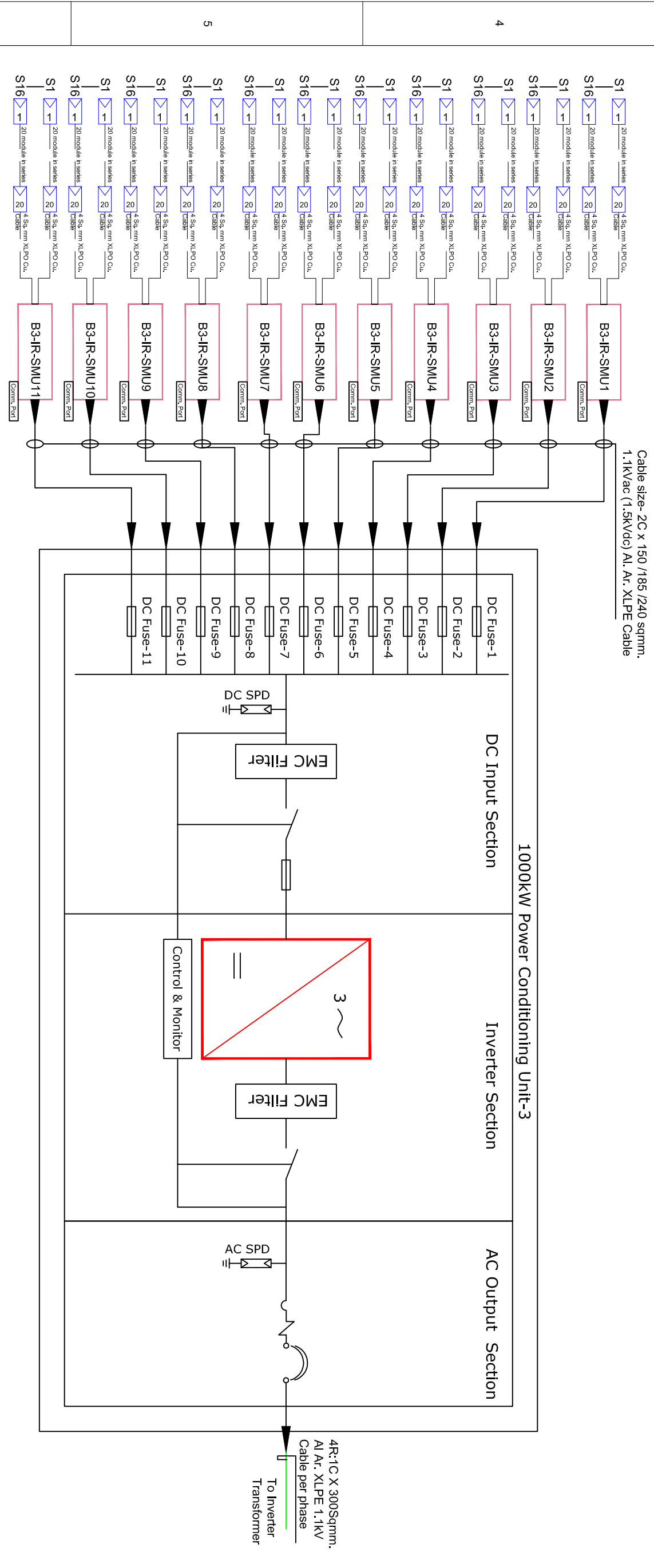
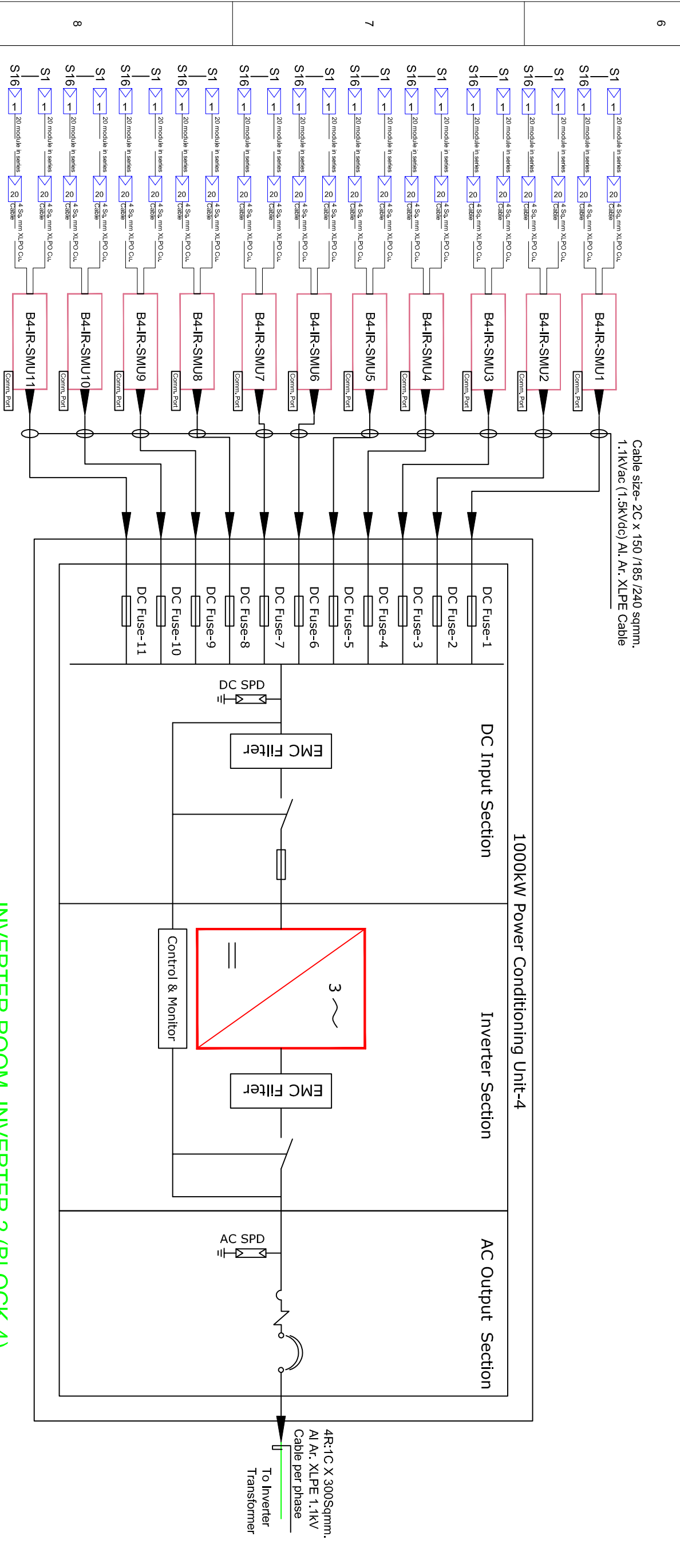


