

SYSTEM INFORMATION

PROJECT / ORDER NUMBER:	419561
PROJECT SITE NAME:	PPP SCHOOLS, SA
SYSTEM DESCRIPTION:	SOLAR GRID PROTECTION WITH easyProtec RELAY
CUSTOMER NAME:	TBC
SPECIFIED BY:	VIHAR DOSHI

TABLE OF CONTENTS

SHEET	DESCRIPTION
1	CONTENTS
2	LEGEND
3	BILL OF MATERIAL
4	SLD
5	SCHEMATIC

SECONDARY PROTECTION RELAY SETTINGS (SA POWER NETWORKS)

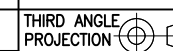
ITEM	FUNCTION DESCRIPTION	SETTING	DELAY TIME (SEC)
1	OVER VOLTAGE	260V	2
2	UNDER VOLTAGE	180V	2
3	OVER FREQUENCY	52 Hz	2
4	UNDER FREQUENCY	47 Hz	2
5	ROCOF	4 Hz/s	0.25
6	SUSTAINED OVER VOLTAGE (10 MIN AVG.)	258V	
7	RECONNECTION DELAY	60 SECONDS	



PM CONTROL SYSTEMS (AUST) PTY LTD
 UNIT 1, 1 WIREGA AVE, KINGSGROVE, NSW 2208
 PHONE: +61 (0)2 9758 2322
 EMAIL: SYDNEY@PMCONTROL.COM.AU

SOLARTUNE PVDB – PPP SCHOOLS – ADELAIDE, SA 5000

REV	NOTES	DRAWN	CHECKED	DATE
NEW	PRELIMINARY RELEASE.	KP	MD	2021-03-09



PROJECT ENGINEER
KINJAL PATEL

PART NO.
ST-1002





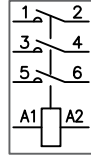






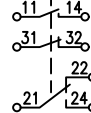



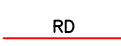



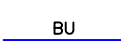

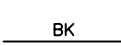







PROJECT NO.
419561

REV
NEW

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE MILLIMETERS. SCALE : N.T.S

SHEET 01

SYMBOL LEGEND

	SINGLE-POLE MCB		TWISTED PAIR(S) CABLE (e.g. FOR RS-485)
	THREE-POLE MCB		CAT-5/5e/6 COMMUNICATION CABLE
	CONTACTOR, THREE-POLE		TERMINAL (2-CONDUCTOR)
			TERMINAL (3-CONDUCTOR)
	FUSE		TERMINAL BLOCKS, TIED/JUMPERED
	RELAY COIL		TERMINAL BLOCK WITH KNIFE DISCONNECT AND TEST POINT FOR 4MM BANANA PLUG
	AUXILIARY CONTACTS: NORMALLY OPEN NORMALLY CLOSED FORM C (CHANGEOVER)		TERMINALS, 2-WAY SLIDE-DISCONNECT E.G. CONNECTWELL CDTTUSH
	LAMP		TO SAFETY GROUND
	415VAC WIRE PHASE L1 (RED) OR FIBRE CABLE		ISOLATOR
	415VAC WIRE PHASE L2 (WHITE)		INSTRUMENT GROUND
	415VAC WIRE PHASE L3 (BLUE)		I.S. EARTH BAR
	415VAC WIRE NEUTRAL (BLACK) OR OTHER CONDUCTOR OR MULTICORE CABLE		WIRES, SEPARATED / NOT JOINED
	+24Vdc (ORANGE)		WIRES JOINED
	DC COMMON (BROWN)		SIGNAL CABLE SHIELD
	REV CLOUD: CHANGES TO PANEL DESIGN		RCBO



PM CONTROL SYSTEMS (AUST) PTY LTD
 UNIT 1, 1 WIREGA AVE, KINGSGROVE, NSW 2208
 PHONE: +61 (0)2 9758 2322
 EMAIL: SYDNEY@PMCONTROL.COM.AU

SOLARTUNE PVDB – PPP SCHOOLS – ADELAIDE, SA 5000
 LEGEND

REV	NOTES	DRAWN	CHECKED	DATE
NEW	PRELIMINARY RELEASE.	KP	MD	2021-03-09

THIRD ANGLE PROJECTION 	PROJECT ENGINEER KINJAL PATEL	PART NO. ST-1002	PROJECT NO. 419561	REV NEW
---	----------------------------------	---------------------	-----------------------	------------

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE MILLIMETERS. SCALE : N.T.S

