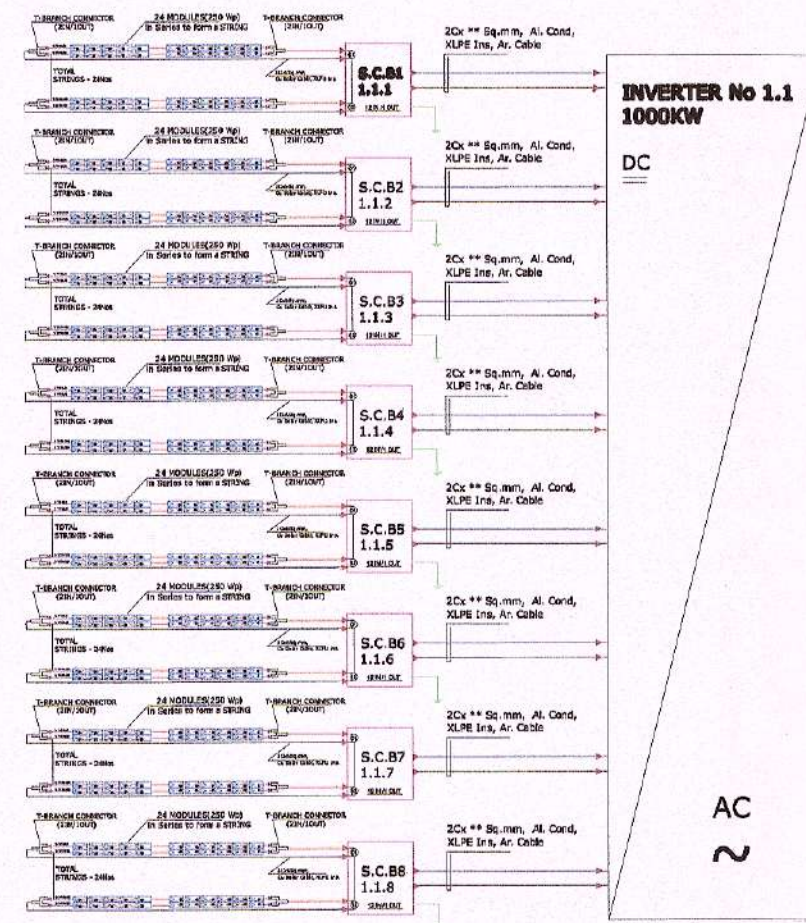
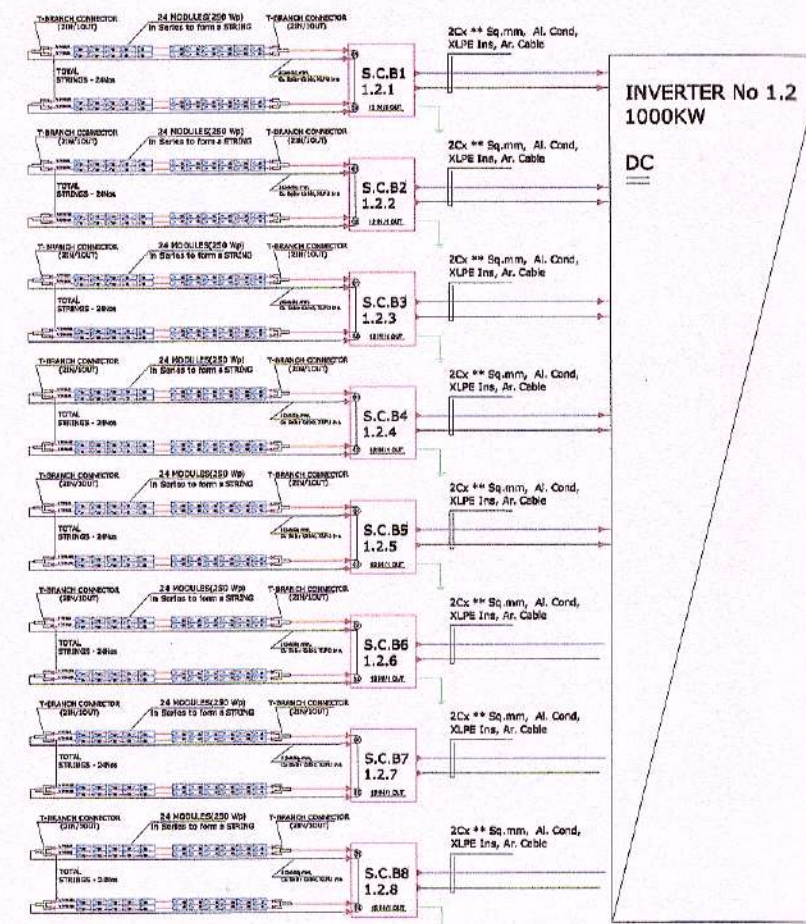


