

**TOP ELEC, SIPTU, AB CONTROLS  
480VAC, MOTORS, K5500  
169000**

| Find Num | Part Number | Item Description  | Qty | Rev |
|----------|-------------|---|-----|-----|
|          |             |   |     | A   |
| 1        | 169001      | ELECTRICAL WIRING SCHEMATICS,<br>SIPTU, AB CONTROLS, 480VAC, K5500      | 1   | D   |
| 2        | 169002      | MAIN ELECTRICAL PANEL, SIPTU,<br>AB CONTROLS, 480VAC, K5500             | 1   | E   |
| 3        | 169003      | FRAME ELECTRICALS, SIPTU,<br>AB CONTROLS, 480VAC, K5500                 | 1   | C   |
| 4        | 169004      | OPERATOR INTERFACE, SIPTU,<br>AB CONTROLS, 480VAC, K5500                | 1   | A   |
| 5        | 169005      | CONTROL PANEL AUXILLARY EQUIPMENT,<br>SIPTU, AB CONTROLS, 480VAC, K5500 | 1   | B   |

**TOP ELEC, SIPTU, AB CONTROLS  
480VAC, MOTORS, K5500  
169000**

KLIKLOK WOODMAN  
5224 SNAPFINGER WOODS DR.  
DECATUR, GA 30035 USA  
TEL: 770-981-5200  
FAX: 770-987-7160

NAME PLATE DATE:  
VOLTS: 480            AMPS: 40  
HERTZ: 60  
PHASE: 3            DISCONNECT  
RATING: 40A  
SHORT CIRCUIT CURRENT RATING:  
100KA  
LARGEST CIRCUIT AMPS: 25

DRAWING LIST:  
PAGE 0: DOCUMENTATION COVER SHEET  
PAGE 1: MAIN POWER DISTRIBUTION  
PAGE 2: 120VAC POWER DISTRIBUTION  
PAGE 3: SAFETY CIRCUIT LOOPS  
PAGE 4: SAFETY RELAY/ 24VDC POWER DISTRIBUTION  
PAGE 5: ETHERNET/PLC CONNECTIONS  
PAGE 6 REMOTE DIGITAL INPUT CONNECTIONS  
PAGE 7: REMOTE DIGITAL OUTPUTS CONNECTIONS  
PAGE 8: SERVO DRIVES-METERING BELT, ACCEL BELT  
PAGE 9: SERVO DRIVES-PHASING BELT 1, PHASING BELT 2  
PAGE 10: SERVO DRIVES-PHASING BELT 3, PHASING BELT 4

MFG\WIRING NOTES

Wire Colors:  
480VAC: BLACK  
120VAC  
    LINE(120L):BLACK  
    NEUTRAL (120N): WHITE  
    GROUND (GND): GREEN W/ YELLOW STRIPE  
24VDC  
    POSITIVE (24P, 24AE): BLUE  
    COMMON (24C): WHITE W/ BLUE STRIPE  
PANEL INTERCONNECTIONS: YELLOW

- 1. ALL UNGROUNDED 480VAC and 240 VAC WIRING TO BE 12 AWG BLACK UNLESS OTHERWISE SPECIFIED.
- 2. ALL DC VOLTAGE WIRING TO BE 18 AWG BLUE UNLESS OTHERWISE SPECIFIED.
- 3. ALL UNGROUNDED 120VAC CONTROL WIRING TO BE 18 AWG RED UNLESS OTHERWISE SPECIFIED.
- 4. ALL UNGROUNDED 24VDC "+" WIRING TO BE 18 AWG BLUE UNLESS OTHERWISE SPECIFIED.
- 5. ALL GROUNDED 24VDC "COM" WIRING TO BE 16 AWG WHITE/BLU UNLESS OTHERWISE SPECIFIED.
- 6. ALL UNGROUNDED WIRING TO REMOTE INLINE I/O MODULES TO BE 18 AWG BLUE (24VDC"+") AND GROUNDED WIRING BLUWHITE (24VDC "COM")
- 7. ALL GROUND(PE) WIRING TO BE 14 AWG GREEN\YELLOW UNLESS OTHERWISE SPECIFIED AND OR MARKED AS GROUND. GROUND TERMINALS ARE MARKED "GND".
- 8. NO MORE THAN 2 CONDUCTORS ON ANY ONE TERMINAL.
- 9. POWER CABLING AND CONTROL WIRING TO BE KEPT SEPERATE WHERE EVER POSSIBLE AND RUN AT 90 ANGLE WHERE IT IS NOT POSSIBLE.
- 10. BOTTOM AND OR RIGHT SIDE OF TERMINAL BLOCKS ARE RESERVED FOR FIELD TERMINATIONS. FIELD TERMINATIONS ARE DESIGNATED BY DASHED LINES.
- 11. POWER WIRING TO TERMINATE TO DEVICES USING THE FOLLOWING RULES. TOP TO BOTTOM, LEFT TO RIGHT, FRONT TO BACK DEPENDING ON THE DEVICE ORIENTATION AS MOUNTED IN THE ENCLOSURE.
- 12. ALL COMPONENTS ARE TO BE LABELED FROM THE SCHEMATIC TAG NUMBER AND LOCATED DIRECTLY ABOVE OR BELOW THE COMPONENT ON THE SUBPANEL AND OR REAR OF DOOR AS APPLICABLE. THE SELF ADHESIVE LABEL WILL BE WHITE 0.5 INCH HIGH WITH 0.25 INCH HIGH BLACK LETTERS. CROY TAPE OR EQUAL. NO LABELS ARE TO BE APPLIED TO THE WIRE DUCT COVERS.
- 13. DO NOT USE SELF TAPPING SCREWS FOR MOUNTING - ONLY MACHINE SCREWS - DRILL AND TAP AS REQUIRED.

