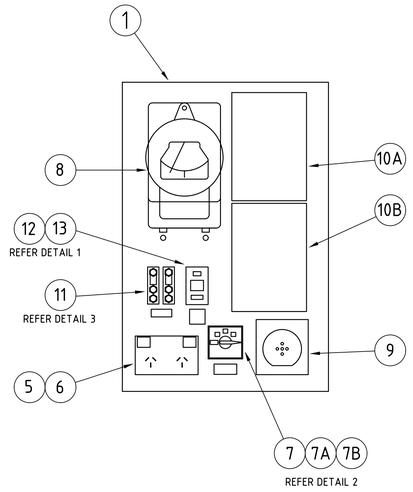
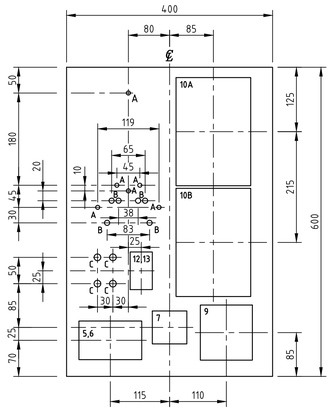
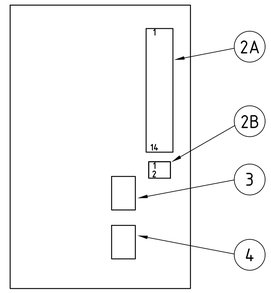


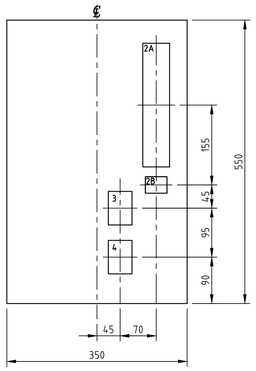
GENERAL ARRANGEMENT
(SCALE 1:5)



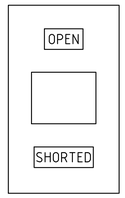
DRILLING DETAILS
(SCALE 1:5)
(SEE NOTES 4 & 5)



GENERAL ARRANGEMENT
(SCALE 1:5)

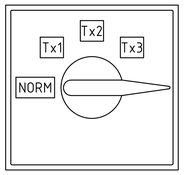


DRILLING DETAILS
(SCALE 1:5)
(SEE NOTE 4)



