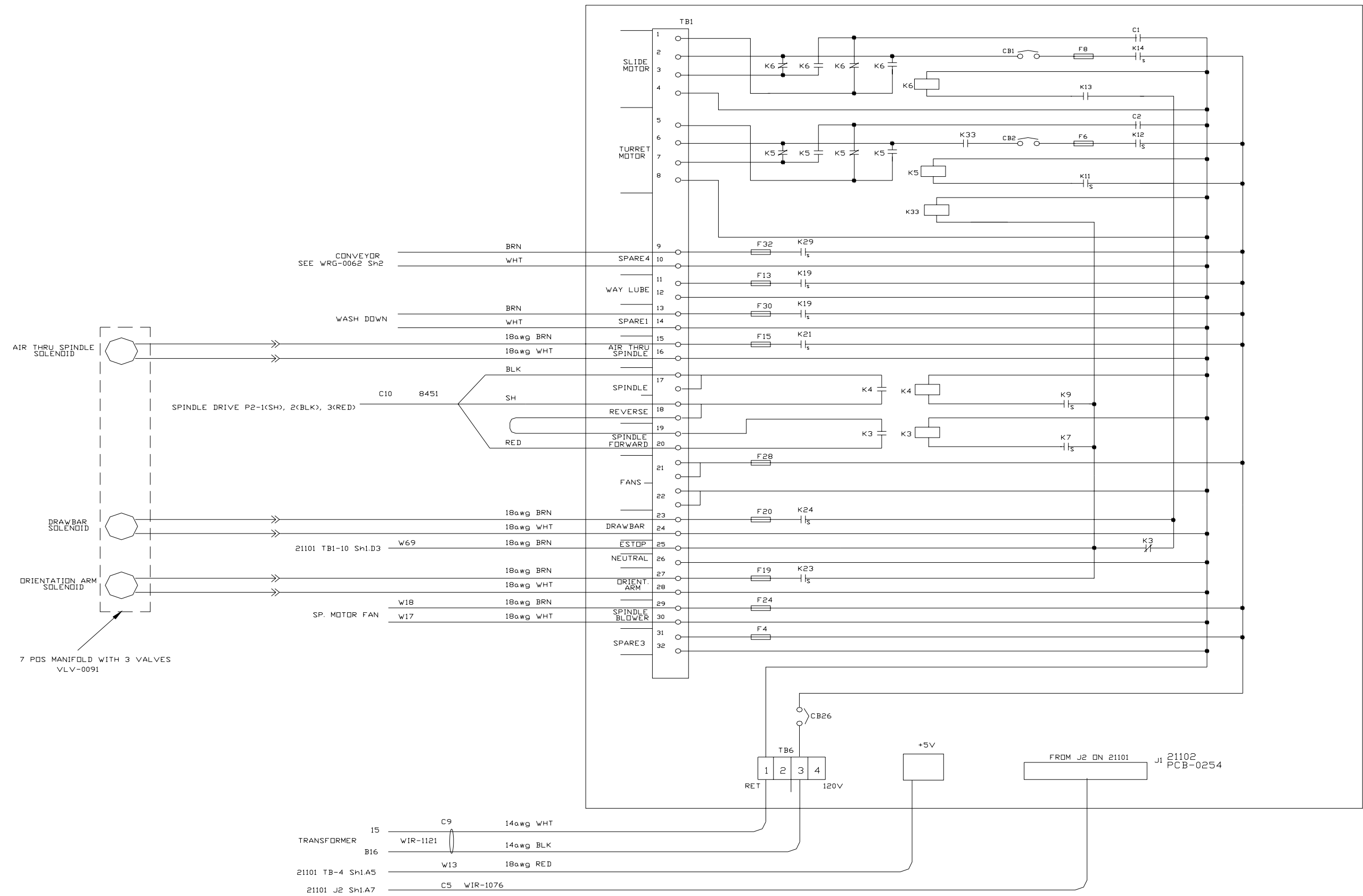


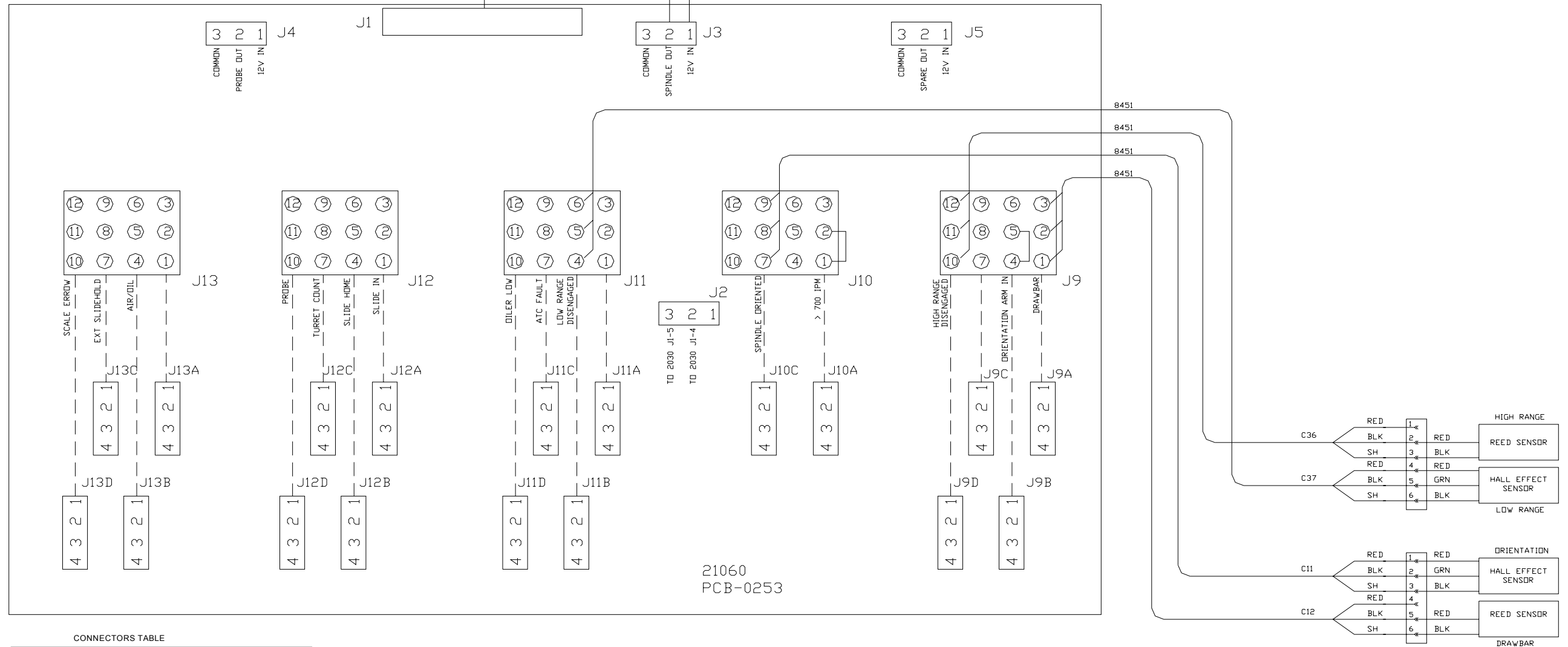
SECTION 12

104D



Wrg_0069A_03of12_104d_21060_std

104/D +12VDC Sh9.C2 W19 22o/wg YELLOW
 104/D DIGITAL IN-1 Sh9.A8 W20 22o/wg RED ORIENTATION MAGNET
 21101 J9 Sh1.C8 C10



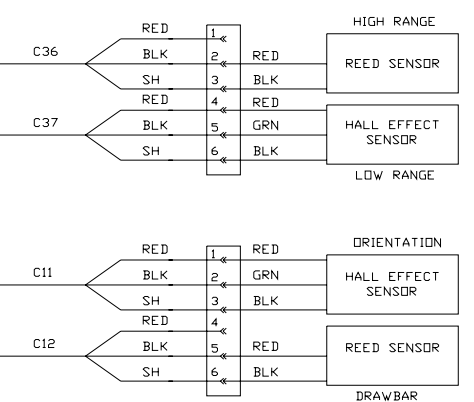
21060
PCB-0253

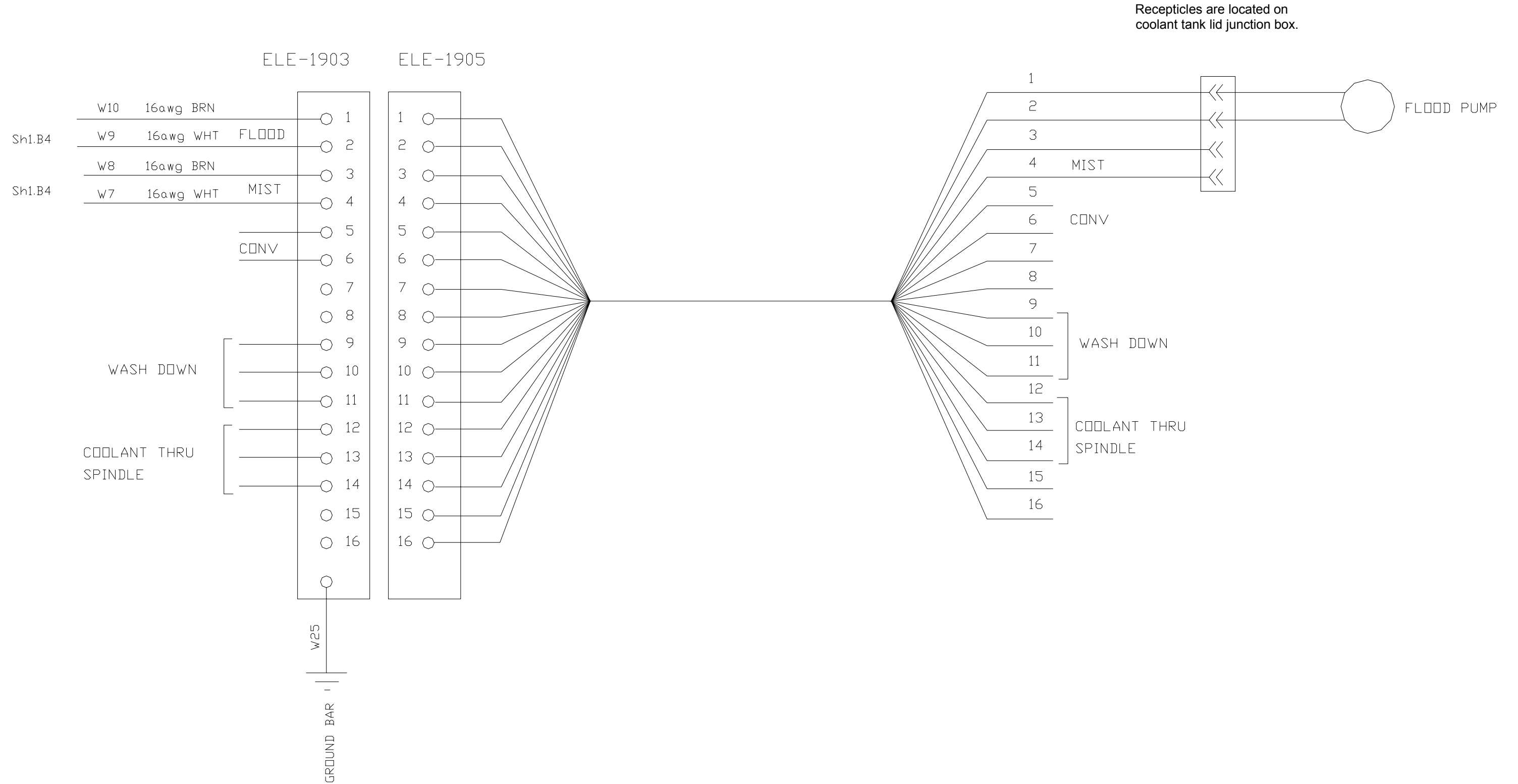
CONNECTOR J1

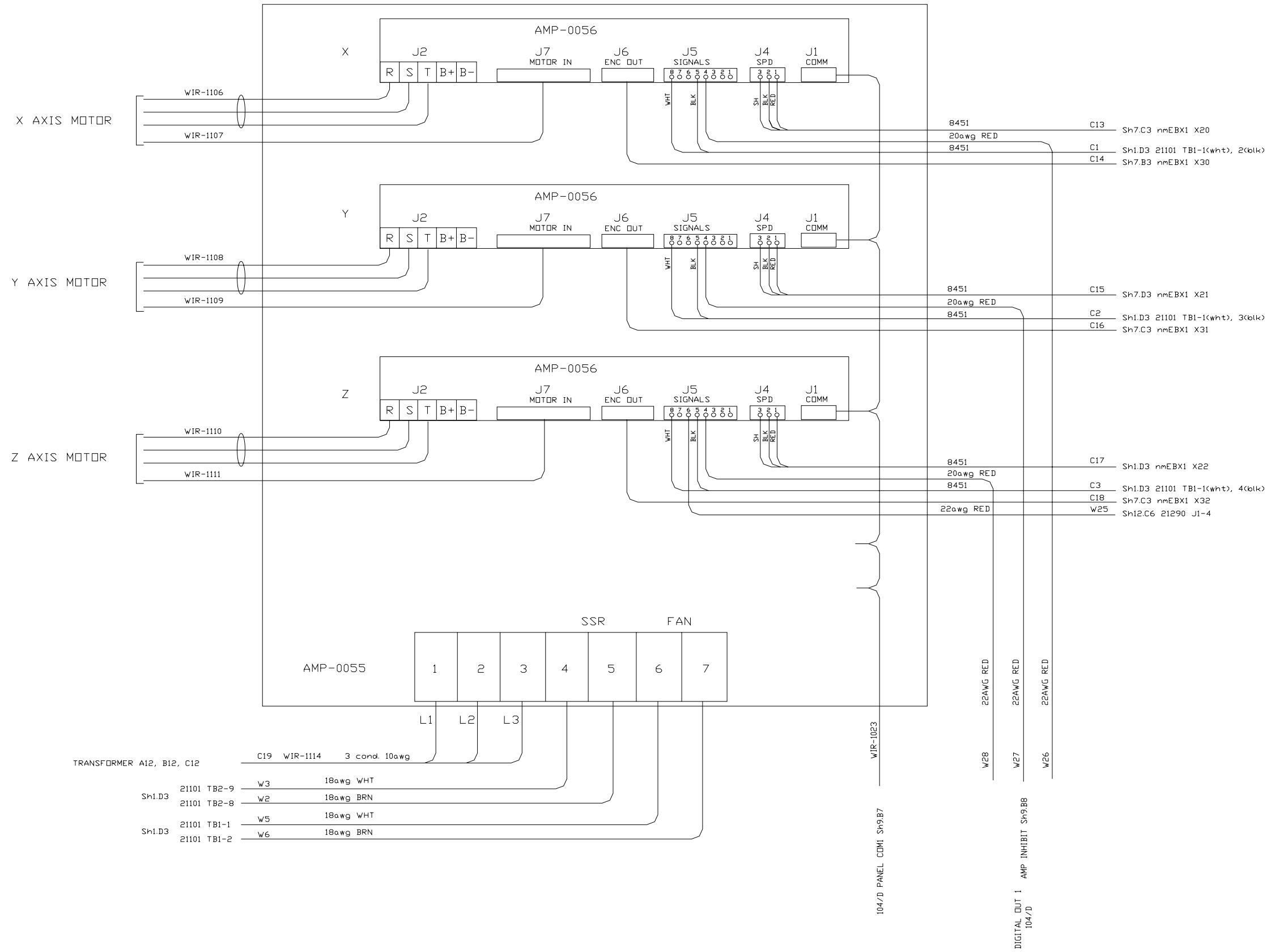
| PIN | SIGNAL |
|-----|------------------|
| 1 | SLIDE EXTENDED |
| 2 | TURRET COUNT |
| 3 | SPINDLE ORIENTED |
| 4 | SLIDE HOME |
| 5 | EXT SLIDE HOLD |
| 6 | SCALE ERROR |
| 7 | PROBE |
| 8 | OVER 700 IPM |
| 9 | ORIENTATION ARM |
| 10 | LOW RANGE |
| 11 | SPARE |
| 12 | AIR/OIL |
| 13 | ATC FAULT |
| 14 | DRAWBAR DOWN |
| 15 | HI RANGE |
| 16 | OILER LOW |
| 17 | SPARE |
| 18 | SPARE |
| 19 | +5V |
| 20 | +5V |
| 21 | +5V |
| 22 | +5V |
| 23 | COM |
| 24 | COM |
| 25 | COM |
| 26 | COM |

