

OBSERVATION TABLE

Sr. No	Star Connection						Delta Connection					
	V_L	V_P	I_L	I_P	V_L/V_P	I_L/I_P	V_L	V_P	I_L	I_P	V_L/V_P	I_L/I_P
1.	200	115	0.055	0.055	1.739	1	200	200	0.75	0.35	1	2
2.	300	170	0.07	0.07	1.764	1	300	300	0.68	0.425	1	1.6
3.	400	220	0.21	0.21	1.81	1	400	400	0.82	0.57	1	1.72

CONCLUSION:

We studied the relationship between phase and line quantities of voltage and current in

a) Star connected ($V_L = \sqrt{3} V_{ph}$)
($I_L = I_{ph}$)

b) Delta connected ($V_L = V_{ph}$)
($I_L = \sqrt{3} I_{ph}$)

QUESTIONS:

1. Explain in brief how three-phase voltage is generated with the help of necessary diagrams.
2. Draw the wave form and the phasor diagram of three-phase generated voltage.
3. Three equal and adequately rated impedances are connected in star and then in delta to the same voltage source. Determine the ratio of the current and power drawn in delta compared to that drawn in star.
4. How would you use one wattmeter to compute power in a balanced 3-phase circuit both star and delta? What are the difficulties to be faced in the method?
5. With neat sketch show how two wattmeter can be connected to measure 3-phase power. What are the advantages of this method?