SHEET 02

LIST OF MATERIAL					
QTY	DEVICE NAME	DEVICE SPECIFICATION	DEVICE ID	MANUFACTURER	NOTES
1	MAIN ISOLATOR	250A, 3P	-S1	MERCS	
1	CONTACTOR	275A AC-1	-K1	SCHNEIDER	LC1F185U7
1	PROTECTION RELAY	EASYPROTEC	-PR	WOODWARD	
4	INVERTER ISOLATING BREAKER	63A, 3P	-Q1,-Q2,-Q3,-Q4	SCHNEIDER	A9F44363
3	CONTROL FUSE	20A			
3	MCB	6A, 1P	-QM2,-QM3,-QM4	SCHNEIDER	
2	MCB	6A, 3P	-QM1,-QM5	SCHNEIDER	
1	AUX RELAY	24V DC	-R1	PHOENIX CONTACT	
2	INDICATING LAMP	24V DC	-H1, -H2	MERCS	
1	POWER METER	KR-63	-PM	SOLAR ANALYTICS	
1	CT SET		-CT1	SOLAR ANALYTICS	
1	THERMOSTAT		-TH1		
1	FAN & LOUVRE				
1	POWER SUPPLY	24V DC	-PS		



PM CONTROL SYSTEMS (AUST) PTY LTD
 UNIT 1, 1 WIREGA AVE, KINGSGROVE, NSW 2208
 PHONE: +61 (0)2 9758 2322
 EMAIL: SYDNEY@PMCONTROL.COM.AU

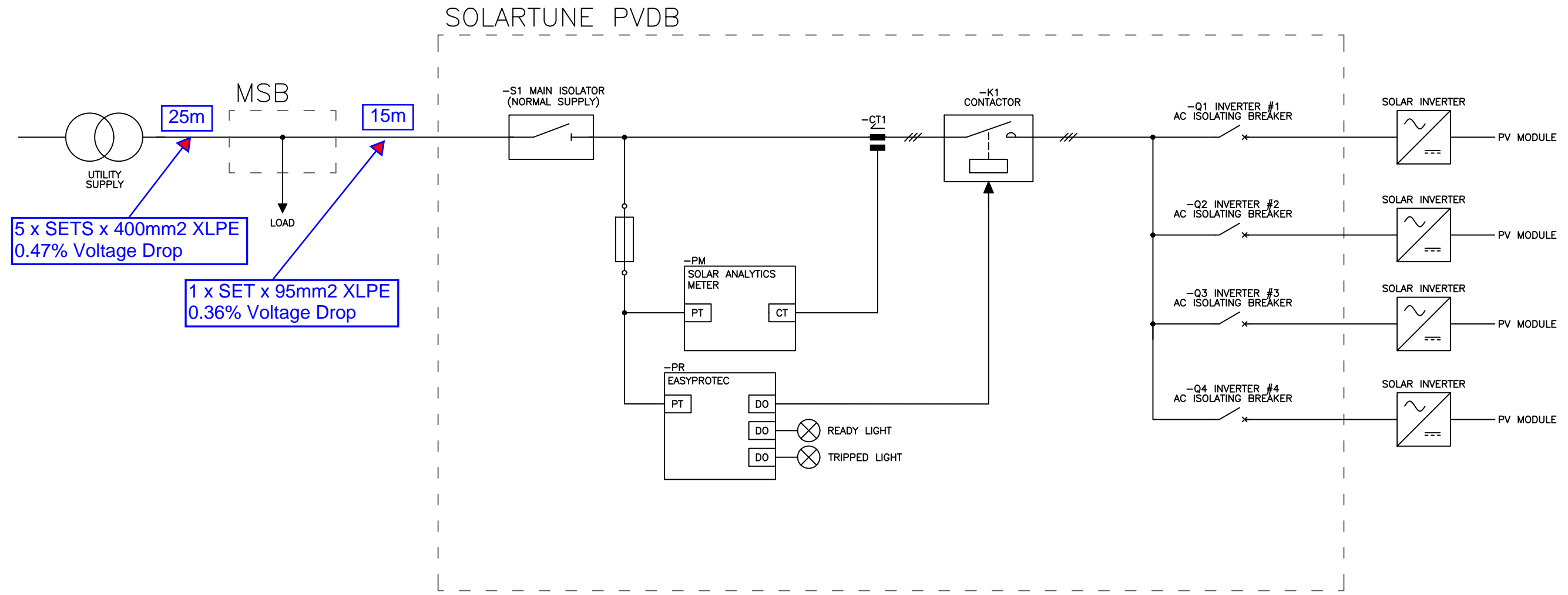
SOLARTUNE PVDB – PPP SCHOOLS – ADELAIDE, SA 5000
 BOM

REV	NOTES	DRAWN	CHECKED	DATE
NEW	PRELIMINARY RELEASE.	KP	MD	2021-03-09

THIRD ANGLE PROJECTION  PROJECT ENGINEER
 KINJAL PATEL

PART NO. ST-1002 PROJECT NO. 419561 REV NEW

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE MILLIMETERS. SCALE : N.T.S SHEET 03



5 x SETS x 400mm² XLPE
0.47% Voltage Drop

1 x SET x 95mm² XLPE
0.36% Voltage Drop

PM CONTROL
PM CONTROL SYSTEMS (AUST) PTY LTD
UNIT 1, 1 WIREGA AVE, KINGSGROVE, NSW 2208
PHONE: +61 (0)2 9758 2322
EMAIL: SYDNEY@PMCONTROL.COM.AU