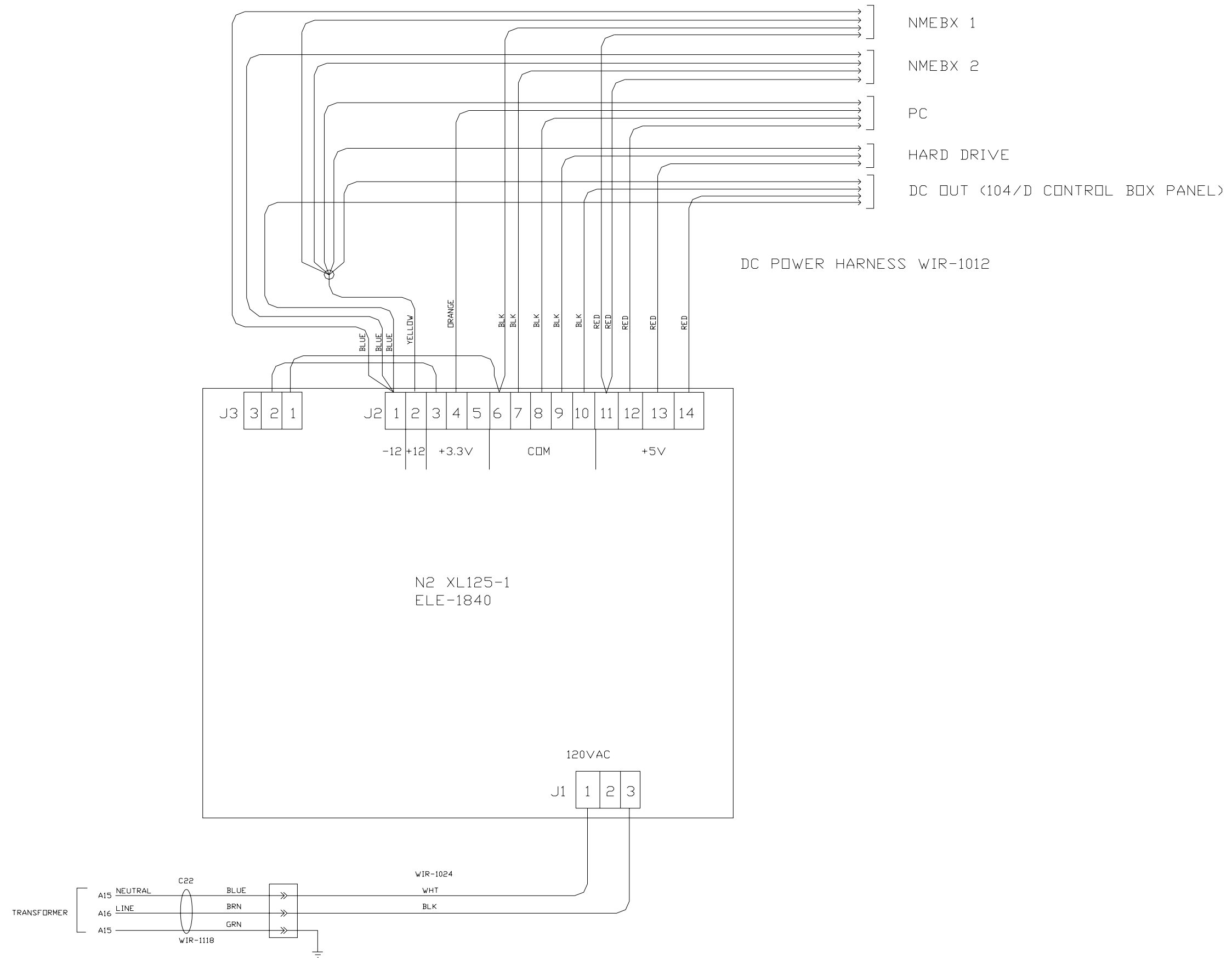
CONNECTORS TABLE

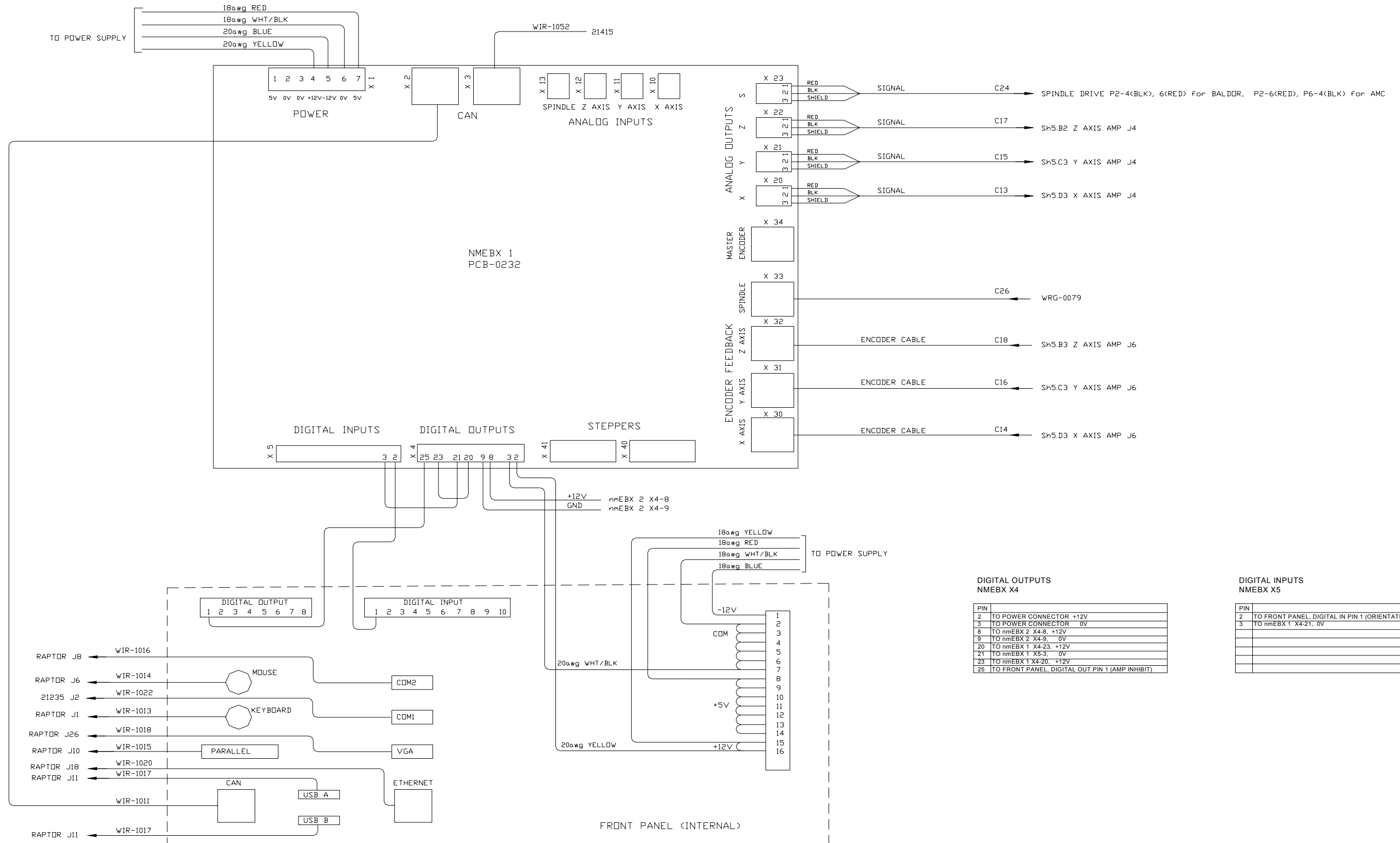
| | PIN | SENSOR |
|----------|-----------------------|-------------------------------|
| J9/J9A | 1-SH, 2-BLK, 3-RED | DRAWBAR |
| J9/J9D | 10-SH, 11-BLK, 12-RED | HI RANGE |
| J10/J10C | 7-SH, 8-BLK, 9-RED | SPINDLE ORIENTED |
| J11/J11B | 4-SH, 5-BLK, 6-RED | LOW RANGE |
| J11/J11C | 7-SH/BLK, 8-RED | ATC FAULT |
| J11/J11D | 10-ORANGE, 11-RED | OILER LOW |
| J12/J12A | 1-SH, 2-BLK, 3-RED | SLIDE EXTENDED |
| J12/J12B | 4-SH, 5-BLK, 6-RED | SLIDE HOME |
| J12/J12C | 7-SH, 8-BLK, 8-RED | TURRET COUNT |
| J13/J13C | 7-SH/BLK, 8-RED | EXT SLIDE HOLD/DOOR INTERLOCK |