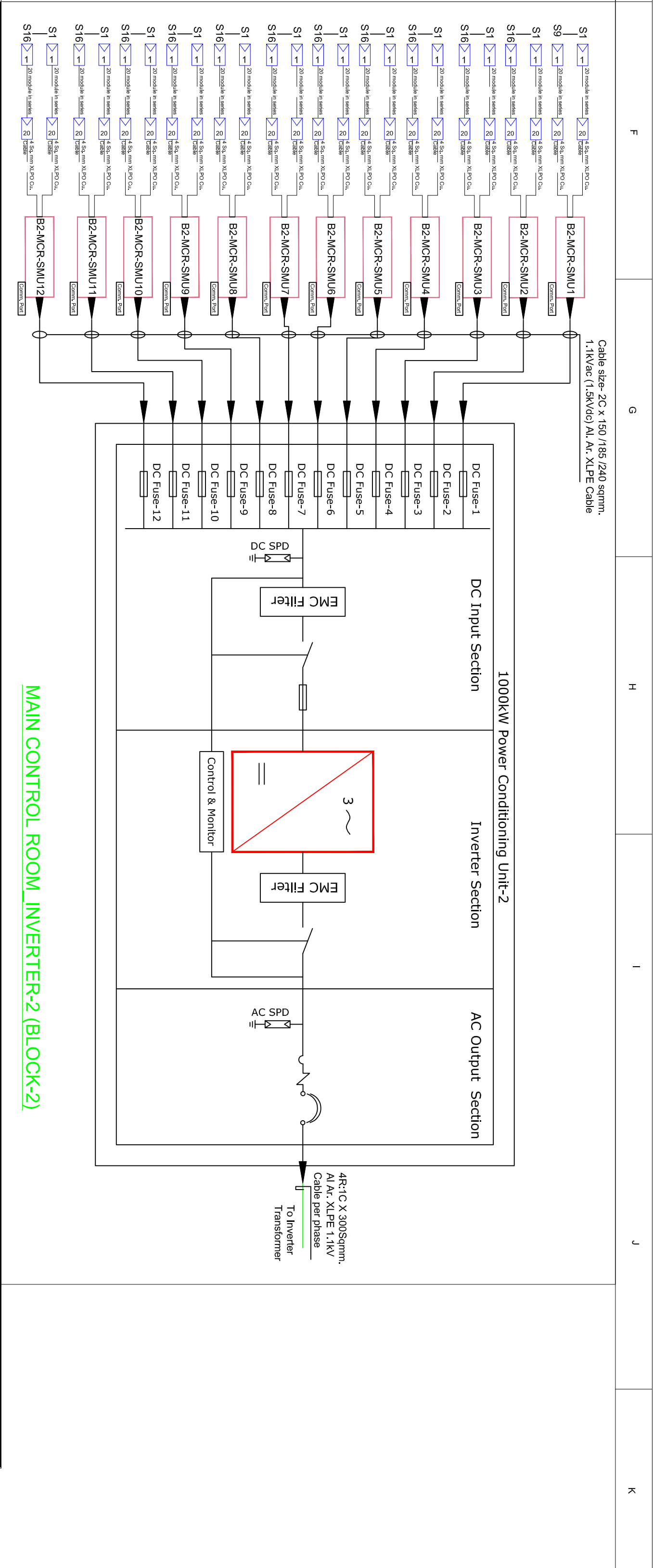
MAIN CONTROL ROOM, INVERTER-1 (BLOCK-1)