LOCAL CONTROL ROOM-1



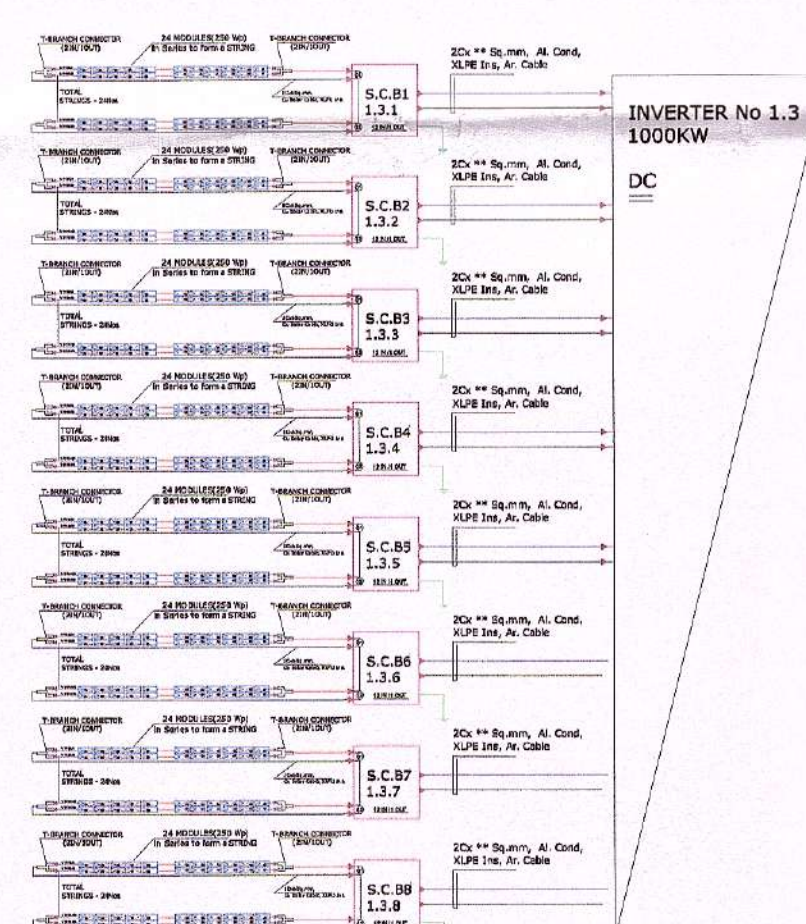
To transformer

AC



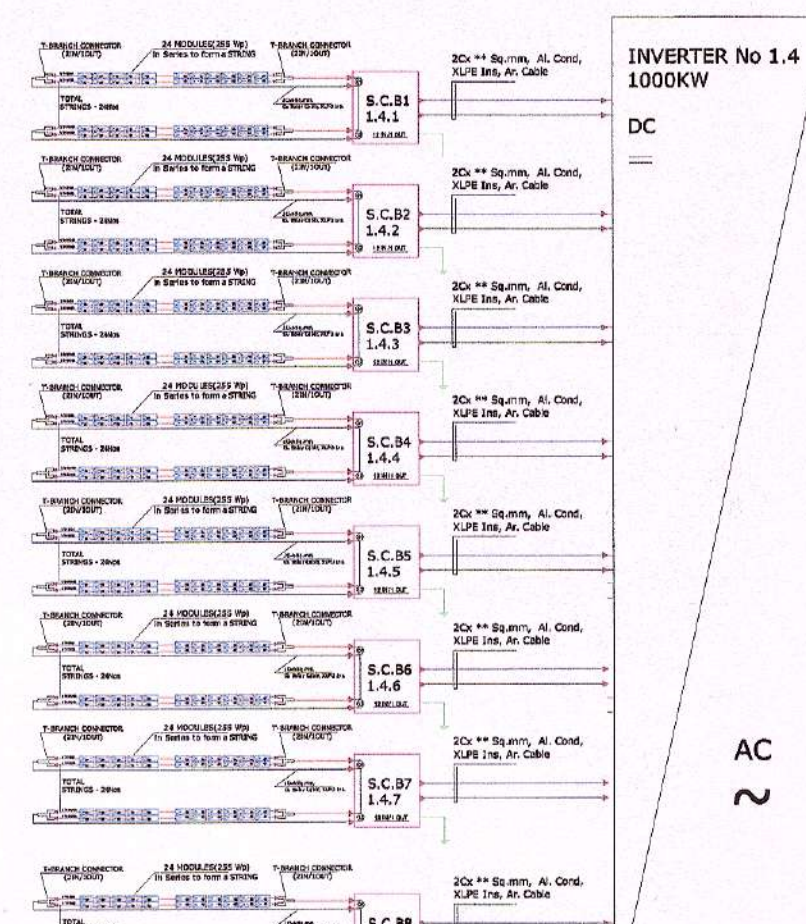
To transformer

AC



To transformer

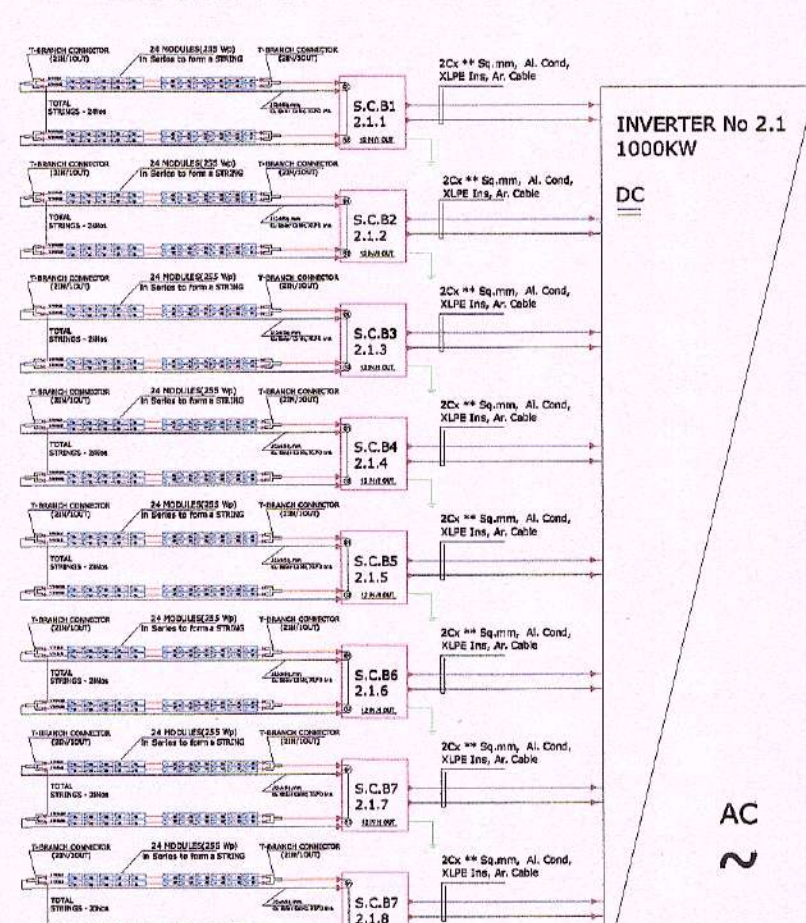
AC



To transformer

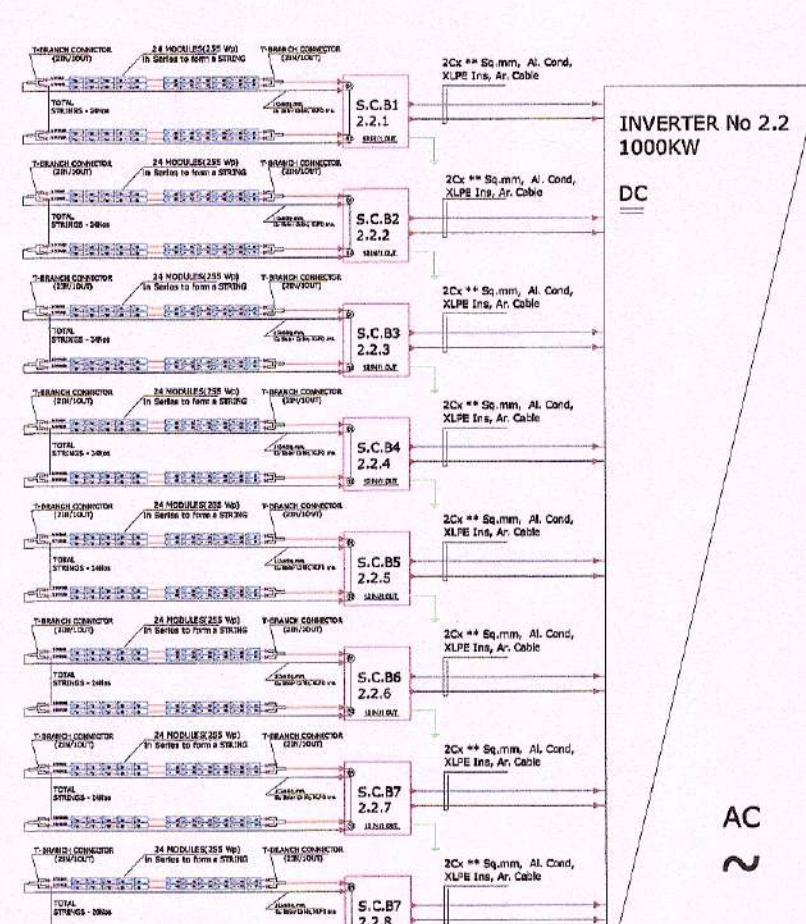
AC

LOCAL CONTROL ROOM-2



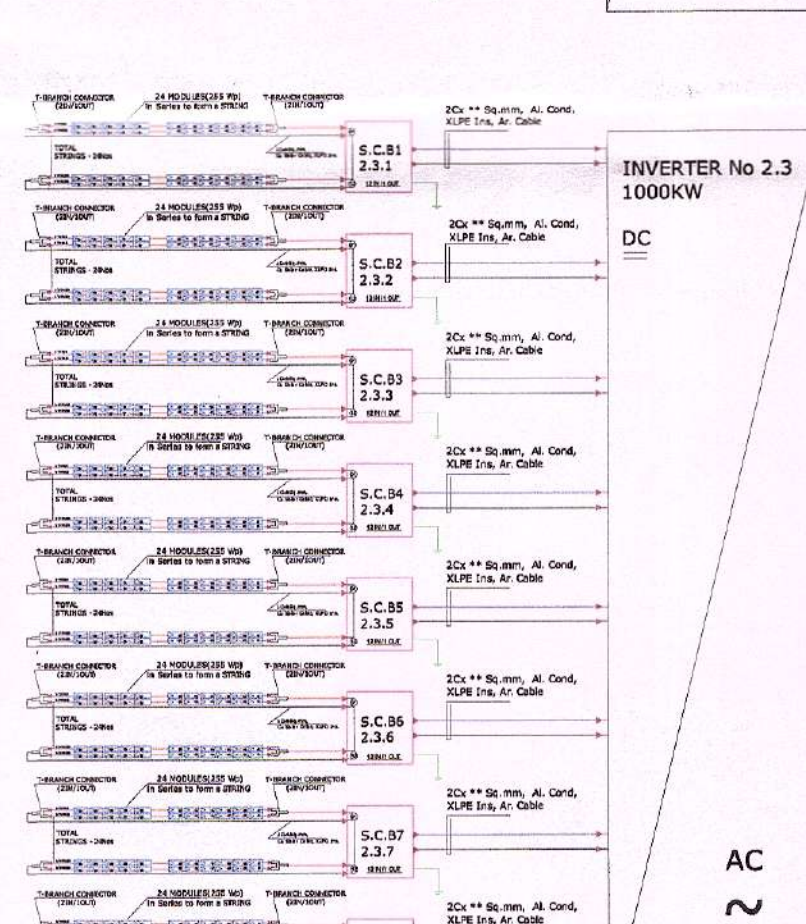
To transformer

AC



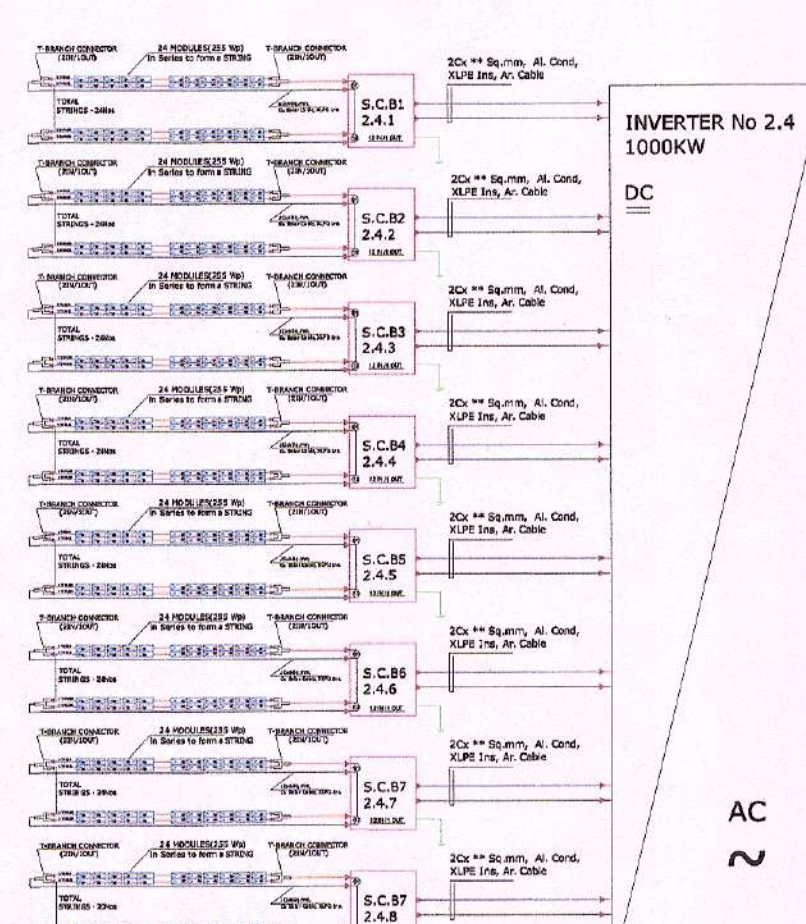
