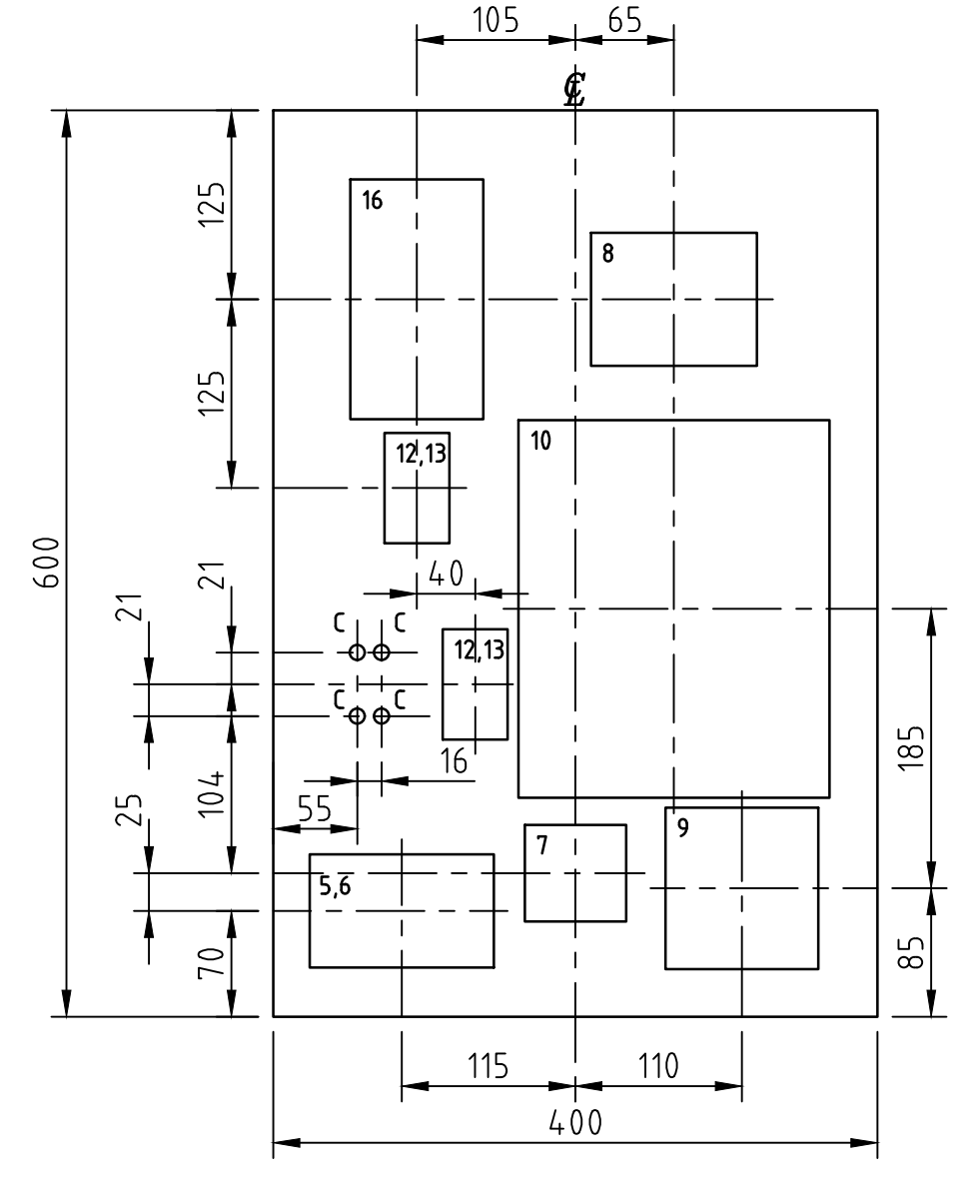
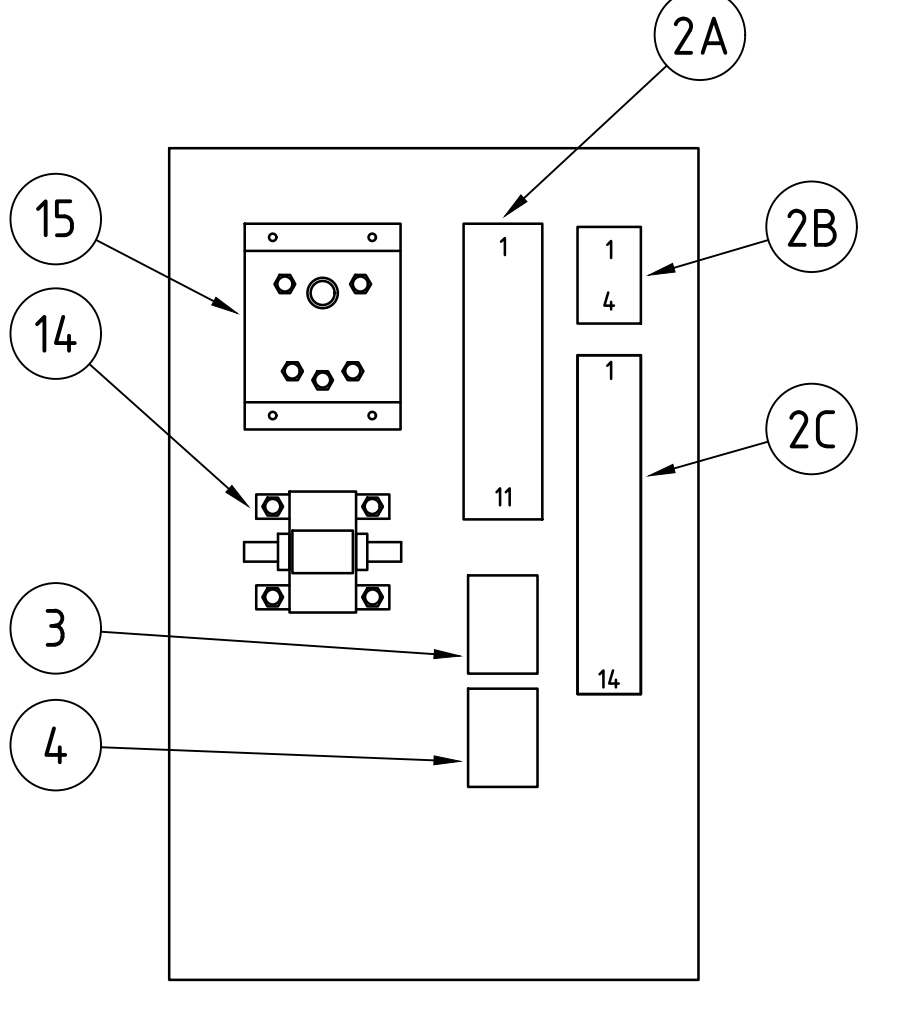