1 — Page Number  
52 — Line Number

D  
REVISION

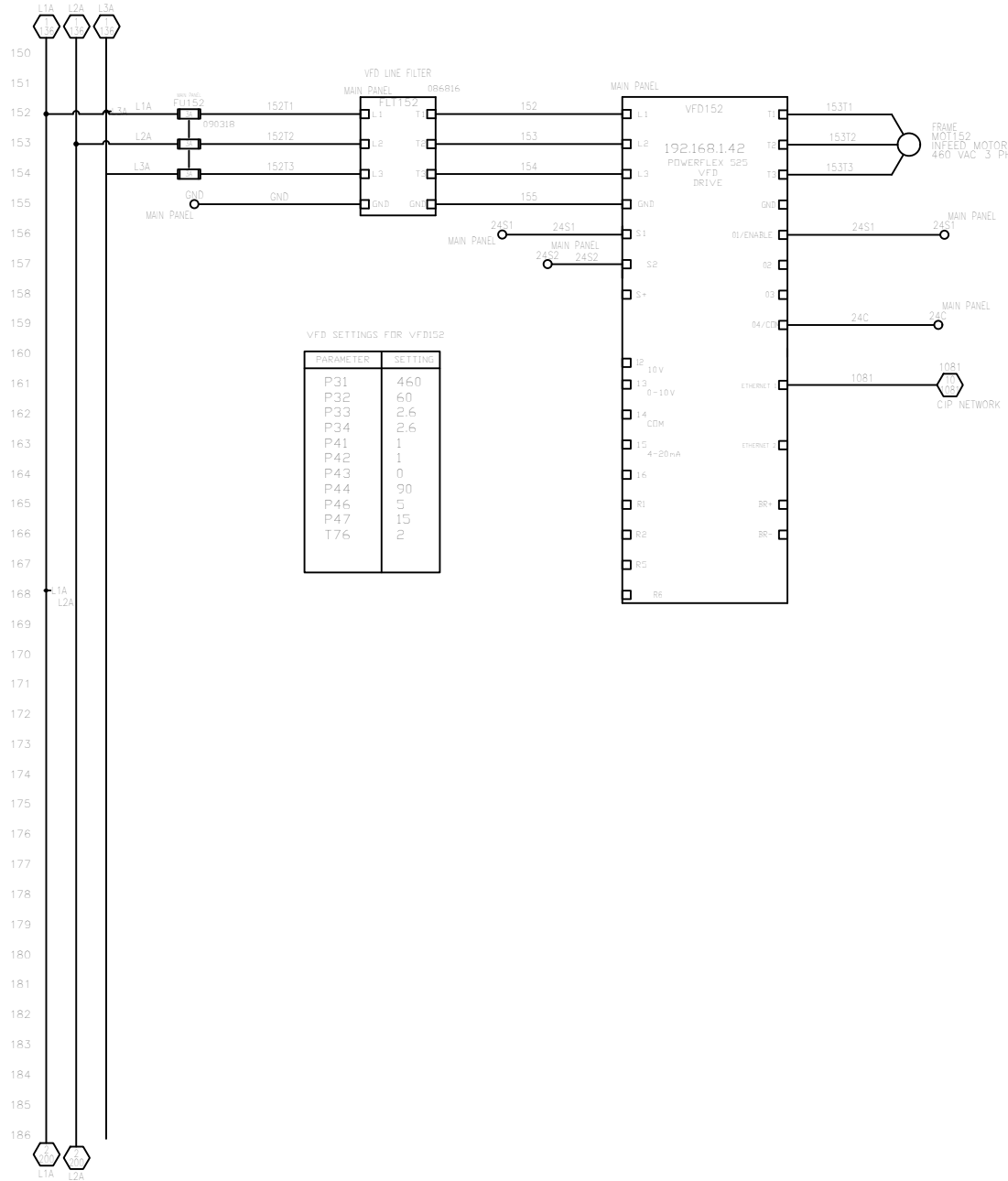
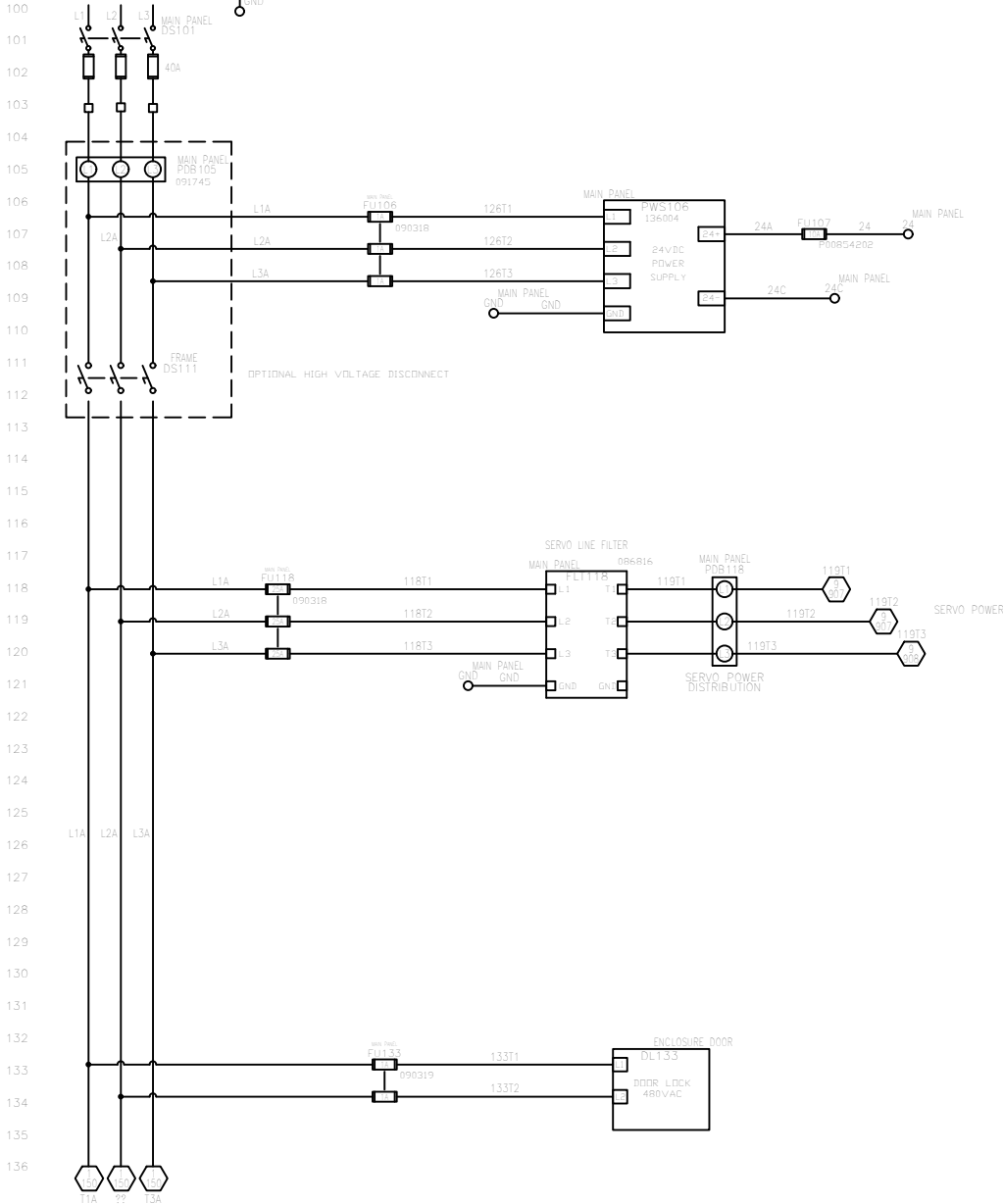
TITLE SHEET  
SIPTU 480 VAC

