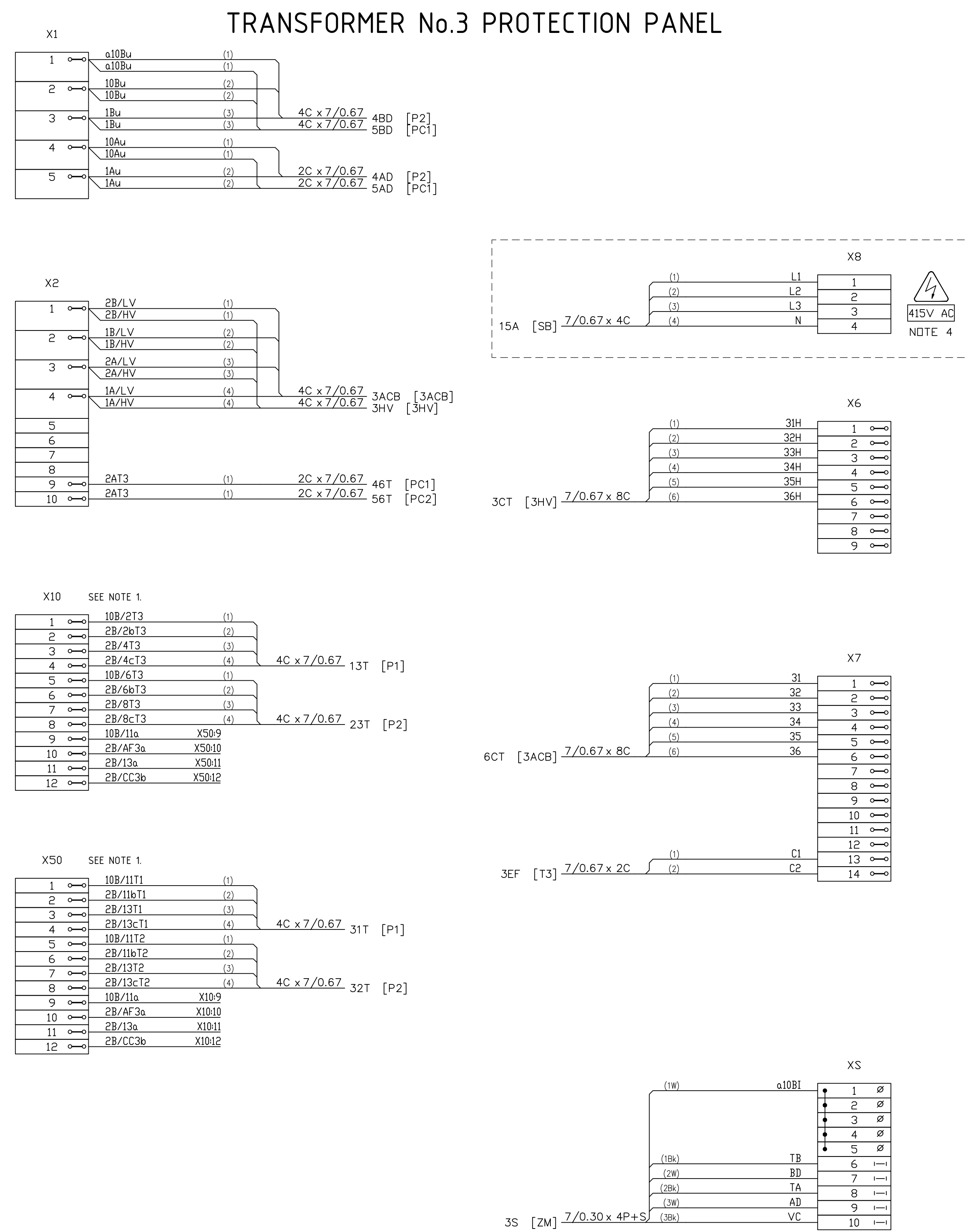