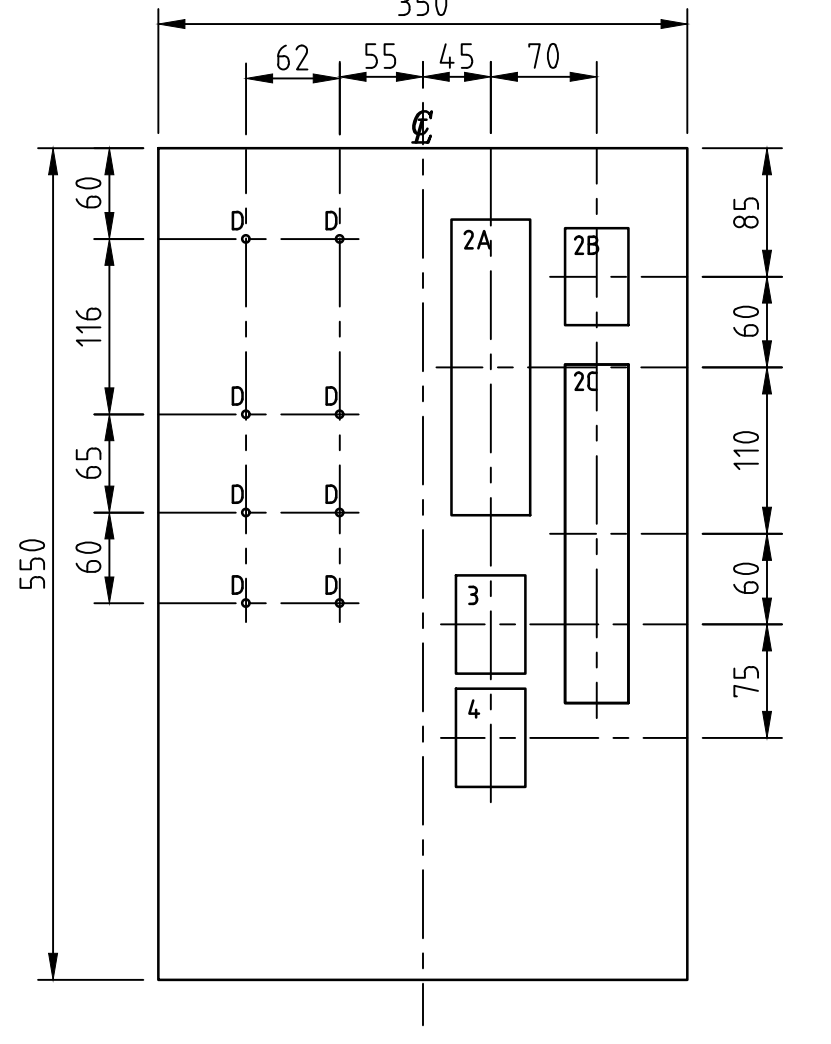
GENERAL ARRANGEMENT
(SCALE 1:5)