0 of 10  
SHEET NO

169001  
DRAWING NUMBER

CUSTOMER SUPPLIED

480 VAC  
60 HZ  
3 PH



**D**  
REVISION

**480 VAC DISTRIBUTION PAGE**  
**SIPTU 480 VAC**

**1 OF 10**  
SHEET NO

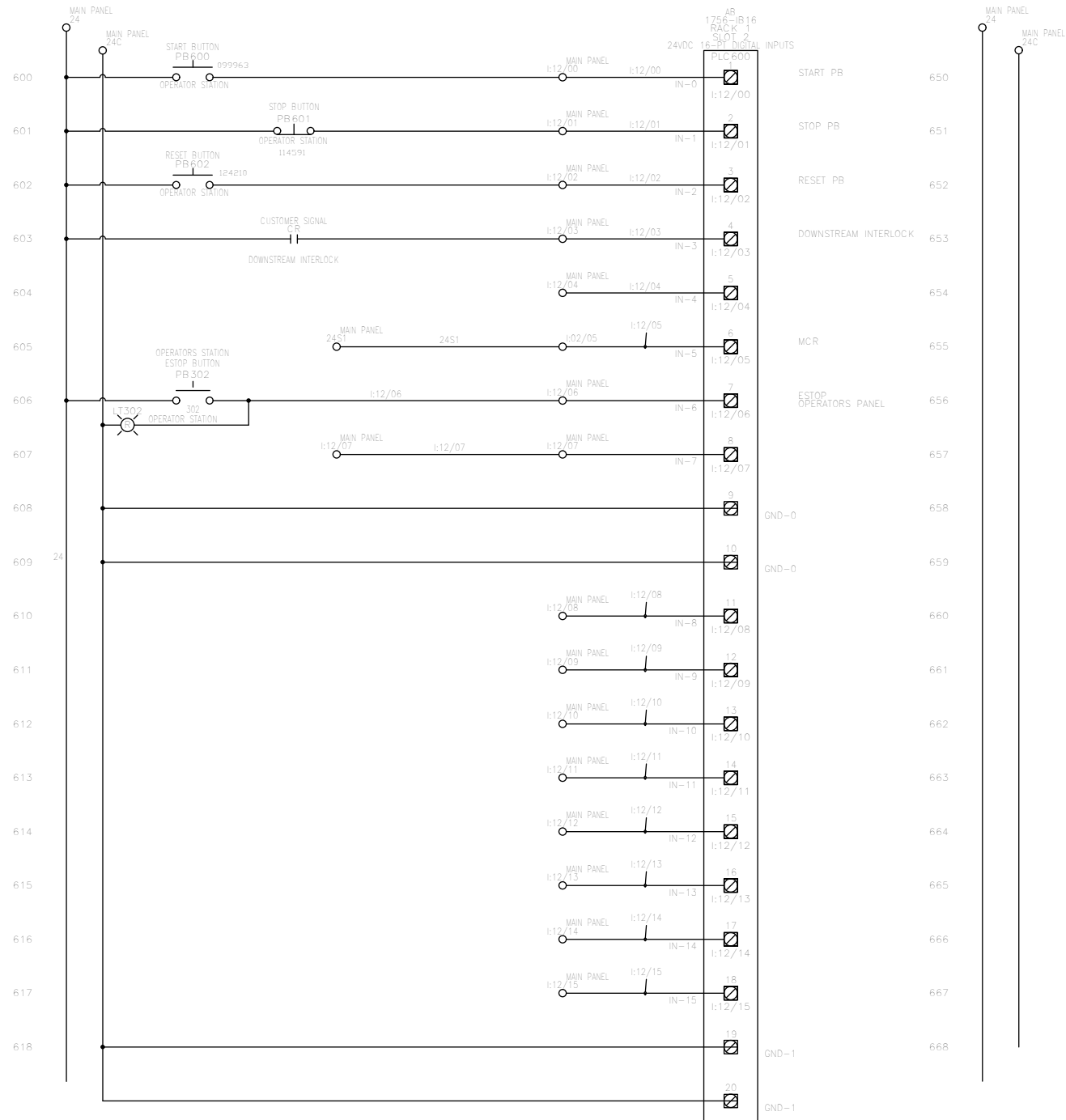
**169001**  
DRAWING NUMBER











D

