



- #### NOTES:
- 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).
  - TERMINALS, INSULATED TEST PANEL SOCKETS 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.
  - 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.
  - FOR INTER-PANEL WIRING THE WIRE DESTINATIONS ARE PREFIXED WITH THE DESTINATION PANELS ABBREVIATION. FOR EXAMPLE "P2 X1-1" MEANS IT WILL TERMINATE IN THE SECOND TX PROTECTION PANEL ON THE X1 TERMINAL RAIL. TERMINAL 1. SEE PANEL ABBREVIATION TABLE.
  - PANEL TERMINAL LAYOUT IS REPRESENTATIVE, FOR ACTUAL LAYOUT SEE DWG 227381 Sh1
  - CABLES 1T, 2T, & 3T, REQUIRED WHERE OIL TRANSFORMER HAS BUCHHOLZ RELAY.

TAG	DESCRIPTION
T1CB	FIRST TRANSFORMER 415V CIRCUIT BREAKER PANEL
T2CB	SECOND TRANSFORMER 415V CIRCUIT BREAKER PANEL
T3CB	THIRD TRANSFORMER 415V CIRCUIT BREAKER PANEL
EFP	FIRST TRANSFORMER EARTH FAULT CT
E2F	SECOND TRANSFORMER EARTH FAULT CT
E3F	THIRD TRANSFORMER EARTH FAULT CT
T1HV	FIRST TRANSFORMER HV CT'S
T2HV	SECOND TRANSFORMER HV CT'S
T3HV	THIRD TRANSFORMER HV CT'S
A	30V DC 'A' BATTERY
B	48V DC 'B' BATTERY TERMINATION BOX
DLAC	DISTRIBUTION LOCAL AUTOMATION CONTROL PANEL
P1	FIRST TRANSFORMER PROTECTION PANEL
P2	SECOND TRANSFORMER PROTECTION PANEL
P3	THIRD TRANSFORMER PROTECTION PANEL
PC1	CUSTOMER OVERCURRENT No.1 PROTECTION PANEL
PC2	CUSTOMER OVERCURRENT No.2 PROTECTION PANEL
OB	OVERCURRENT BOARD
T1	FIRST TRANSFORMER
T2	SECOND TRANSFORMER
T3	THIRD TRANSFORMER
VTP	VOLTMETER / TEST POINT FOR 30V DC 'A' BATTERY

PANEL ABBREVIATION TABLE

TAGNAME	MFG	CATNO	DESC	REF	DWG
X1, X3, X6, X7, X10, X50	LUTLUX	3820	RAIL MOUNTED TERMINAL - ORANGE	198542	-
X2	LUTLUX	H2238	RAIL MOUNTED TERMINAL -	-	-
X4	WEDMULLER	SAK 25	RAIL MOUNTED TERMINAL CAT No. 27966	-	-
X5	WEDMULLER	AK41	RAIL MOUNTED FUSE CAT No. 3576	-	-
X5	WEDMULLER	SAKR	RAIL MOUNTED ISOLATING TERM CAT No. 4726	-	-

LEGEND

TITLE	DWG No.
EPOXY RESIN ENCASED PROTECTION CURRENT TRANSFORMER OUTLINE AND DETAILS	125190
RMCB SUBSTATIONS WITH E TYPE LV BOARD WITH OPTICAL ARC FLASH DETECTION FIBRE LOOPING AND GENERAL MOUNTING DETAILS	227350 Sh5
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD CUSTOMER ACB INTERNAL WIRING AND ACB PANEL CONTROL WIRING SCHEMATIC	227350 Sh2
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD TRANSFORMER ACB INTERNAL WIRING AND ACB PANEL CONTROL WIRING SCHEMATIC	227350 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, OAFD, & CUSTOMER OC No.1 PROTECTION, DISTRIBUTION AUTOMATION CONTROL PANEL WIRING & CABLING DIAGRAM	227389 Sh2
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD DISTRIBUTION LOCAL AUTOMATION CONTROL PANEL LAYOUT AND LABEL DETAILS	227389 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD 500VVA TX'S AND VENTILATION FAN AC SERVICE BOARD LAYOUT, WIRING, & CONNECTIONS	227381 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD OPTICAL ARC FLASH DETECTION CABLE SCHEDULE	227384 Sh2
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION CABLE CONNECTION DIAGRAM	227384 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD CUSTOMER OC No.1 (8 No.2) PROTECTION PANEL WIRING AND CABLE CONNECTIONS	227384 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, OIL TYPE TX, & OAFD, TRANSFORMER PROTECTION PANEL CABLE CONNECTION DIAGRAM	227384 Sh2
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, OIL TYPE TX, & OAFD, TRANSFORMER PROTECTION PANEL CABLE CONNECTION DIAGRAM	227384 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OAFD TRANSFORMER ACB INTERNAL WIRING AND ACB PANEL CONTROL WIRING SCHEMATIC	227389 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, DRY TYPE TX, & OAFD, TRANSFORMER PROTECTION PANEL WIRING DIAGRAM	227383 Sh1
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD & OAFD, TRANSFORMERS AND CUSTOMER OVERCURRENT PROTECTION FREE STANDING PANELS LABEL DETAILS	227382 Sh1
CITY DISTRIBUTION SUB WITH E TYPE LV BOARD AND OAFD, DLAC PANEL SCHEMATIC, GENERAL DC SUPPLIES INTER-PANEL WIRING, FIBRE COMMS & CABLING DIAGRAM	227380 Sh4
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION CUSTOMER OVERCURRENT SCHEMATIC	227380 Sh3
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION CUSTOMER OVERCURRENT SCHEMATIC	227380 Sh2
CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION AC SCHEMATIC	227380 Sh1

SCALE NA

DESIGNED NA

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DATE 04/02/2015

PROJECT No. -

PROJECT NUMBER -

DRAWING No. **227384** SHEET 2 AMD 0 SIZE A0

CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD & OIL TYPE TX & OPTICAL ARC FLASH DETECTION TRANSFORMER PROTECTION PANEL CABLE CONNECTION DIAGRAM

REFERENCE DRAWINGS

227350 Sh5

227350 Sh2

227350 Sh1

227389 Sh2

227389 Sh1

227381 Sh1

227384 Sh2

227384 Sh1

227384 Sh2

227384 Sh1

227389 Sh1

227389 Sh2

227389 Sh1

227383 Sh1

227382 Sh1

227380 Sh4

227380 Sh3

227380 Sh2

227380 Sh1

C&P - DISTRIBUTION SUBSTATIONS

20111004

SCALE DRAWING

DATE

REVISIONS

FOR ARRANGEMENTS WITH DRY TYPE TRANSFORMERS SEE 227384 Sh1



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