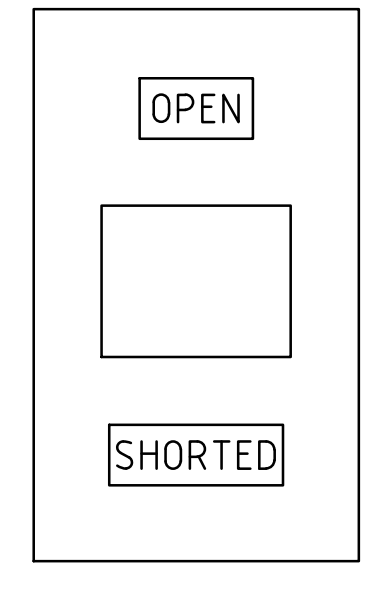
DRILLING DETAILS
(SCALE 1:5)
(SEE NOTES 4 & 5)



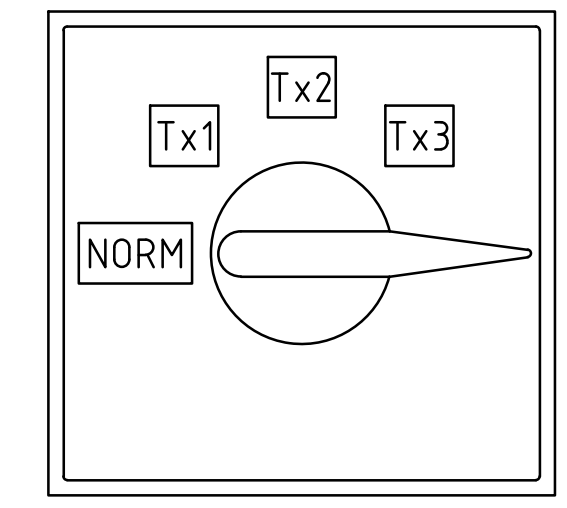
GENERAL ARRANGEMENT
(SCALE 1:5)



