

Measurement of Current of correlator systems

GWB system : UPS 1 , 62 to 78% of 20 KVA, Under Use for tests by SHR @ 3:20pm to 3:50pm.

Row 1 (Top) : 29.2 Amps and Row 2 (Bottom) : 32.1 Amps Total : 61.3# Amps

61.3Amps * 230Volts = 14,099 watts OR 17.62375 KVA(PF-0.8) ie 88.11%

Sl. No.	Distribution board	Current in Amps	Remarks
1	GWB rack-1 : ROW1(top), MCB No. 1	12.2	
2	GWB rack-2 : ROW1(top), MCB No. 2	10.6	
3	GWB rack-3 : ROW1(top), MCB No. 3	3.6	
4	Ext Board 1 : ROW1(top), MCB No. 4	0.6	
5	GWB rack-4 : ROW2(top), MCB No. 1	7.9	
6	GWB rack-5 : ROW2(top), MCB No. 2	10.1	
7	GWB rack-6 : ROW2(top), MCB No. 3	10.6	
8	Ext Board 2 : ROW2(top), MCB No. 4	2.4	
	Grand Total	60.0*	

GSB system : UPS 2 , 56% of 20 KVA, Under Use for tests by SHR @ 3:20pm to 3:50pm.

Row 1 (Top) : 27.8 Amps and Row 2 (Bottom) : 17.0 Amps Total : 44.8# Amps

44.8 Amps * 230Volts = 10,304 watts OR 12.88 KVA(PF-0.8) ie 64.40%

Sl. No.	Distribution board	Current in Amps	Remarks
1	GSB rack-2(EB3) : ROW1(top), MCB No. 1	7.3	
2	GSB rack-3(EB1) : ROW1(top), MCB No. 2	5.8	
3	GSB rack-2(EB1) : ROW1(top), MCB No. 3	5.8	
4	GSB EXT 1 : ROW1(top), MCB No. 4	1.6	
5	GSB EXT 2 : ROW1(top), MCB No. 5	--	
6	GSB EXT 26 : ROW1(top), MCB No. 6	2.1	
7	GSB EXT 27 : ROW1(top), MCB No. 7	0.7	
8	Lamps : ROW1(top), MCB No. 8	0.1	
9	GSB EXT 3 : ROW1(top), MCB No. 11	0.2	
10	GSB rack-3(EB2) : ROW2(Bottom), MCB No. 1	4.8	
11	GSB rack-2(EB2) : ROW2(Bottom), MCB No. 2	7.6	
12	GSB rack-3(EB3) : ROW2(Bottom), MCB No. 3	3.5	
13	Lamps : ROW2(Bottom), MCB No. 8	0.2	
	Grand Total	39.7*	

GSB system : UPS 3 , 64% of 12.5 KVA, Under Use for tests by SHR @ 3:20pm to 3:50pm.

Row 1 (Only) : 29.8# Amps

$$29.8 \text{ Amps} * 230\text{Volts} = 6,854 \text{ watts OR } 8.5675 \text{ KVA(PF-0.8) ie } 68.54\%$$

Sl. No.	Distribution board	Current in Amps	Remarks
1	GSB EXT 1 : ROW1, MCB No. 1	0.5	
2	GSB rack-1(EB1) : ROW1, MCB No. 2	4.0	
3	GSB rack-1(EB2) : ROW1, MCB No. 3	6.4	
4	GSB EXT 2 : ROW1, MCB No. 4	0.9	
5	GSB rack-4(EB3) : ROW1, MCB No. 5	6.1	
6	GSB EXT 4 : ROW1, MCB No. 6	1.9	
7	GSB rack-4(EB2) : ROW1, MCB No. 7	1.8	
8	GSB rack-4(EB1) : ROW1, MCB No. 8	3.7	
	Grand Total	25.3*	

: Maximum on this day with current usage.

* : Current varies during system use.

Grand Total : $61.3 + 44.8 + 29.8 = 135.9$ Amps

$135.9\text{Amps} * 230\text{Volts} = 31,257$ Watts ,

If Power Factor : 0.8 : 39.07125 KVA (8.5675+12.88+17.62375=39.07125KVA)

If Power Factor : 0.7 : 44.65285 KVA

If Power Factor : 0.65 : 48.08769 KVA