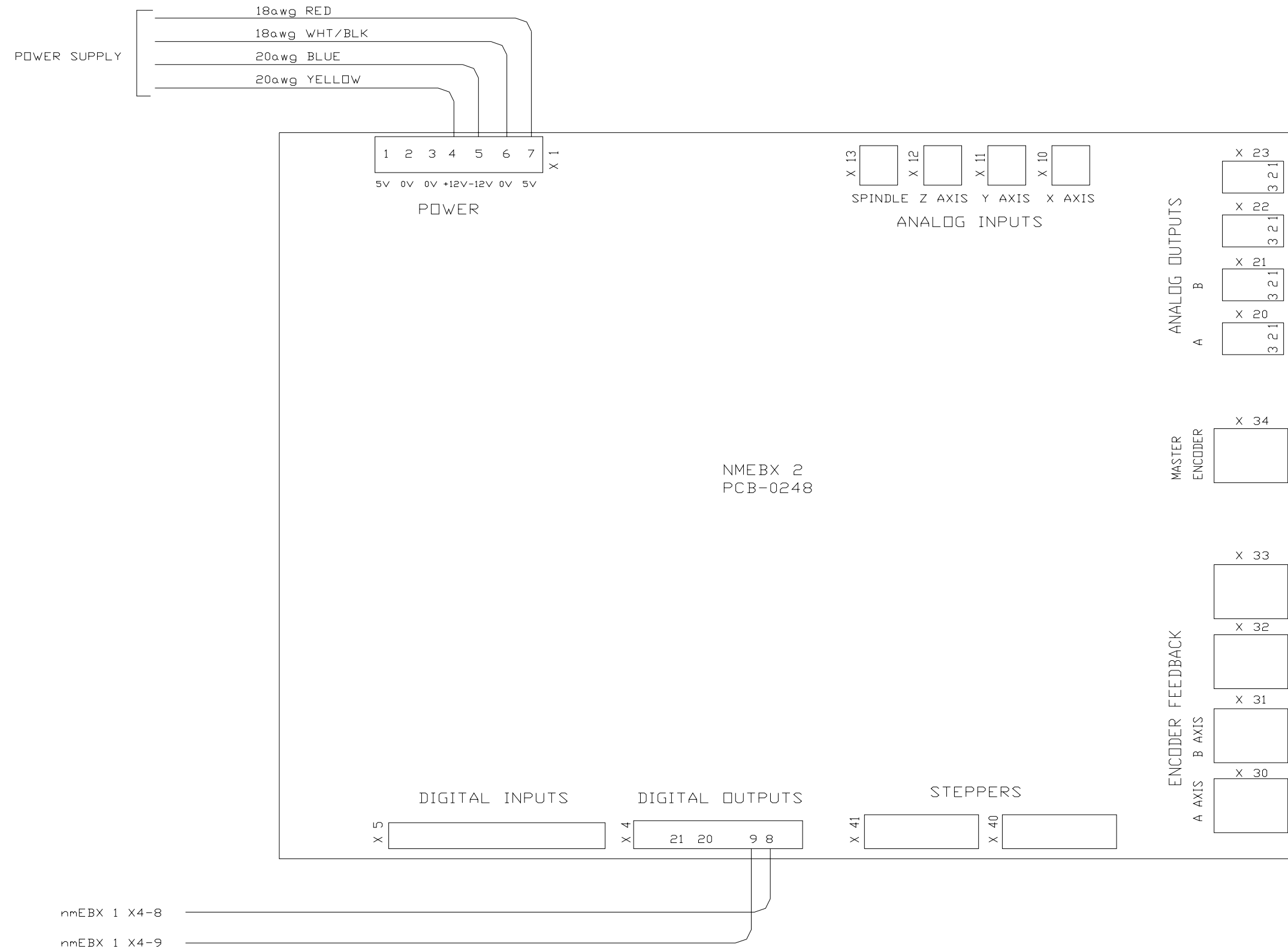




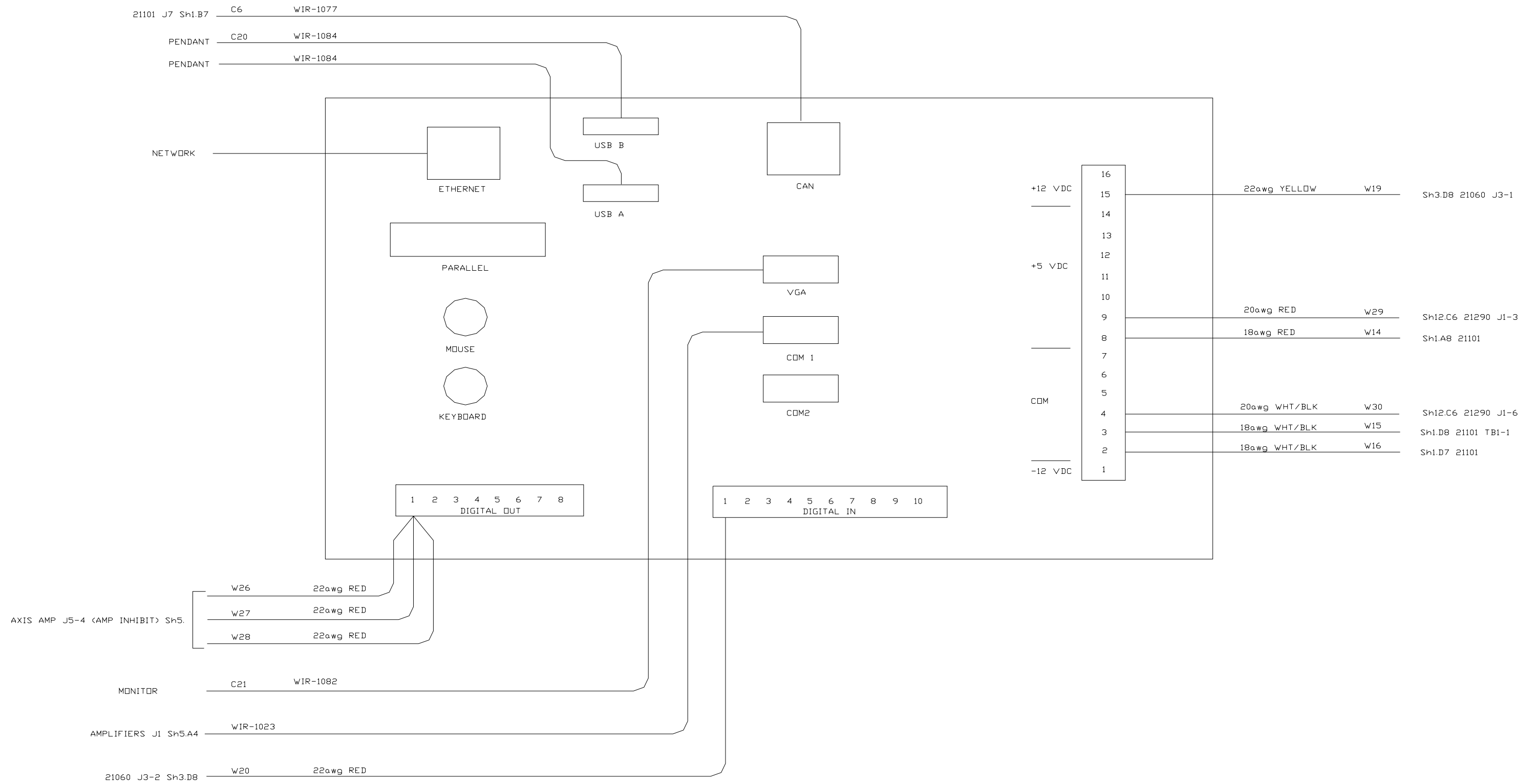




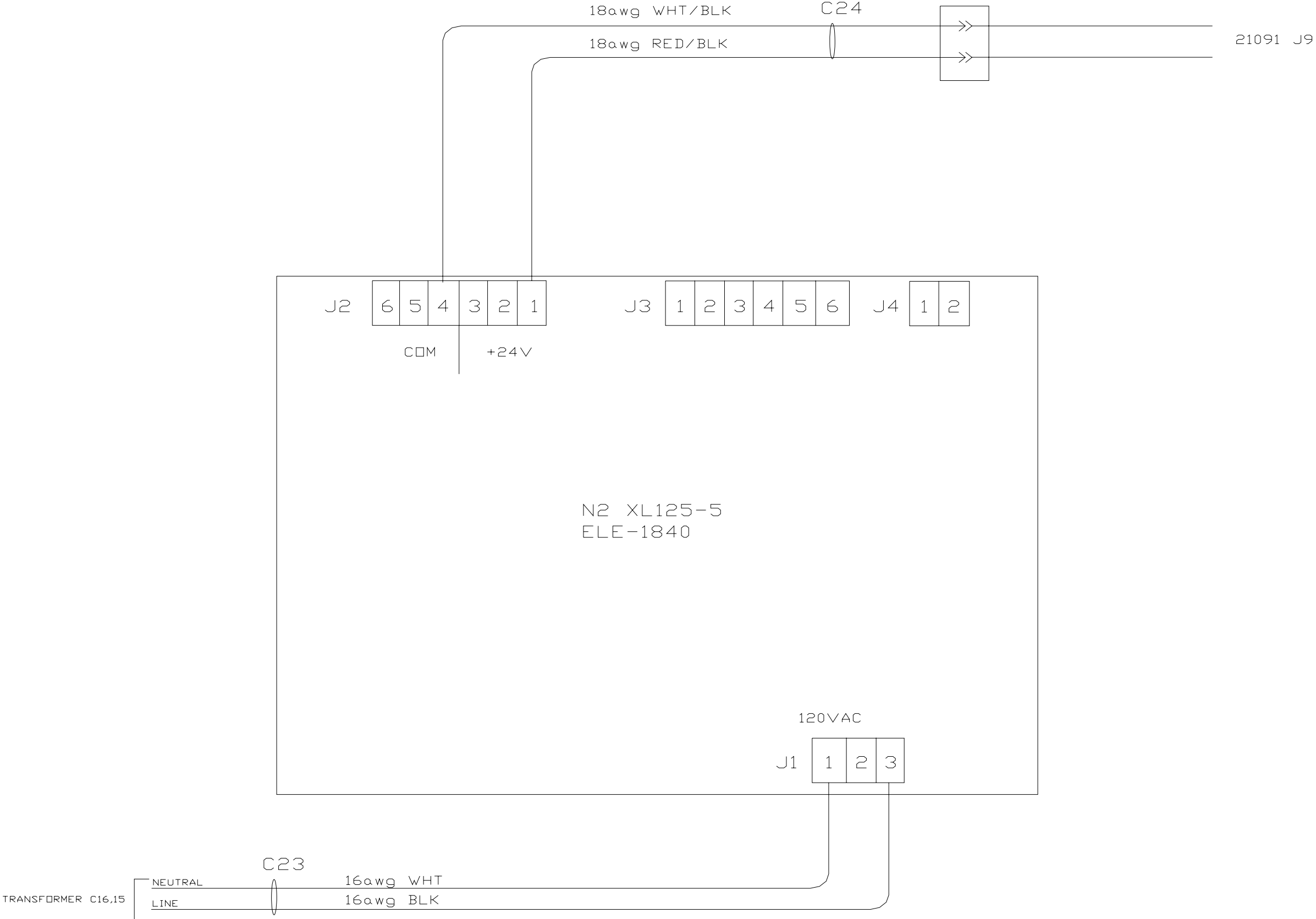


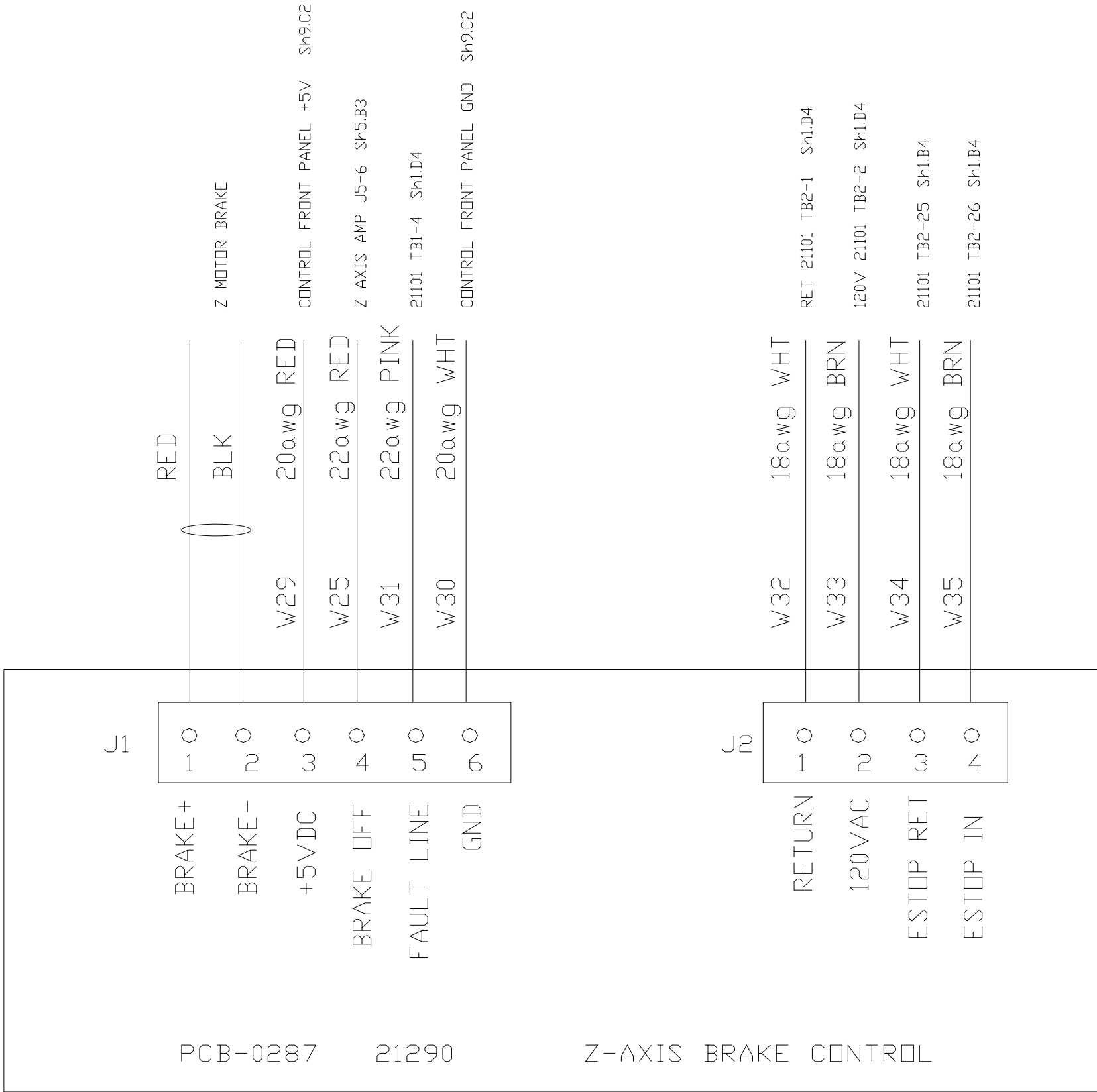


Wrg_0069A_09of12_104d_box_panel_std

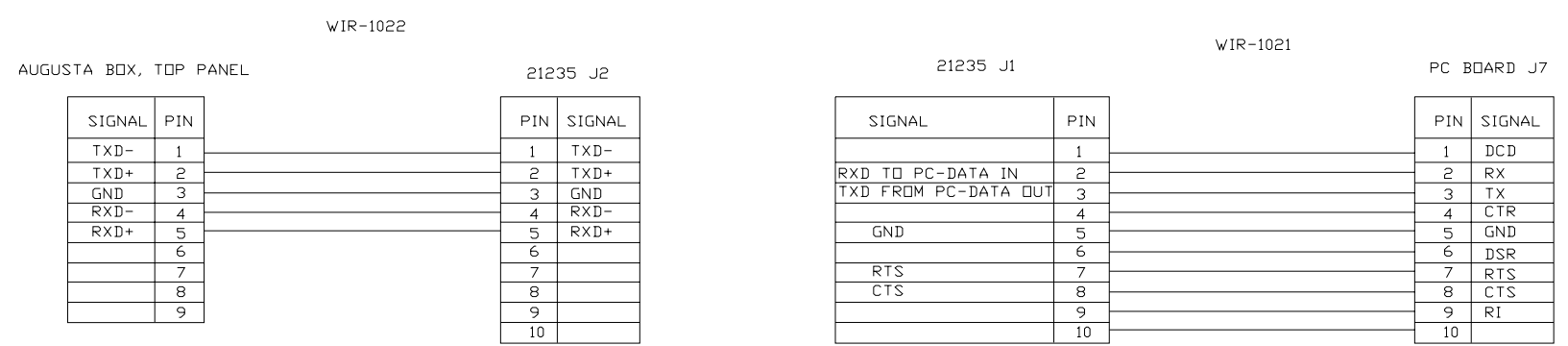
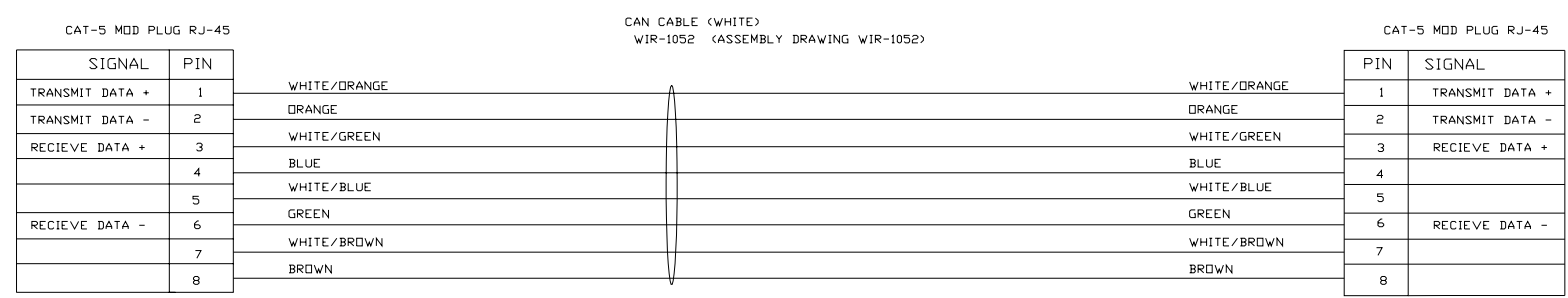
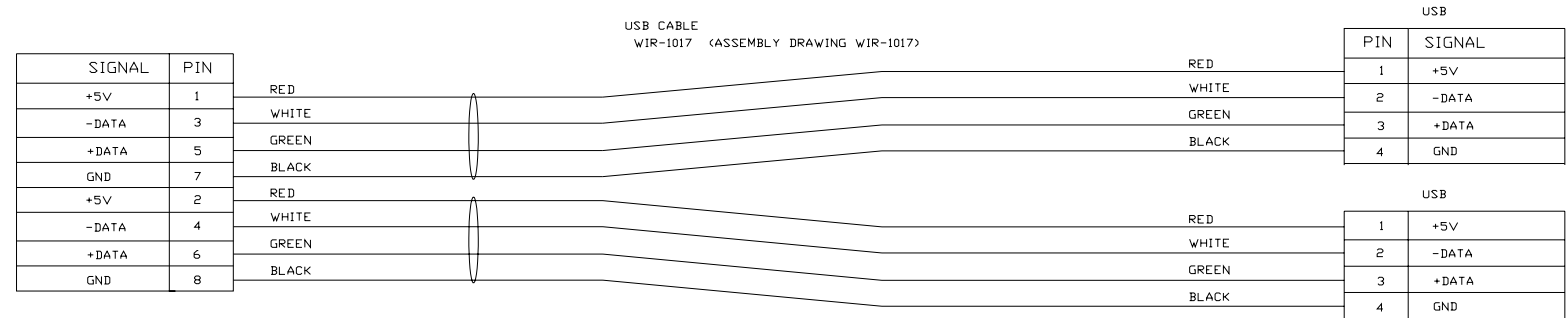
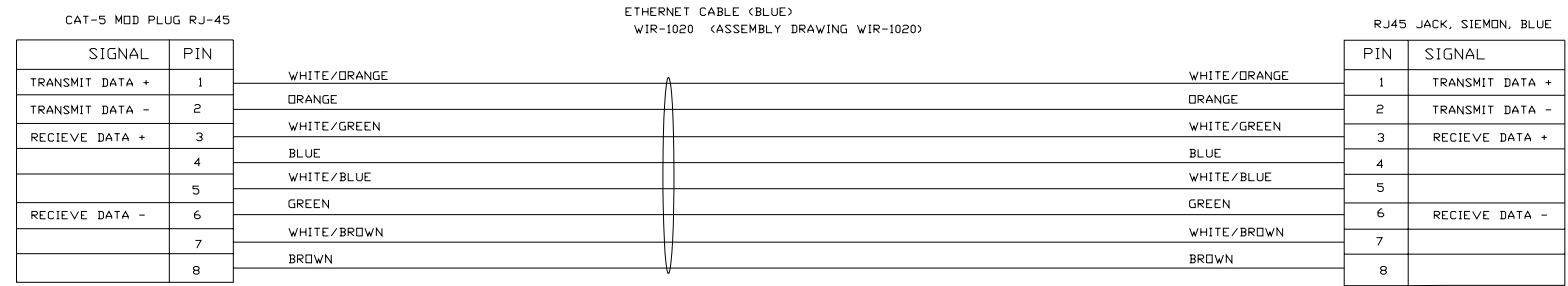
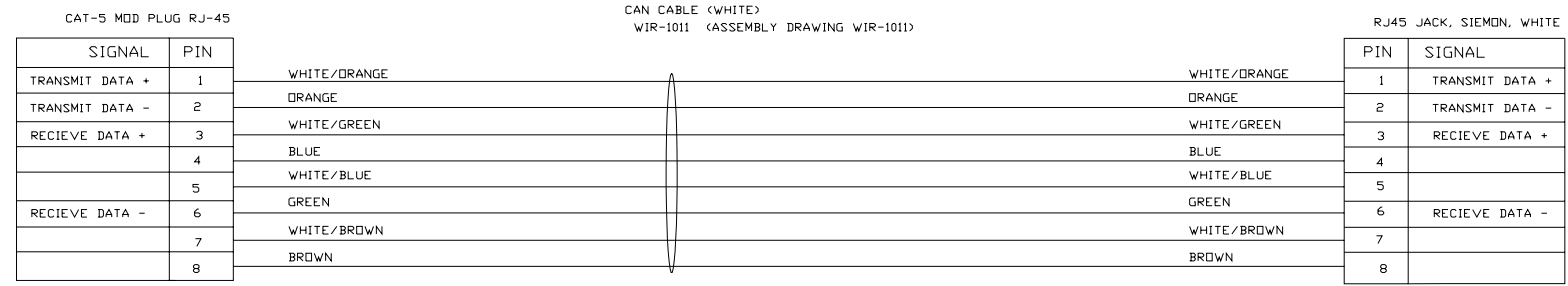


Wrg_0069A_11of12_104d_24vdc_power_supply_std

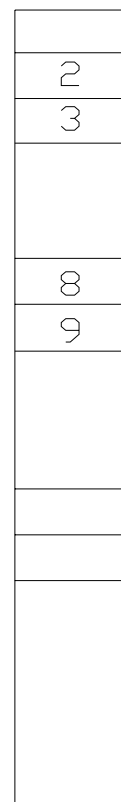




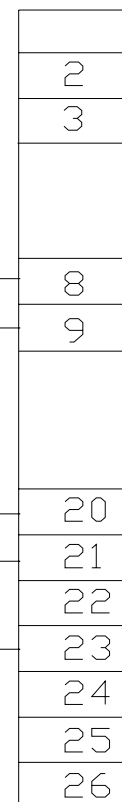
Wrg_0070A_1of5_104d_can_ethernet_usb_cable



nmEBX 2
DIGITAL OUT



nmEBX 1
DIGITAL OUT



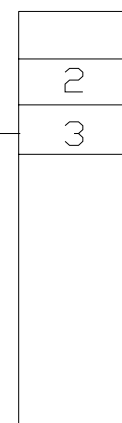
22awg YELLOW POWER CONNECTOR +12V
22awg WHT/BLK POWER CONNECTOR 0V

+12V 22awg YELLOW
0V 22awg WHT/BLK

+12V

22awg RED DIGITAL OUT (AUGUSTA BOX PANEL) - 1

nmEBX 1
DIGITAL IN

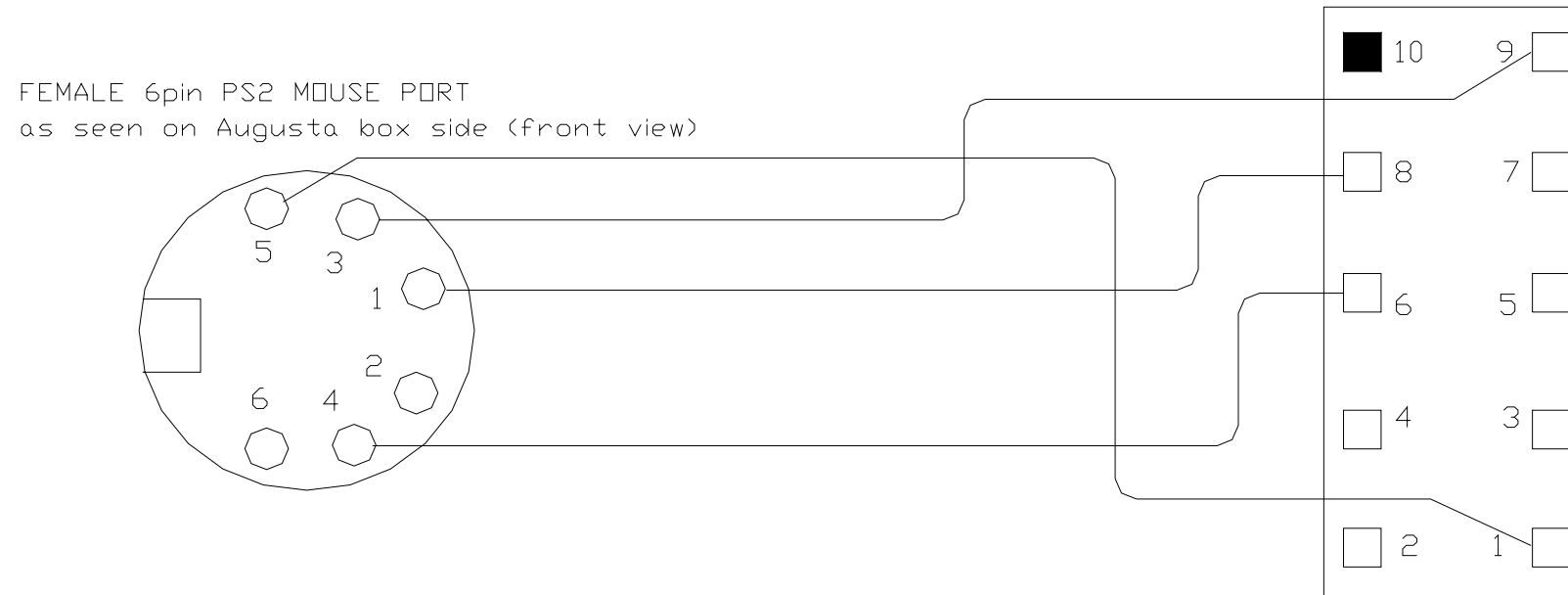


22awg RED DIGITAL IN (AUGUSTA BOX PANEL) - 1

0V

Wrg_0070A_3of5_104d_keyboard_mause_cable

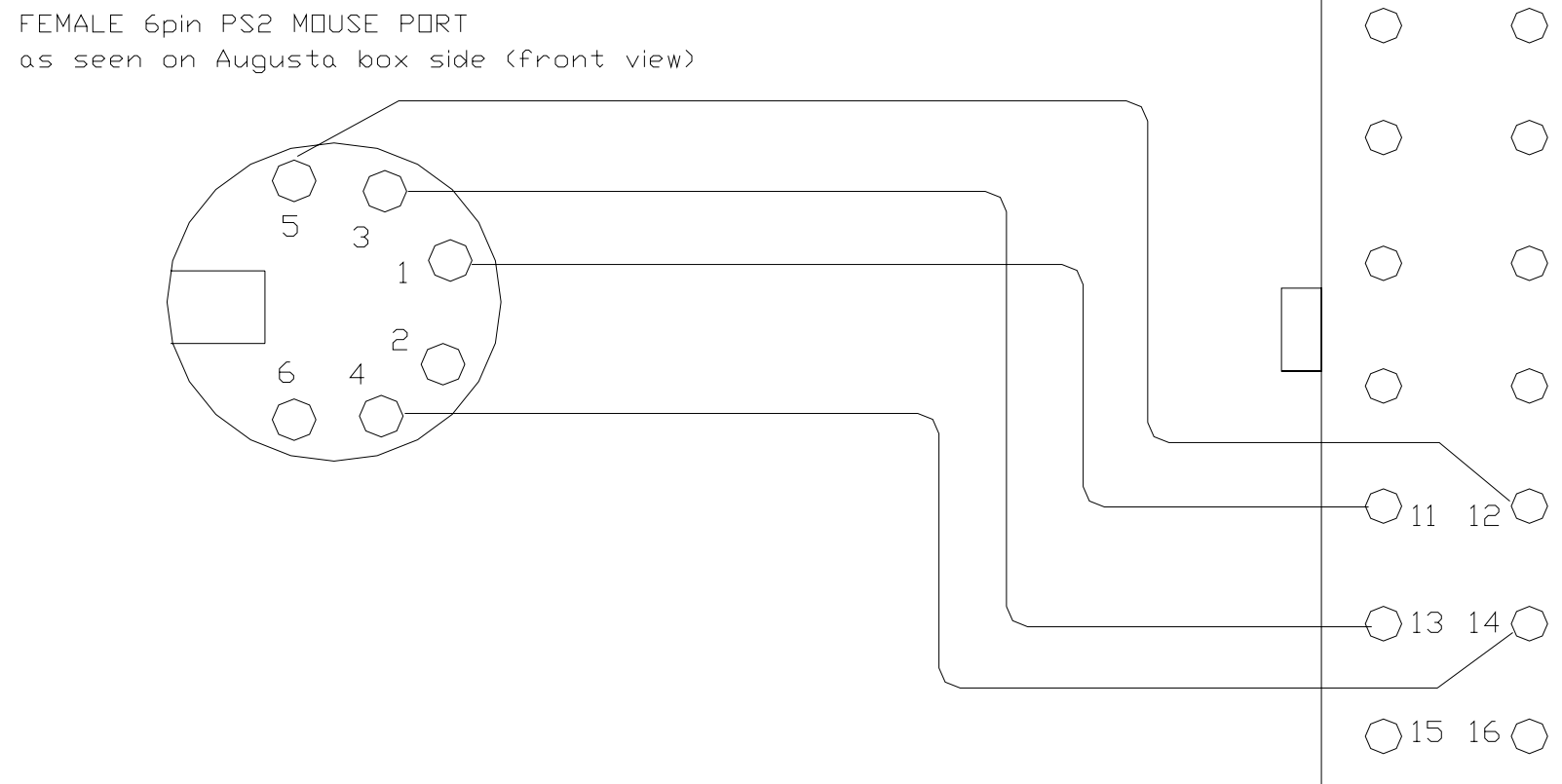
MOUSE
WIR-1014 (ASSEMBLY DRAWING WIR-1014)



MOUSE CON. 10pin

| PIN | SIGNAL |
|-----|----------------|
| 1 | CLOCK |
| 6 | +5V |
| 8 | DATA |
| 9 | GROUND |
| 10 | MECHANICAL KEY |
| | |
| | |

KEYBOARD
WIR-1013 (ASSEMBLY DRAWING WIR-1013)

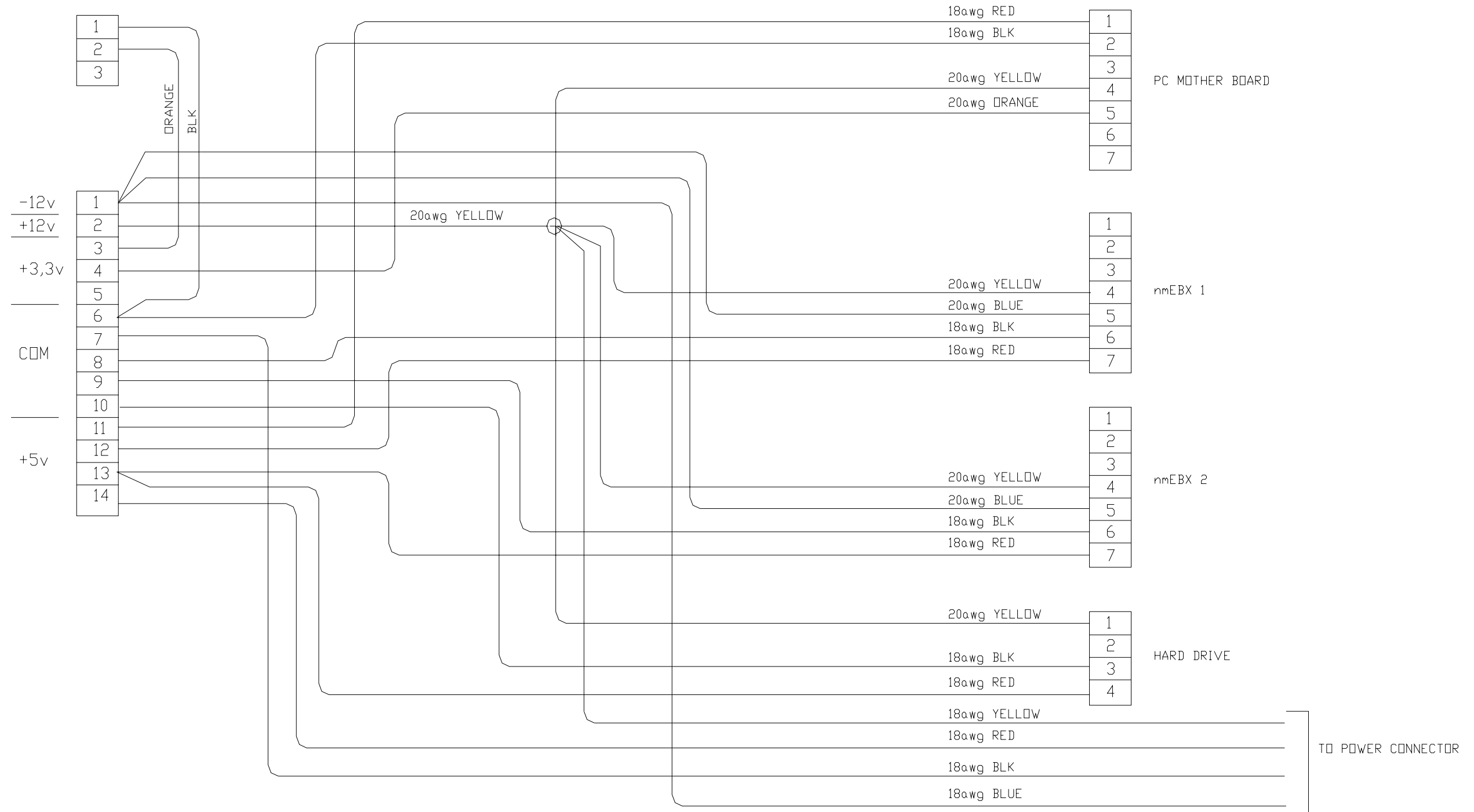


KEYBOARD CON. 16pin

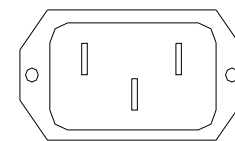
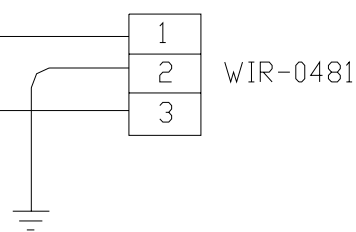
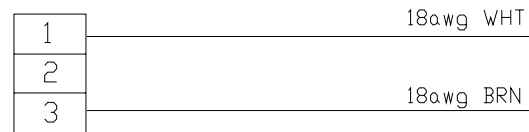
| PIN | SIGNAL |
|-----|-----------------|
| 11 | DATA |
| 12 | CLOCK |
| 13 | KEYBOARD GROUND |
| 14 | +5V |

