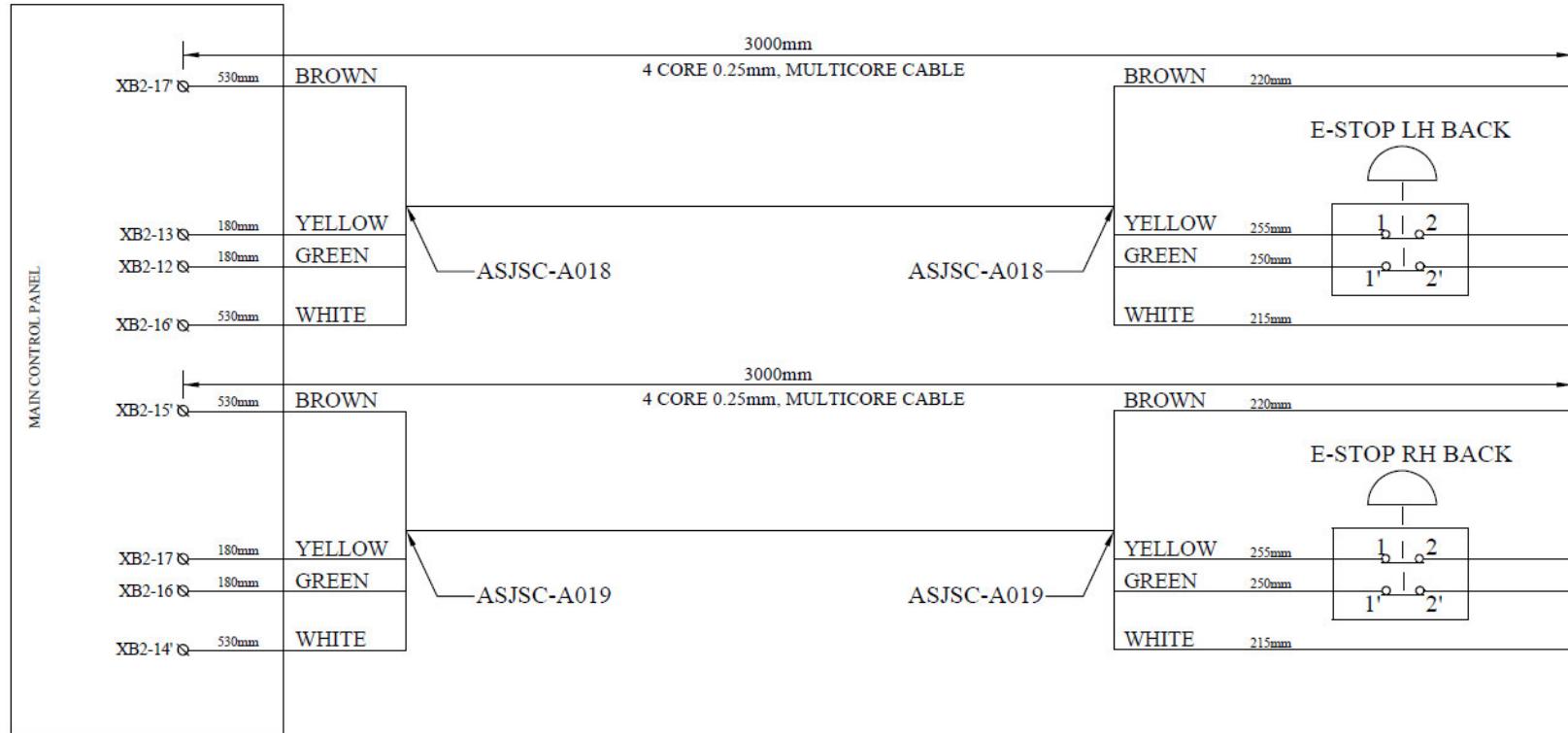


Figure 2- 48 E-Stop &amp; Door Switch Wiring



**Figure 2- 49    E-Stop Wiring Back**

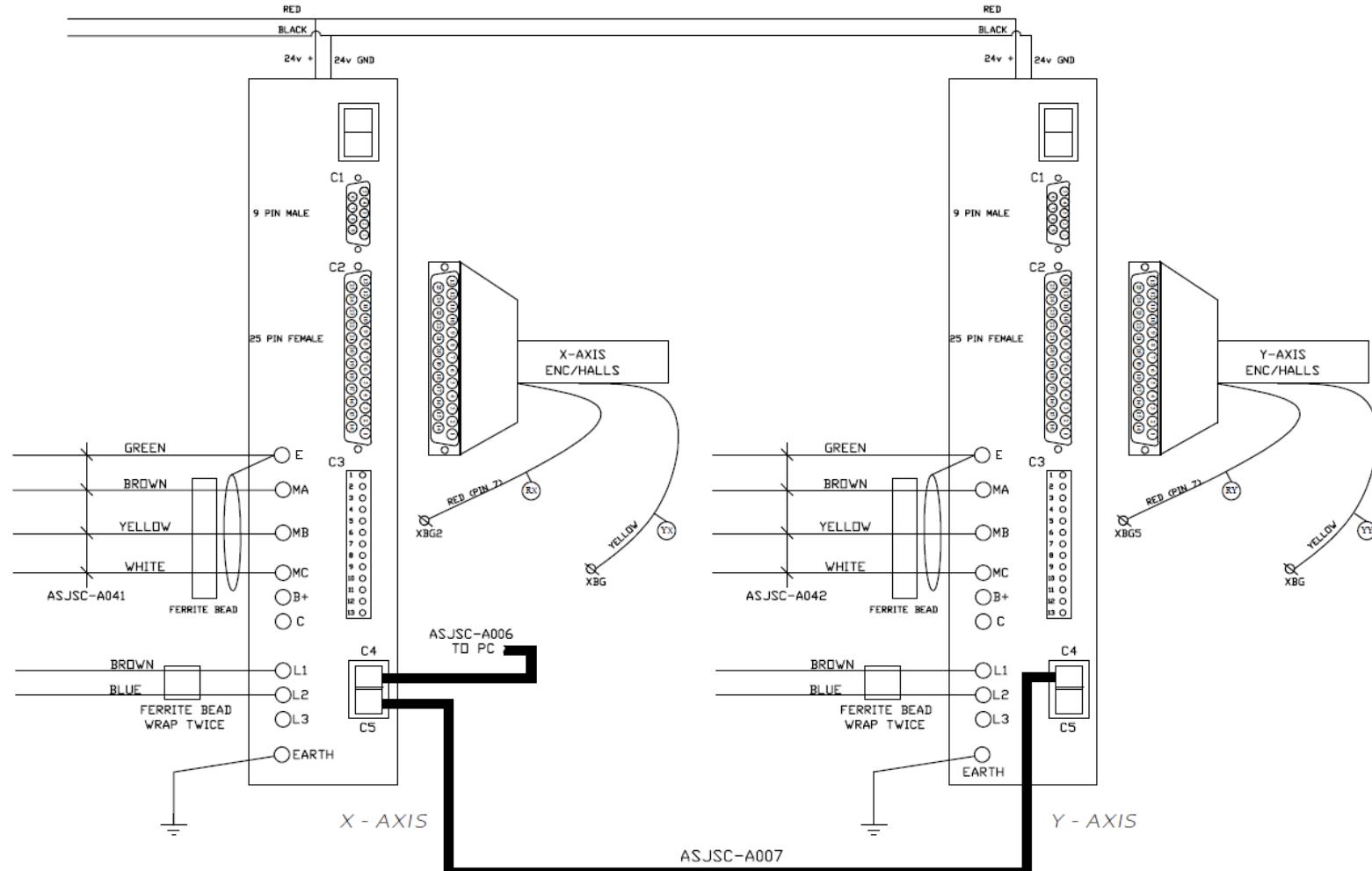


Figure 2- 50 Kollmorgen Wiring

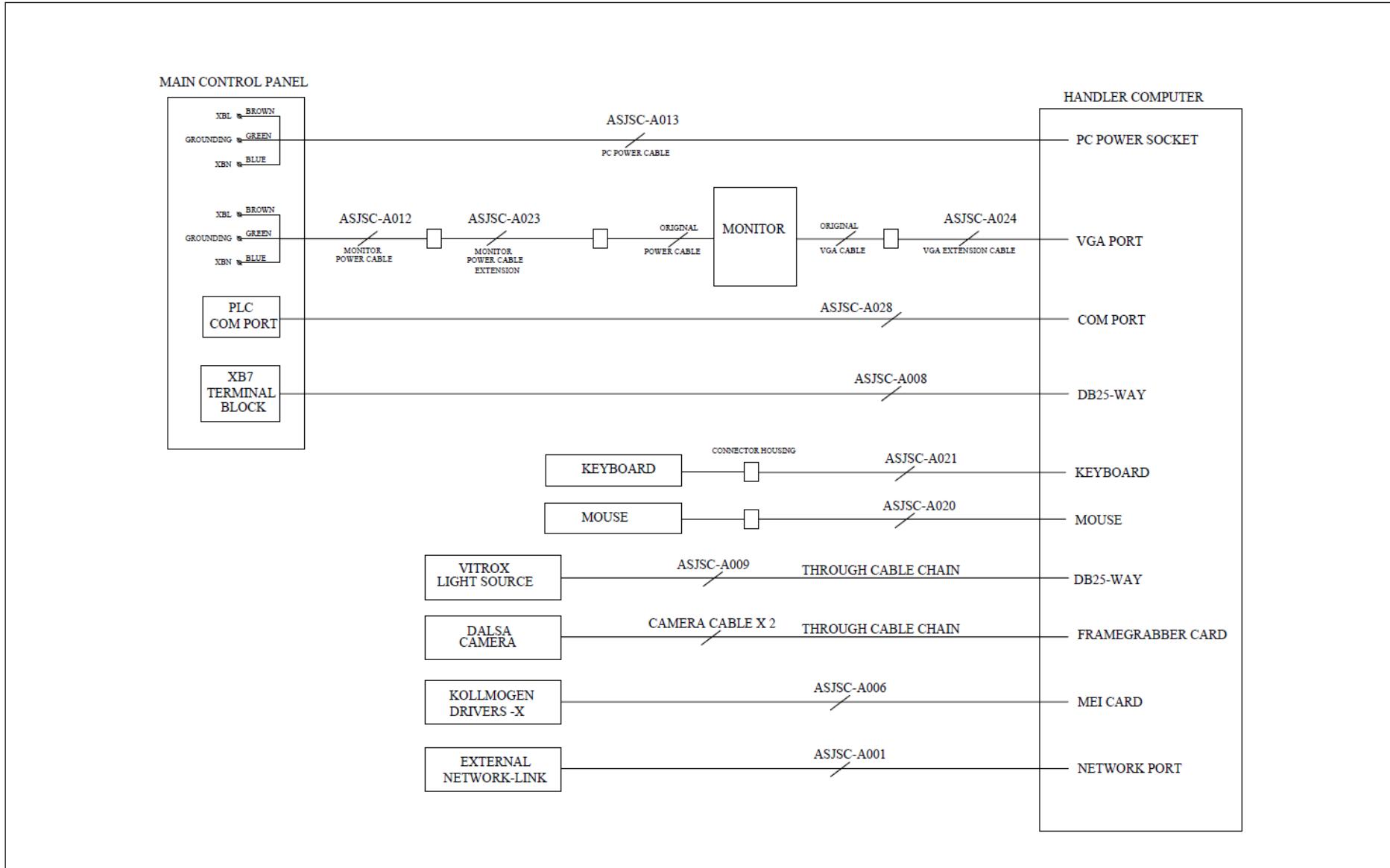


Figure 2- 51 PC Wiring