INVERTER ROOM, INVERTER-1 (BLOCK-3)



INVERTER ROOM, INVERTER-2 (BLOCK-4)



MAIN CONTROL ROOM, INVERTER-2 (BLOCK-2)

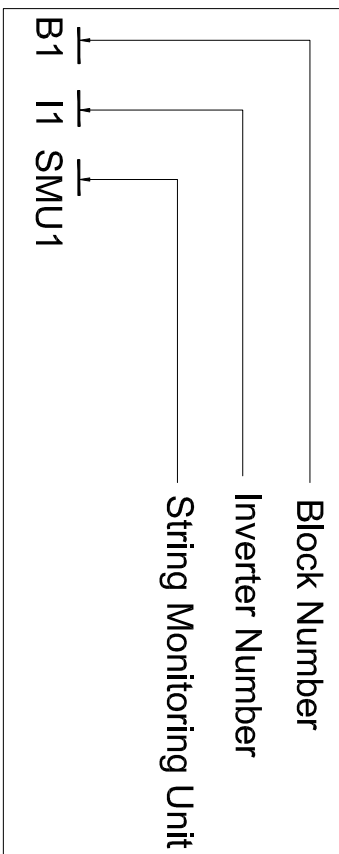
DC Power Loading of PolyCrystalline Modules																
S.No.	Module Wp	Inverter Capacity (Ac) kW	No. of Modules in series	No. of Strings per Inverter	16 Input SMU	String Formation	Inverter number	Block number	DC/AC Ratio	Nos. of Modules per Inverter	Nos. of 305Wp Modules	Total DC per Inverter Wp	Total DC per Block Wp	Total DC Capacity MWp	Total AC Capacity MW	Remarks
1	305	1000	20	185	12	16*11+9*1	Inverter-1	Block - 1	1.13	3700	7400	1128500	2257000	4,404.200	4,000	
2	305	1000	20	185	12	16*11+9*1	Inverter-2		1.13	3700	1128500					
3	305	1000	20	176	11	16*11	Inverter-1	Block - 2	1.07	3520	7040	1073600	2147200			
4	305	1000	20	176	11	16*11	Inverter-2		1.07	3520	1073600					
				722	46						14440					

Clause No.	Existing clause in the tender	Updated clause of the tender
4.23.4	Only copper conductor cables, PVC insulated with appropriate grade conforming to IS of regulated make shall be used in DC side of plant between interconnection of Modules, Junction box, inverters, DC panel and other associated equipments.	Cables used between SCBs and Inverters shall be of min. 1.5 kv (DG) grade. These Power cables shall have compacted Aluminium conductor, XLPE insulated, PVC inner-sheathed, Armoured, RUS PVC outer sheathed conforming to IS:7098.
4.23.6	Total percentage voltage drop of DC cables (SPV modules to inverter) shall be limited to 2%. However, minimum cable size from module to string combiner box shall be 4 Sqmm. Cables used for inter-connecting SPV modules as well as Modules to SCB's shall conform to the requirements of TUV specification 2 Ptg 1169/08.2007 applicable for DC cable for photovoltaic system. These cables shall meet the fire resistance requirement as per TUV specification 2 Ptg 1169/08.2007 and shall be electron beam cured. The cables used for (+) ve and (-)ve shall have distinct color identification.	Total percentage voltage drop of DC cables (SPV modules to inverter) shall be limited to 2%. However, minimum cable size from module to string combiner box shall be 4 Sqmm. Cables used for inter-connecting SPV modules as well as Modules to SCB's shall conform to the requirements of TUV specification 2 Ptg 1169/08.2007 applicable for DC cable for photovoltaic system. These cables shall meet the fire resistance requirement as per TUV specification 2 Ptg 1169/08.2007 and shall be electron beam cured. The cables used for (+) ve and (-)ve shall have distinct color identification.