To transformer

AC



To transformer

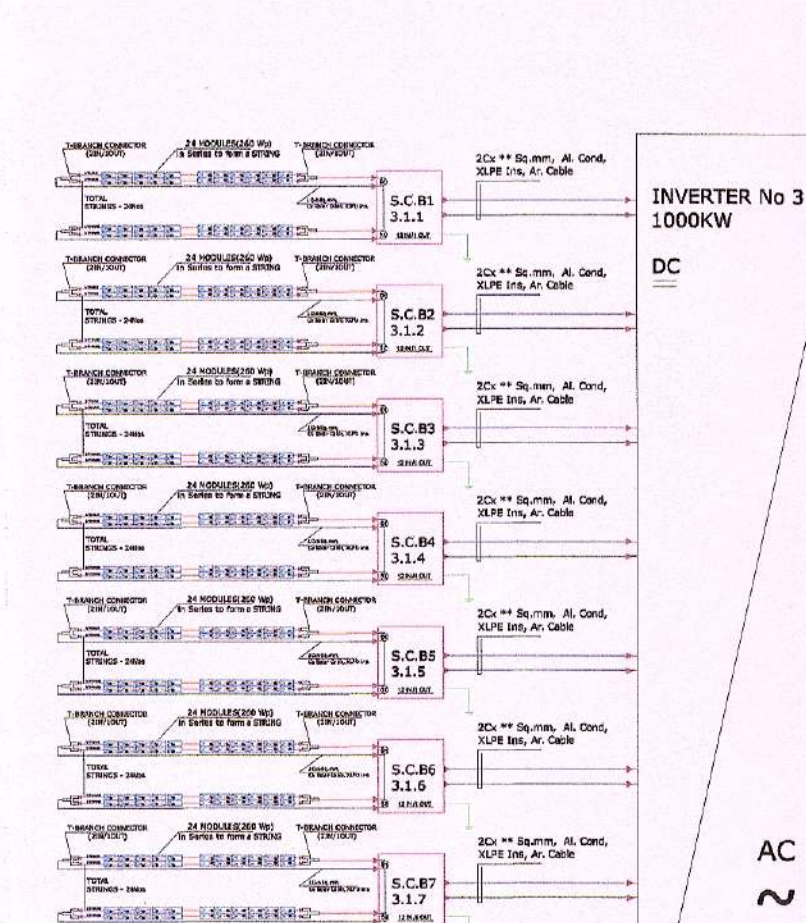
AC



To transformer

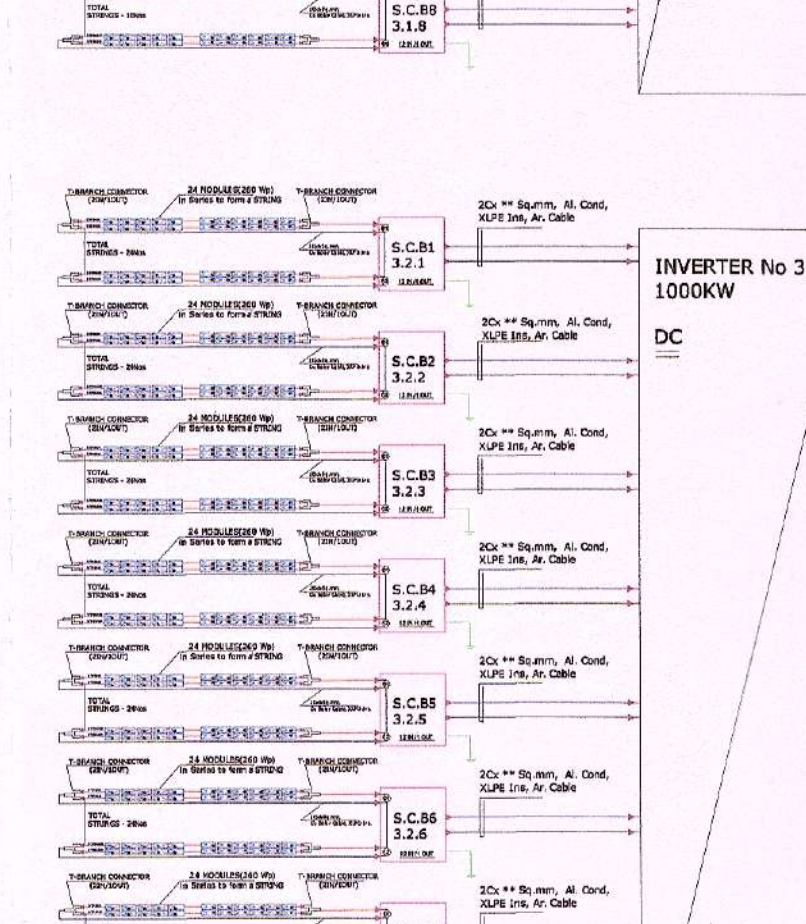
AC

LOCAL CONTROL ROOM-3



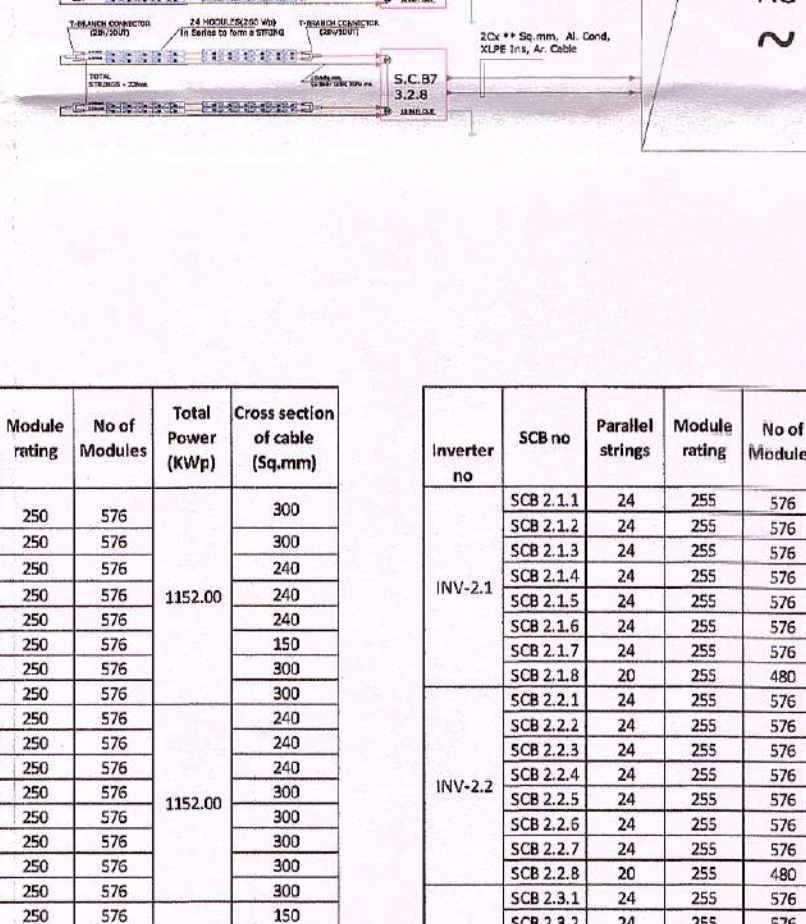
To transformer

AC



To transformer

AC



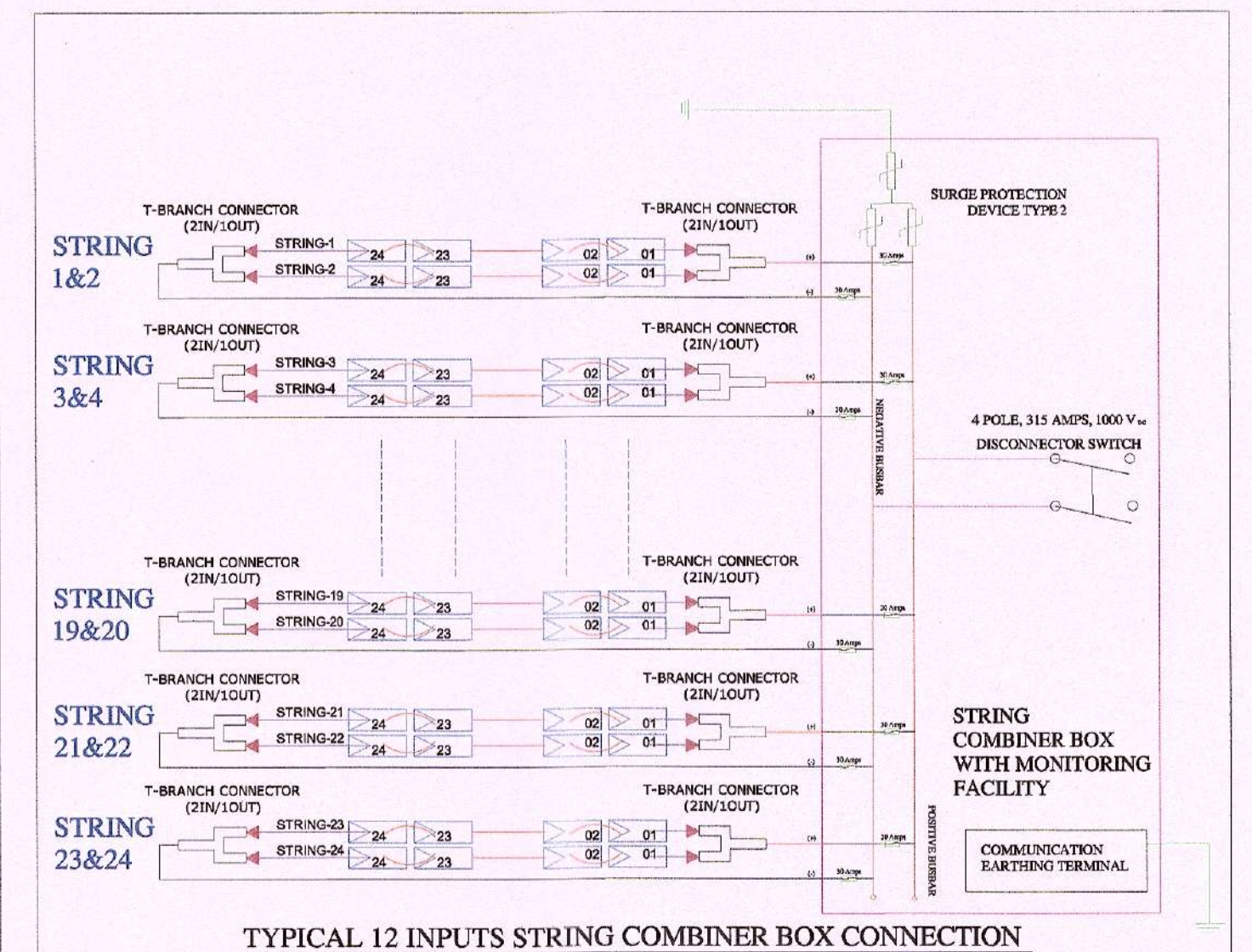
To transformer

AC

Inverter no	SCB no	Parallel strings	Module rating	No of Modules	Total Power (KWp)	Cross section of cable (sq.mm)
