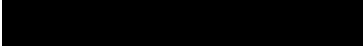
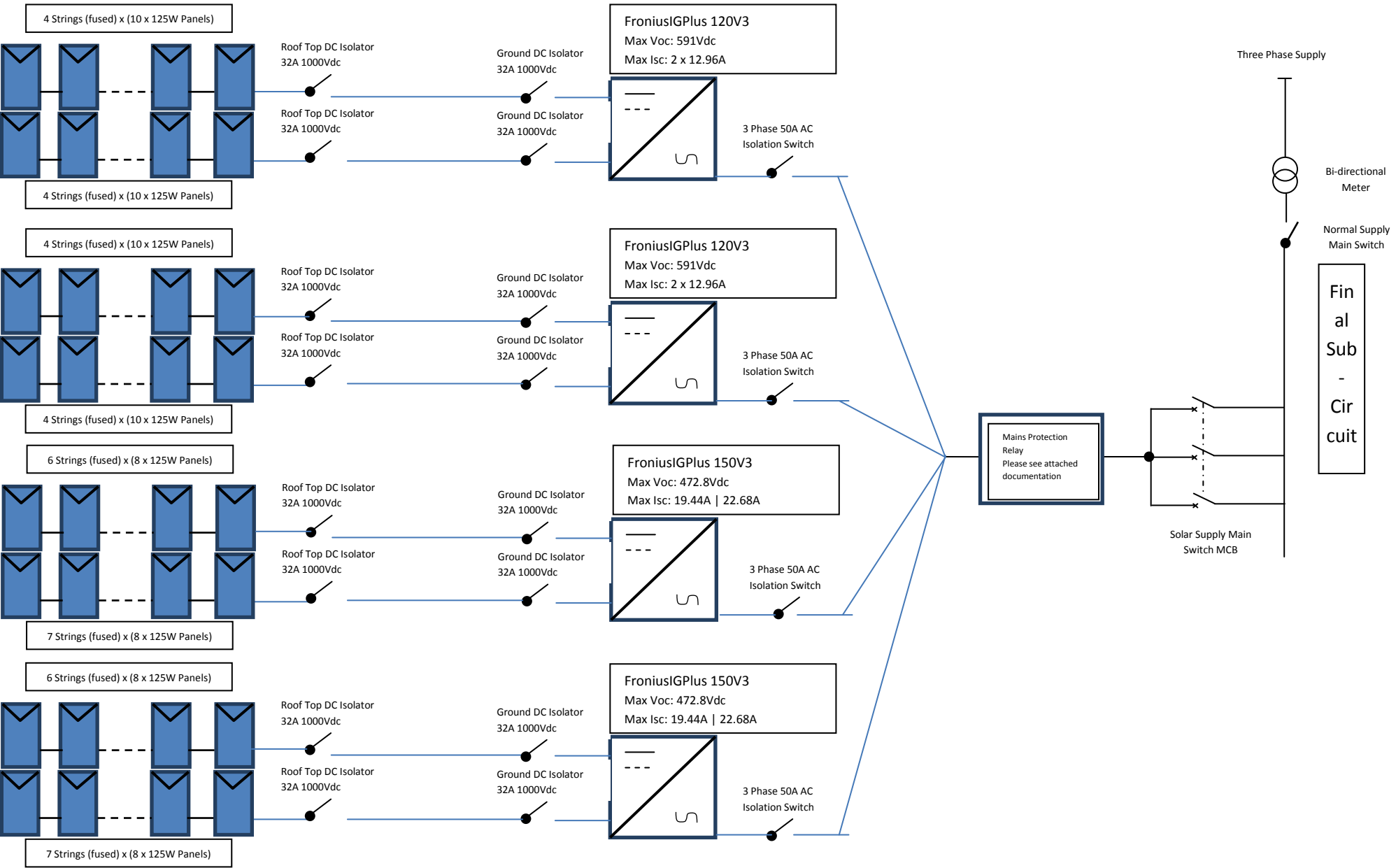
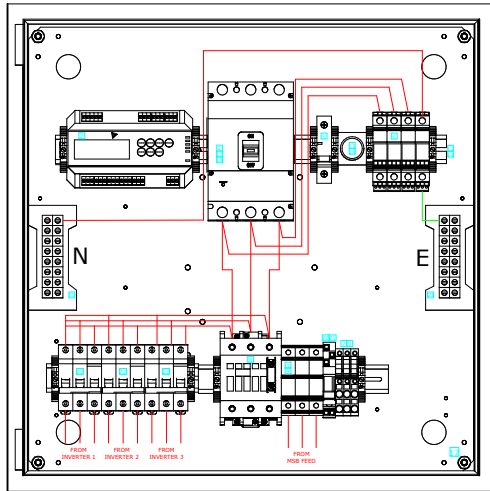