REVISION

PLC INPUTS PAGE  
SIPTU 480 VAC

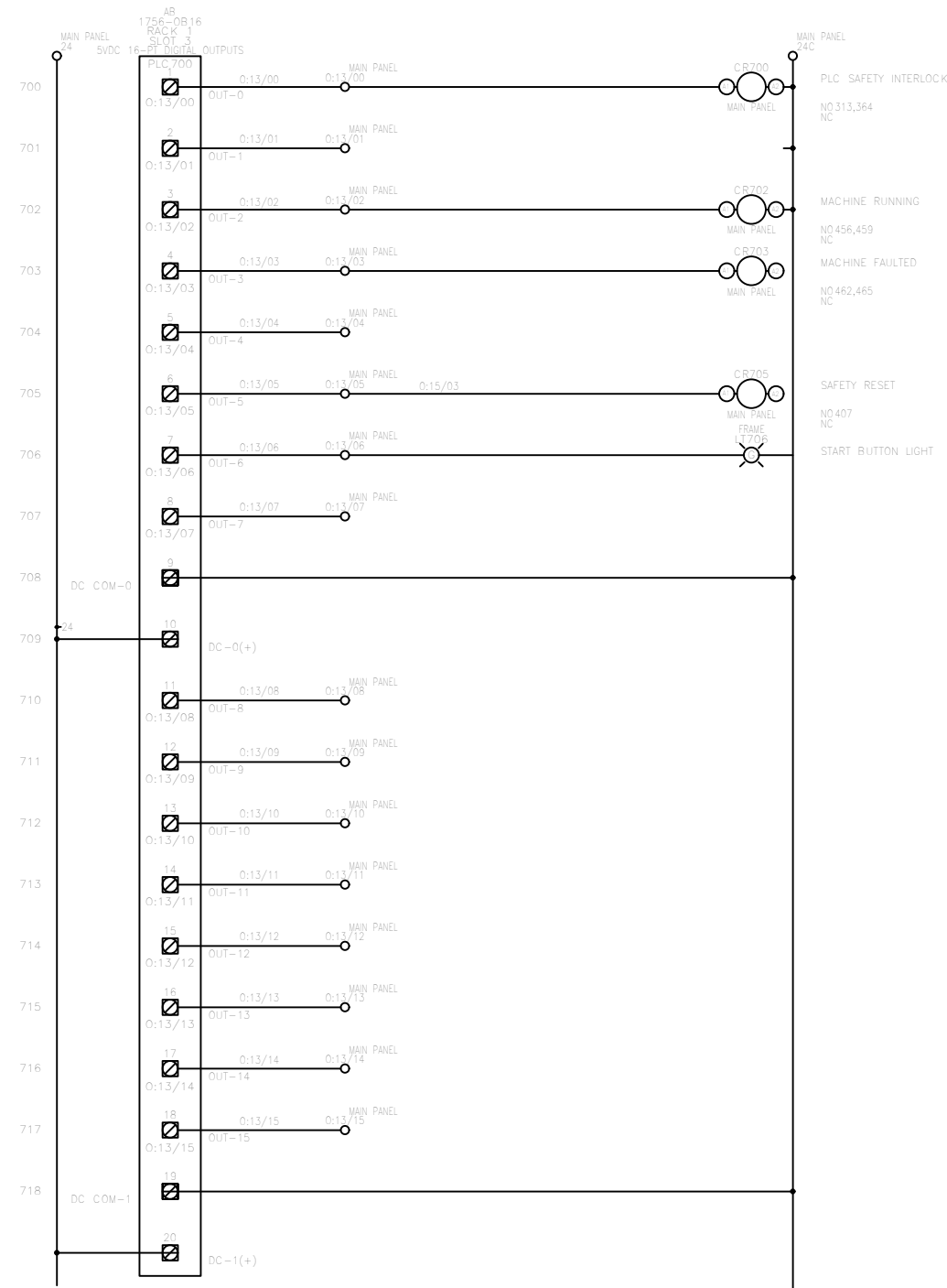
6 OF 10

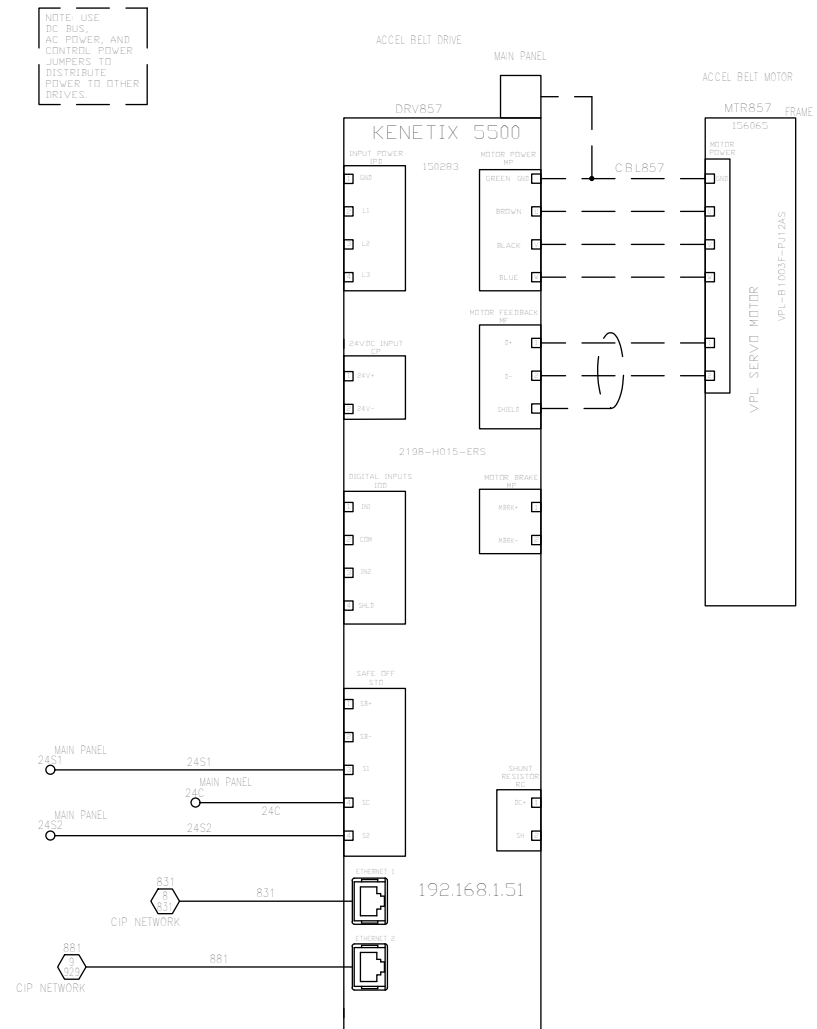
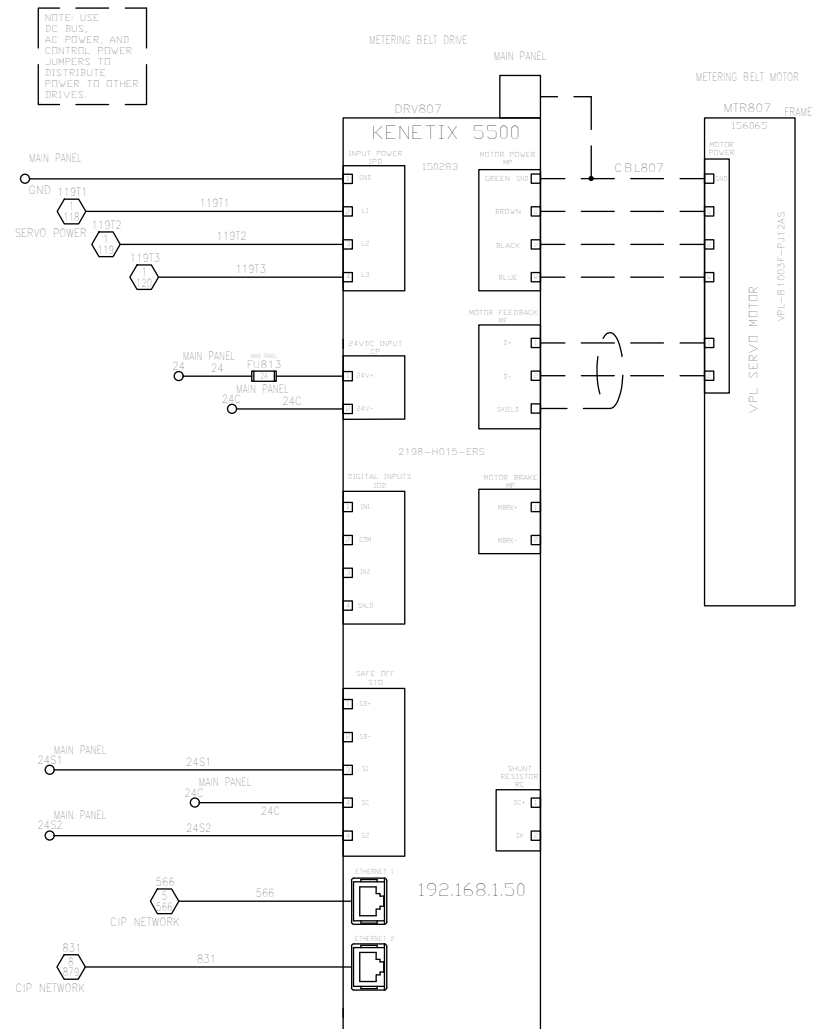
SHEET NO

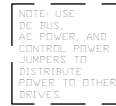
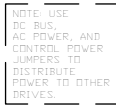
169001