INV-1.1	SCB 1.1.1	24	250	576	300	240
	SCB 1.1.2	24	250	576	300	240
	SCB 1.1.3	24	250	576	300	240
	SCB 1.1.4	24	250	576	300	240
	SCB 1.1.5	24	250	576	300	240
	SCB 1.1.6	24	250	576	300	240
	SCB 1.1.7	24	250	576	300	240
	SCB 1.1.8	24	250	576	300	240
INV-1.2	SCB 1.2.1	24	250	576	300	240
	SCB 1.2.2	24	250	576	300	240
	SCB 1.2.3	24	250	576	300	240
	SCB 1.2.4	24	250	576	300	240
	SCB 1.2.5	24	250	576	300	240
	SCB 1.2.6	24	250	576	300	240
	SCB 1.2.7	24	250	576	300	240
	SCB 1.2.8	24	250	576	300	240
INV-1.3	SCB 1.3.1	24	250	576	300	240
	SCB 1.3.2	24	250	576	300	240
	SCB 1.3.3	24	250	576	300	240
	SCB 1.3.4	24	250	576	300	240
	SCB 1.3.5	24	250	576	300	240
	SCB 1.3.6	24	250	576	300	240
	SCB 1.3.7	24	250	576	300	240
	SCB 1.3.8	24	250	576	300	240
INV-1.4	SCB 1.4.1	24	255	576	300	240