Wrg_0070A_4of5_104d_power_harness_internal

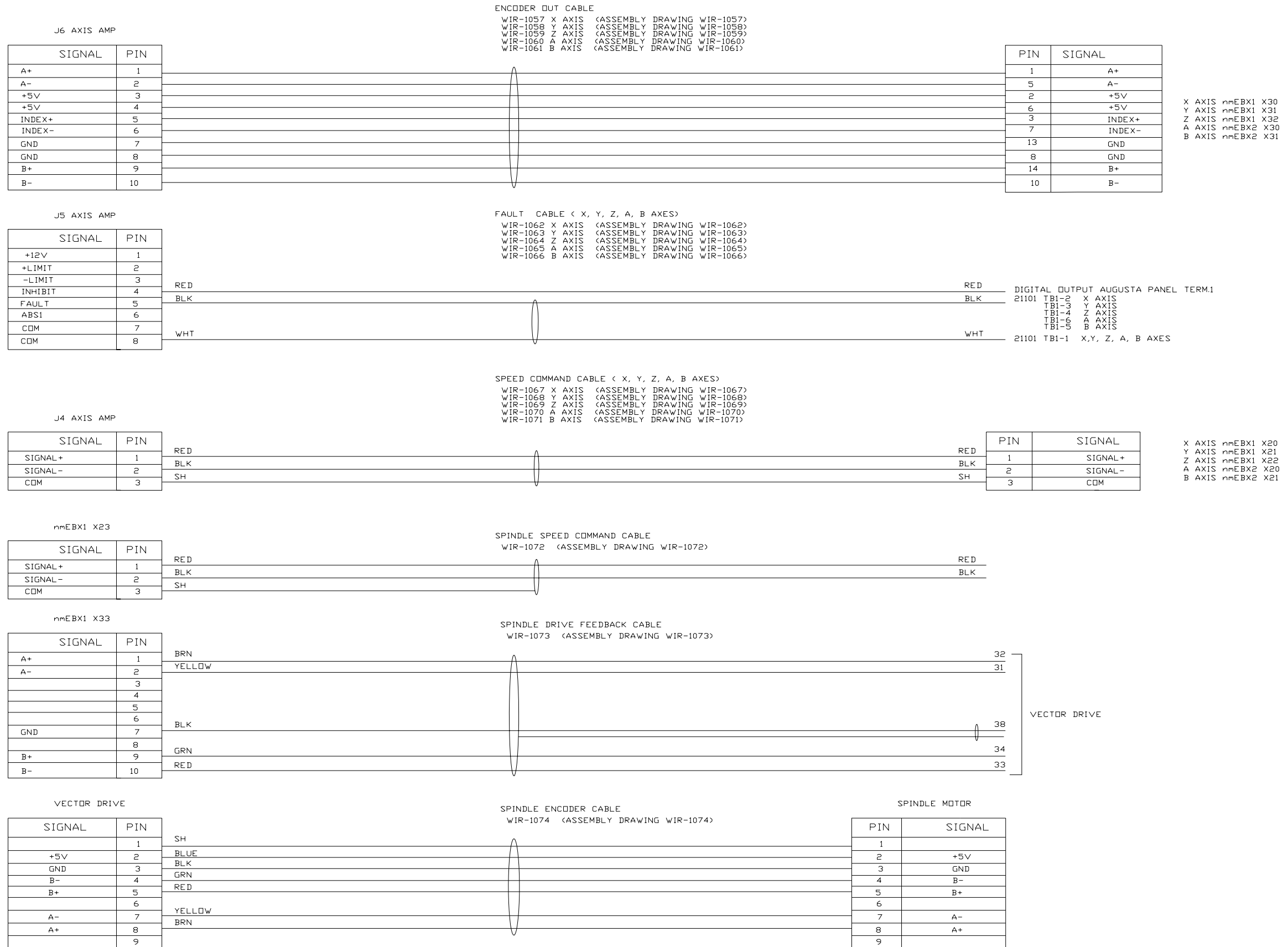
WIR-1012 (ASSEMBLY DRAWING WIR-1012)



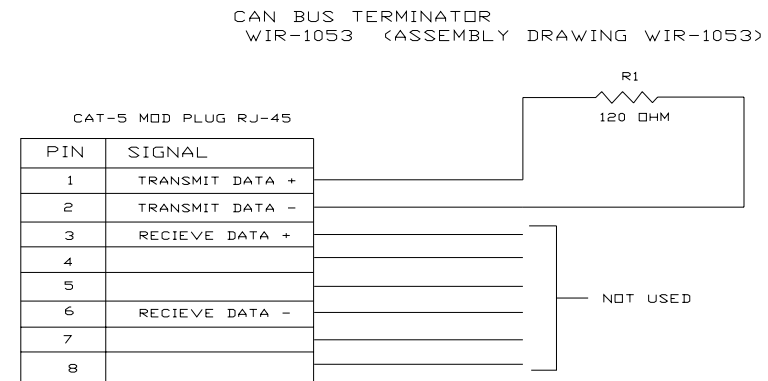
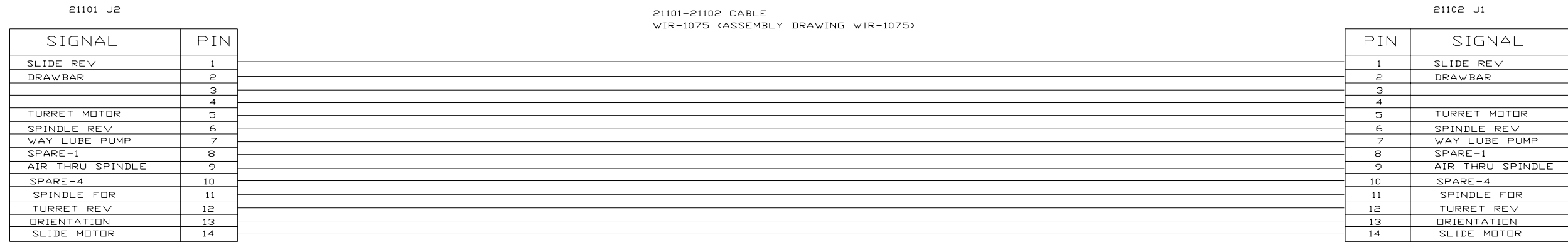
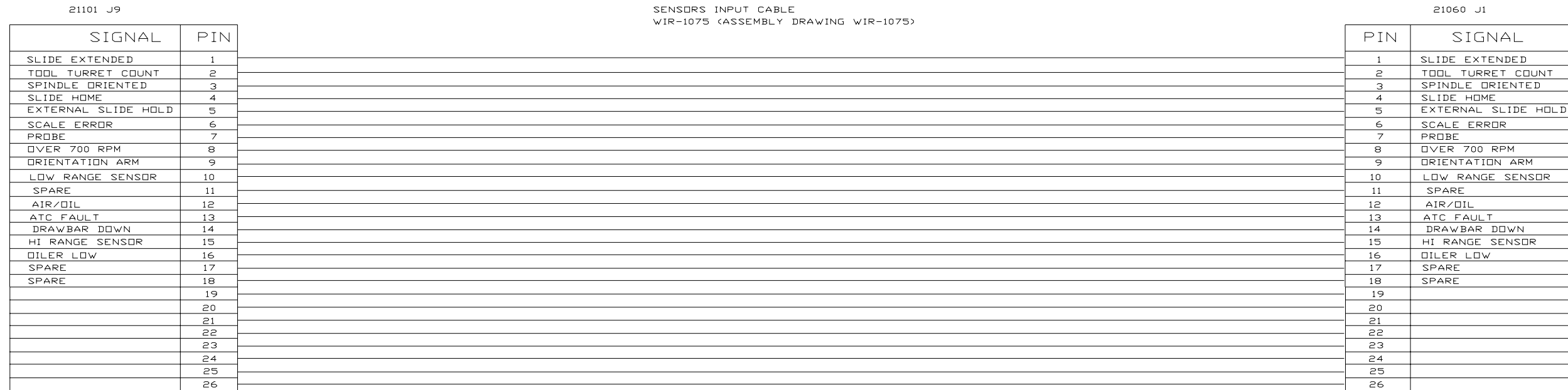
WIR-1024 (ASSEMBLY DRAWING WIR-1024)



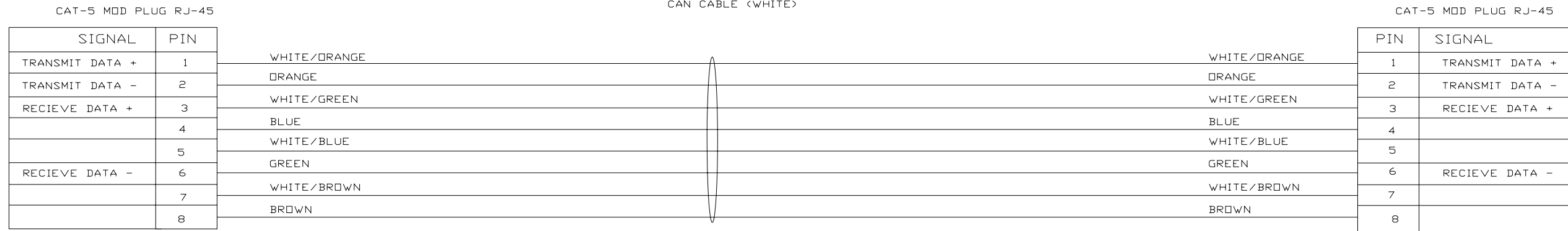
WRG_0074X_1of4_104d_control_cable



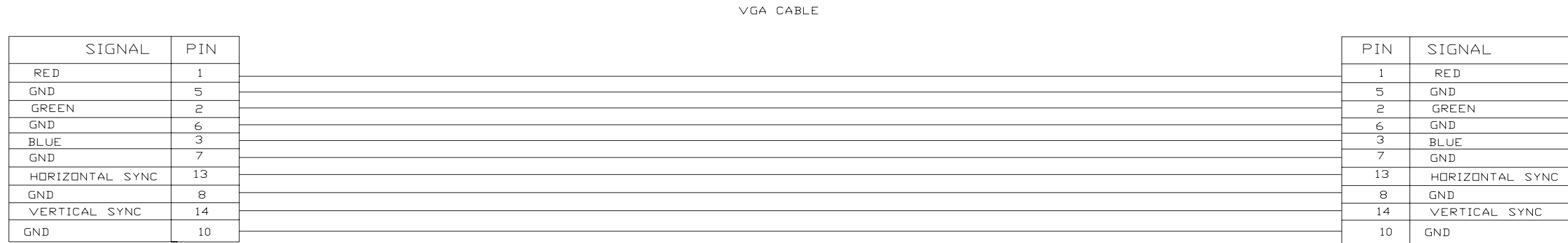
WRG_0074X_2of4_104d 21060 to 21101 21101 to 21102 cable



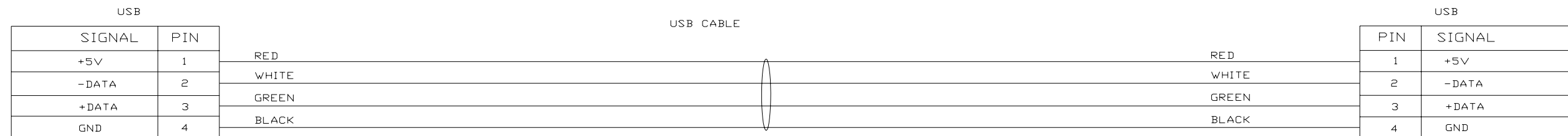
WRG_0074X_3of4_104d can vga usb cable



WIR-1077 AUGUSTA PANEL - 21101 J7 <ASSEMBLY DRAWING WIR-0077>
 WIR-1078 21101 J8 - 21550 J6 <ASSEMBLY DRAWING WIR-0078>
 WIR-1079 21550 J5 - 21330 J17 <ASSEMBLY DRAWING WIR-0079>
 WIR-1080 21330 J16 - INTERMIDIATION CONNECTION <ASSEMBLY DRAWING WIR-0080>
 WIR-1081 INTERMIDIATION CONNECTION - 21090 J7 <ASSEMBLY DRAWING WIR-0081>



WIR-1082 AUGUSTA PANEL - INTERMIDIATION CONNECTION <ASSEMBLY DRAWING WIR-0082>
 WIR-1083 INTERMIDIATION CONNECTION - MONITOR <ASSEMBLY DRAWING WIR-0083>



WIR-1084 AUGUSTA PANEL - INTERMIDIATION CONNECTION <ASSEMBLY DRAWING WIR-0084>
 WIR-1085 INTERMIDIATION CONNECTION - KEYBOARD <ASSEMBLY DRAWING WIR-0085>

WRG_0074X_4of4_104d motor signal power cable

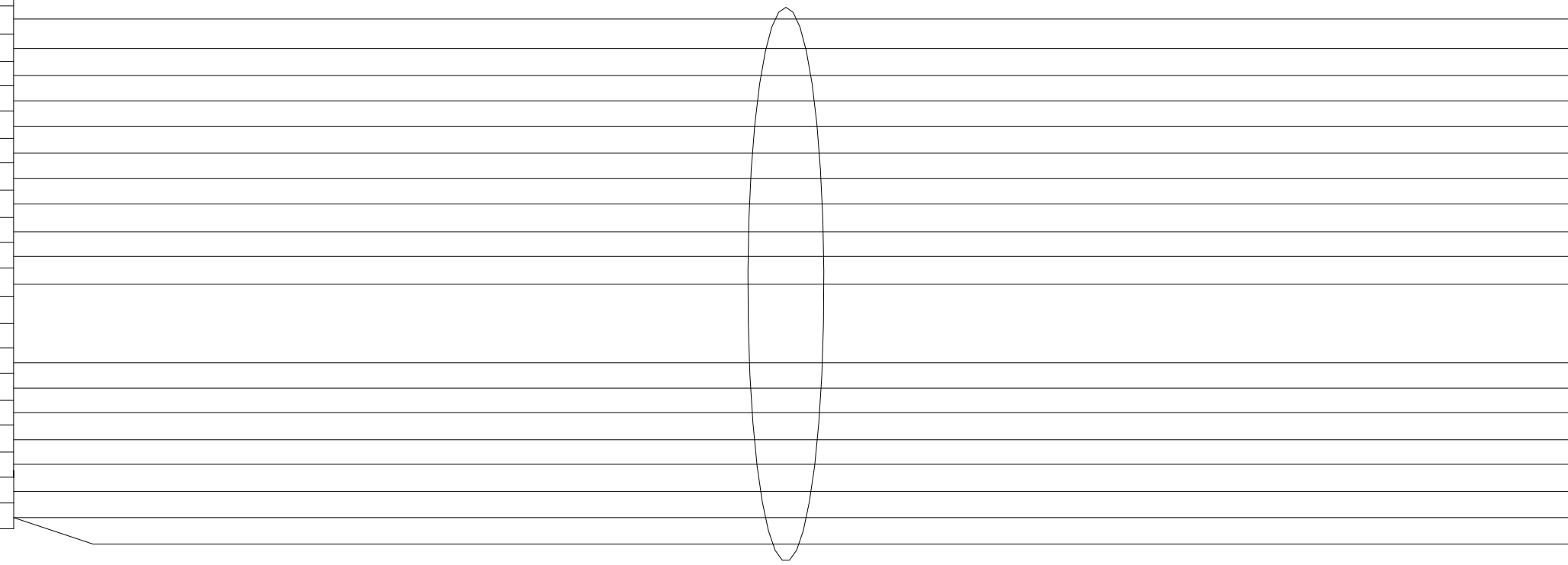
AMP J7

X, Y, Z, A, B AXES SIGNAL CABLE
WIR-xxxx (ASSEMBLY DRAWING WIR-xxxx)

MOTOR SIGNAL

| SIGNAL | PIN |
|---------------|-----|
| A+ | 1 |
| A- | 2 |
| +5V | 3 |
| +5V | 4 |
| M+ | 5 |
| M- | 6 |
| COM | 7 |
| COM | 8 |
| B+ | 9 |
| B- | 10 |
| ENCODER ERROR | 11 |
| nc | 12 |
| nc | 13 |
| U | 14 |
| V | 15 |
| W | 16 |
| TEMP | 17 |
| +5V | 18 |
| COM | 19 |
| SHIELD | 20 |

| PIN | SIGNAL |
|-----|-----------------|
| F | A+ |
| G | A- |
| S | +5V FOR ENCODER |
| V | +5V FOR ENCODER |
| U | M+ |
| K | M- |
| E | COM FOR ENCODER |
| R | COM FOR ENCODER |
| H | B+ |
| J | B- |
| T | ENCODER ERROR |
| | |
| M | HALL U |
| A | HALL V |
| B | HALL W |
| L | TEMP |
| N | +5V FOR HALL |
| P | COM FOR HALL |
| C | ENCODER SHIELD |
| D | HALL SHIELD |

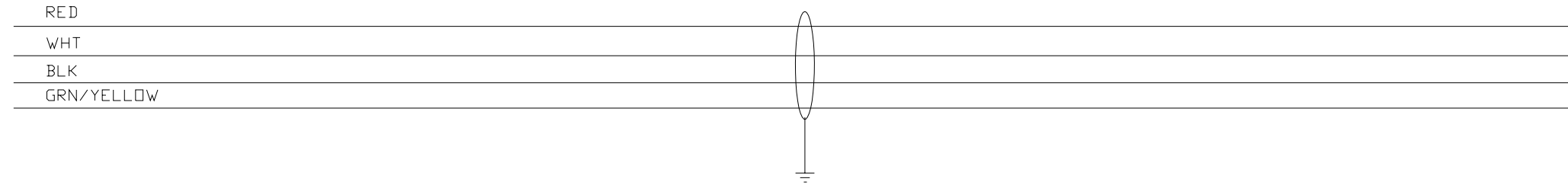


X, Y, Z, A, B AXES POWER CABLE
WIR-xxxx (ASSEMBLY DRAWING WIR-xxxx)