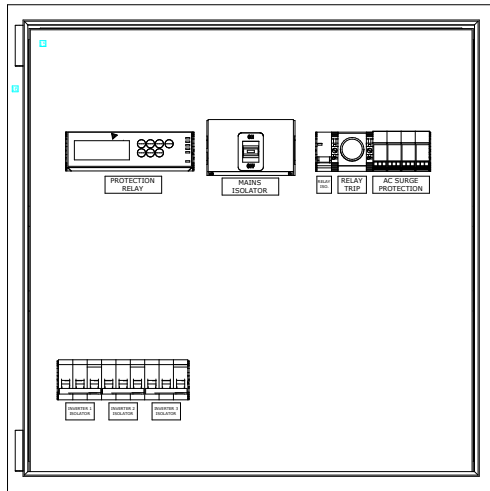
- 
1. Technology: Solar PV
 2. Maximum Power: 44kW
 3. Contribution to fault levels: N/A
 4. Size & rating of the relevant Transformer: N/A
 5. Single line diagram: refer to following page
 6. Protection Systems & Communication Systems: refer to following page
 7. Voltage Control and reactive power capability: N/A
 8. Details specific to the location of facility: N/A

Address: [REDACTED]

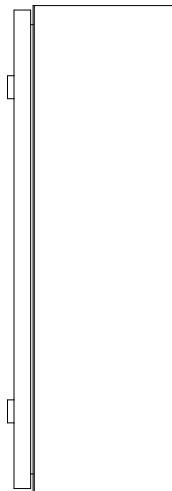




FRONT ELEVATION
(DOOR & ESCUTCHEON REMOVED)



FRONT ELEVATION
(DOOR REMOVED)



SIDE ELEVATION

EQUIPMENT SCHEDULE

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	MCCB, FEN160, 3P, 50KA, 160A LMTD TRIP UNIT	IPD - FEN36TD160JF
2	1	MAINS DECOUPLING RELAY	MAINSPRO
3	1	FUSE FOLDER 32A 3 POLE 690V DIN MOUNT	IPD - CMS103
4	3	FUSE LINK 6A 500V 10*38MM 120KA FERRULE	IPD - 10G06
5	1	2A 1P TYPE C MCB 6KA	IPD - G61C02
6	1	SPD 4P CLASS 2 25KA 8/20us 5 WIRE W/FUSES	IPD - DGMTC1275
7	3	DISCONNECT AND TEST TERMINALS	IPD - CDS6U
8	1	CONTACTOR 3P, 140A, AC1, NO 240VAC	IPD - CL09A311M7
9	1	END PLATE FOR TEST TERMINALS	IPD - EPCDS6U
10	2	350A 7 HOLE NEUTRAL LINK MAX 120mm CABLES	IPD - LT350/7
11	1	PUSH BUTTON FLUSH GREEN 1NO CONTACT	IPD - P9XPN52002
12	1	LONG DIN RAIL CUT & PUNCHED 428mm	IPD - E-DINRAIL-L
13	1	FE & FD TOP HAT MOUNTING BRACKET	IPD - E-FETH
14	4	DIN RAIL SUPPORT PILLAR 87mm x 14mm M6x6mm	IPD - E-DRSP
15	1	600x600 ESCUTCHEON TO SUIT ENCLOSURE	IPD - E-M06PVFE-ID
16	1	DB SHELL 600H IP65 GREY INC ESCUTCHEON	IPD - E65SHELL6G
17	1	MOUNTING PAN FOR 600H SHELL	IPD - E-06U-MP
18	1	TERMINAL SHIELDS FE FRAME 3P SHORT	IPD - FEJS3
19	1	DIN RAIL ADAPTOR FOR 22MM PILOT DEVICES	IPD - P9DINRA
20	1	RJ15 RELAY BASE. DIN RAIL MOUNT	IPD - SJ15-CL-A240
21	1	RELAY SLIM LINE, SPDT, 240VAC, 12A	IPD - RJ15-CL-A240
22	3	50A 3P TYPE C MCB 10KA	IPD - G103C50