	SCB 1.4.2	24	255	576	300	240
	SCB 1.4.3	24	255	576	300	240
	SCB 1.4.4	24	255	576	300	240
	SCB 1.4.5	24	255	576	300	240
	SCB 1.4.6	24	255	576	300	240
	SCB 1.4.7	24	255	576	300	240
	SCB 1.4.8	24	255	576	300	240

Inverter no	SCB no	Parallel strings	Module rating	No of Modules	Total Power (KWp)	Cross section of cable (sq.mm)
INV-3.1	SCB 3.1.1	24	260	576	300	240
	SCB 3.1.2	24	260	576	300	240
	SCB 3.1.3	24	260	576	300	240
	SCB 3.1.4	24	260	576	300	240
	SCB 3.1.5	24	260	576	300	240
	SCB 3.1.6	24	260	576	300	240
	SCB 3.1.7	24	260	576	300	240
	SCB 3.1.8	24	260	576	300	240
INV-3.2	SCB 3.2.1	24	260	576	300	240
	SCB 3.2.2	24	260	576	300	240
	SCB 3.2.3	24	260	576	300	240
	SCB 3.2.4	24	260	576	300	240
	SCB 3.2.5	24	260	576	300	240
	SCB 3.2.6	24	260	576	300	240
	SCB 3.2.7	24	260	576	300	240
	SCB 3.2.8	24	260	576	300	240