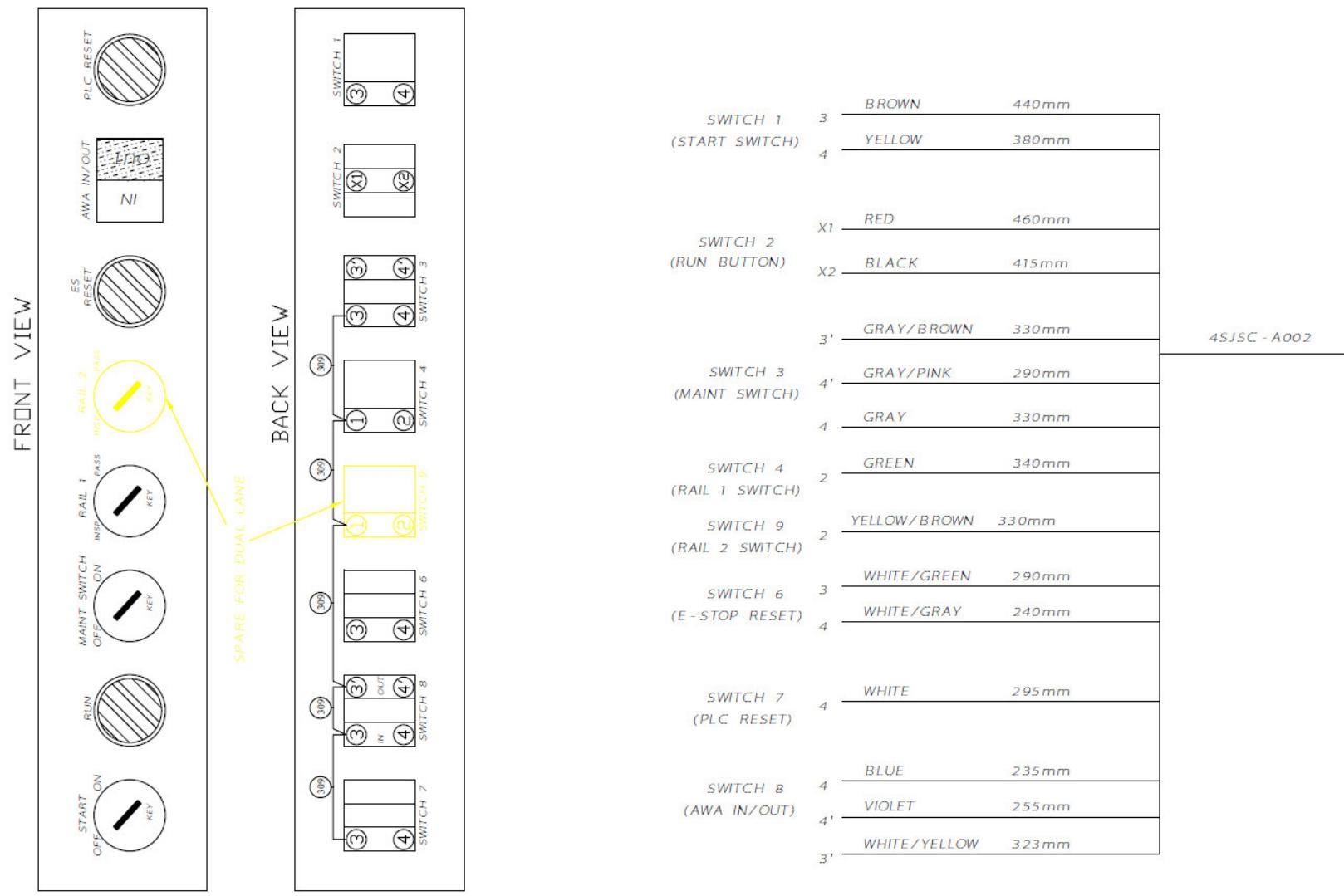


Figure 2- 52    Switch Plate Layout

<b>V510 Cable List</b>			
<b>AC</b>	<b>AWG #</b>	<b>Color Code</b>	<b>Description</b>
1	AWG 12	Brown	AC Live
2	AWG 12	Blue	AC Network
3	AWG 12	Brown	AC Live
4	AWG 12	Blue	AC Network
5	AWG 12	Brown	AC Live
6	AWG 12	Blue	AC Network
7	AWG 12	Brown	AC Live
8	AWG 12	Blue	AC Network
9	AWG 12	Brown	AC Live
10	AWG 12	Brown	AC Live
11	AWG 12	Blue	AC Network
12	AWG 12	Brown	AC Live
14	AWG 14	Brown	AC Live
15	AWG 14	Brown	AC Live
16	AWG 14	Brown	AC Live
200-299	AWG 18	Red	Power Supply 24V,6.5A
100-199	AWG 24	White	PLC Data Input
300-399	AWG 18	Black	Power Supply Gnd (0V)
700-799	AWG 12	Green/Yellow	AC Gnd
400-499	AWG 24	Grey	PLC Data Output
500-599	AWG 24	Grey	Relay & Stepper Motor I/O
600-699	AWG 18	Yellow	Stepper Motor I/O (Phase)

Table 2- 53      V510 Cable List