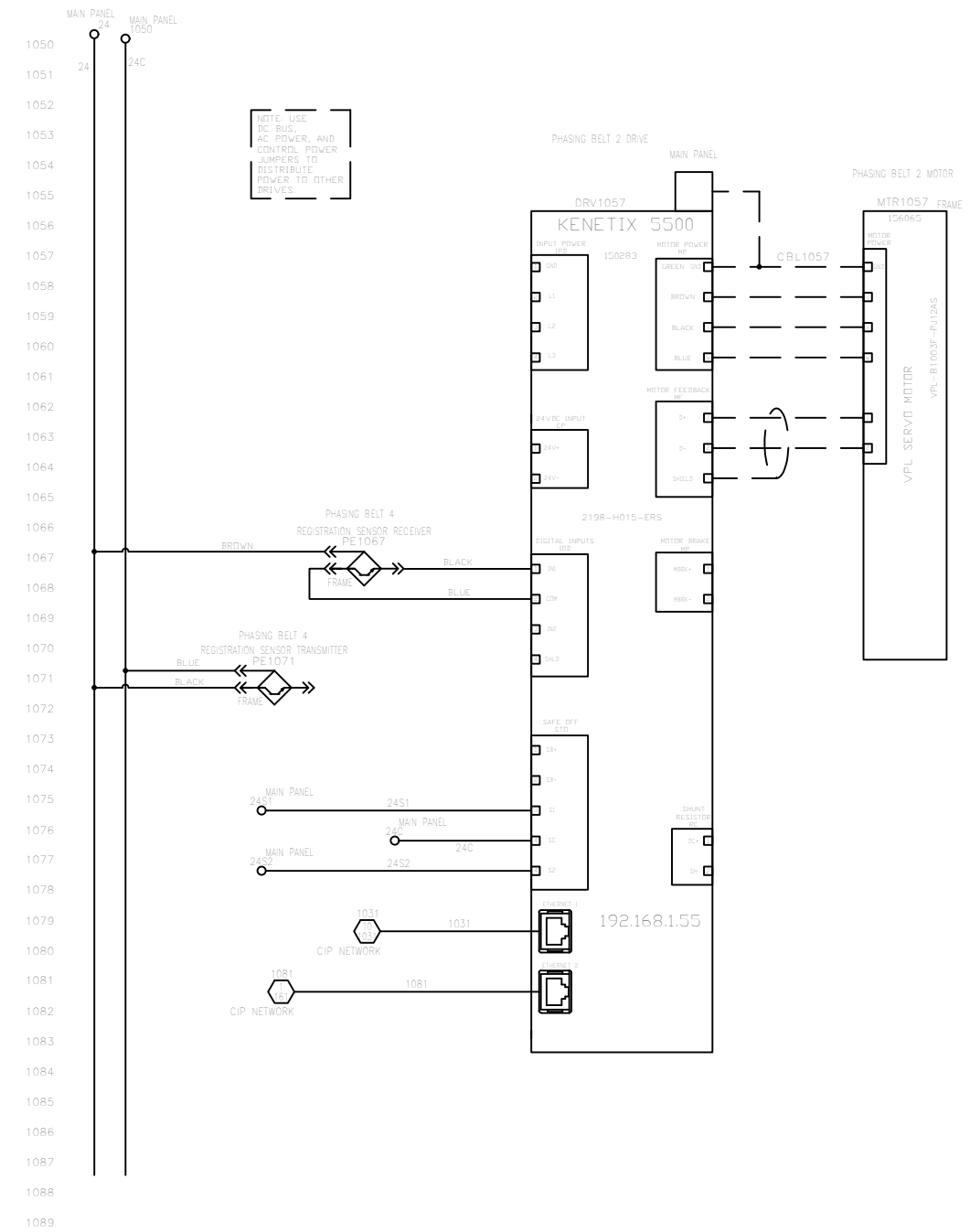
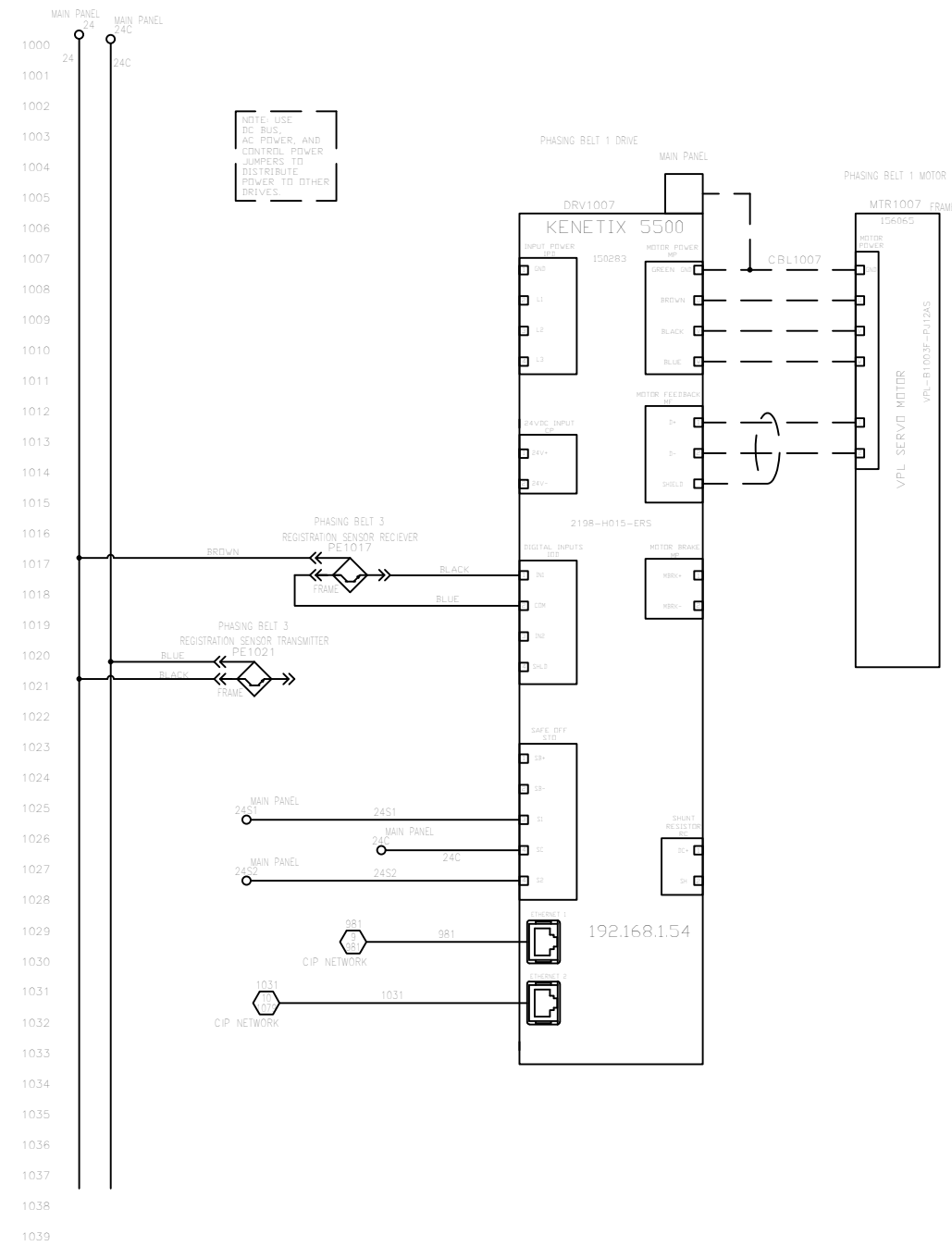
DRAWING NUMBER