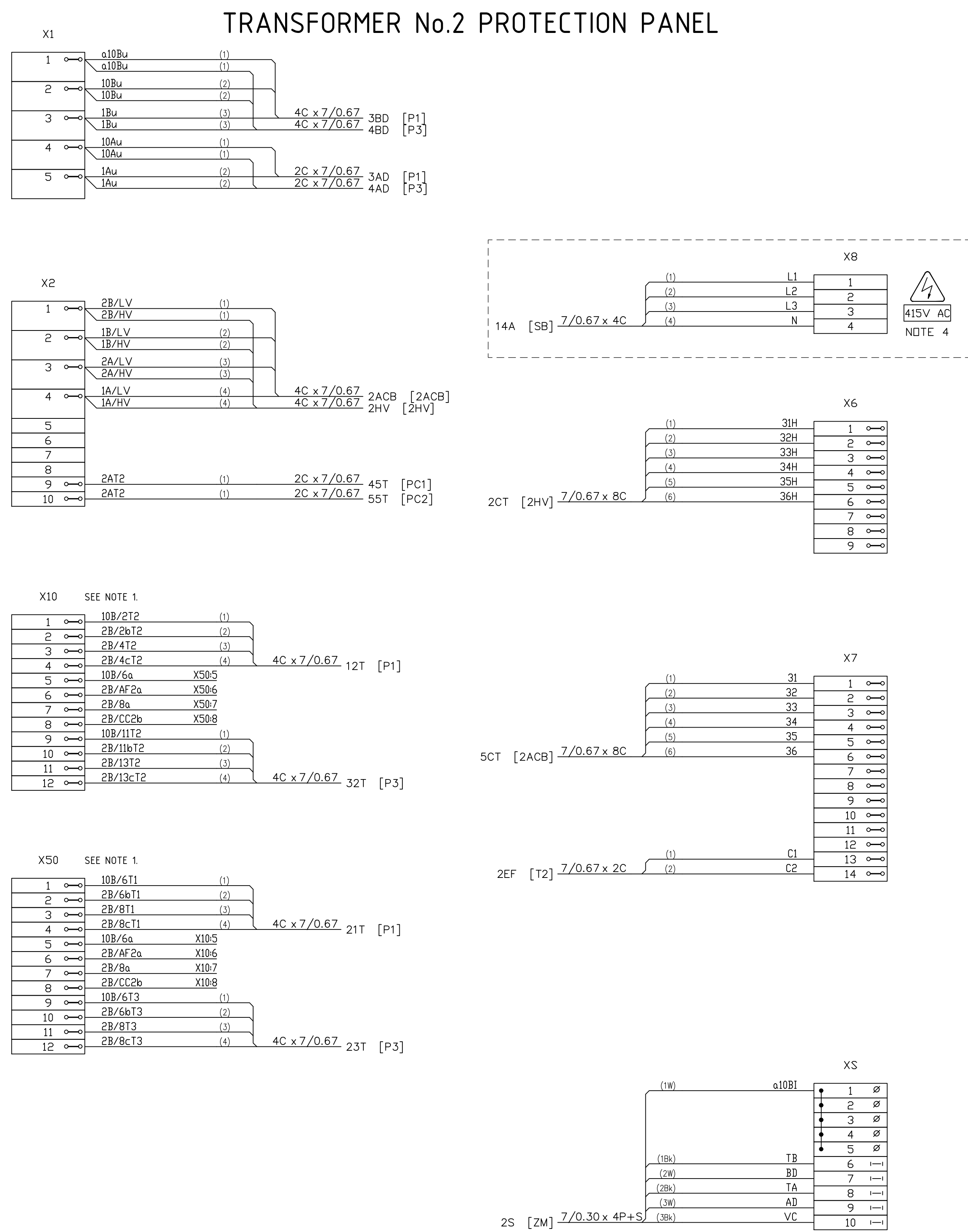