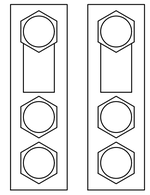
MDI SHORTING SWITCH

DETAIL 1
MDI SHORTING SWITCH
REFER NOTE 10
SCALE 1:1



ESSENTIAL SERVICES STANDBY SUPPLY CHANGEOVER SWITCH

DETAIL 2
CHANGEOVER SWITCH
REFER NOTE 10
SCALE 1:1



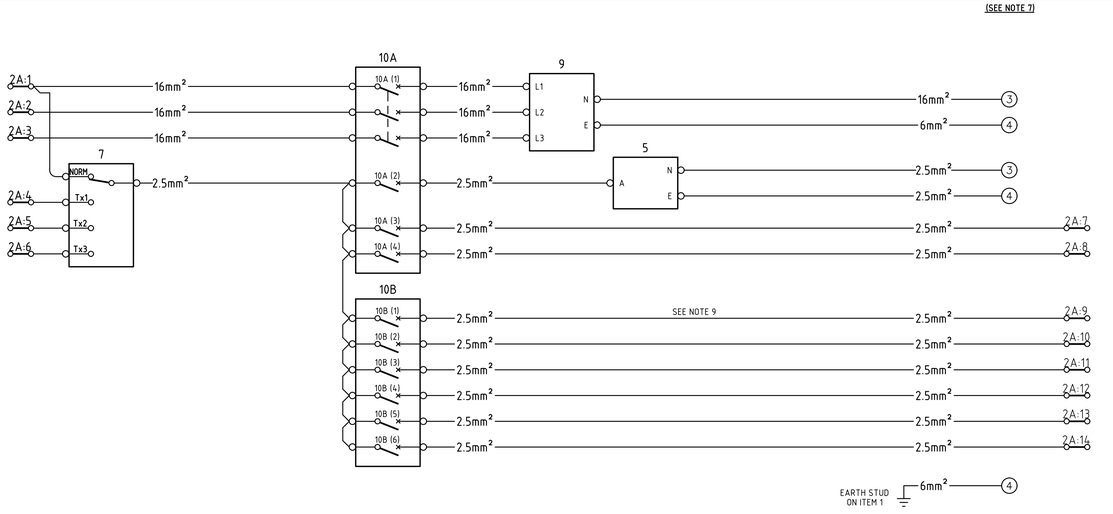
B MDI N TEST LINKS

DETAIL 3
MDI TEST LINKS
REFER NOTE 10
SCALE 1:1

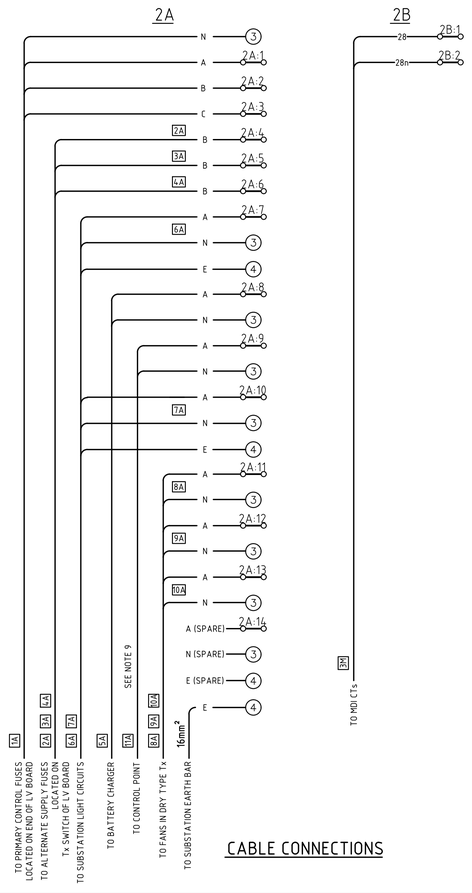
DOOR (FRONT VIEW)

TERMINALS (2A)	4 STEP SWITCH (7)	CABLE SIZE		SWITCHBOARD (10)	CABLE SIZE	3ϕ 5 PIN SOCKET (9)	DOUBLE GPO (5)		CABLE SIZE	NEUTRAL LINK (3) / EARTH LINK (4)	TERMINALS (2A)

(SEE NOTE 7)



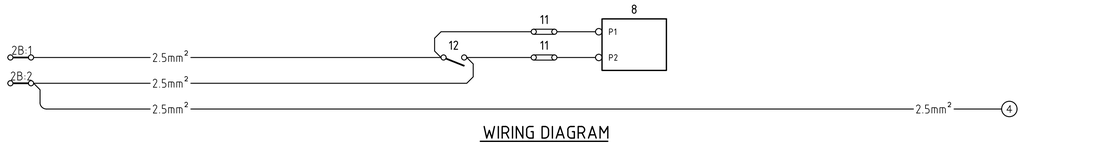
INTERIOR PANEL (FRONT VIEW)



CABLE CONNECTIONS

TERMINALS (2B)		CABLE SIZE		10A SWITCH (12)	M6 LINK (11)	M.D.I. UNIT (8)		CABLE SIZE	EARTH LINK (4)	

(SEE NOTE 7)