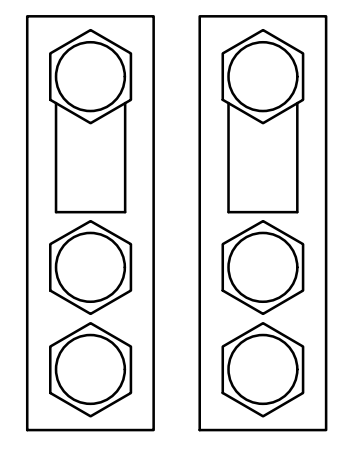
DRILLING DETAILS
(SCALE 1:5)
(SEE NOTES 4 & 5)



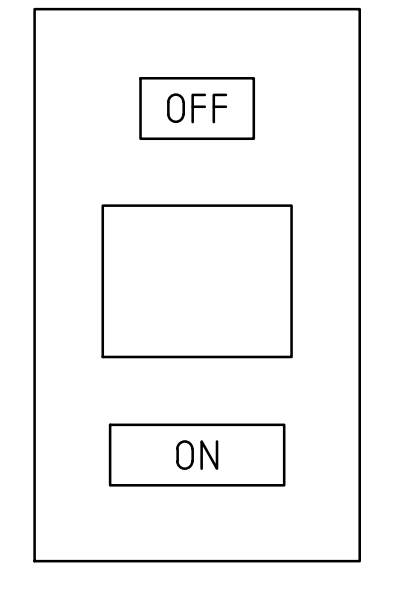
DETAIL 1
MDI SHORTING SWITCH
REFER NOTE 10