CONSTRUCTION NOTES

PAINT COLOUR GREY
 ESCUTCHEON HINGED ON LHS
 CHASSIS N/A
 ENCLOSURE POWDER COATED MILD STEEL IP65
 CABLE ENTRY REMOVABLE PLATES TOP & BOTTOM
 LABELS AS PER LABEL SCHEDULE

LABEL SCHEDULE

MAIN ISOLATOR "MAIN ISOLATOR"
 COMAP MAINSPRO "PROTECTION RELAY"
 2A C/B "RELAY ISO."
 GREEN PUSHBUTTON "RELAY TRIP"
 AC SPD "AC SURGE PROTECTION"
 INVERTER ISOLATORS "INVERTER 1 ISOLATOR"...

Rev	Date	Comments	Dwn	Chkd

NOTES:
 ALL WIRING, COMPONENTS AND EARTHING MUST BE INSTALLED IN ACCORDANCE WITH AS/NZS 3000 & 5033:2012 AND ALL THE CURRENT CEC REQUIREMENTS
 EARTHING CABLE RUNS ARE INDICATIVE ONLY. ONLY EARTH CABLES USED FOR PV MODULE BONDING ARE INDICATED FOR CLARITY
 AC LOSSES BETWEEN INVERTERS AND MSB <1%P
 DC LOSSES BETWEEN ARRAYS (INCLUDING LOSSES IN STRING CABLES) AND INVERTERS TO BE <3%P
 NOTE - VOLTAGES ARE OVER 600VDC. SYSTEM MUST COMPLY WITH RESTRICTED ACCESS REQUIREMENTS. INSTALL PADLOCK ON DOORS IF REQUIRED AND ENSURE ALL WIRING AND SYSTEM COMPONENTS CAN ONLY BE ACCESSED BY COMPETENT AND TRAINED PERSONNEL.
 CONDUITS, CABLE TRAYS AND ALL CABLE MANAGEMENT SYSTEMS MUST ALLOW FOR HEAT EXPANSION AS WELL TO AVOID DAMAGE TO CABLES

