

MECHANICAL CALCULATION

1. ELECTRICAL EQUIPMENT:

No.	EQUIPMENT NAME	SYMBOL	SIZE (mm) LxWxH	HEAT CAPACITY (W)	DEMAND FACTOR	CALCULATE HEAT CAPACITY (W)	REMARK
1	HV Panel	NE-BIBI	1,620x710x1,142	2,200	0.20	440	
2	Transformer 1500kVA	TR4	1,310x2,110x1,830	19,300	0.60	11,580	
3	Transformer 2000kVA	TR5	1,310x2,140x2,010	25,200	0.60	15,120	
4	Transformer 400kVA	TR6	880x1,490x1,455	6,800	0.60	4,080	
5	Low Voltage Breaker	3200AF		2,400	0.60	1,440	1 set
		2500AF		1,500	0.60	900	1 set
		1200AF		1,100	0.60	660	1 set
		800AF		990	0.30	297	3 sets
		400AF		750	0.30	225	5 sets
		250AF		1,750	0.30	525	25 sets
		100AF		800	0.30	240	40 sets
6	Low Voltage Current Transformer	3200:5		520	0.60	312	
		2500:5		380	0.60	228	
		1200:5		200	0.60	120	
7	Low Voltage Main Bus Frame	MSB4 2500AF		700	0.60	420	
		MSB5 3200AF		1,000	0.60	600	
		MSB6 1200AF		420	0.60	252	
8	Reactor			2,420	0.60	1,452	22 sets
9	Capacitor	Heat load small (can be ignored)					
10	Auxiliary Compartment (Low-Voltage Panel)			200	0.60	120	
11	Busduct	Heat load small (can be ignored)					
12	Cable & Cable Trays	NOT CONSIDER					
13	AHU TWE240	NOT CONSIDER					
	TOTAL					39,011	