

The two types of transformer cores are

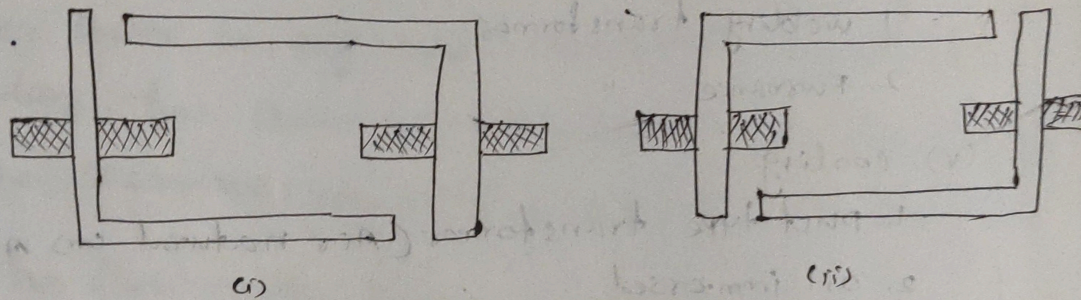
a. core type

b. shell type

a. core type transformer

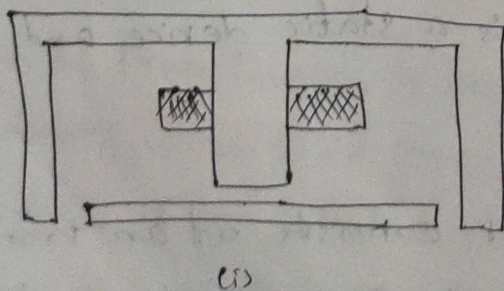
It has only one magnetic path. It has two limbs for the two windings and is made up of two L-type stampings. The coils used usually are of cylindrical type and are usually wound.

For higher rating stepped core with circular cylindrical coil is used. For smaller rating, rectangular coils with core of square or rectangular cross section is used.



b. shell type transformer

The two windings are carried by central limb. The core is made up of E and I stampings and has three limbs. It has two parallel paths for magnetic flux.



Classification of Transformers:

(i) Duty they perform

1. Power Transformer

2. Current "

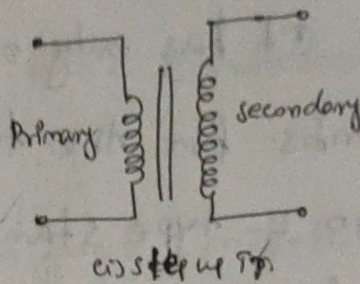
3. Potential "

(ii) construction

1. Core type transformer

2. Shell "

3. Berry " "

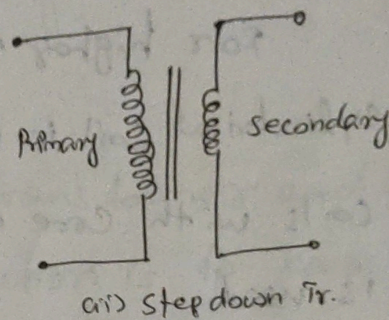


(iii) output voltage

1. Step down transformer

2. Step up "

3. Auto transformer



(iv) Applications

1. welding transformer

2. Furnance "

(v) cooling

1. Duct type transformer (Air natural con) Air blast)

2. oil immersed

a. self cooled

b. forced air cooled

c. water cooled

d. forced oil cooled

(vi) Input supply

1. Single phase transformer

2. Three " "

Constructional Details:

A transformer is a static device and its construction is simple.

ci) Magnetic core:

magnetic circuit consists of an iron core.

The transformer core is generally laminated and is made out of a magnetic material like silicon steel.