SOLARTUNE PVDB – PPP SCHOOLS – ADELAIDE, SA 5000
SLD

THIRD ANGLE PROJECTION

PROJECT ENGINEER
KINJAL PATEL

PART NO.
ST-1002

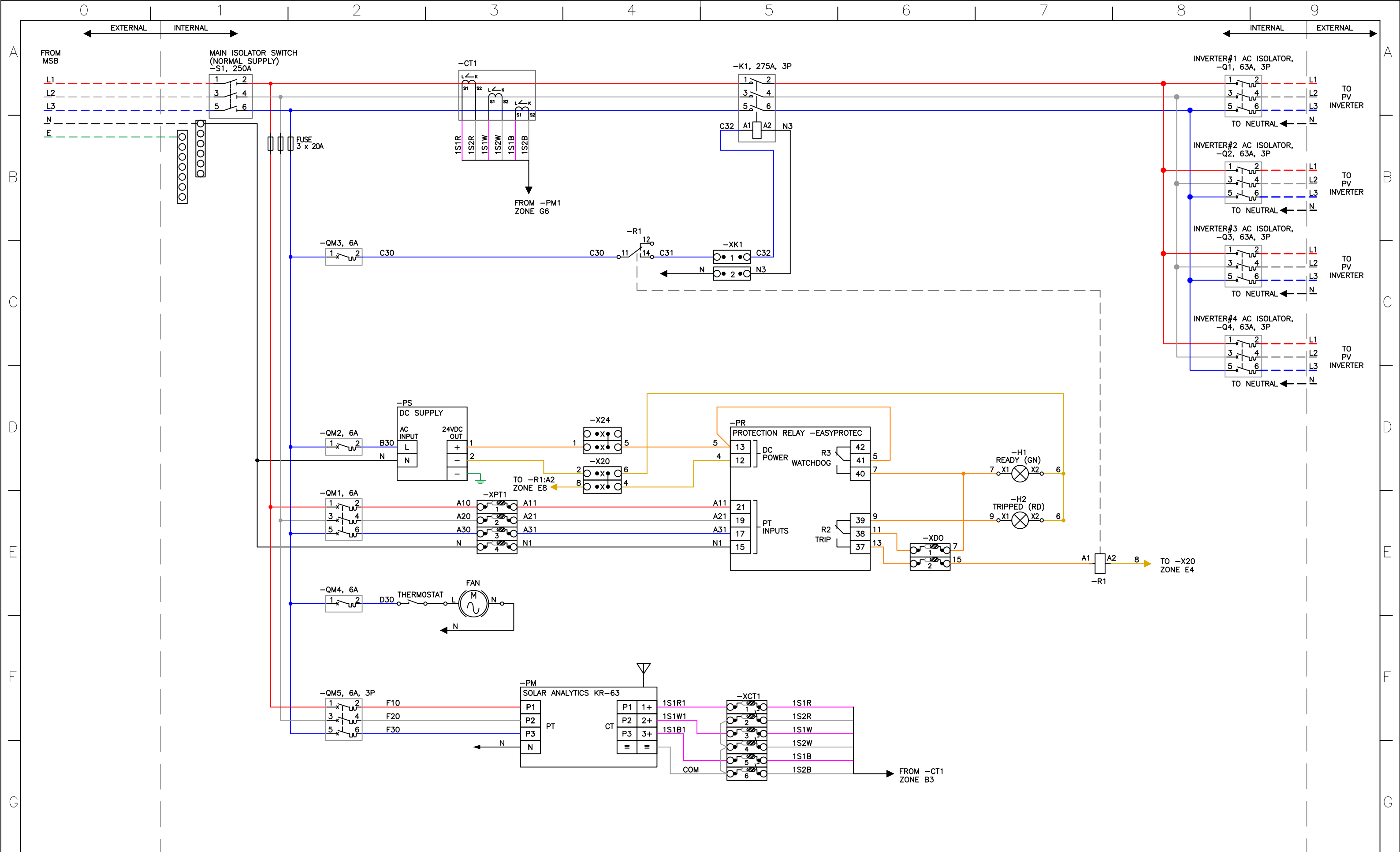
PROJECT NO.
419561

REV
NEW

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE MILLIMETERS. SCALE : N.T.S

SHEET 04

REV	NOTES	DRAWN	CHECKED	DATE
NEW	PRELIMINARY RELEASE.	KP	MD	2021-03-09



PM CONTROL SYSTEMS (AUST) PTY LTD
 UNIT 1, 1 WIREGA AVE, KINGSGROVE, NSW 2208
 PHONE: +61 (0)2 9758 2322
 EMAIL: SYDNEY@PMCONTROL.COM.AU

SOLARTUNE PVDB - PPP SCHOOLS - ADELAIDE, SA 5000
 SCHEMATIC

REV	NOTES	DRAWN	CHECKED	DATE
NEW	PRELIMINARY RELEASE.	KP	MD	2021-03-09

THIRD ANGLE PROJECTION
 PROJECT ENGINEER: KINJAL PATEL
 PART NO.: ST-1002
 PROJECT NO.: 419561
 REV: NEW
 SHEET: 05

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE MILLIMETERS. SCALE : N.T.S.