



This apparatus has been designed primarily for demonstration of the basic principles of the a.c. transformer. The various coils and cores will also serve as the basis of many experiments in electromagnetism, using either direct or alternating current.

About Apparatus:

- 1 laminated 'U' core, length of side 95 mm, base 150 x 40 x 40 mm
- 1 each of clamp base, yoke, clamping bar and securing knobs (pair) for U-core
- It consists of one mains coil with 2400 turns, 230 v ,50 hz and two secondary coils are provided which can be used one at a time
- The two secondary coils :
 - ❖ One for 12 volt output it is of 130 turns
 - ❖ Another for 6v output it is of 65 turns.
- In the basic transformer set all coils are fitted with 4mm socket connections.
- All coils are of enamelled copper wire wound round on high impact plastic moulded bobbins 75mm long with cheeks 75 x 60mm.
- The robust clamping base is provided with a tommy-bar screw to hold the 'U' core, and two knurled nuts secure the armature and provide for easy changeover of the coils.
- Soft iron pieces locate on top of the 'U' core arms.
- A simple channel and wing-nut clamping arrangement facilitates quick assembly and interchange of coils.

Advantages

- Transformers are a reasonably simple, safe, efficient.
- They are cost-effective way to use AC voltage
- A transformer has no internal moving parts so it ensures under normal conditions, a long and trouble-free life

Disadvantages:

- Transformer only work in AC if we apply DC voltage to the transformer, the reactance of its winding will be zero.
- This apparatus is only used for Demonstration purpose.

Note: Specifications are subject to change.