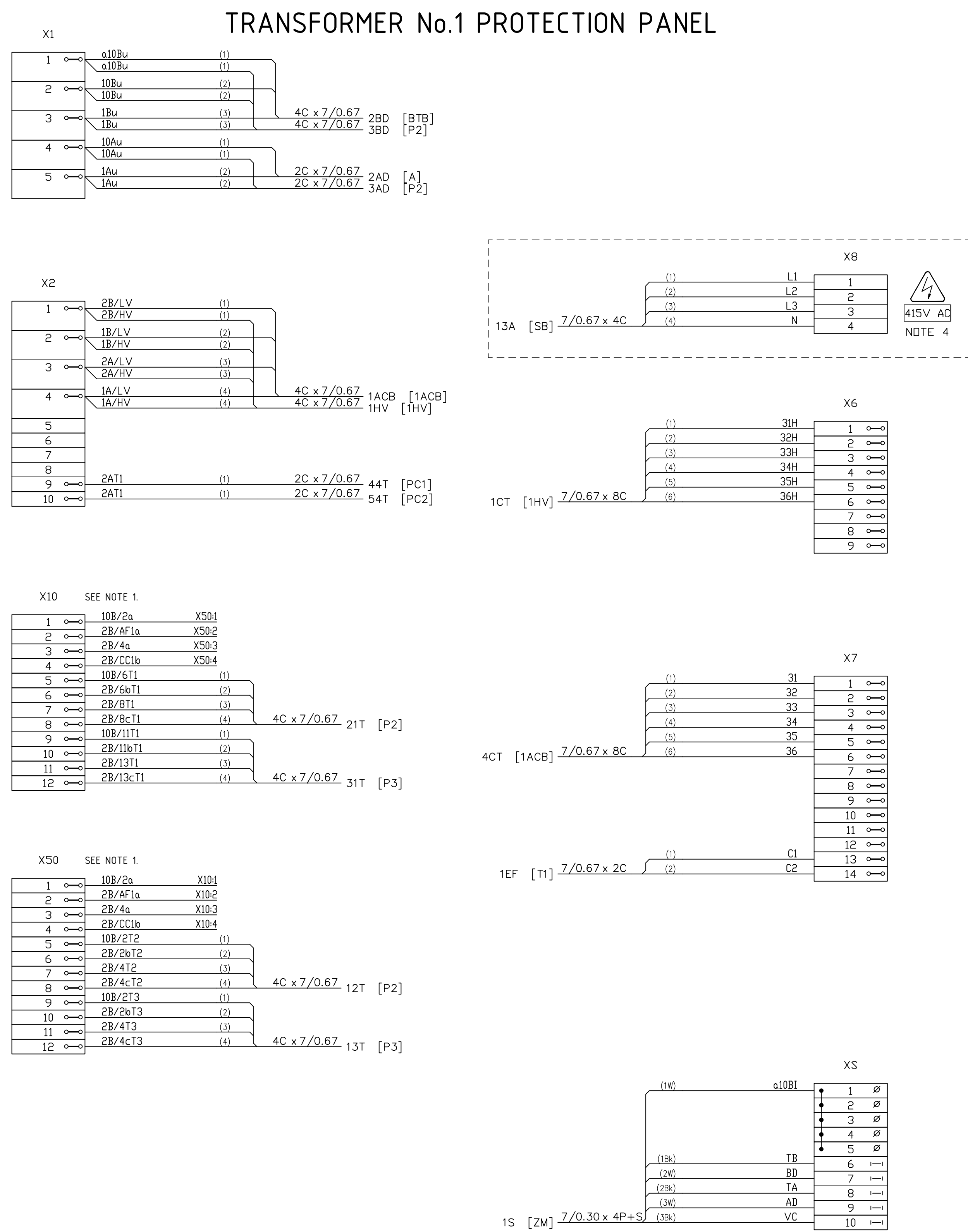