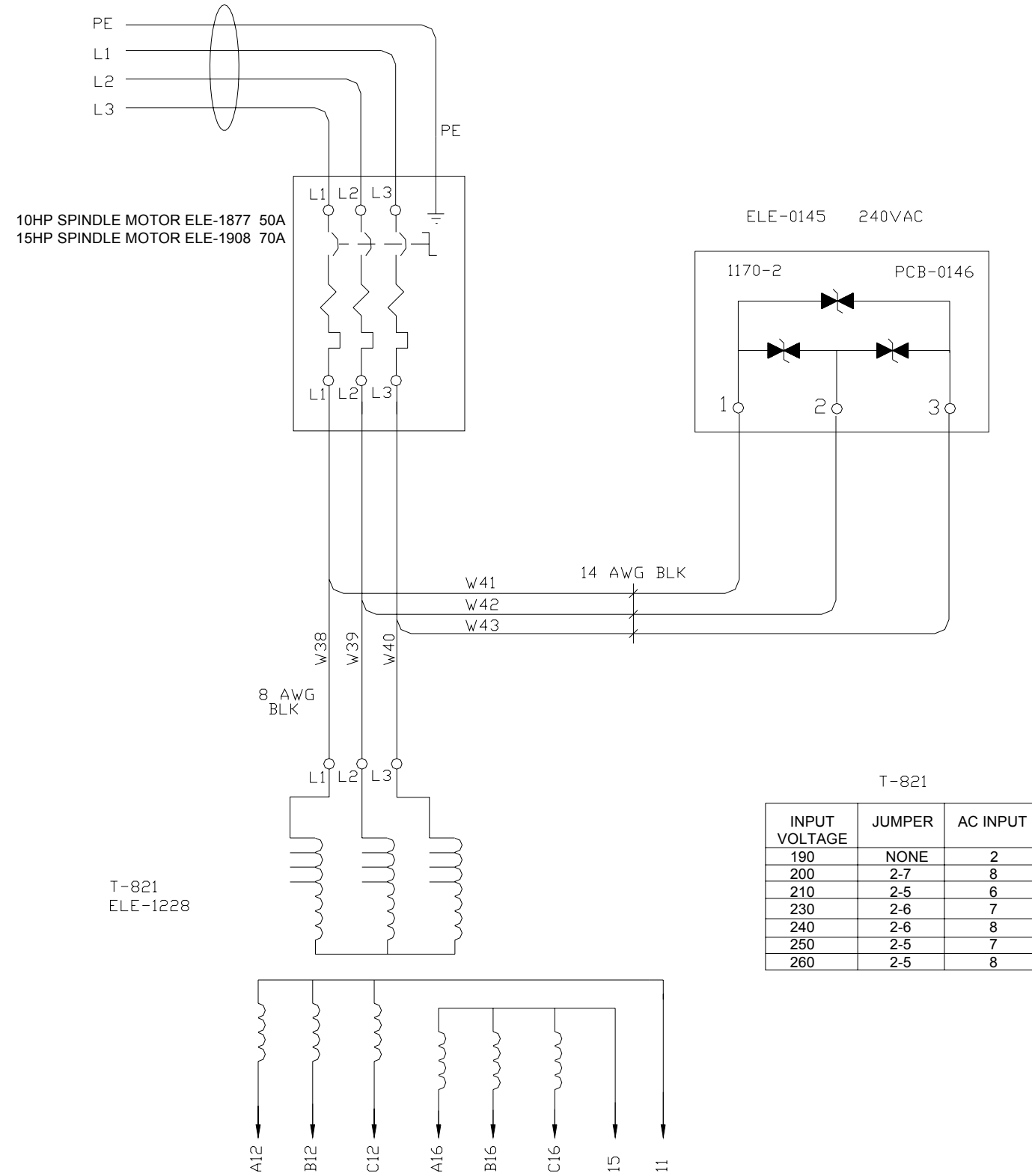
MOTOR POWER

RED
WHT
BLK
GRN/YELLOW

| PIN | SIGNAL |
|-----|---------|
| A | PHASE R |
| B | PHASE S |
| C | PHASE T |
| D | GND |
| E | NC |

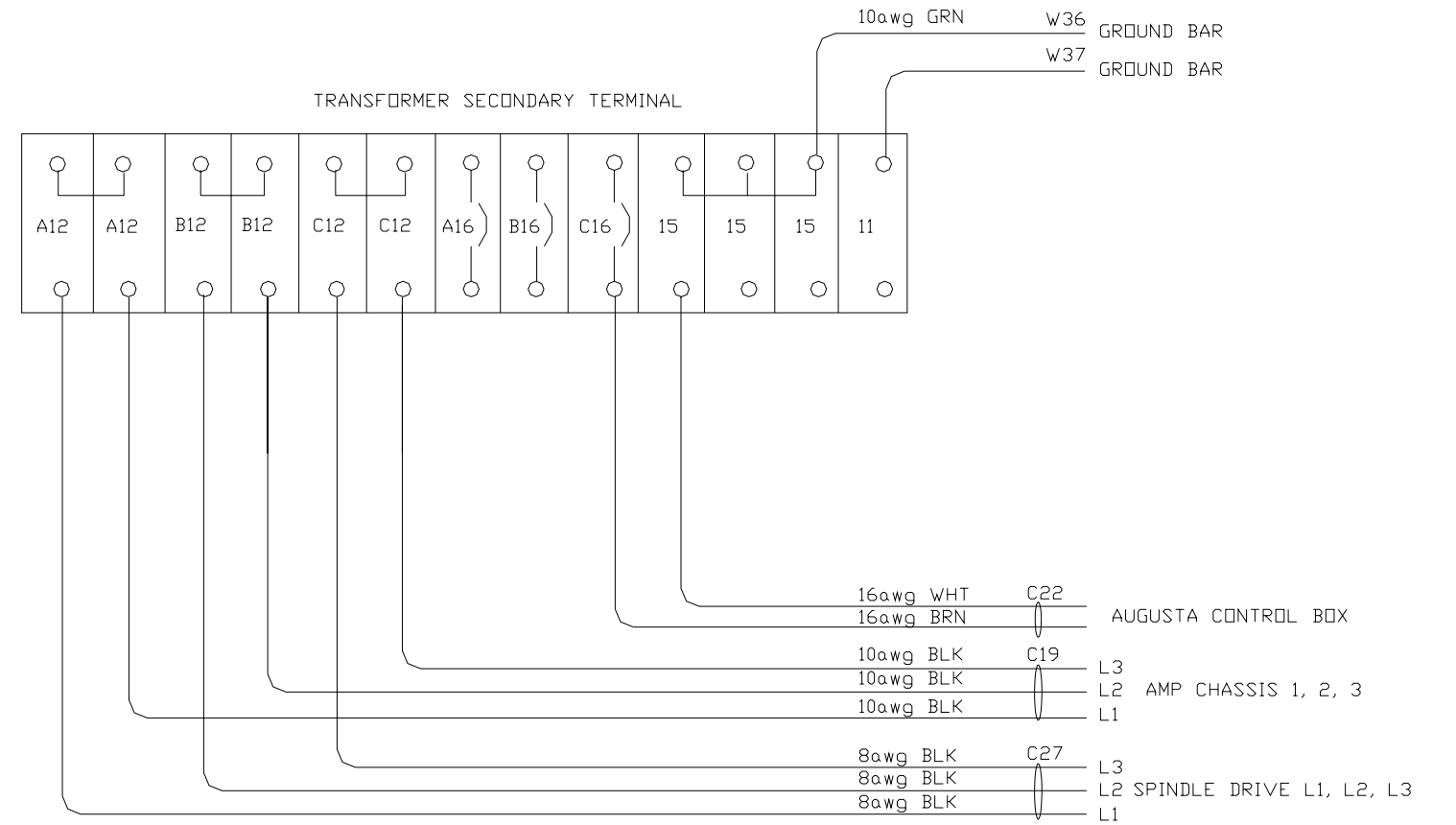


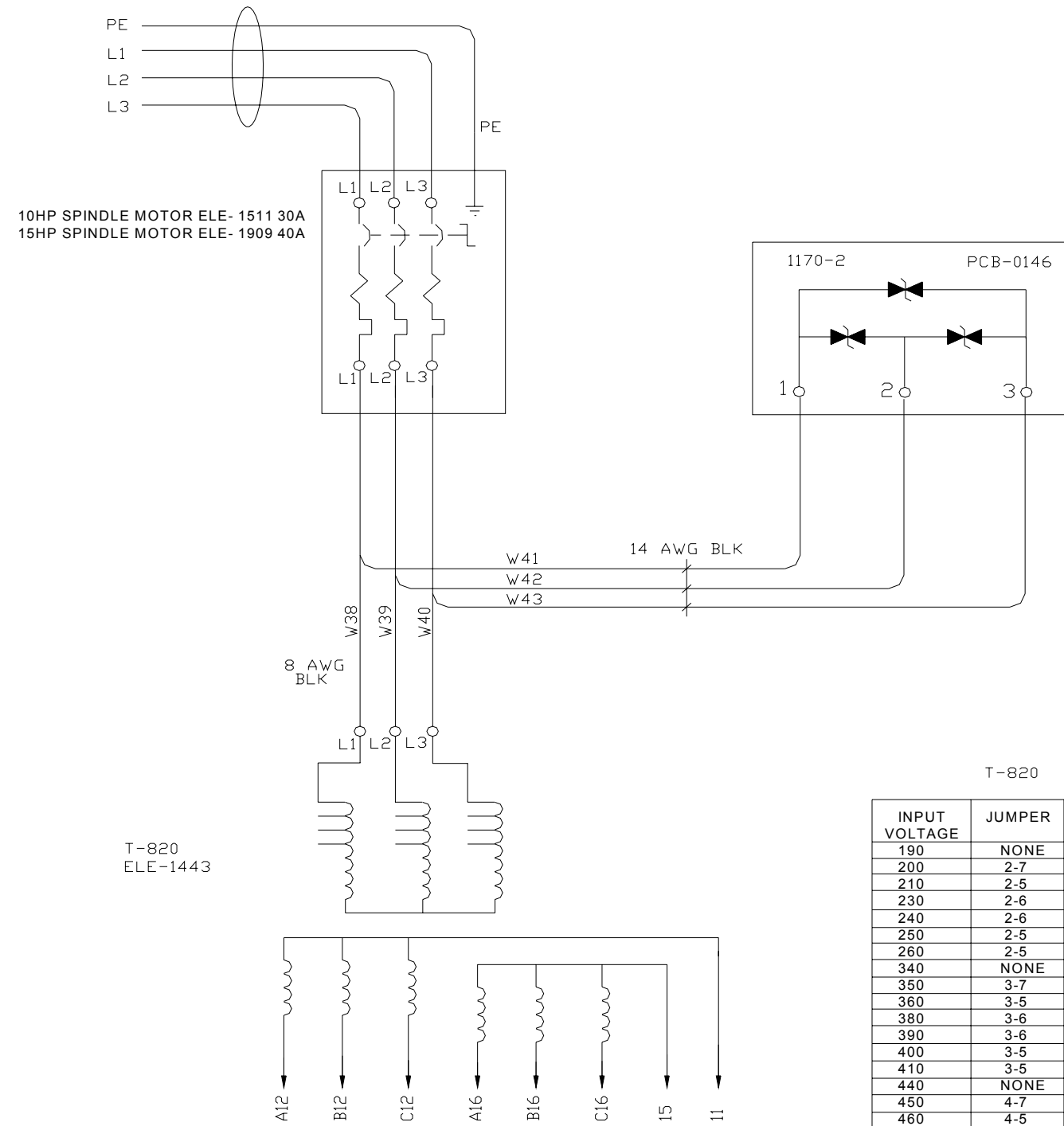
WRG_0075X_1of6_104D_trans240



T-821

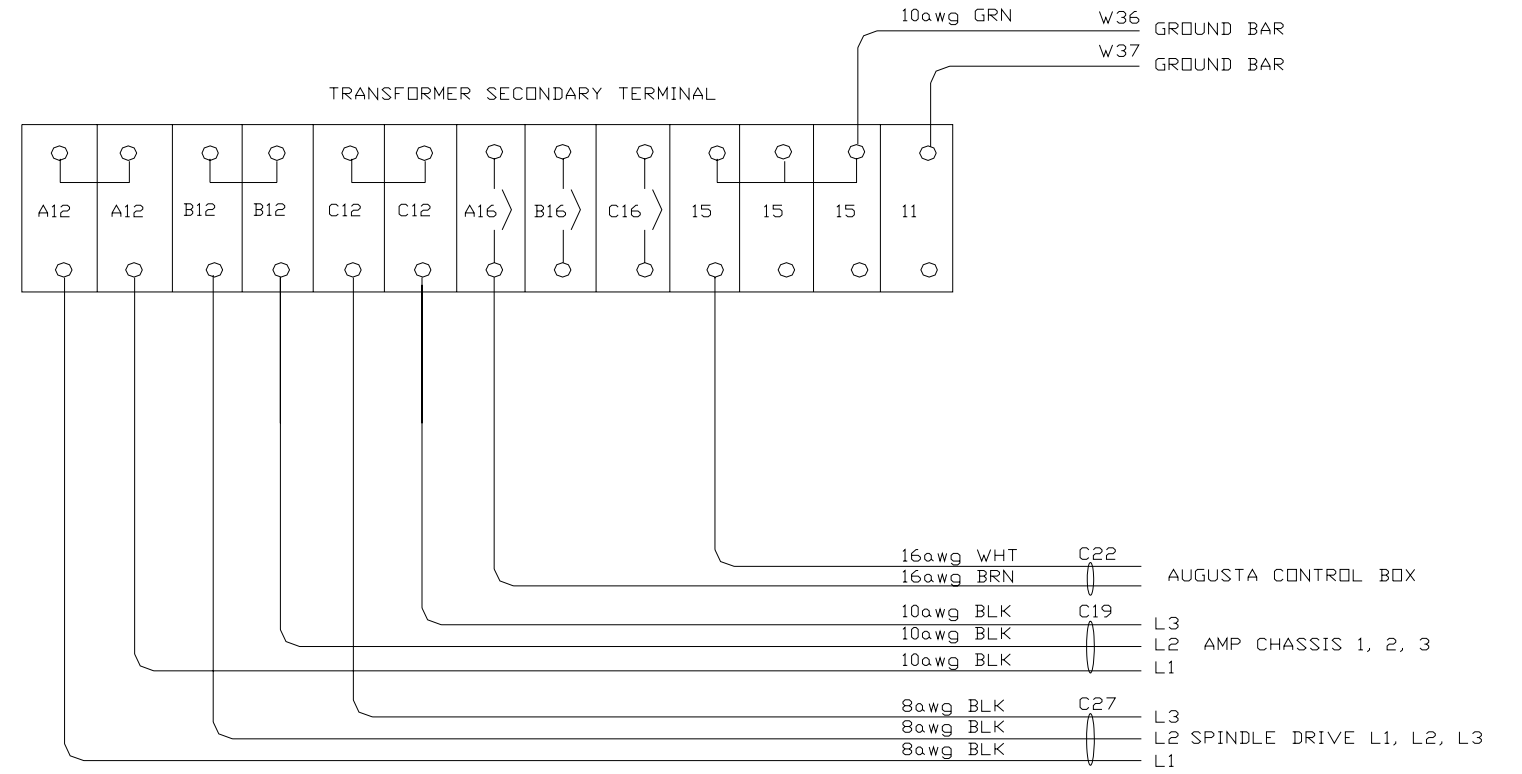
| INPUT VOLTAGE | JUMPER | AC INPUT |
|---------------|--------|----------|
| 190 | NONE | 2 |
| 200 | 2-7 | 8 |
| 210 | 2-5 | 6 |
| 230 | 2-6 | 7 |
| 240 | 2-6 | 8 |
| 250 | 2-5 | 7 |
| 260 | 2-5 | 8 |



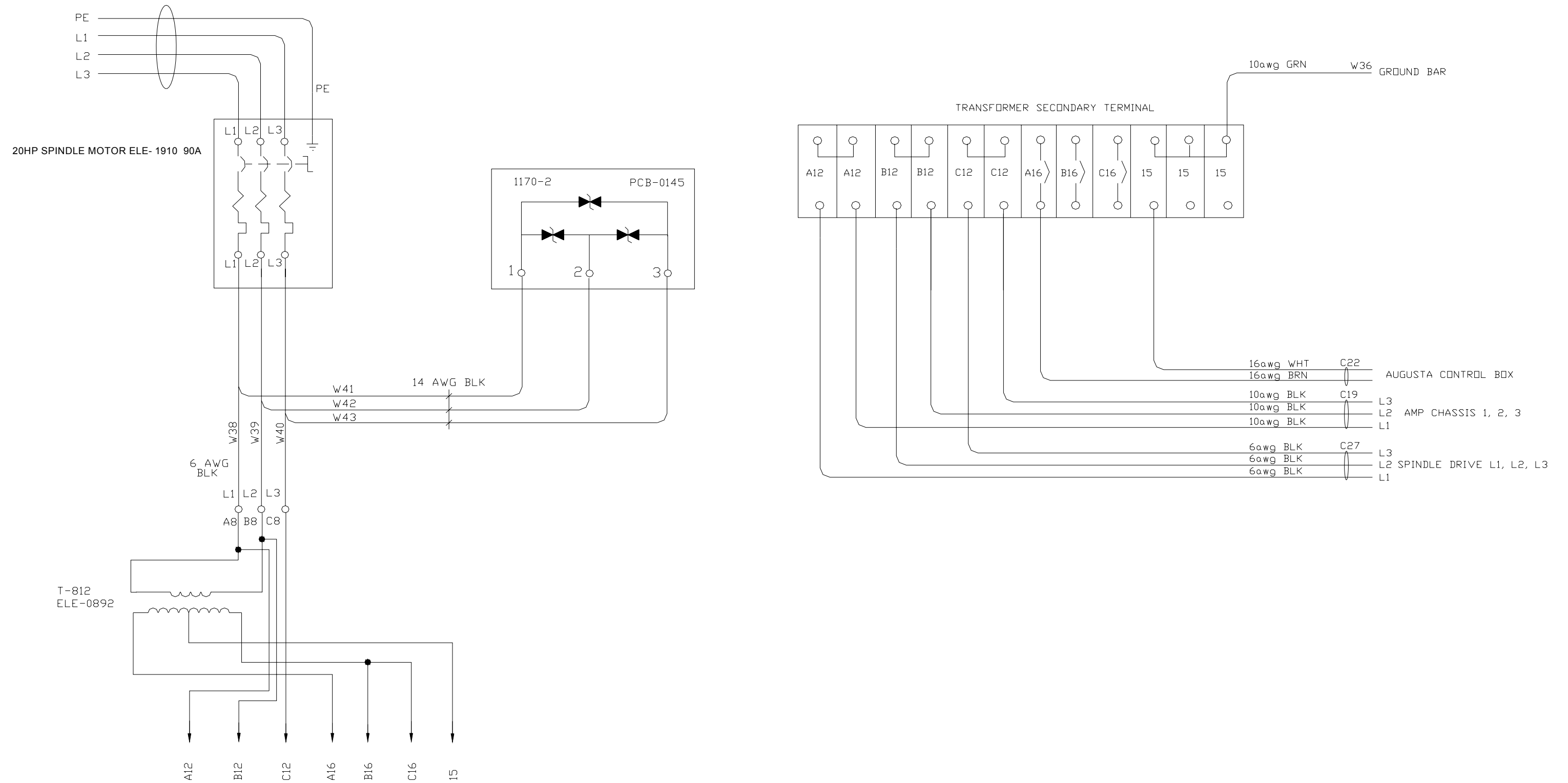


T-820

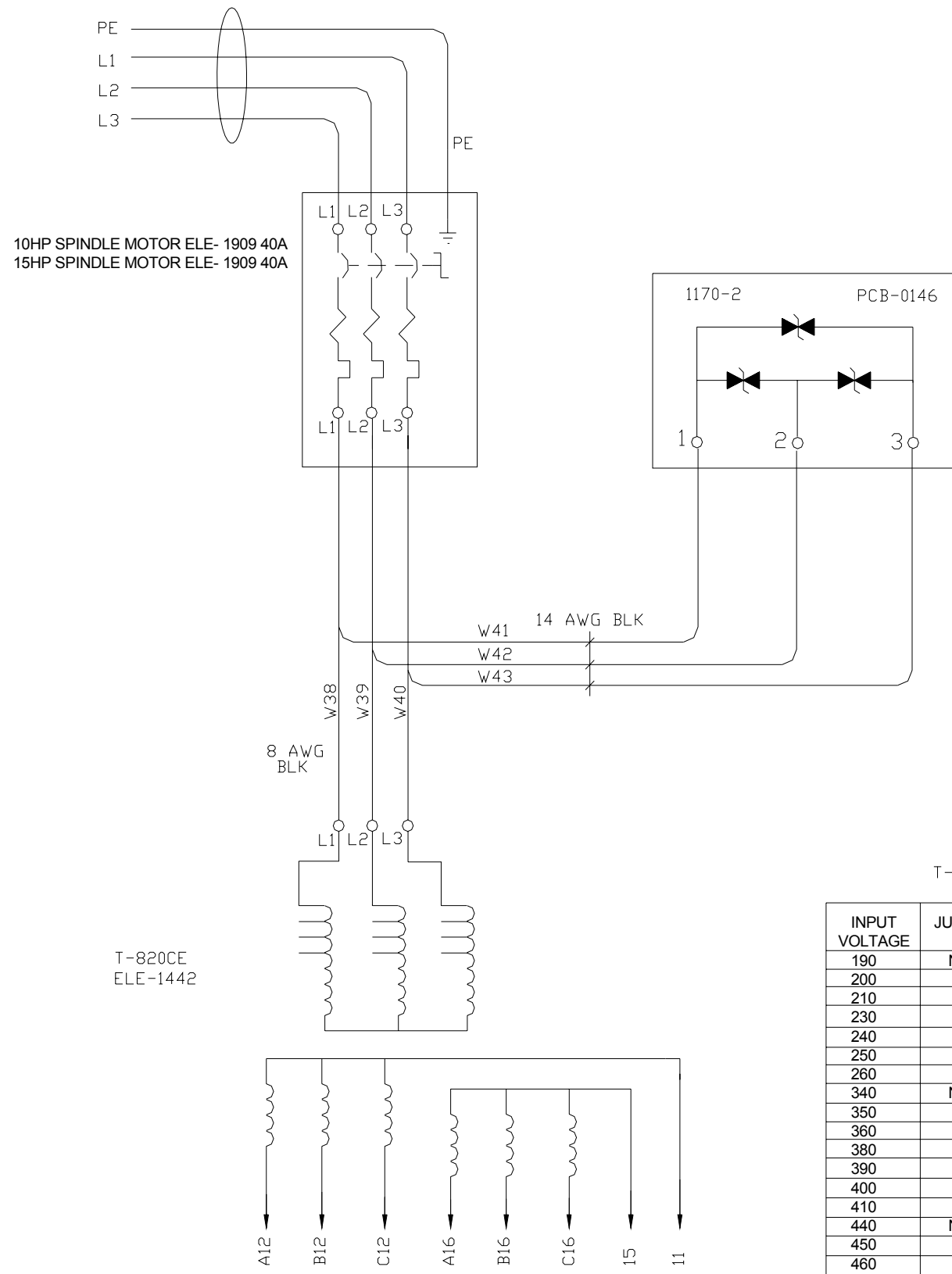
| INPUT VOLTAGE | JUMPER | AC INPUT |
|---------------|--------|----------|
| 190 | NONE | 2 |
| 200 | 2-7 | 8 |
| 210 | 2-5 | 6 |
| 230 | 2-6 | 7 |
| 240 | 2-6 | 8 |
| 250 | 2-5 | 7 |
| 260 | 2-5 | 8 |
| 340 | NONE | 3 |
| 350 | 3-7 | 8 |
| 360 | 3-5 | 6 |
| 380 | 3-6 | 7 |
| 390 | 3-6 | 8 |
| 400 | 3-5 | 7 |
| 410 | 3-5 | 8 |
| 440 | NONE | 4 |
| 450 | 4-7 | 8 |
| 460 | 4-5 | 6 |
| 480 | 4-6 | 7 |
| 490 | 4-6 | 8 |
| 500 | 4-5 | 7 |
| 501 | 4-5 | 8 |