DETAIL 2
CHANGEOVER SWITCH
REFER NOTE 10



DETAIL 3
MDI TEST LINKS
REFER NOTE 10

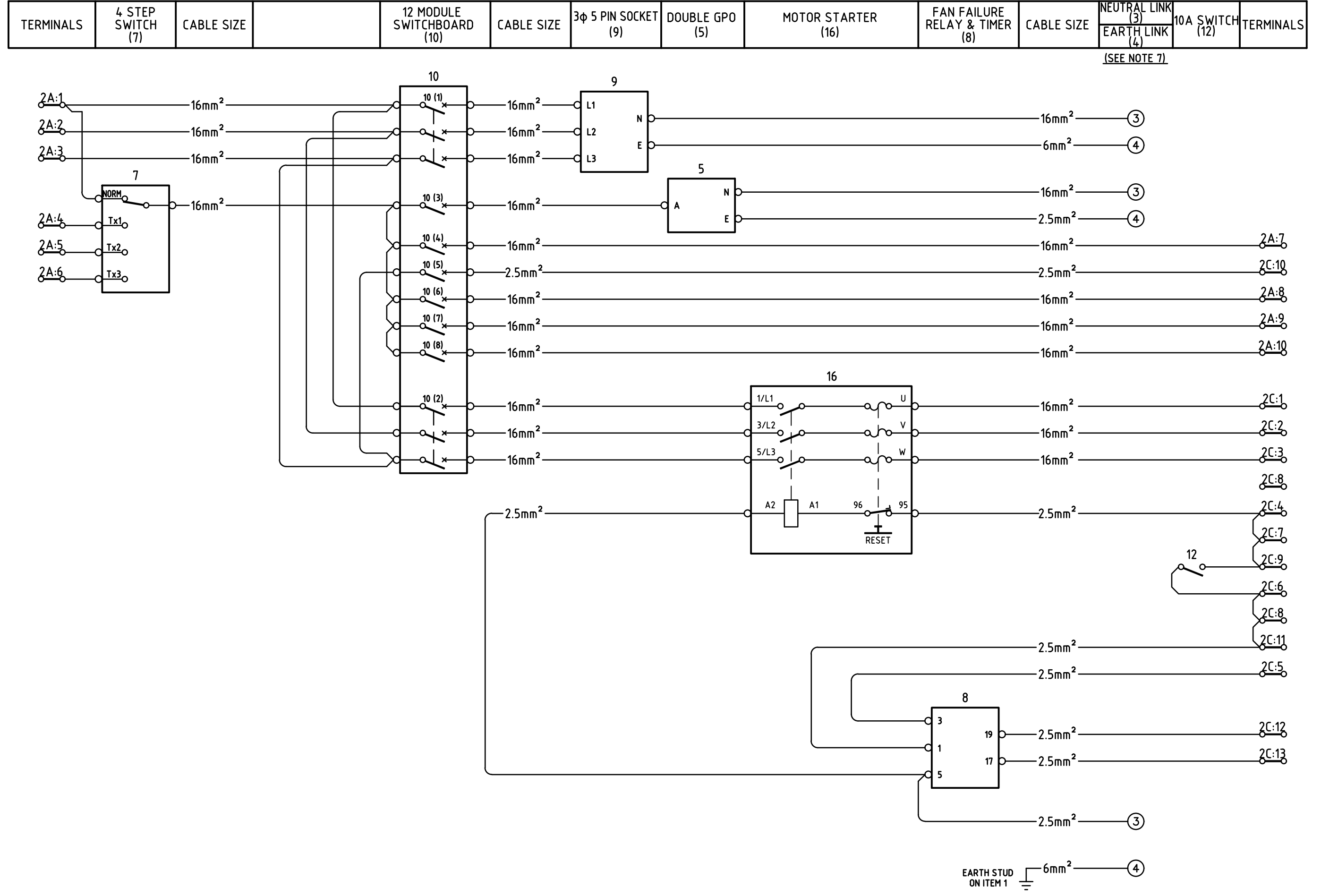


DETAIL 4
FAN CONTROL SWITCH
REFER NOTE 10

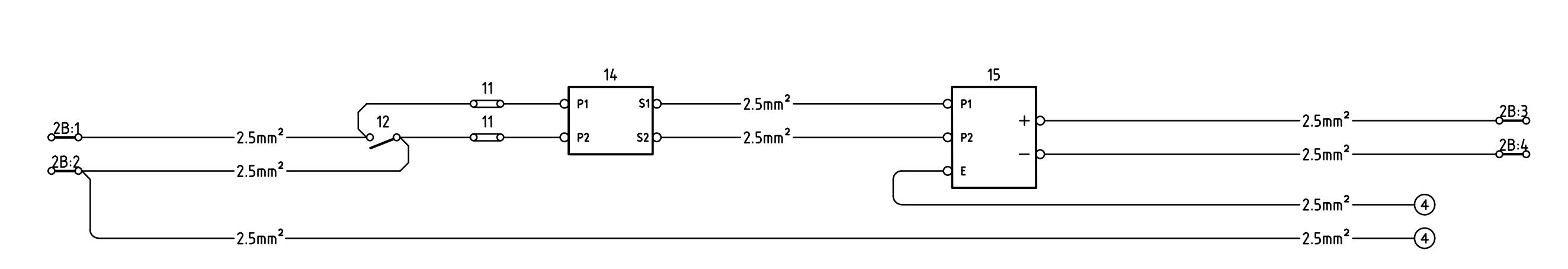
NOTES

- THIS SERVICE BOARD HAS SUBSTATION FAN CONTROL EQUIPMENT INCLUDED & IS DESIGNED FOR USE IN CITY DISTRIBUTION SUBSTATIONS.
- 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.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT NETWORK STANDARDS.
- DRILLING DETAILS FOR THE TRANSDUCER, INTERPOSING CT AND MOULDED LINKS ONLY ARE SHOWN FOR ALL OTHER COMPONENTS REFER TO THE MANUFACTURE FOR DETAILS.
- DRILLING DETAILS, DIAMETER OF HOLES.
C - 10mm
D - 5mm
- COMPRESSION TYPE CABLE LUGS ARE TO BE USED FOR CABLE TERMINATIONS 2A, 2B, 2C, 11, 14 AND 15.
- THE EARTH AND NEUTRAL LINK CONNECTIONS DESIGNATED BY ③ & ④ ARE TO BE INDIVIDUALLY CONNECTED TO THEIR LINK.
- CIRCUIT 10(7) CONTROL POINT IS NOT REQUIRED ON ALL INSTALLATIONS.
- CABLE TO BE OF ADEQUATE SIZE TO PREVENT VOLTAGE DROP, REFER TO AS 3000 FOR CABLE SIZE.
- DETAILS 1, 2, 3 & 4 SHOW WORDING AND POSITION OF SELF ADHESIVE LABELS. LABELS ARE TO BE BLACK LETTERING ON WHITE BACKGROUND.
- NUMBERS SHOWN IN A BOX ARE CABLE NUMBERS REFER TO DRAWINGS 178233 & 178234.

