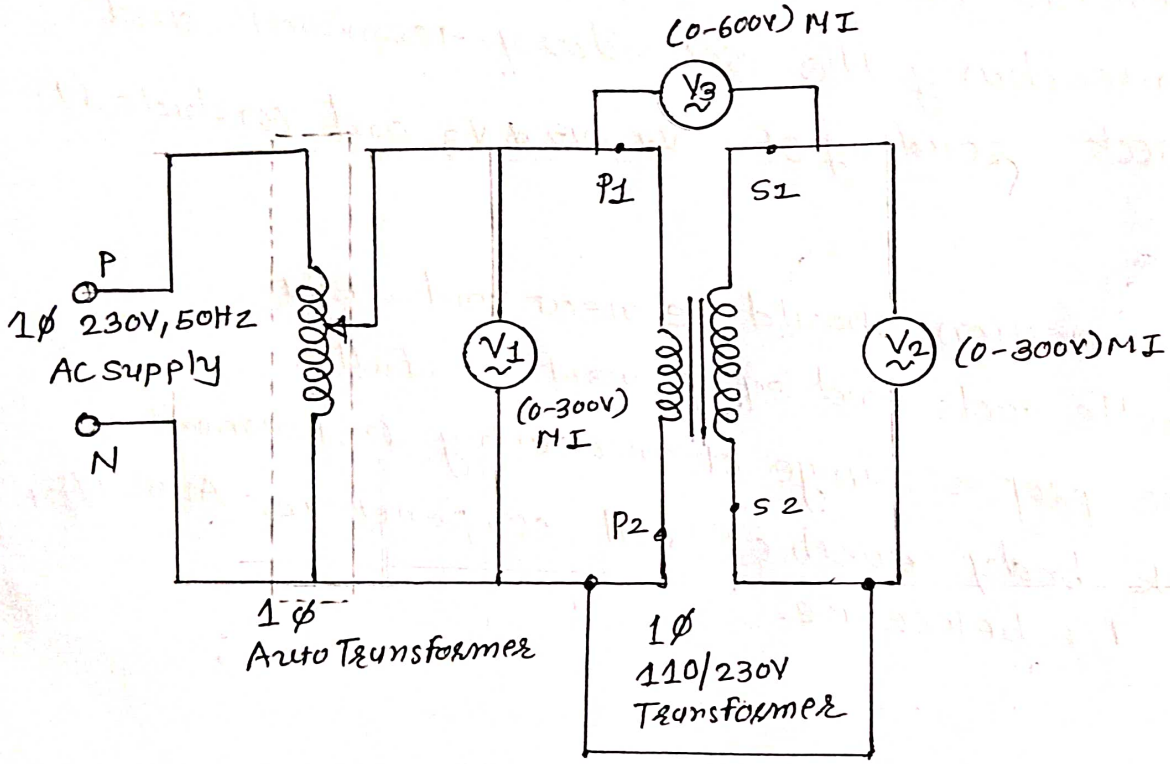
Polarity test of 1ϕ Transformer

Material, Tools & Equipment.

Specification	Rating	Quantity
1ϕ auto T/F	2 KVA	1 Nos
1ϕ 110/230V T/F	2 KVA	1 NOS
Voltameter (0-600V).	(0-600V) MI	1 NO.
Voltameter (0-300V)	(0-300V) MI	2 NO.



Conclusion:-

(i) $V_3 = V_2 - V_1$

↳ Substractive polarity

↳ Polarity is correct.

(ii) $V_3 = V_2 + V_1$

↳ Additive polarity

↳ Polarity is incorrect.

Procedure:-

1) Collect all tools and equipment and check its phsical and electrical working condition.
2) Construct circuit according to diagram.
3) Switch ON supply throught the auto T/F and observe reading of $V_1, V_2 \& V_3$ and conclude it.
4) Interchany the secondary teminal and check reading of $V_1, V_2 \& V_3$ and conclude it.

Safety

1) All connection should be neat and right.
2) Handle tools and equipement carefully.
3) Take proper runge of measuring instrument.
4) Check body earth of all componet ie. Auto T/F, and T/F before use.