|      |                                            |
|------|--------------------------------------------|
| TACB | TRANSFORMER NO.1 115V CIRCUIT BREAKER      |
| TEF  | TRANSFORMER NO.1 EARTH FAULT CT            |
| THV  | TRANSFORMER NO.1 THV HR CIRCUIT BREAKER    |
| 30V  | 30V AC BATTERY                             |
| BTB  | BATTERY TERMINATION BOX                    |
| P2   | TRANSFORMER NO.2 PROTECTION PANEL          |
| P3   | TRANSFORMER NO.3 PROTECTION PANEL          |
| P1C  | CUSTOMER OVERCURRENT NO.1 PROTECTION PANEL |
| P2C  | CUSTOMER OVERCURRENT NO.2 PROTECTION PANEL |
| S8   | SERVICE BOARD                              |
| T1   | TRANSFORMER NO.1                           |
| ZM   | SCADA CABINET (ALARM & SIGNALING UNIT)     |

PANEL ABBREVIATION TABLE

|                          |                                            |
|--------------------------|--------------------------------------------|
| 2ACB                     | TRANSFORMER NO.2 415V CIRCUIT BREAKER      |
| 2EF                      | TRANSFORMER NO.2 EARTH FAULT CT            |
| 2HV                      | TRANSFORMER NO.2 11kV RM CIRCUIT BREAKER   |
| P1                       | TRANSFORMER NO.1 PROTECTION PANEL          |
| P3                       | TRANSFORMER NO.3 PROTECTION PANEL          |
| PC                       | CUSTOMER OVERCURRENT NO.1 PROTECTION PANEL |
| PC2                      | CUSTOMER OVERCURRENT NO.2 PROTECTION PANEL |
| SB                       | SERVICE BOARD                              |
| T2                       | TRANSFORMER NO.2                           |
| ZM                       | SCADA CABINET (ALARM & SIGNALING UNIT)     |
| PANEL ABBREVIATION TABLE |                                            |

|                          |                                            |
|--------------------------|--------------------------------------------|
| 3ACB                     | TRANSFORMER NO 3 415V CIRCUIT BREAKER      |
| 3CF                      | TRANSFORMER NO 3 EARTH FAULT CT            |
| 3HV                      | TRANSFORMER NO 3 11kV RM CIRCUIT BREAKER   |
| P1                       | TRANSFORMER NO 1 PROTECTION PANEL          |
| P2                       | TRANSFORMER NO 2 PROTECTION PANEL          |
| PC1                      | CUSTOMER OVERCURRENT NO 1 PROTECTION PANEL |
| PC2                      | CUSTOMER OVERCURRENT NO 2 PROTECTION PANEL |
| SB                       | SERVICE BOARD                              |
| T3                       | TRANSFORMER NO 3                           |
| ZM                       | SCADA CABINET (ALARM & SIGNALING UNIT)     |
| PANEL ABBREVIATION TABLE |                                            |

## PANEL TERMINAL RAIL LAYOUT CABLING & WIRE JUMPERS

## PANEL TERMINAL RAIL LAYOUT CABLING & WIRE JUMPERS

## PANEL TERMINAL RAIL LAYOUT CABLING & WIRE JUMPERS

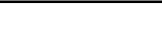
NOTES:

1. ALL CABLING AND WIRE JUMPING SHOWN IS FOR A 3 TRANSFORMER SUBSTATION WITH 2 CUSTOMER OVERCURRENT PROTECTION PANELS, ONLY REQUIRED CABLING AND WIRE JUMPING IS TO BE INSTALLED. SEE THE SUBSTATION DESIGN INFORMATION PACKAGE AND RELEVANT NETWORK STANDARDS.
2. CABLE NAMING COULD ALTER FOR THE POSSIBLE SUBSTATION CONFIGURATIONS. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE CABLING AND CABLE SCHEDULE DRAWINGS 227355Sh01 - 02.
3. ALL PANEL WIRING IS TO BE AS LISTED HERE:
  - DC WIRING IS TO BE 7/0.50, 0.6kV GRADE PVC INSULATED COLOURED GREY.
  - EARTH WIRING IS TO BE 7/0.67, 0.6kV GRADE PVC INSULATED COLOURED GREEN/YELLOW (Y/G).
  - A PHASE CT AND AC WIRING IS TO BE 7/0.67, 0.6kV GRADE PVC INSULATED COLOURED RED (R).
  - B PHASE CT AND AC WIRING IS TO BE 7/0.67, 0.6kV GRADE PVC INSULATED COLOURED WHITE (W).
  - C PHASE CT AND AC WIRING IS TO BE 7/0.67, 0.6kV GRADE PVC INSULATED COLOURED BLUE (B).
  - EARTH CT AND NEUTRAL AC WIRING IS TO BE 7/0.67, 0.6kV GRADE PVC INSULATED COLOURED BLACK (Bk).
4. TERMINALS, FUSES AND RELAY CONNECTIONS ARE TO BE FITTED WITH CAUTION LABELS TO WARN OF THE 415V/240 AC HAZARD. ANY EXPOSED TERMINALS ARE TO BE APPROPRIATELY COVERED.
5. ALL WIRING TO HAVE IDENTIFICATION FERRULES FITTED AT BOTH ENDS OF WIRE ADJACENT TO TERMINALS WHERE POSSIBLE. WIRE IDENTIFICATION CODES TO BE IN ACCORDANCE WITH THIS DRAWING.
6. ALARM AND SIGNAL CABLE SCREENS TO BE ISOLATED AND NOT TO BE TERMINATED IN THIS CABINET. SCREENS ONLY TO BE EARTHED AT SCADA CABINET.

| TAGNAME     | MFG | CATNO      | DESC             | REF_DWG                                  |
|-------------|-----|------------|------------------|------------------------------------------|
| X1, X2, X10 | ○=  | UTLUX      | 3820             | RAIL MOUNTED TERMINAL                    |
| X8, X7      | ○=  | UTLUX      | 3820             | RAIL MOUNTED TERMINAL                    |
| X2          | ○=  | PHOENIX    | 17 05 60 3946281 | FEED THROUGH TERMINAL BLOCK              |
| X50         | ○=  | UTLUX      | 3820             | RAIL MOUNTED TERMINAL                    |
| X5          | ○=  | WEIDMULLER | SAK 2.5          | RAIL MOUNTED TERMINAL CAT No. 27966      |
| X5          | -   | WEIDMULLER | SAKR             | RAIL MOUNTED ISOLATING TERM CAT No.41226 |
| LEGEND      |     |            |                  |                                          |

| A M E N D M E N T S |            |                                                                                                                                                              |          |             |            |             |
|---------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------|------------|-------------|
| AMC                 | DATE       | DESCRIPTION                                                                                                                                                  | DRAWN BY | DESIGNED BY | CHECKED BY | APPROVED BY |
| 1                   |            |                                                                                                                                                              |          |             |            |             |
| 2                   | 24/10/2024 | NEW UPDATED BORDER ADDED.                                                                                                                                    | S.M      | S.M         | M.B        | M.B.        |
| 3                   | 10/09/2025 | DRAWING BORDER UPDATED UTIL/LUX H2239 ORANGE RAIL MOUNTED TERMINALS REPLACED BY PHOENIX 'UT 10 60 304628' FEED-THROUGH TERMINAL BLOCK LEGENDS TABLE UPDATED. | H.O.     | H.O.        | M.B        | M.B.        |