**D**  
REVISION

**SERVO DRIVES - PHASING BELT 3, PHASING BELT 4**  
**SIPTU 480 VAC**

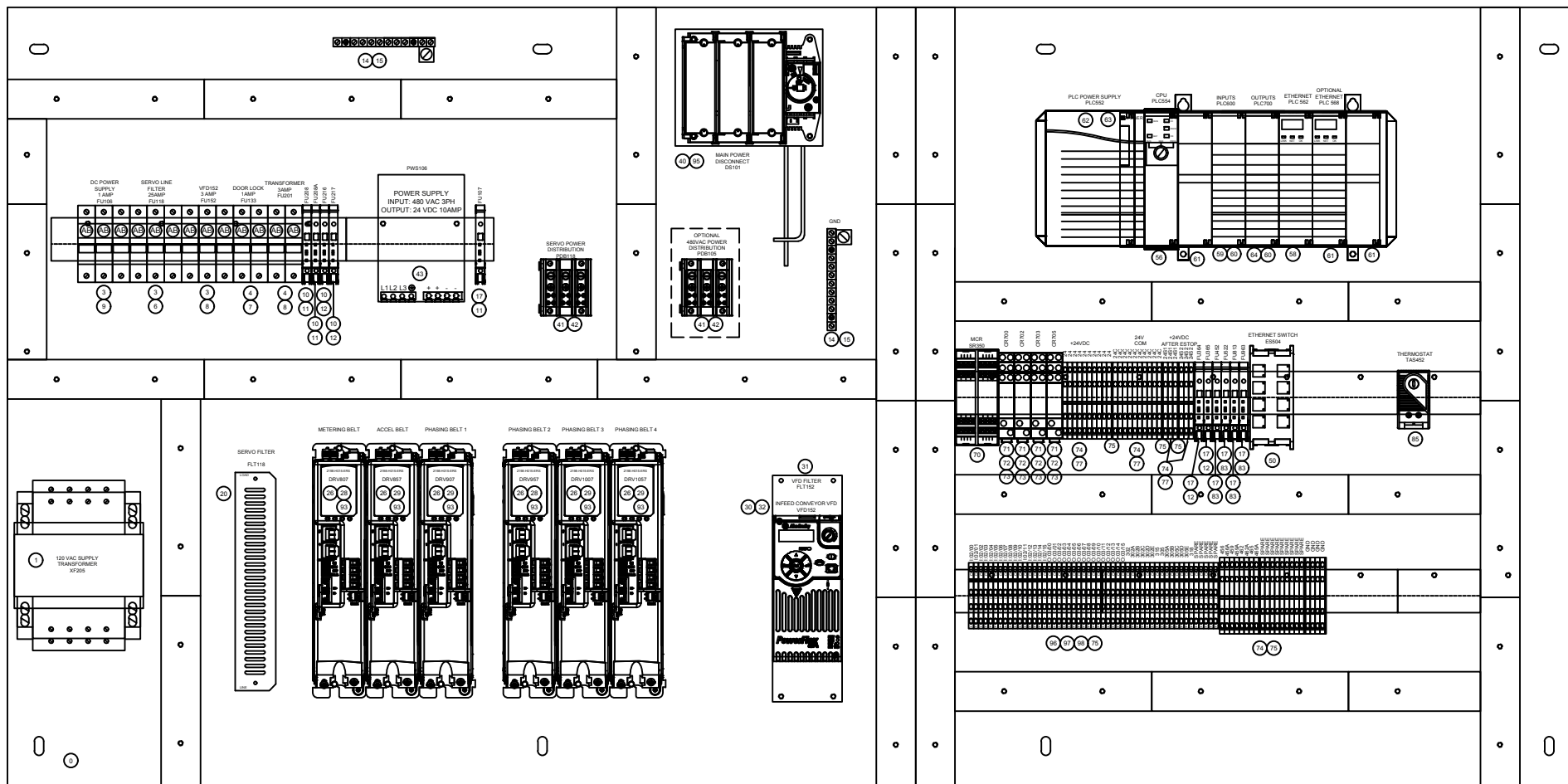
**10 of 10**  
SHEET NO

**169001**  
DRAWING NUMBER

**SHEET 1 OF 3**  
**MAIN ELECTRICAL PANEL**  
**SIPTU, AB CONTROLS, 480VAC, K5500**  
**169002**

**SHEET 2 OF 3**  
**MAIN ELECTRICAL PANEL**  
**SIPTU, AB CONTROLS, 480VAC, K5500**  
**169002**

| Find Num | Part Number | Item Description  | Qty | Rev |
|----------|-------------|---|-----|-----|
|          |             |   |     | E   |
| 0        | 168676      | CONTROL PANEL BACK PLATE, SIPTU, AB CONTROLS, 480VAC, K5500 | 1   | A   |
| 1        | 099226      | TRF-Transformer   | 1   | A   |
| 3        | 090318      | FSH-Fuse Holder   | 3   | D   |
| 4        | 090319      | FSH-Fuse Holder   | 2   | D   |
| 6        | 165521      | FUS-Fuse  | 3   | A   |
| 7        | 096685      | FUS-Fuse  | 5   | A   |
| 8        | 125063      | FUS-Fuse  | 5   | A   |
| 10       | 147260      | FSH-Fuse Holder   | 4   | A   |
| 11       | 114543      | FUS-Fuse  | 3   | A   |
| 12       | 044232P     | FUS-Fuse  | 4   | A   |
| 14       | 037732P     | TER-Terminal  | 2   | B   |
| 15       | 037735P     | TER-Terminal  | 2   | B   |
| 16       | 147258      | TER-Terminal  | 4   | A   |
| 17       | 147259      | FSH-Fuse Holder   | 7   | A   |
| 20       | 086816      | FLT-Filter  | 1   | B   |
| 26       | 150283      | DRV-Drive   | 6   | B   |
| 28       | 150284      | CON-Connector   | 2   | A   |
| 29       | 150285      | CON-Connector   | 4   | A   |
| 30       | 165524      | VFD-Variable Frequency Drive                                | 1   | A   |
| 31       | 150282      | FLT-Filter  | 1   | A   |
| 32       | 159041      | VFD-Variable Frequency Drive                                | 1   | A   |
| 35       | 147339      | TER-Terminal  | 3   | A   |
| 36       | 147338      | TER-Terminal  | 1   | A   |
| 37       | 150125      | TER-Terminal  | 2   | A   |
| 40       | 145859      | SWT-Switch  | 1   | A   |
| 41       | 058847      | PWB-Power Block   | 1   | C   |
| 42       | 098232      | CVP-Cover Plate   | 1   | A   |
| 43       | 136004      | PWS-Power Supply  | 1   | A   |