WIRING DIAGRAM

NOTES

1. THIS SERVICE BOARD IS DESIGNED FOR SUBURBAN SUBSTATIONS WITH 1500kVA TRANSFORMERS.
2. ALL MATERIALS SHOWN CAN BE SUBSTITUTED AS LONG AS THE SUBSTITUTE COMPONENT PROVIDES SIMILAR OR BETTER PERFORMANCE THAN THE ONE SHOWN. DETAILS PROVING THE PERFORMANCE OF OTHER PRODUCTS MUST BE SUBMITTED FOR ACCEPTANCE, IN ACCORDANCE WITH THE REQUIREMENTS OF NETWORK STANDARD NS181, BEFORE USE.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT NETWORK STANDARDS.
4. DRILLING DETAILS FOR THE M.D.I. UNIT AND MOULDED LINKS ONLY ARE SHOWN. FOR ALL OTHER COMPONENTS REFER TO THE MANUFACTURE FOR DETAILS.
5. DRILLING DETAILS, DIAMETER OF HOLES.
   - A – 8mm
   - B – 10mm
   - C – 13mm
   - D – 12.5mm
6. COMPRESSION TYPE CABLE LUGS ARE TO BE USED FOR CABLE TERMINATIONS ONTO ITEMS 2A, 2B AND 11.
7. THE EARTH AND NEUTRAL LINK CONNECTIONS DESIGNATED BY (3) & (4) MUST BE INDIVIDUALLY CONNECTED AS SEPERATE CABLES TO THEIR RESPECTIVE LINK.
8. ITEM 10A IS ALWAYS REQUIRED BUT 10B IS ONLY REQUIRED IF ANY OF THE FOLLOWING ARE PRESENT:
   - AN ADDITIONAL LIGHTING CIRCUIT IS NEEDED
   - DRY TYPE TRANSFORMERS ARE INSTALLED
   - IF A CONTROL POINT IS PRESENT
9. CABLE TO BE OF ADEQUATE SIZE TO PREVENT VOLTAGE DROP, REFER TO AS 3000 FOR CABLE SIZE.
10. DETAILS 1,2 & 3 SHOW WORDING AND POSITION OF SELF ADHESIVE LABELS. LABELS ARE TO BE BLACK LETTERING ON WHITE BACKGROUND.
11. NUMBERS SHOWN [XX] ARE CABLE NUMBERS REFER TO DWG A0-178231.

ITEM No	DESCRIPTION	REMARKS	No. OFF
13	MOUNTING BLOCK	HPM TYPE 141	1
12	10A SINGLE POLE SWITCH	HPM TYPE A770/1	1
11	M6 MOULDED LINK	LOGISTICS SERVICES STOCK CODE 78493	2
10B (6)	20A 1ϕ 8kA MINIATURE C/B (Tx3 FAN)	CLIPSAL TYPE 4CB120	1
10B (5)	20A 1ϕ 8kA MINIATURE C/B (Tx2 FAN)	CLIPSAL TYPE 4CB120	1
10B (4)	20A 1ϕ 8kA MINIATURE C/B (Tx1 FAN)	CLIPSAL TYPE 4CB120	1
10B (3)	20A 1ϕ 8kA MINIATURE C/B (SPARE)	CLIPSAL TYPE 4CB120	1
10B (2)	16A 1ϕ 8kA MINIATURE C/B (SPARE LIGHTS)	CLIPSAL TYPE 4CB116	1
10B (1)	20A 1ϕ 8kA MINIATURE C/B (CONTROL POINT)	CLIPSAL TYPE 4CB120	1
10B	6 MODULE SWITCHBOARD (REFER NOTE 8)	CLIPSAL TYPE 4C6FD	1
10A (4)	20A 1ϕ 8kA MINIATURE C/B (BATTERY CHARGER)	CLIPSAL TYPE 4CB120	1
10A (3)	16A 1ϕ 8kA MINIATURE C/B (LIGHTS)	CLIPSAL TYPE 4CB116	1
10A (2)	20A 1ϕ 8kA MINIATURE C/B (1ϕ POWER)	CLIPSAL TYPE 4CB120	1
10A (1)	50A 3ϕ 8kA MINIATURE C/B (3ϕ POWER)	CLIPSAL TYPE 4CB350	1
10A	6 MODULE SWITCHBOARD (REFER NOTE 8)	CLIPSAL TYPE 4C6FD	1
9	50A 3 PHASE, 5 PIN SOCKET	CLIPSAL CAT No. 56SO550	1
8	M.D.I. UNIT	LOGISTICS SERVICES STOCK CODE 169920	1
7B	TERMINAL COVERS	KRAUS & NAIMER TYPE S1 M160/B03	1
7A	ADJUSTABLE SHAFT	KRAUS & NAIMER TYPE S1 M004/E/000B070	1
7	4 STEP CHANGEOVER SWITCH	KRAUS & NAIMER TYPE C32 A231 603 E	1
6	MOUNTING BLOCK	HPM TYPE 140	1
5	10A DOUBLE GPO	HPM TYPE 777	1
4	EARTH LINK	CLIPSAL TYPE L8	1
3	NEUTRAL LINK	CLIPSAL TYPE L12	1
2B	TERMINAL STRIP 2 (2B:1-2)	UTILUX H3820 30A	2
2A	TERMINAL STRIP 1 (2A:1-14)	KLIPPON ST5 85A	14
1	WALL MOUNTED BOX	EMPCO W6425	1