DOOR (FRONT VIEW)

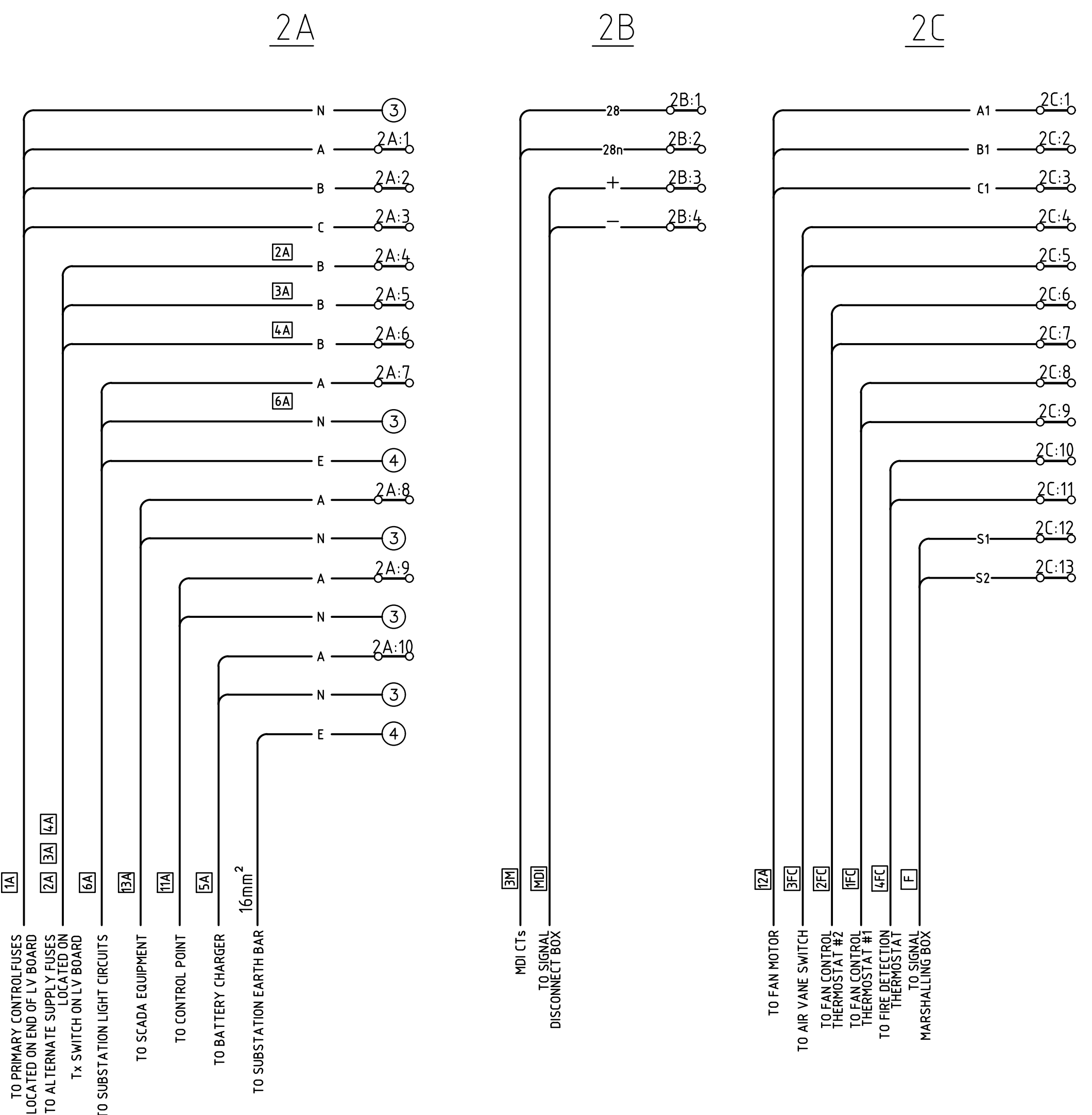


TERMINALS	CABLE SIZE	10A SWITCH (12)	M6 LINK (11)	INTERPOSING CT (14)	CABLE SIZE	TRANSUDER (15)	CABLE SIZE	EARTH LINK (4)	TERMINALS
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WIRING DIAGRAM

INTERIOR PANEL (FRONT VIEW)



CABLE CONNECTIONS

MATERIAL LIST (SEE NOTE 2)

ITEM No	DESCRIPTION	REMARKS	No. OFF
1	WALL MOUNTED BOX	EMPCO W6425	1
2A	TERMINAL STRIP 1 (2A: 1-10)	KLIIPPON ST5 85A	10
2B	TERMINAL STRIP 2 (2B: 1-4)	UTILUX H3820 30A	4
2C	TERMINAL STRIP 3 (2C: 1-13)	UTILUX H3820 30A	13
3	NEUTRAL LINK	CLIPSAI TYPE L10	1
4	EARTH LINK	CLIPSAI TYPE L8	1
5	10A & 15A DOUBLE GPO	HPM TYPE 777/1015	1
6	MOUNTING BLOCK	HPM TYPE 140	1
7	4 STEP CHANGEOVER SWITCH	KRAUS & NAIMER TYPE C32 A231 603 E	1
7A	ADJUSTABLE SHAFT	KRAUS & NAIMER TYPE S1 M004E/0008070	1
7B	TERMINAL COVERS	KRAUS & NAIMER TYPE S1 M160/B03	1
8	FFS FAN FAILURE RELAY & TIMER	AUSGRID STOCK CODE 60962	1