| 44       | 145349      | HAN-Handle  | 1   | A   |
| 45       | 146987      | CBL-Cable   | 1   | A   |
| 50       | 136005      | HUB-Hub   | 1   | A   |
| 56       | 144807      | PLC-Programmable Logic Controller                           | 1   | A   |
| 58       | 159043      | PLC-Programmable Logic Controller                           | 1   | A   |
| 59       | 069838      | PLC-Programmable Logic Controller                           | 1   | D   |
| 60       | 069842      | PLC-Programmable Logic Controller                           | 2   | A   |
| 61       | 069835      | PLC-Programmable Logic Controller                           | 3   | A   |
| 62       | 069833      | PWS-Power Supply  | 1   | D   |
| 63       | 069832      | PLC-Programmable Logic Controller                           | 1   | A   |
| 64       | 069839      | PLC-Programmable Logic Controller                           | 1   | A   |
| 70       | 133497      | REL-Relay   | 1   | B   |
| 71       | 111509      | REL-Relay   | 4   | B   |
| 72       | 111510      | MOD-Module  | 4   | B   |
| 73       | 111507      | REL-Relay   | 4   | A   |
| 74       | 147254      | TER-Terminal  | 47  | A   |
| 75       | 147261      | TER-Terminal  | 8   | A   |
| 76       | 095671      | TER-Terminal  | 8   | A   |
| 77       | 134229      | JMP-Jumper  | 6   | A   |
| 82       | P0072510    | FUS-Fuse  | 1   | A   |
| 83       | P0072515    | FUS-Fuse  | 3   | C   |
| 85       | 012853P     | THS-Thermostats   | 1   | B   |
| 86       | 086829      | PAN-Panel   | 25  | B   |
| 87       | P00856112   | MNR-Mounting Rail   | 25  | -   |
| 88       | 125025      | MNR-Mounting Rail   | 3   | A   |
| 89       | 096518      | TER-Terminal  | 1   | A   |
| 90       | 033324P     | TER-Terminal  | 2   | -   |
| 91       | 134234      | TER-Terminal  | 2   | B   |
| 92       | 091502      | CBL-Cable   | 2   | B   |
| 93       | 136162      | CBL-Cable   | 6   | A   |
| 94       | 114719      | CBL-Cable   | 1   | A   |
| 95       | 117610      | FUS-Fuse  | 3   | A   |
| 96       | 147257      | TER-Terminal  | 51  | A   |
| 97       | 147256      | TER-Terminal  | 51  | A   |
| 98       | 147255      | TER-Terminal  | 51  | A   |



