

- 
1. Technology: Solar PV
 2. Maximum Power: 39.52 kW
 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

PROJECT No: P1100-14-AU-PV
 SYSTEM NO: S-AU-1100
 DRAWING NO: 9771-1105
 CUSTOMER: [REDACTED]

REV	DESCRIPTION	DATE	APPROVED
NEW	PRELIMINARY	19 DEC 2014	[REDACTED]
A	AS-BUILT	18 NOV 2015	[REDACTED]

SUBJECT: CONTROL WIRING
 SOLARTUNE CONTROL WITH EASYPROTEC RELAY (PROTECTION ONLY)

SHEET	CONTENTS
1	COVER AND CONTENTS
2	LEGENDS
3	SYSTEM OVERVIEW
4	DETAILED LAYOUT
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 DRAWING DEFINITIONS AND TOLERANCES
 SHALL BE FOUND IN SS-112.



PM Control Systems
 [REDACTED]

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APPROVALS		DATE
ENGINEER	[REDACTED]	19NOV15
DRAWN BY	[REDACTED]	16DEC14

TITLE			
SOLARTUNE SOLAR INVERTER INTERFACE CONTROL COVER AND CONTENTS			
SIZE	SYSTEM PART NO.	DRAWING NO.	REV
A3	S-AU-1100	9771-1105	A
SCALE : N.T.S.			SHEET 1 OF 4

REF. DWGS.

STANDARD WIRING NOTES

ALL WIRING IS $\phi 1\text{mm}^2$ UNLESS SPECIFIED OTHERWISE

- 1. WIRING IS $\phi 16\text{mm}^2$
- 2. WIRING IS $\phi 2.5\text{mm}^2$
- 3. WIRING IS $\phi 1.5\text{mm}^2$
- 4. UNLESS OTHERWISE SPECIFIED:
 - A. RELAYS SHOWN DE-ENERGISED.
 - B. RELAYS ENERGISED FOR FUNCTION.
 - C. RELAY CONTACT RATINGS:
 - 8.0A AT 28VDC
 - 8.0A AT 110VDC
 - 8.0A AT 250VAC

- 5. 120Ω RESISTOR
- 6. CUSTOMER PROVIDE WIRING.
- 7. DASHED LINES INDICATE CUSTOMER FIELD WIRING.
- 8. CUSTOMER SUPPLIED
- 9. EXISTING
- PM. PM CONTROL SUPPLIED

CABLE LABELLING IS USED TO BE (MATERIAL) TRAFFOLYTE.
ALL FIELD WIRING ARE PROVIDED BY CUSTOMER.



MISCELLANEOUS ABBREVIATIONS

- FTM - FIELD TERMINAL MODULE
- SHLD - SHIELD
- I.S - INTRINSICALLY SAFE

ELECTRICAL SYMBOLS USED

	SINGLE POLE MCB		COMMUNICATION CABLE (RS485)
	TRIPLE POLE MCB		COMMUNICATION CABLE (ETHERNET STRAIGHT)
	CONTACTOR, 3 PHASE		TERMINAL BLOCK
	FUSE		TERMINAL BLOCKS TIED
	RELAY COIL		TEST TERMINAL BLOCK
	CONTACT, NORMALLY OPEN		TO SAFETY GROUND
	DIODE (NOT USED)		CHASSIS GROUND (NOT USED)
	415VAC WIRE PHASE L1 (RED)		INSTRUMENT GROUND (NOT USED)
	415VAC WIRE PHASE L2 (WHITE)		I.S EARTH BAR (NOT USED)
	415VAC WIRE PHASE L3 (BLUE)		WIRES NOT JOINED
	415VAC WIRE NEUTRAL (BLACK)		WIRES JOINED
	+24VDC (ORANGE)		SIGNAL CABLE SHIELD (NOT USED)
	24VDC COMMON (BROWN)		

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DRAWING DEFINITIONS AND TOLERANCES SHALL BE FOUND IN SS-112.		THIRD ANGLE PROJECTION		PM Control Systems		
APPROVALS		DATE		TITLE		
ENGINEER		18NOV15		SOLARTUNE		
DRAWN BY		16DEC14		SOLAR INVERTER INTERFACE CONTROL		
LEGENDS		SIZE		SYSTEM PART NO.		REV
REF. DWGS.		A3		S-AU-1100		A
		SCALE		DRAWING NO.		SHEET
		N.T.S.		9771-1105		2 OF 4