9	50A 3 PHASE, 5 PIN SOCKET	CLIPSAI CAT No. 5650550	1
10	12 MODULE SWITCHBOARD	HPM TYPE HM12	1
10 (1)	50A 3Φ 8kA MINIATURE C/B (3Φ POWER)	CLIPSAI TYPE 4CB350	1
10 (2)	20A 3Φ 8kA MINIATURE C/B (3Φ FAN)	CLIPSAI TYPE 4CB320	1
10 (3)	20A 1Φ 8kA MINIATURE C/B (1Φ POWER)	CLIPSAI TYPE 4CB120	1
10 (4)	16A 1Φ 8kA MINIATURE C/B (LIGHTS)	CLIPSAI TYPE 4CB116	1
10 (5)	10A 1Φ 8kA MINIATURE C/B (FAN CONTROL)	CLIPSAI TYPE 4CB116	1
10 (6)	10A 1Φ 8kA MINIATURE C/B (SCADA)	CLIPSAI TYPE 4CB110	1
10 (7)	20A 1Φ 8kA MINIATURE C/B (CONTROL POINT)	CLIPSAI TYPE 4CB120	1
10 (8)	20A 1Φ 8kA MINIATURE C/B (BATTERY CHARGER)	CLIPSAI TYPE 4CB120	1
11	M5 MOULDED LINK	AUSGRID STOCK CODE H28494	2
12	10A SINGLE POLE SWITCH	HPM TYPE A770/1	2
13	MOUNTING BLOCK	HPM TYPE 141	2
14	INTERPOSING C.T.	CROMPTON TYPE MASY-94 15/5A	1
15	TRANSUDUCER	DEWAR ELECTRONICS MODEL 666/2	1
16	5.5kW/7.5HP D.O.L. MOTOR STARTER	LE1-D123/LR2-D1316 SCHNEIDER (FORMER TELEMECANIQUE)	1