MATERIAL LIST (SEE NOTE 2)

CAD DRAWING DO NOT MANUALLY AMEND

AMENDMENTS

1. REDRAWN ON NEW BORDER. CONNECTIONS REVISED. REFERENCE DRAWING ADDED. BATTERY CHARGER CB ADDED. NEW MOUNTING HOLES FOR FREESTANDING SERVICE PANEL ADDED. PN 99-110-2-7 IWR 28/05/2003 CHECKED PWJ APPROVED PWJ
2. TITLE REVISED. CIRCUIT BREAKER Nos REVISED. NOTES REVISED. ALTERNATIVE SUPPLY CLARIFIED. ALTERNATIVE SUPPLY REVISED. PN 103/59/1/3 IWR 19/12/2003 CHECKED PWJ APPROVED PWJ
3. REF C2: 5 SOA GALLARD TERMINALS HAVE BEEN REPLACED WITH A CLIPSAL 50A, 3ϕ 5 PIN SOCKET. ITEM 12 ADDED. GENERAL ARRANGEMENT & DRILLING DETAILS ALTERED TO SUIT A 400x600 WALL MOUNTED BOX. CABLE CONNECTIONS DRAWING ADDED. NOTES RW-WRITTEN PN 103/59/1/2 DP/JH 10/04/07 CHECKED PWJ APPROVED PWJ
4. NEUTRAL LINK TO EARTH LINK CONNECTION DELETED. BOX EARTH STUD CONNECTION DESIGNATED. MAIN NEUTRAL CONNECTION MOVED FROM 2A TERMINAL STRIP TO NEUTRAL LINK. CONNECTIONS TO NEUTRAL & EARTH LINKS ADDED TO CABLE CONNECTIONS. ALLOCATION OF 2A TERMINALS ITEMS 2A & 2B No OFF ADJUSTED. ITEMS 2A & 2B WERE NOMINATED AS X ON WIRING & CABLE CONNECTIONS. SIZE OF NEUTRAL & EARTH LINKS INCREASED. CABLE CONNECTIONS CLARIFIED AND CABLE NUMBERS ADDED. ITEM 9 DESIGNATION CORRECTED ON WIRING DIAGRAM. DRILLING DIMENSIONS CLARIFIED. ITEM 1 CORRECTED. PN 208/6/9/2 PW 24/5/13 CHECKED : IWR APPROVED: MT
5. NEW AUSGRID BORDER & LOGO ADDED. RLAALAA 24-09-2013 APPROVED TT LAMPARD
6. BORDER & TITLE BLOCK UPDATED. REFERENCE DRAWING ADDED. COLOUR PRINTED. AMENDED GPO TYPE. L MARTINUZZI 17-09-2018 CHECKED M NEWBERY APPROVED. M BENNETT

NETWORK STANDARD Ausgrid

570 George Street
SYDNEY NSW 2000
P: 9272 3805

ISSUED FOR

SCALE	AS SHOWN
DESIGNED	-
DRAWN	M.W.R
CHECKED	A.J.E
APPROVED	B.J.L
DATE	24/10/1995
TRIM REF	-
PROJECT NUMBER	5004639

SUBURBAN TYPE SUBSTATIONS WITH 1500kVA TRANSFORMERS SERVICE BOARD GENERAL ARRANGEMENT AND WIRING DIAGRAM

DRAWING No 121949 | SHEET 1 | AMD 6 | SIZE B1

C&P - x

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