WRG_0075X_3of6_104D_transVHT

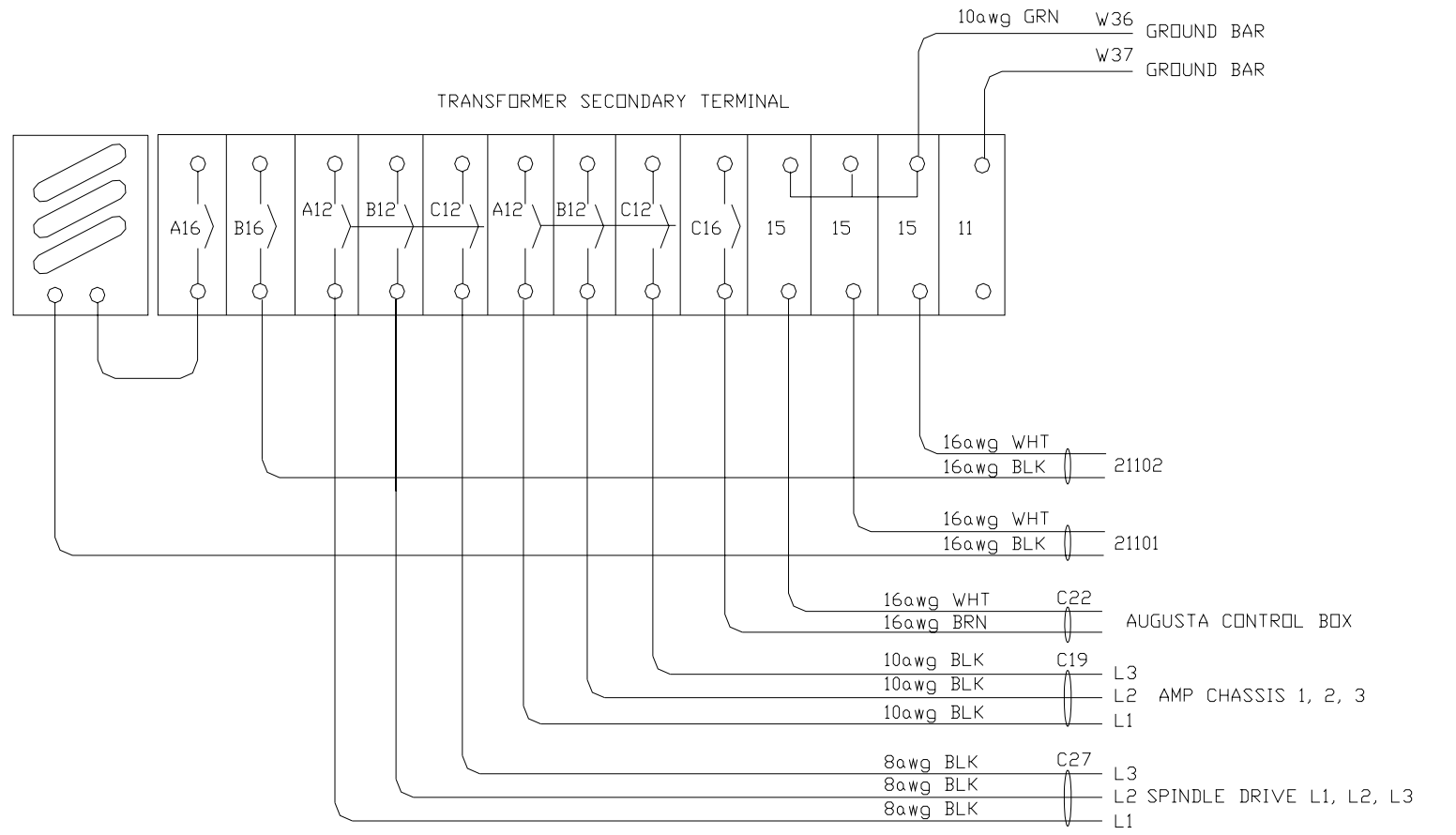


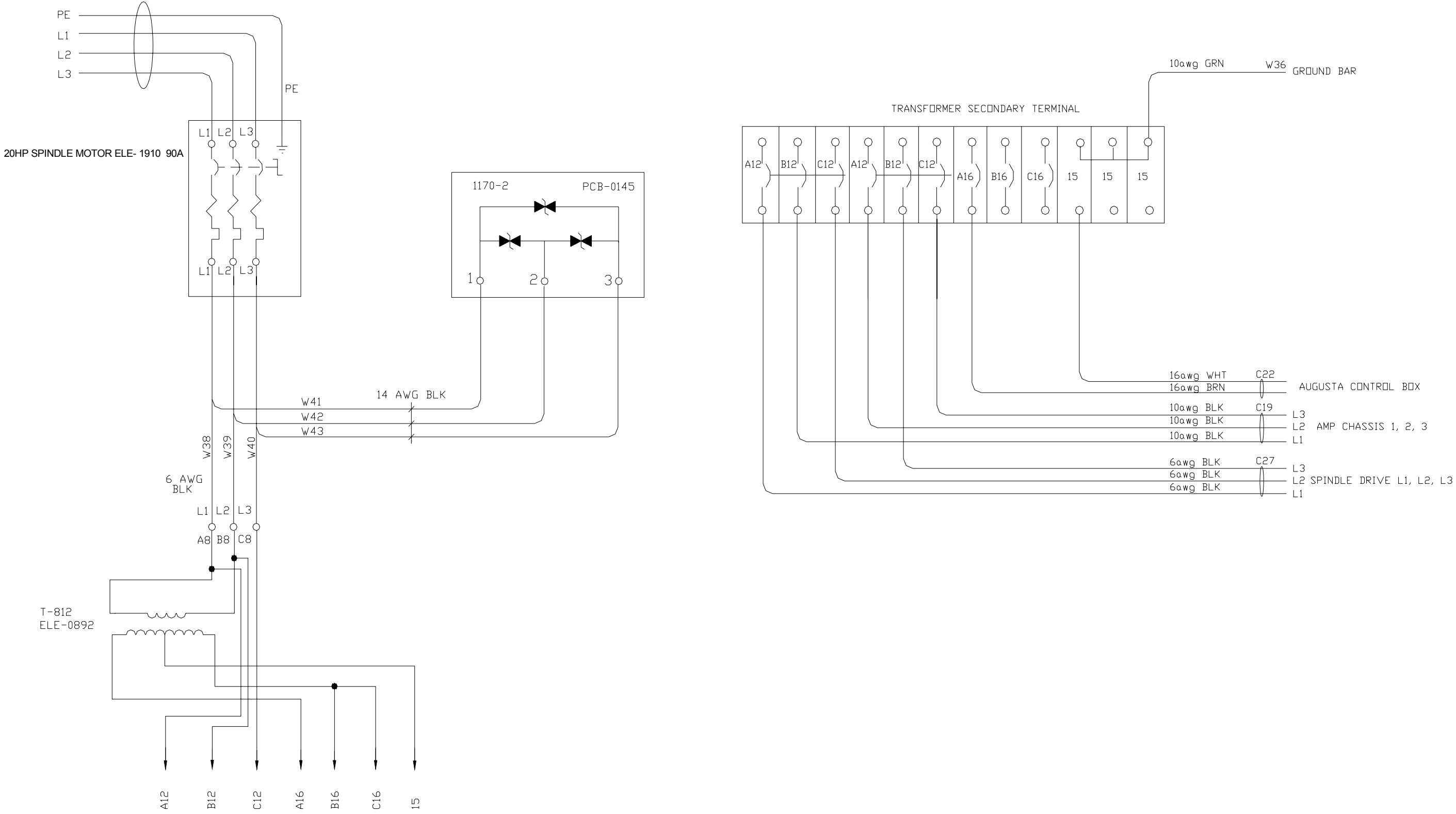
WRG_0075X_4of6_104D_transCE



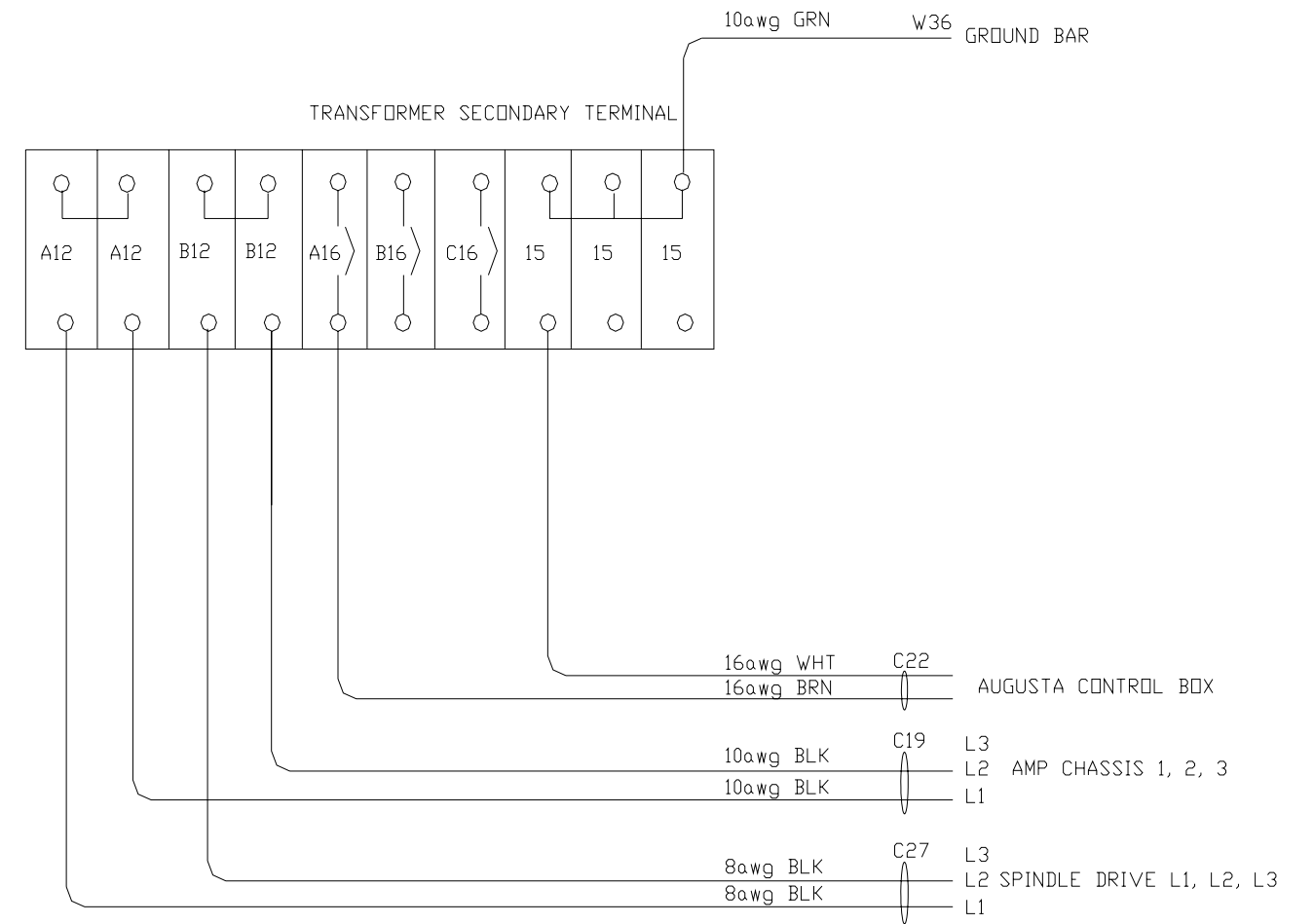
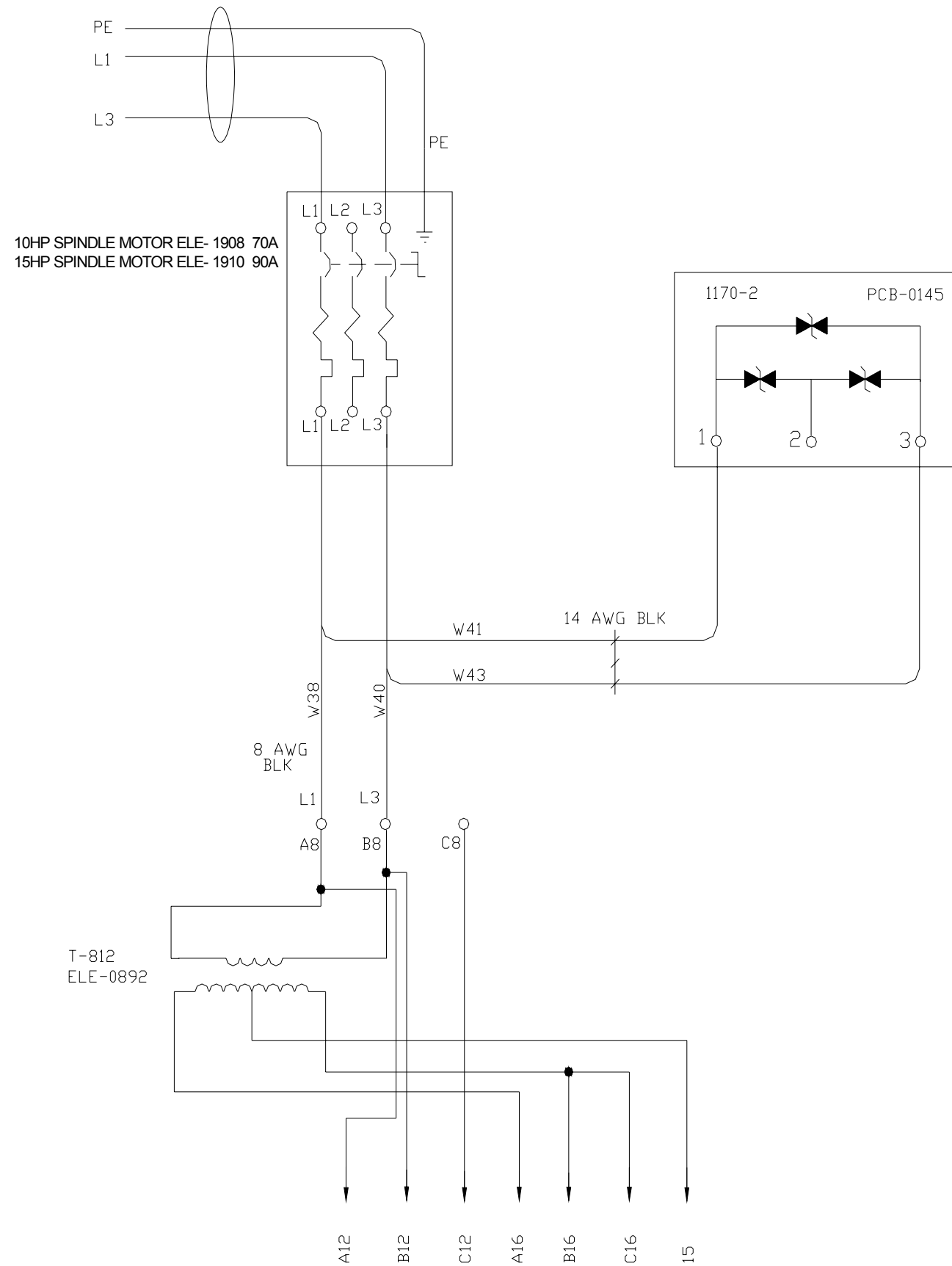
T-820

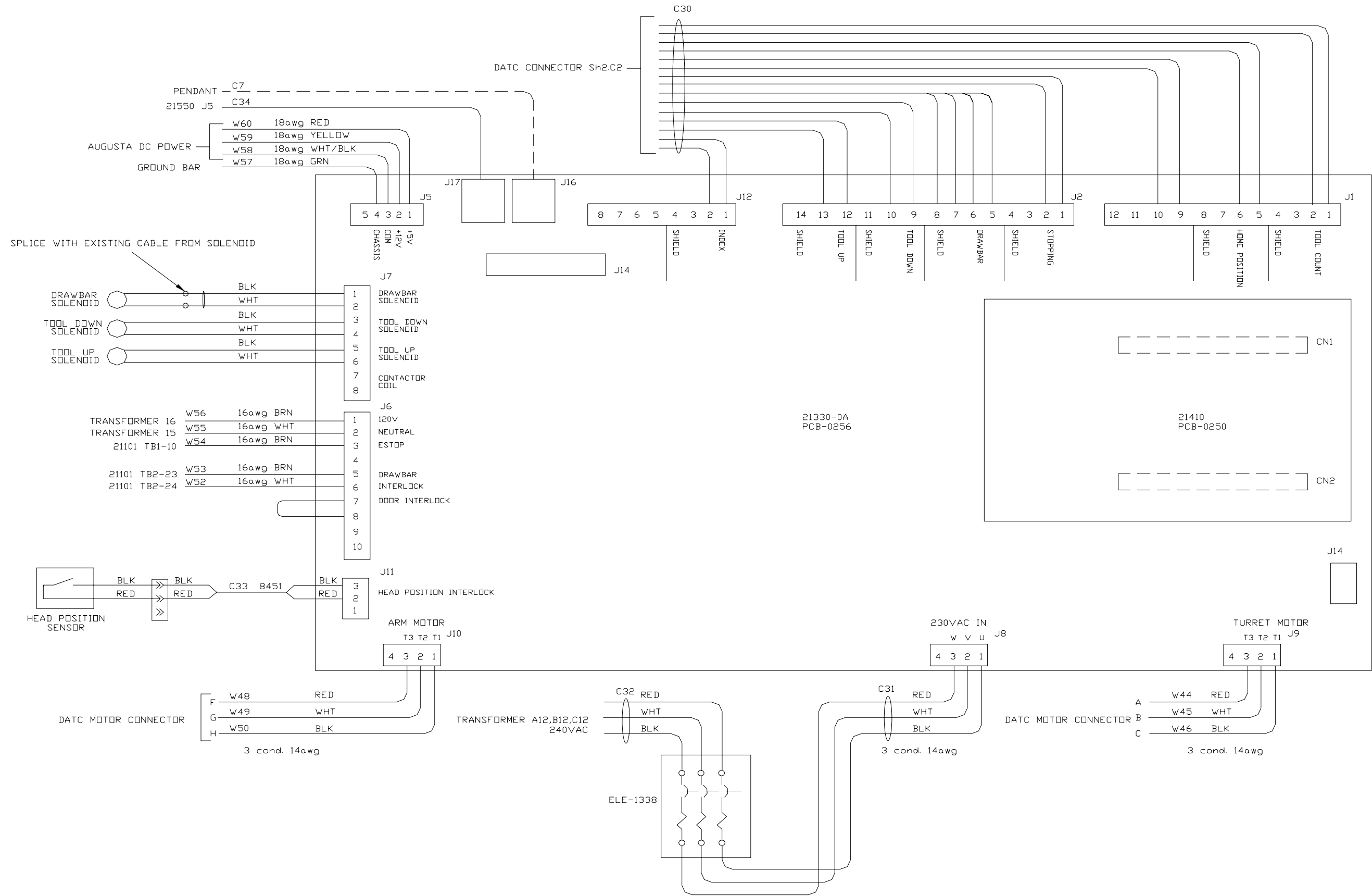
| INPUT VOLTAGE | JUMPER | AC INPUT |
|---------------|--------|----------|
| 190 | NONE | 2 |
| 200 | 2-7 | 8 |
| 210 | 2-5 | 6 |
| 230 | 2-6 | 7 |
| 240 | 2-6 | 8 |
| 250 | 2-5 | 7 |
| 260 | 2-5 | 8 |
| 340 | NONE | 3 |
| 350 | 3-7 | 8 |
| 360 | 3-5 | 6 |
| 380 | 3-6 | 7 |
| 390 | 3-6 | 8 |
| 400 | 3-5 | 7 |
| 410 | 3-5 | 8 |
| 440 | NONE | 4 |
| 450 | 4-7 | 8 |
| 460 | 4-5 | 6 |
| 480 | 4-6 | 7 |
| 490 | 4-6 | 8 |
| 500 | 4-5 | 7 |
| 501 | 4-5 | 8 |