CAD DRAWING
DO NOT MANUALLY AMEND

AMENDMENTS

1. REDRAWN ON NEW BORDER
REFERENCE DRAWINGS ADDED
BATTERY CHARGER GS ADDED NEW
SERVICE BOARD ADDED

DRAWN: IWR 28/05/2003
CHECKED: P.W.J.
APPROVED: P.W.J.
PN ES599-100-2-7

2. TITLE REVISED
CIRCUIT BREAKER HAS REVISED
MATERIAL LIST REVISED

DRAWN: IWR 19/12/2003
CHECKED: P.W.J.
APPROVED: P.W.J.
PN ES103/59A/1/3

3. REF C3-50A GALLARDI TERMINALS
50A 3Φ 8kA MINIATURE C/B (3Φ POWER)
GENERAL ARRANGEMENT & WIRING
DETAILS ALTERED TO SUIT A
400x400 WALL MOUNTED BOX.
CABLE CONNECTIONS DRAWING
ADDED. NOTES RE-WRITTEN.

DRAWN: IWR/JH 10/04/07
CHECKED: P.W.J.
APPROVED: P.W.J.
PN ES103/59A/1/2

4. NEUTRAL LINK TO EARTH LINK
CONNECTION DELETED
EARTH STUD CONNECTION
DESIGNATED
MAIN NEUTRAL CONNECTION MOVED
FROM 2A TERMINAL STRIP TO
NEUTRAL LINK TO NEUTRAL & EARTH
LINKS ADDED TO CABLE
CONNECTIONS.
ALLOCATION OF 2A TERMINALS
ITEMS 2A, 2B & 2C WERE ADJUSTED
AS X ON WIRING & CABLE
CONNECTIONS CLARIFIED AND
CABLE CONNECTIONS CLARIFIED AND
CABLE NUMBERS ADDED.
WIRING DIAGRAM CORRECTED ON
OVERALL DIMENSIONS CLARIFIED.
ITEM 1 CORRECTED.

P.W.J. 3.10.07
CHECKED: IWR
APPROVED: MT
PN 208/6/9/2

5. ITEM 8 WAS IN FILE
FOR WAS (SPARE LIGHTS).
NOTE 8 REWRITTEN.
ITEM 8 WAS DELETED AND
RENUMBERED ON WIRING DIAGRAM
ACCORDINGLY.
MOTOR STARTER (ITEM 16) REWRITTEN
TO BE A 5.5kW/7.5HP D.O.L. CIRCUIT
TO ALIGN WITH FAN CONTROL
DRAWING.

P.JARVIS 6.9.03
T.UBIRIN
APPROVED: P.TURRIN
PN 02-0203-0-2001

6. BORDER & TITLE BLOCK UPDATED.
M6 LINKS WERE 16.
20/09/2024
M.BENNETT
L.MARTINZZI
H.BENNETT
APPROVED.

24 Campbell Street
SYDNEY NSW 2000
P. 9272 3805

ISSUED FOR
CONSTRUCTION

SCALE	AS SHOWN
DESIGNED	-
DRAWN	MWR
CHECKED	AJE
APPROVED	BJL
DATE	24/10/1995
TRIM REF	-
PROJECT NUMBER	ES 103-59-1-2

**CITY DISTRIBUTION SUBSTATIONS
SERVICE BOARD
WITH SUBSTATION FAN CONTROL
GENERAL ARRANGEMENT & WIRING DIAGRAM**

ISSUED FOR CONSTRUCTION

DRAWING No **121950** SHEET 1 AMD 6 SIZE B1

C&P - DISTRIBUTION SUBS