E

REVISION

## MAIN PANEL LAYOUT SIPTU 480 VAC

1 OF 1

SHEET NO

169002

DRAWING NUMBER

**SHEET 3 OF 3**  
**MAIN ELECTRICAL PANEL**  
**SIPTU, AB CONTROLS, 480VAC, K5500**  
**169002**

# **FRAME ELECTRICALS, SIPTU AB CONTROLS, 480VAC, K5500 169003**

| Find Num | Part Number | Item Description | Qty | Notes                                   | Rev |
|----------|-------------|------------------|-----|---|-----|
|          |             |                  |     |   | C   |
| 1        | 156065      | SRV-Servo Motor  | 6   |   | A   |
| 2        | 150751      | CBL-Cable        | 6   |   | A   |
| 4        | 144665-1    | SNR-Sensor       | 4   |   | A   |
| 5        | 144665-2    | SNR-Sensor       | 4   |   | A   |
| 10       | 011101P     | CBL-Cable        | 8   |   | C   |
| 30       | 149828      | GRO-Grommet      | 12  | if cord in place, split one wall to fit | A   |
| 31       | 004158P     | CBL-Cable        | 25  |   | -   |
| 32       | 099328      | CBL-Cable        | 1   |   | B   |
| 34       | 140975      | SWT-Switch       | REF | Optional High voltage disconnect.       | A   |

**FRAME ELECTRICALS, SIPTU  
AB CONTROLS, 480VAC, K5500  
169003**



# OPERATOR INTERFACE, SIPTU AB CONTROLS, 480VAC, K5500 169004

| Find Num | Part Number | Item Description   | Qty | Rev |
|----------|-------------|--|-----|-----|
|          |             |  |     | A   |
| 1        | 159516      | DISPLAY, PANELVIEW PLUS 6 EXTENDED FEATURES10" WITH 2GB SD CARD. | 1   | A   |
| 4        | 114940      | SWT-Switch   | 1   | A   |
| 5        | 114951      | SWT-Switch   | 1   | A   |
| 6        | 099963      | SWT-Switch   | 1   | C   |
| 8        | 124210      | SWT-Switch   | 1   | A   |
| 9        | 103534      | LBL-Label  | 1   | A   |
| 10       | 103535      | LBL-Label  | 1   | A   |
| 11       | 103537      | LBL-Label  | 1   | A   |
| 12       | 114487      | NMP-Nameplate  | 1   | A   |

OPERATOR INTERFACE, SIPTU  
AB CONTROLS, 480VAC, K5500  
169004

# CONTROL PANEL AUXILLARY EQUIPMENT

## SIPTU, AB CONTROLS, 480VAC, K5500

### 169005

| Find Num | Part Number | Item Description    | Qty | Notes | Rev |
|----------|-------------|---------------------|-----|-------|-----|
|          |             | SR4W Former         |     |       | B   |
| 0        | 070020      | CON-Connector       | 1   |       | A   |
| 0        | 121220      | PLL-Pilot Light     | 1   |       | C   |
| 0        | 151288      | SWT-Switch          | 1   |       | A   |
| 0        | 154023      | LGH-Light           | 4   |       | A   |
| 3        | 110901      | ADP-Adapter         | 1   |       | B   |
| 9        | 100872      | LCK-                | 1   |       | B   |
| 10       | 016866P     | ENC-Enclosure       | 1   |       | -   |
| 12       | N8800508    | CDF-Conduit Fitting | 25  |       | A   |
| 14       | 091501      | CBL-Cable           | 2   | RECPT | B   |
| 21       | 170574      | CON-Connector       | 6   |       | A   |

**CONTROL PANEL AUXILLARY EQUIPMENT**  
**SIPTU, AB CONTROLS, 480VAC, K5500**  
**169005**