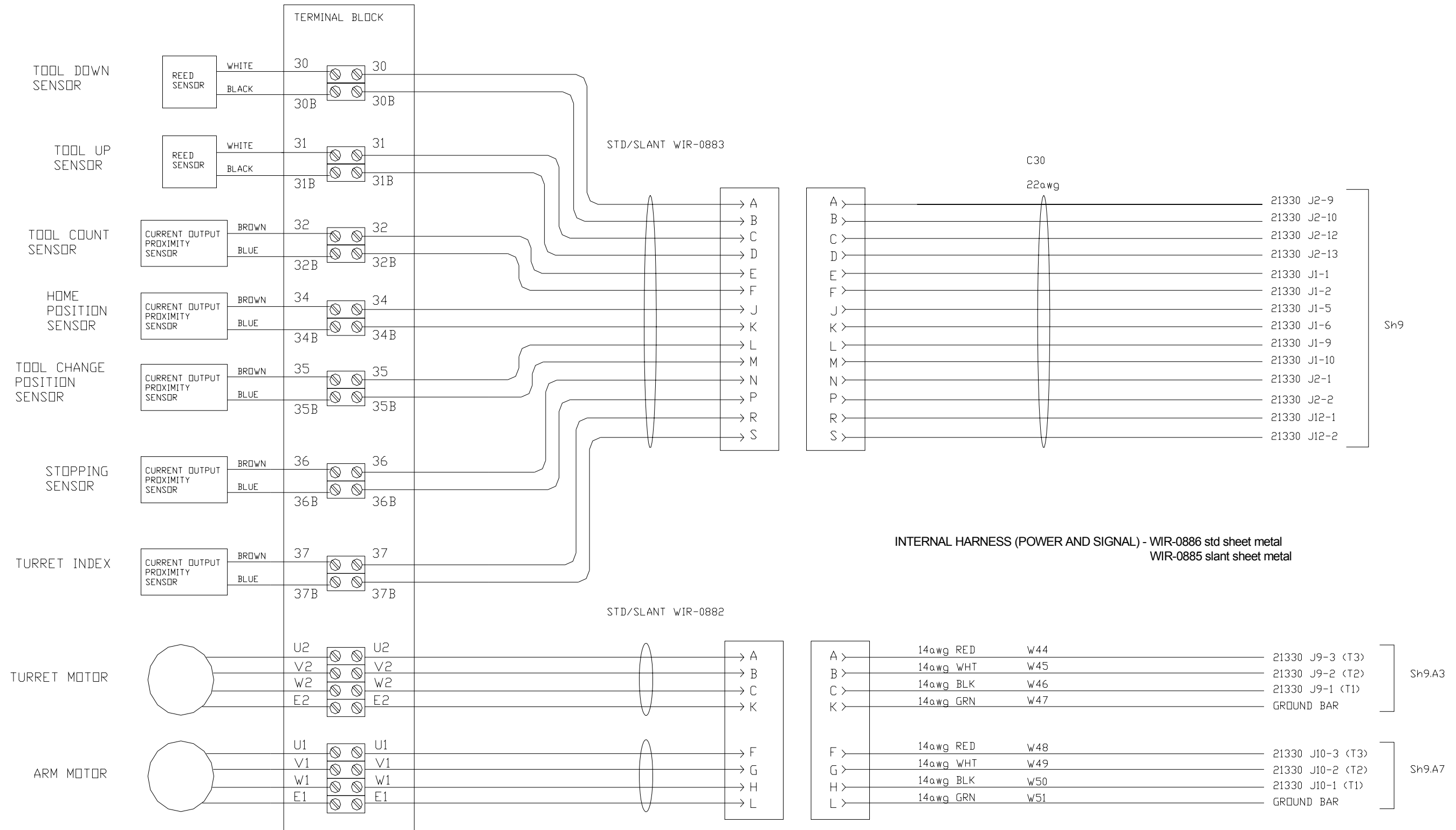


WRG_0075X_6of6_104D_trans_single_ph

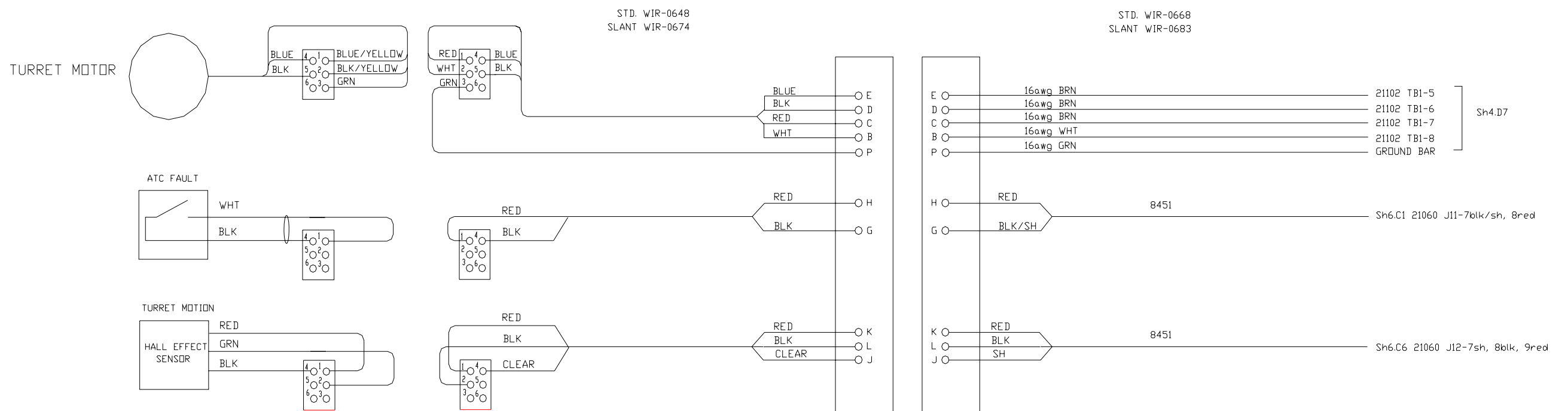
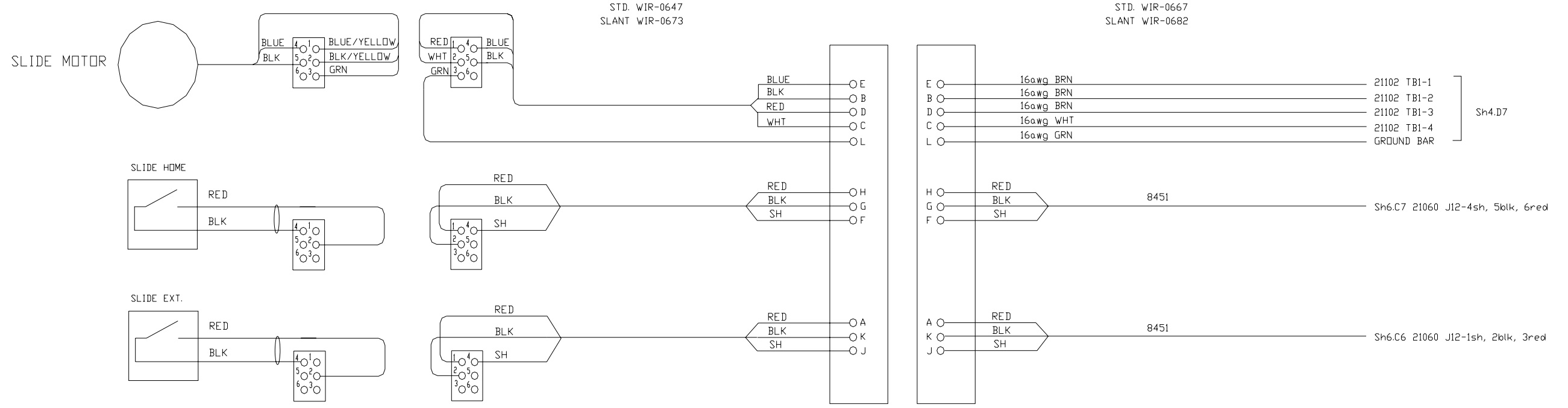




NOTE: UNNAMED WIRES AND CABLES BELONG TO DATC HARNESS

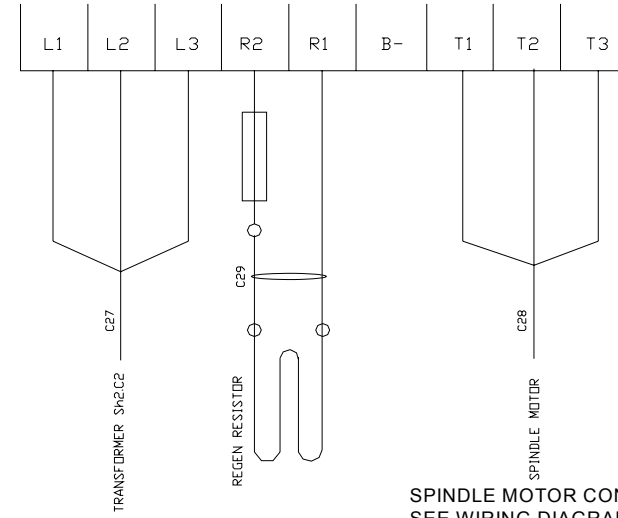
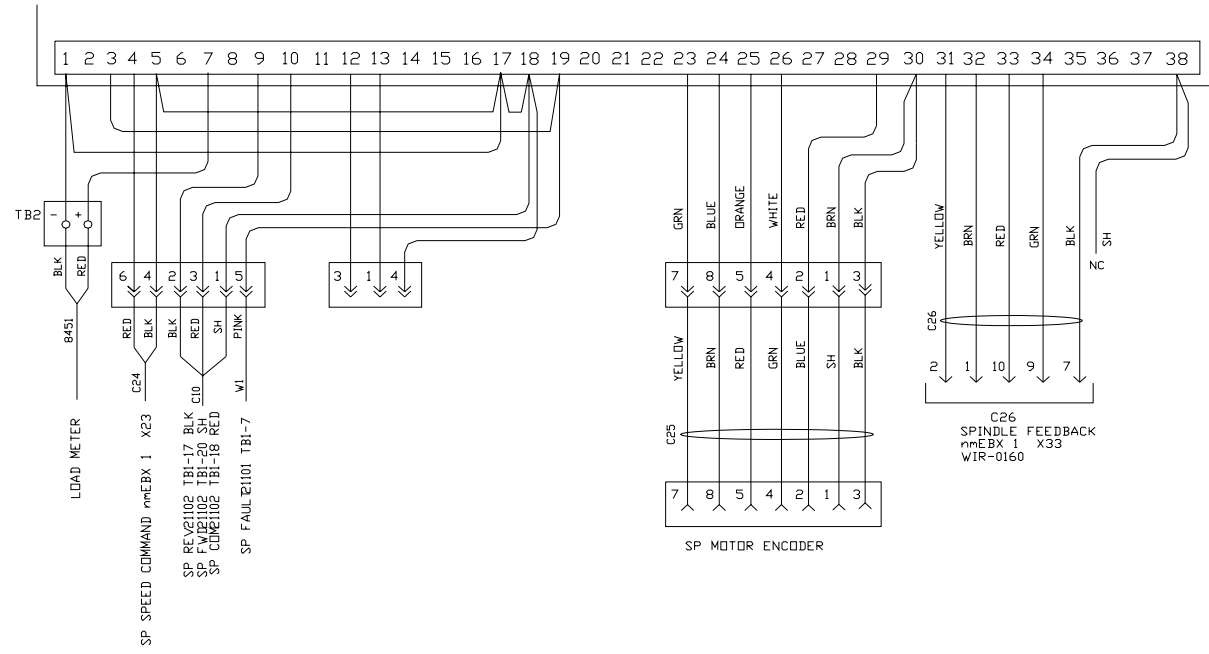


NOTE: - TOOL CHANGER JUNCTION BOX IS MOUNTED ON TOOL CHANGER.



WRG_0079X_104D_spindle_drive

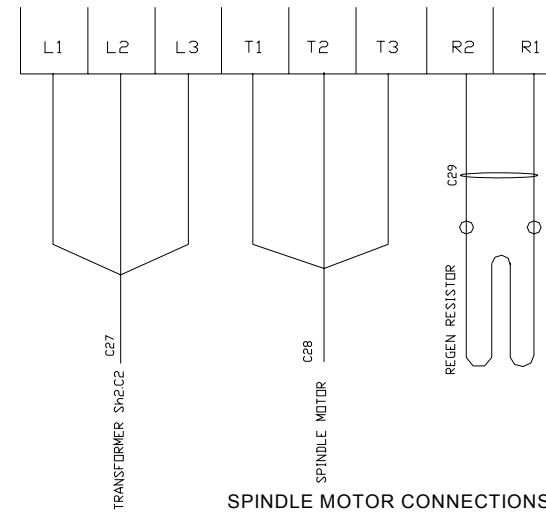
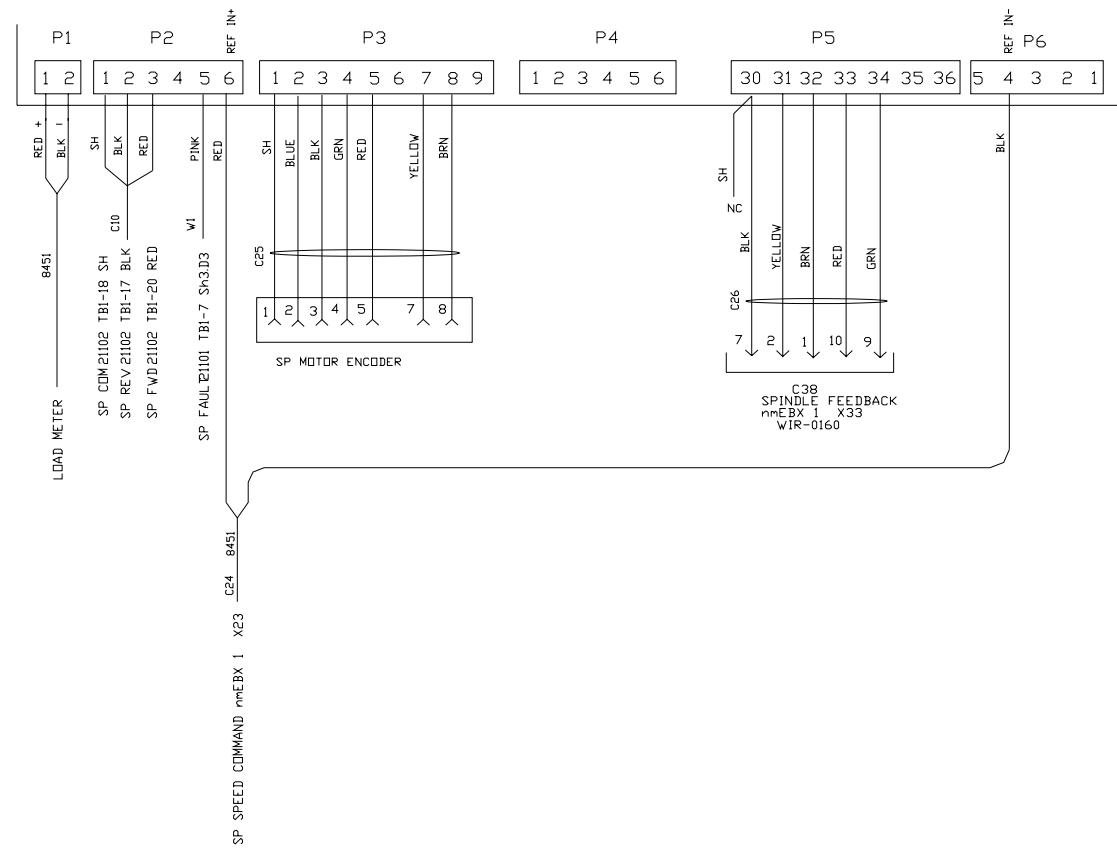
BALDOR VECTOR DRIVE



VMC-2016L, 3016L, 2216
3016, 4020 STD 10000 RPM **INV-0041**
VMC-2216, 3016, 3020, 4020
4525, 6030, 8030 10000 RPM **INV-0020**