Inverter no	SCB no	Parallel strings	Module rating	No of Modules	Total Power (KWp)	Cross section of cable (sq.mm)
INV-2.1	SCB 2.1.1	24	255	576	300	240
	SCB 2.1.2	24	255	576	300	240
	SCB 2.1.3	24	255	576	300	240
	SCB 2.1.4	24	255	576	300	240
	SCB 2.1.5	24	255	576	300	240
	SCB 2.1.6	24	255	576	300	240
	SCB 2.1.7	24	255	576	300	240
	SCB 2.1.8	24	255	576	300	240
INV-2.2	SCB 2.2.1	24	255	576	300	240
	SCB 2.2.2	24	255	576	300	240
	SCB 2.2.3	24	255	576	300	240
	SCB 2.2.4	24	255	576	300	240
	SCB 2.2.5	24	255	576	300	240
	SCB 2.2.6	24	255	576	300	240
	SCB 2.2.7	24	255	576	300	240
	SCB 2.2.8	24	255	576	300	240
INV-2.3	SCB 2.3.1	24	255	576	300	240
	SCB 2.3.2	24	255	576	300	240
	SCB 2.3.3	24	255	576	300	240
	SCB 2.3.4	24	255	576	300	240
	SCB 2.3.5	24	255	576	300	240
	SCB 2.3.6	24	255	576	300	240
	SCB 2.3.7	24	255	576	300	240
	SCB 2.3.8	24	255	576	300	240
INV-2.4	SCB 2.4.1	24	255	576	300	240
	SCB 2.4.2	24	255	576	300	240
	SCB 2.4.3	24	255	576	300	240
	SCB 2.4.4	24	255	576	300	240
	SCB 2.4.5	24	255	576	300	240
	SCB 2.4.6	24	255	576	300	240
	SCB 2.4.7	24	255	576	300	240
	SCB 2.4.8	24	255	576	300	240



NOTE:-

- The module mix which has been considered for plant is 250Wp, 255Wp & 260Wp.
- Cables from SPV module to string combiner box shall be of 1 core, copper conductor, XLPO, flexible type. The crosssection will be 6.0 sq.mm .
- Cables from String combiner box to Inverter shall be of 2 core, armoured aluminium conductor, XLPE Insulated(As pe IS 7098-P1). The crosssection of cable as per table given below.
- 1 core 16 sq.mm copper multistrand of green colour flexible pvc insulated cable is considered as earthing conductor for string combiner box (or on recommended by string combiner box manufacturer) and 1 core 70 sq.mm flexible pvc insulated cable is considered as earthing conductor for Inverter (or recommended by inverter manufacturer).
- 32 X 6 mm Tinned Cu Busbar is considered in each String Combiner Box .
- Inverter is been numbered on basis of its control room in which it is located. 03 nos Control rooms are arranged for the project. In control room 1 & 2 have 4 inverters in each rooms. Control room 3 have only 2 inverters.Example: 2nd Inverter in Local Control room 3 will be numbered as 3.2.
- Each Inverter has 8 SCB and they are numbered on basis of the Inverter to which they are attached to for example 7th SCB of inverter 3.2. would be numbered as 3.2.7.
- Strings in plant are numbered on basis of SCB they are connected to. Two String are connected through T connector. Each SCB are connected through o/p of 12 T connector. Hence 7th string attached to SCB 3.2.7 through 4th T would be numbered as 3.2.7.7
- Capacity Utilization Factor = $\frac{NMGG}{\{ (11 \text{ MWp DC }) \times 8760 \text{ hr. } \}}$
NMGG = Net Minimum Generation Guarantee

LEGEND:-

S.NO.	SYMBOL	DESCRIPTION
1		INVERTER 1000 KW
2		CABLE
3		STRING COMBINER BOX (12 IN / 1 OUT)
4		SOLAR MODULE (250Wp, 255Wp & 260 Wp)
5		FUSE (Fuse Wire Rating : 30 A) (Fuse Holder Rating : 32 A)
6		SURGE PROTECTION DEVICE TYPE 2
7		T-BRANCH CONNECTOR (Rating : 30 A)
8		DC CONNECTOR SWITCH (Rating : 315 A)

TITLE	SLD OF DC WORKS	SCALE	NTS
DRAWING NO.	P014-ELE-001	REVISION NO.	03
DRAWN BY	CHECKED BY	APPROVED BY	SHEET NO.
RAJEEV	UTTAM HALDAR	B.K SINGH	1 of 1
Date:22.01.2016	Date:22.01.2016	Date:22.01.2016	SIZE- A1