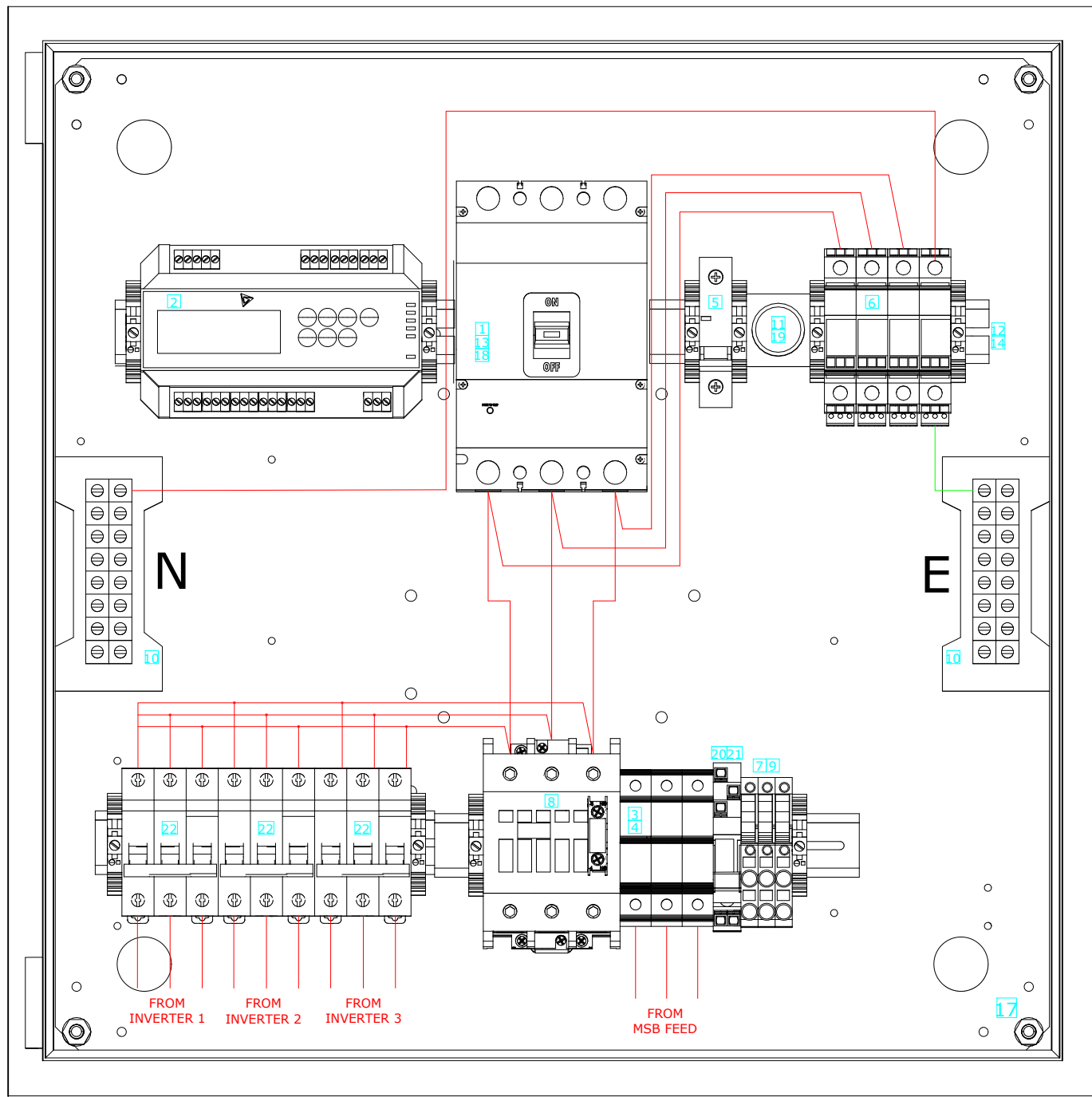
PROJECT NAME:

CLIENT'S NAME:

Project Address

Sheet Title
SOLAR PROTECTION BOARD
GENERAL OVERVIEW

Draw	Date	Checked	Date
Status	FOR CONSTRUCTION		Sc
Drawing No.			Revision 0



FRONT ELEVATION
(DOOR & ESCUTCHEON
REMOVED)

Rev	Date	Comments	Dwn	Chkd
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PROJECT NAME:

CLIENT'S NAME:

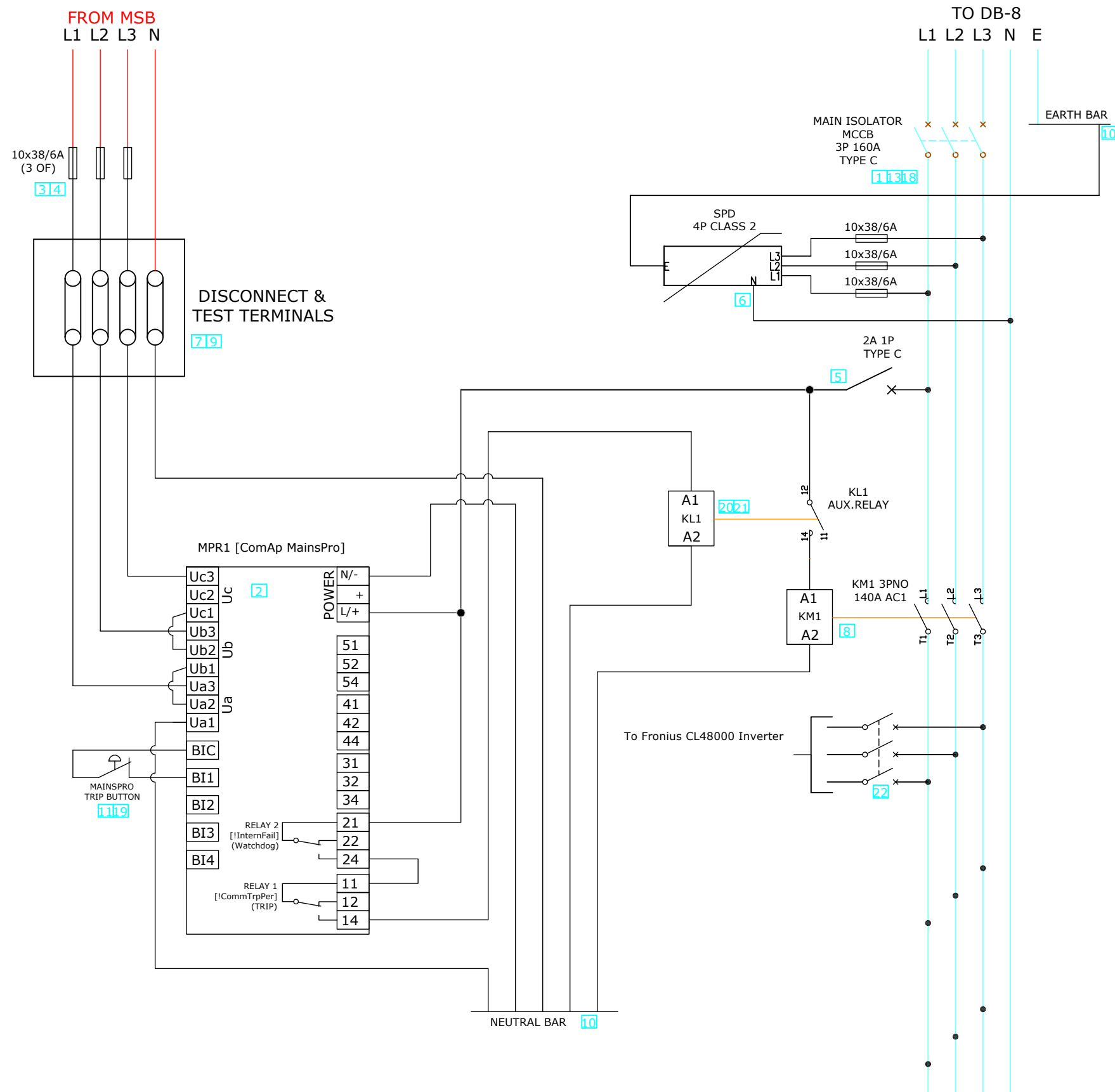
Project Address

Sheet Title
**SOLAR PROTECTION BOARD
 DETAILED VIEW**

Drawn	Date	Checked	Date
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Status	Scale
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Drawing No.	Revision
	0



ANSI DEVICE SCHEDULE - ALL TBC BY DNSP

No.	DESCRIPTION	VALUE
27	UNDER VOLTAGE	208V-2.0 SEC
59	OVER VOLTAGE	257V-2.0 SEC
810	OVER FREQUENCY	52Hz-2.0SEC
81U	UNDER FREQUENCY	48Hz-2.0 SEC
81RF	ROCOF	1Hz/s
78	VECTOR SHIFT	8°-2.0 SEC
	DISCONNECT TIME	2 SEC
	AUTO RE-CONNECT TIME	60 SEC

TRIPPING / RECONNECT ARRANGEMENTS:

THE RELAY MUST ISOLATE THE PV SYSTEM FROM THE REST OF THE ELECTRICAL INSTALLATION IN CASE OF GRID FAILURE AND SUB-STANDARD GRID PARAMETERS [UN-HEALTHY GRID].

THE RELAY MUST ALSO ISOLATE THE PV INSTALLATION IN CASE THE RELAY LOSES POWER SUPPLY OR WHEN THERE IS A PROBLEM WITH THE RELAY. INCLUDE 9VDC UNDERVOLTAGE COIL.

WHEN A TRIP IS INITIATED OR THE RELAY IS NOT HEALTHY (LOST POWER OR MALFUNCTION) THE RELAY(S) MUST OPEN, DISCONNECTING THE SOLAR SUPPLY

Rev	Date	Comments	Dwn	Chkd

PROJECT NAME:

CLIENT'S NAME:

Project Address

Sheet Title
**SOLAR PROTECTION BOARD
 SCHEMATIC**

Drawn	Date	Checked	Date
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Status **FOR CONSTRUCTION** Scale

Drawing No.	Revision 0
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