1 2 3 4 5 6 7 8

A A

B B

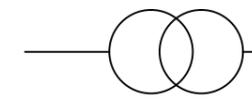
C C

D D

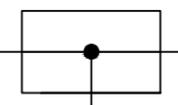
E E

F F

UTILITY
SUPPLY

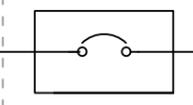


MSB
Main Switch Board



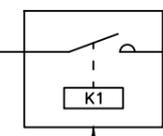
LOAD

MAIN SWITCH



SCOPE OF SUPPLY

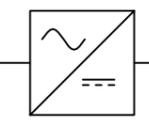
K1
CONTACTOR



INV1



SOLAR
INVERTER

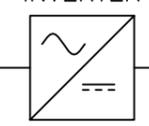


PV CELL
SUPPLY

INV2

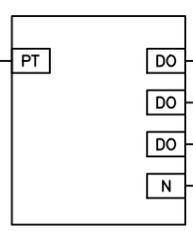


SOLAR
INVERTER



PV CELL
SUPPLY

EP
EASYPROTEC



READY LIGHT

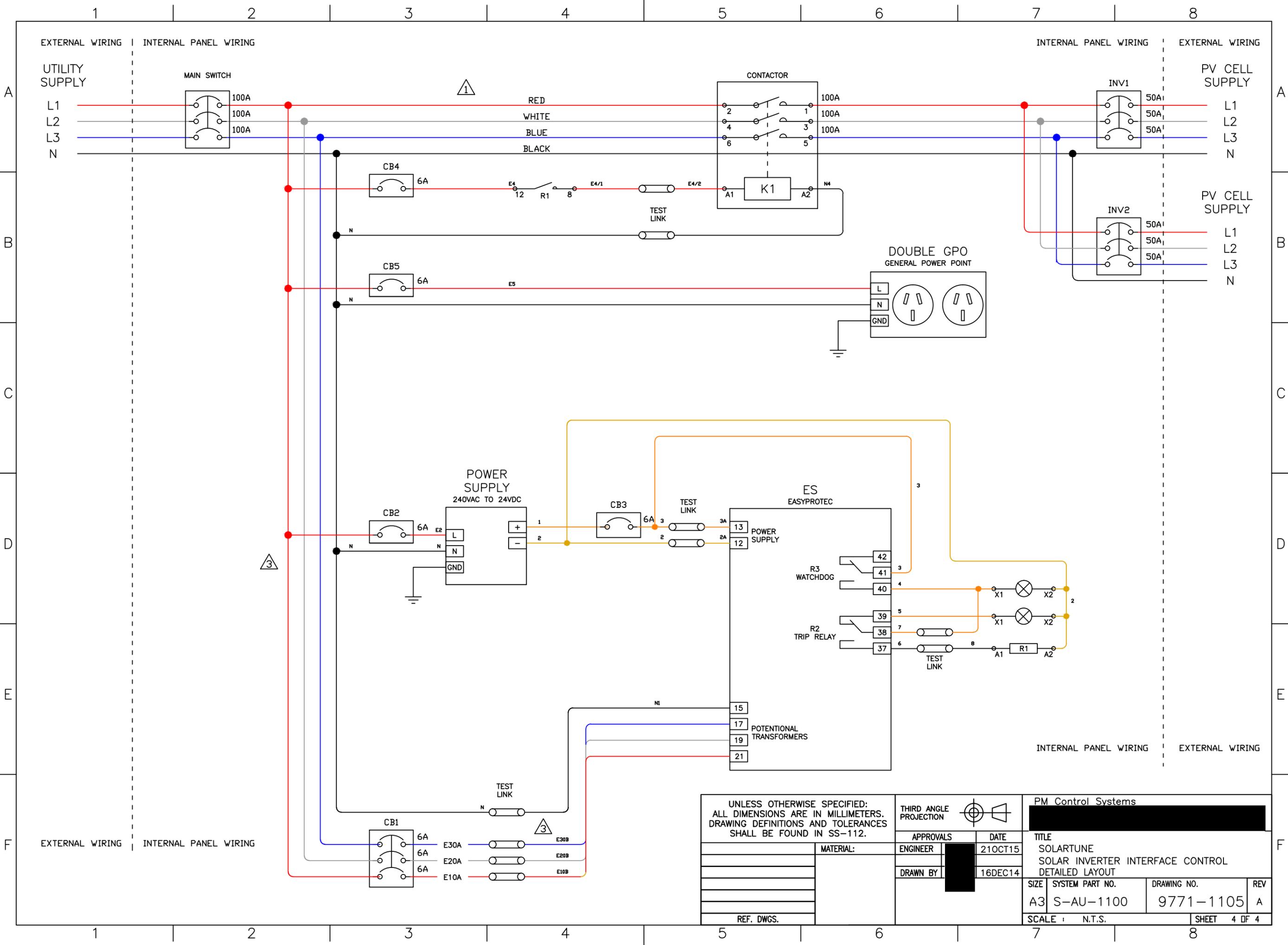
TRIP LIGHT

INDICATION LIGHTS LOCATED ON
PANEL DOOR

SCOPE OF SUPPLY

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DRAWING DEFINITIONS AND TOLERANCES SHALL BE FOUND IN SS-112.		THIRD ANGLE PROJECTION				PM Control Systems	
		APPROVALS		DATE		TITLE	
MATERIAL:		ENGINEER		18NOV15	SOLARTUNE		
		DRAWN BY		16DEC14	SOLAR INVERTER INTERFACE CONTROL		
				SIZE	SYSTEM PART NO.	DRAWING NO.	REV
REF. DWGS.				A3	S-AU-1100	9771-1105	A
						SCALE : N.T.S.	SHEET 3 OF 4

1 2 3 4 5 6 7 8



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APPROVALS		DATE	TITLE	
ENGINEER		21OCT15	SOLARTUNE SOLAR INVERTER INTERFACE CONTROL DETAILED LAYOUT	
DRAWN BY		16DEC14	SIZE	REV
MATERIAL:			A3	A
REF. DWGS.			SYSTEM PART NO.	DRAWING NO.
			S-AU-1100	9771-1105
			SCALE	SHEET
			N.T.S.	4 OF 4