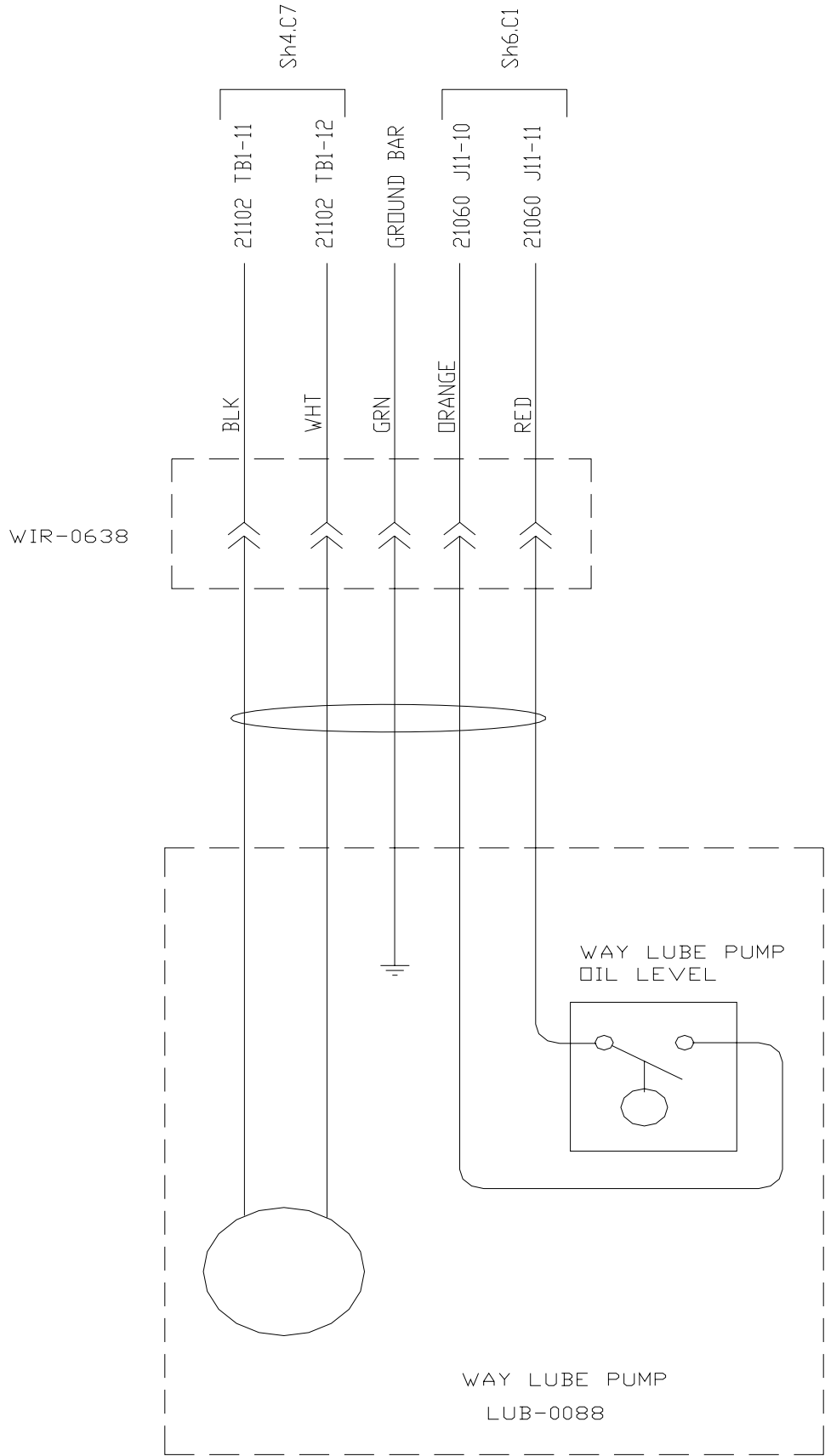
SPINDLE MOTOR CONNECTIONS
SEE WIRING DIAGRAMS: WRG-0023(WYE DELTA)
WRG-0024

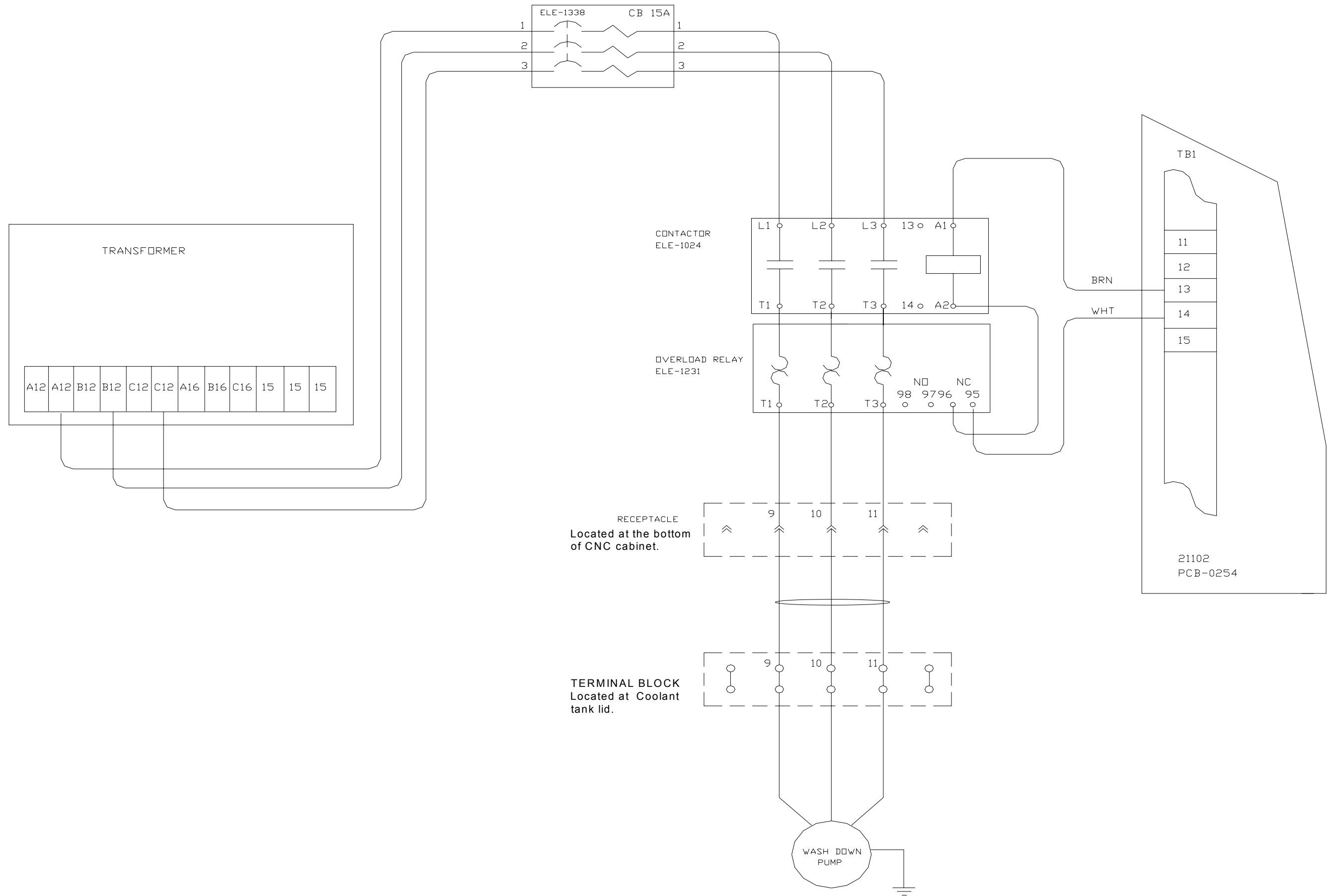
AMC VECTOR DRIVE



VMC-2216, 3016, 3020, 4020
4525, 6030, 8030 10000 RPM **INV-0056**

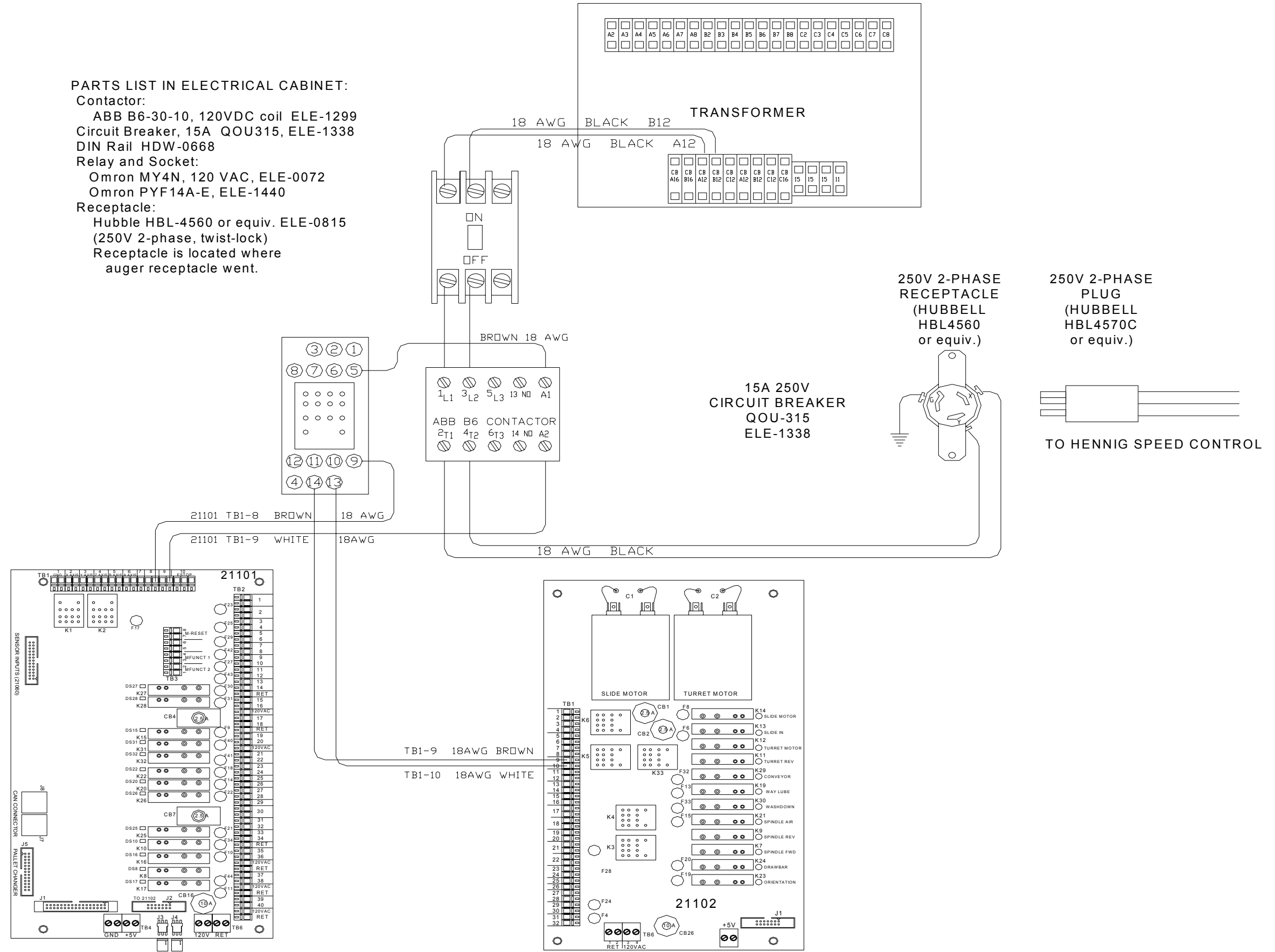
SPINDLE MOTOR CONNECTIONS
SEE WIRING DIAGRAMS: WRG-0023(WYE DELTA)
WRG-0024



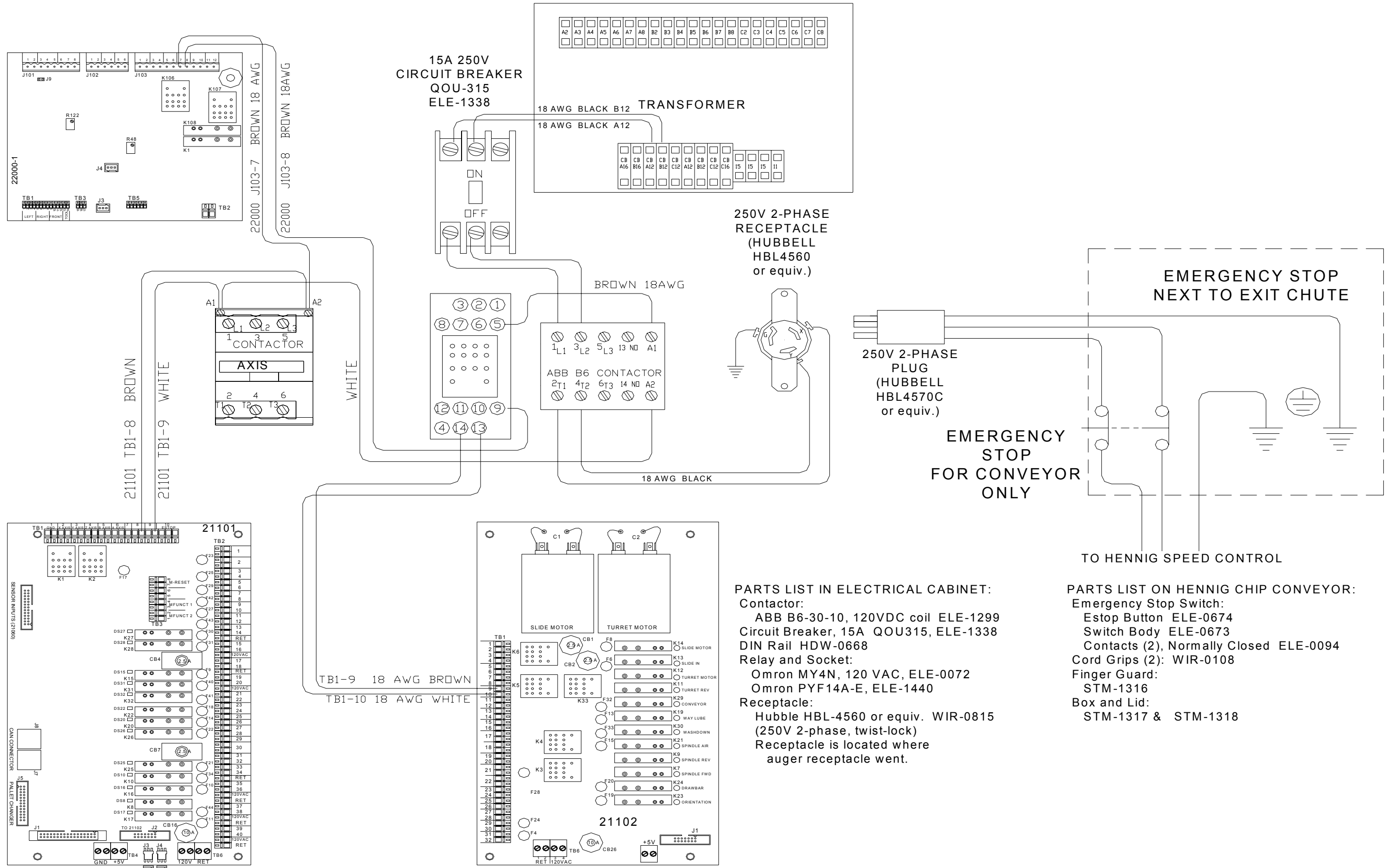


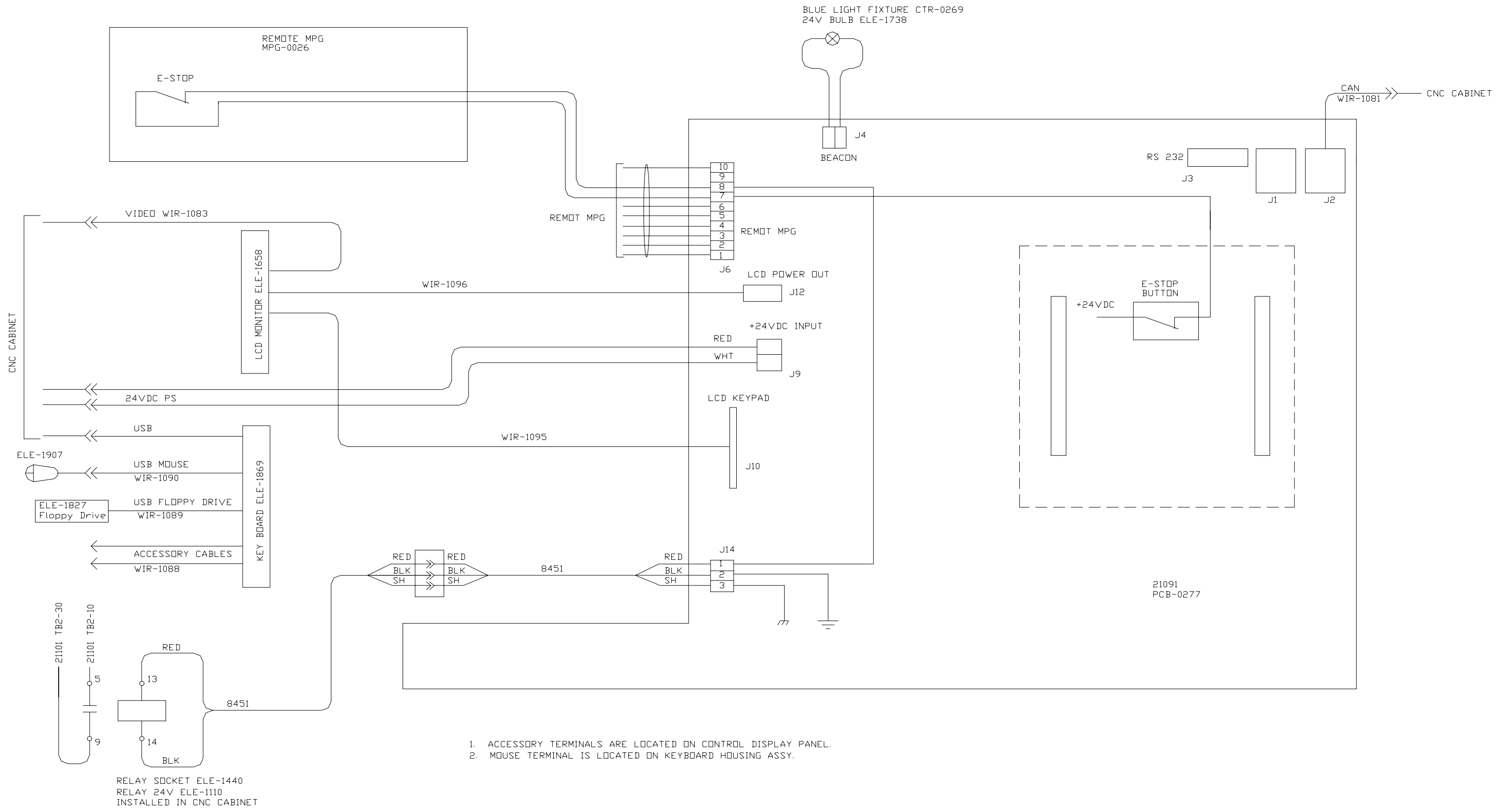
WRG_0083A_sht1of2_104D_US wiring_Hennig_Chip_Conveyor

PARTS LIST IN ELECTRICAL CABINET:
Contactor:
 ABB B6-30-10, 120VDC coil ELE-1299
 Circuit Breaker, 15A QOU315, ELE-1338
 DIN Rail HDW-0668
Relay and Socket:
 Omron MY4N, 120 VAC, ELE-0072
 Omron PYF14A-E, ELE-1440
Receptacle:
 Hubbell HBL-4560 or equiv. ELE-0815
 (250V 2-phase, twist-lock)
 Receptacle is located where
 auger receptacle went.

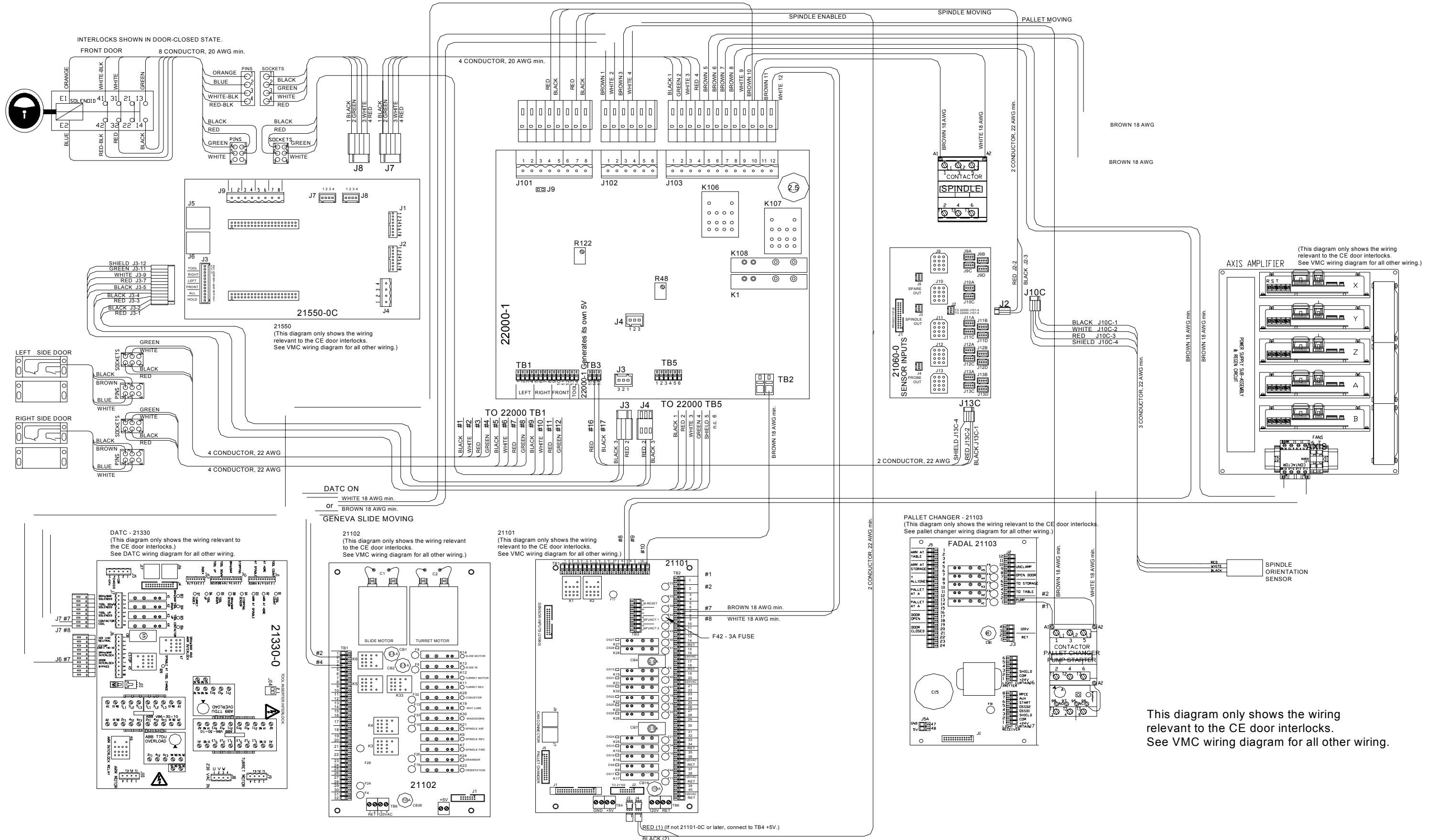


WRG_0083A_sht2of2_CE_wiring_Hennig_Chip_Conveyor 104D

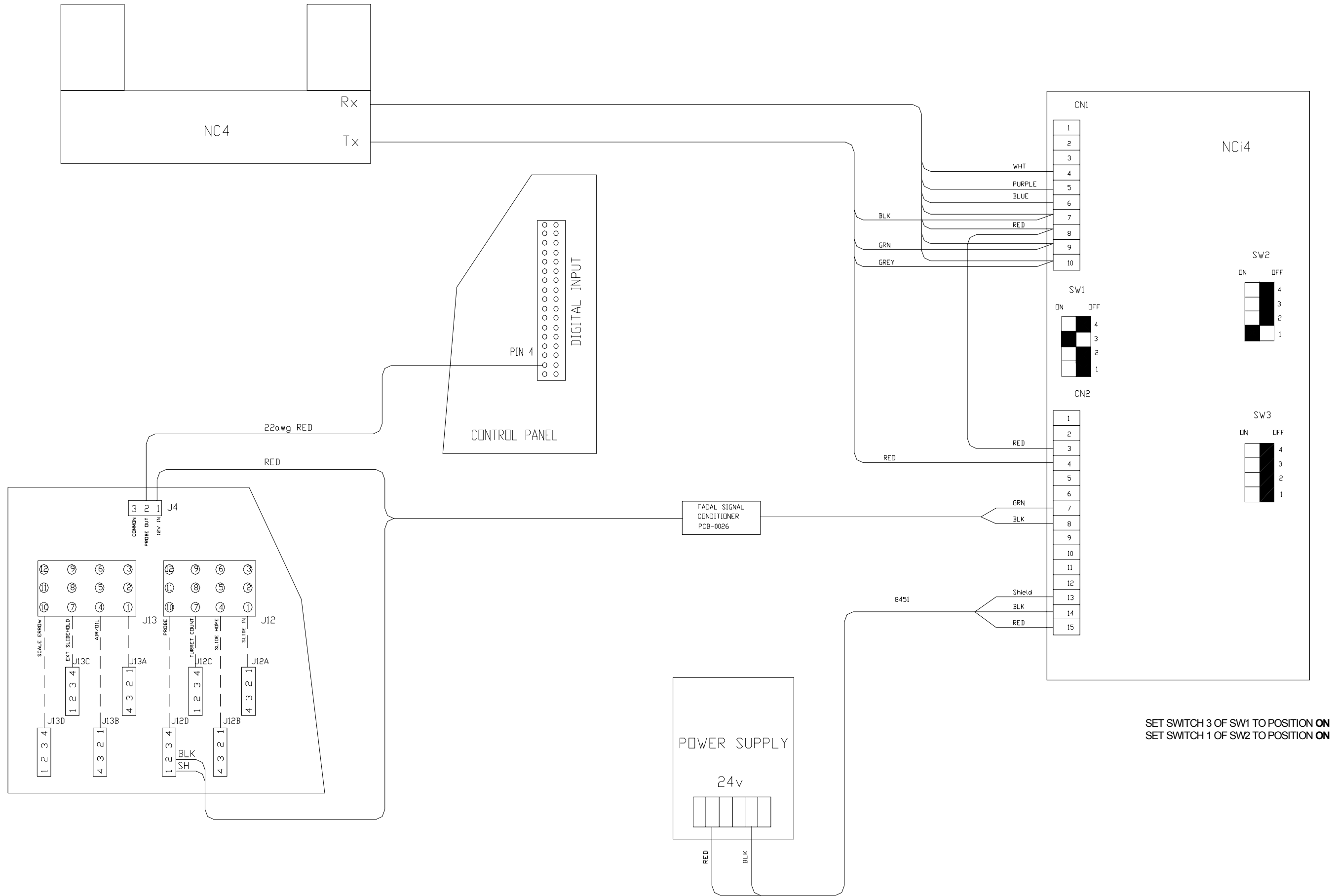




WRG_0087A_CE_Interlock_Wiring_Diagram_104D



WRG_0142A_NC4_Probe_Wiring_Diagram_104D



SET SWITCH 3 OF SW1 TO POSITION **ON**
 SET SWITCH 1 OF SW2 TO POSITION **ON**