|                                                                                                                                    |             |
|------------------------------------------------------------------------------------------------------------------------------------|-------------|
| RMCB SUBSTATIONS WITH E TYPE LV BOARD AC SCHEMATIC WITH OPTICAL ARC FLASH DETECTION                                                | DWG No.     |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TRANSFORMER DC SCHEMATIC WITH OPTICAL ARC FLASH DETECTION                                    | 2273505Sh01 |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD CUSTOMER OVERCURRENT DC SCHEMATIC                                                            | 2273505Sh02 |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD DC SUPPLY CABLE LOOPING AND SCADA SCHEMATIC                                                  | 2273505Sh03 |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD WITH OPTICAL ARC FLASH DETECTION FIBRE LOOPING AND GENERAL MOUNTING DETAILS                  | 2273505Sh05 |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TX WALL MOUNTED PROTEN PANEL WITH OPTICAL AFD STYLE 1 LAYOUT AND LABEL DETAILS DIAGRAM       | 227351Sh01  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TRANSFORMER PROTECTION PANEL STYLE 1 WIRING DIAGRAM                                          | 227351Sh02  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TRANSFORMER PROTECTION PANEL STYLE 1 CABLE CONNECTION DIAGRAM                                | 227351Sh03  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TX WALL MOUNTED PROTEN PANEL WITH OPTICAL AFD STYLE 2 LAYOUT AND LABEL DETAILS DIAGRAM       | 227352Sh01  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TRANSFORMER PROTECTION PANEL STYLE 2 WIRING DIAGRAM                                          | 227352Sh02  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD TRANSFORMER PROTECTION PANEL STYLE 2 CABLE CONNECTION DIAGRAM                                | 227352Sh03  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD CUSTOMER OVERCURRENT WALL MOUNTED PROTEN PANEL LAYOUT AND LABEL DETAILS DIAGRAM              | 227353Sh01  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD CUSTOMER OVERCURRENT WIRING DIAGRAM                                                          | 227353Sh02  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD OPTICAL ARC FLASH DETECTION INDICATION PANEL SCHEMATIC DRILLING AND WIRING DIAGRAM           | 227354Sh01  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION CABLING DIAGRAM                                              | 227355Sh01  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION CABLE SCHEDULE                                               | 227355Sh02  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD SUBURBAN TYPE SUBSTATION WITH 1500kVA TRANSFORMERS SERVICE BOARD GEN. ARRANGEMENT AND WIRING | 227356Sh01  |
| E TYPE LV BOARD MERLIN GERIN MASTERPAC TP AIR CIRCUIT BREAKERS EXTERNAL CONNECTIONS FOR AFD DIST. SUBSTATIONS                      | 227357Sh01  |
| RMCB SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION SCADA PANEL WIRING AND CABLING DETAILS                       | 227358Sh01  |
| E TYPE LV BOARD ACCEPTABLE COMBINATIONS                                                                                            | 178227      |
| EPOXY RESIN ENCASED PROTECTION CURRENT TRANSFORMER OUTLINE AND DETAILS                                                             | 125190      |
| REFERENCE DRAWINGS                                                                                                                 |             |

|                                                                                                                                                                   |                   |              |                                                                                                                                                  |        |         |       |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------|-------|---------|
|  <b>Ausgrid</b><br><br>24 Campbell Street<br>SYDNEY NSW 2000<br>P. 9272 3805 | SCALE             | AS SHOWN     | RMICB SUBSTATIONS<br>WITH E TYPE LV BOARD<br>TRANSFORMER WALL MOUNTED PROTECTION<br>PANEL WITH OPTICAL AFD STYLE 1<br>CABLING CONNECTION DIAGRAM |        |         |       |         |
|                                                                                                                                                                   | DESIGNED          | -            |                                                                                                                                                  |        |         |       |         |
|                                                                                                                                                                   | DRAWN             | L.MARTINUZZI |                                                                                                                                                  |        |         |       |         |
|                                                                                                                                                                   | CHECKED           | W.BYRNE      |                                                                                                                                                  |        |         |       |         |
|                                                                                                                                                                   | APPROVED          | M.BENNETT    |                                                                                                                                                  |        |         |       |         |
|                                                                                                                                                                   | DATE              | 15/06/2012   |                                                                                                                                                  |        |         |       |         |
|                                                                                                                                                                   | TOWN REF          |              |                                                                                                                                                  |        |         |       |         |
| ISSUED FOR<br>CONSTRUCTION ISSUE                                                                                                                                  | PROJECT<br>NUMBER | SM 6717-1-2  | DRAWING No                                                                                                                                       | 227351 | SHEET 3 | AMD 3 | SIZE A0 |