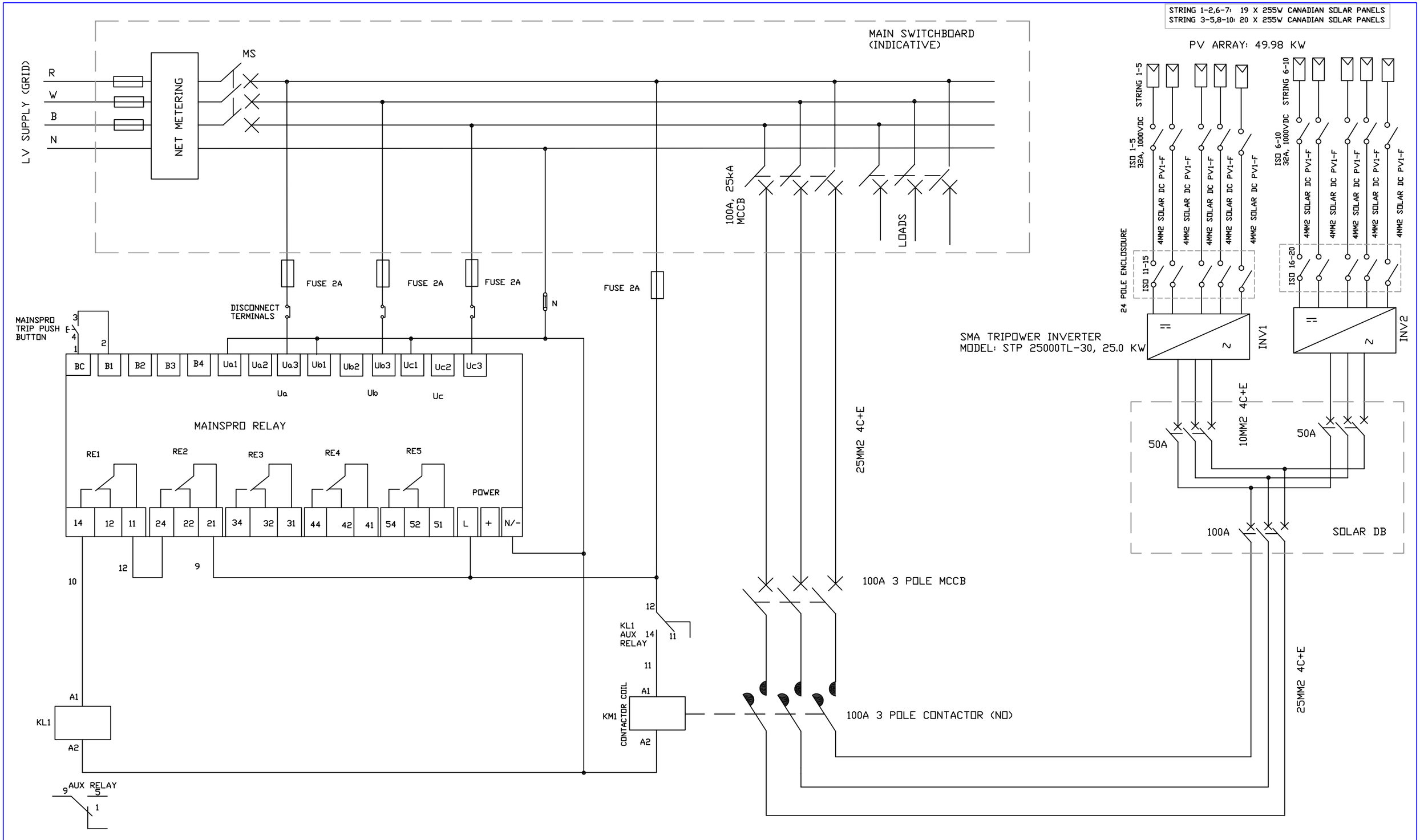
[redacted]

1. Technology: Solar PV
2. Maximum Power: 50 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



Item	Back-up Protection	Setting	Time Delay
1	Under-voltage (UV) : (27P)	200V	2 Sec
2	Over-voltage (OV) : (59P)	270V	2 Sec
3	Under-frequency (UF) : (81U)	48 Hz	2 Sec
4	Over-frequency (OF) : (81O)	52 Hz	2 Sec
5	Rate of change of Frequency (ROCOF) : (81R)	1 Hz/s	
6	Voltage Vector Shift (VVS) :	8°	Half Cycle
7	Reconnection Time: 70 S		

Item	Inverter Settings	Value
1	Vmax	257V
2	Vmin	200V
3	Fmax	52 Hz
4	Fmin	48 Hz
5	Disconnect Time	2 Sec
6	Reconnect Time	60 Sec

TITLE	ELECTRICAL SHEMATIC DIAGRAM BACK-UP ANTI-ISLANDING PROTECTION OF A 50.0 KW GC SOLAR PV SYSTEM WITH MAINS PRO RELAY	CUSTOMER	[redacted]
		PV ARRAY	49.98kW
COMPANY	NATURAL ENERGY ENGINEERS, [redacted]	DRAWING NO.	NE0001 [redacted]
		SCALE	NOT TO SCALE REV. NO.:1
		DATE	13/10/2015