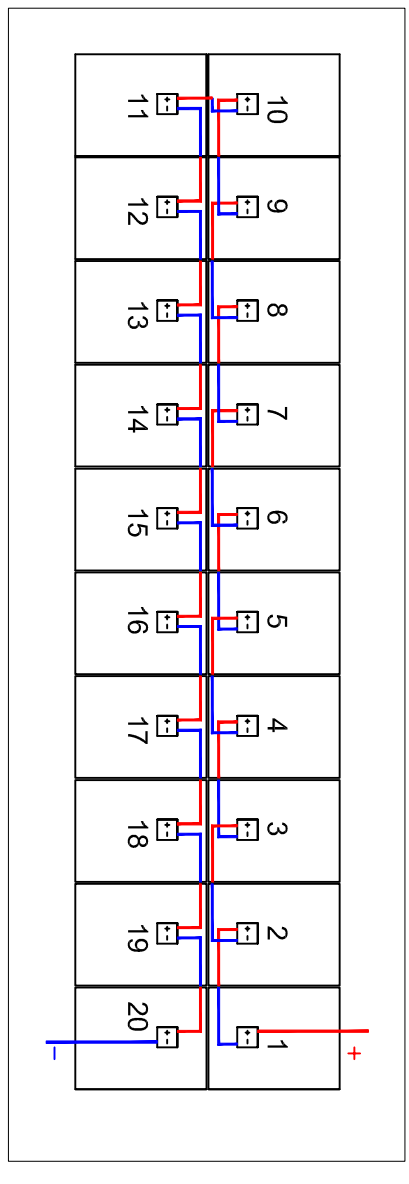
Details for 4.4MWp

Module Capacity	305Wp
No of modules per table	20 nos.
No. of modules in one string	20 nos.
Total no. of modules	14440 nos.
No of Tables	722 nos.
String Mounting Unit	16 in 1 out
No. of SMU	46 nos.
No. of Inverter used.	4 nos.

LEGENDS:-



Cable Size-Module to SMU	1C x 4sqmm, XLPO insulated solar grade copper cable	As per Clause No. 4.23.6 Corrigendum-1, CRFQ no. 1000224612, Page No. 9 of 20,
Cable Size-SMU to Inverter	2C x 150/185/240sqmm, 1.1kVAc As per Clause No. 4.23.4 Corrigendum-1, CRFQ no. 1000224612, Page No. 9 of 20,	



Legends:-

Symbol	Description
	Solar PV Module
	String Monitoring Box
	Communication Port
	DC Fuse
	SPD
	ACB

01 REVISED AS PER CLIENTS COMMENT				P.A.	P.A.	M.A.	M.A.	31.07.15
00 RELEASED FOR APPROVAL				P.A.	P.A.	M.A.	M.A.	17.07.15
Rev Details of Revision and Description				Drawn	Design/Checked	Approved	Date	
PROJECT 4.4MWp SOLAR POWER PLANT, BINA, MADHYA PRADESH								
OWNER BHARAT PETROLEIUM CORPORATION LIMITED BINA, MADHYA PRADESH								
PMC CONSULTANT FIRST GREEN CONSULTING PVT LTD DL/F PHASE 3, SECTOR 24, GURGAON, HARYANA								
EPC CONTRACTOR JAKSON ENGINEERS LIMITED (JEL)								
TITLE DC SINGLE LINE DIAGRAM								
JEL Dwg. No.			JEL-S013-DRG-EE-002			Scale	1:1	
NOTE: THE DRAWINGS OF THIS DRAWING SET IS THE PROPERTY OF JAKSON ENGINEERS LIMITED. COPYING OR REUSE OF THIS DRAWING WITHOUT PERMISSION IS PROHIBITED.			Date			Sheet	1 of 1	
						Rev	01	