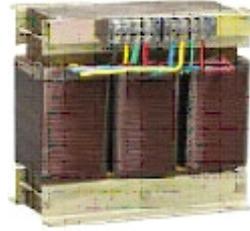


AUTO TRANSFORMERS :



An autotransformer is an electrical transformer in which there is one winding, a portion of which is common to both the primary and the secondary circuits. In other words, the primary and secondary coils have some or all windings in common.

An autotransformer is commonly used for the voltage conversion of local power line voltage to some other Voltage value needed for a particular piece of electrical equipment. Unlike an isolation transformer, an autotransformer uses common windings and offers no interference or disturbance isolation.

A given size autotransformer will support a load equal to its rated value These units are employed in custom designs or when converting industrial/military equipment between various operating voltage systems. Unlike an isolation transformer, it uses common windings and offer no interference or disturbance isolation. You add any suppression or filtering networks your system requires.

With a single / multi tapped winding, an autotransformer is generally preferred to an isolation transformer, with two separate windings, for numerous reasons. It is much smaller and lighter than an isolation transformer. It also has better voltage stability and greater overload tolerance. It performs in much the same way as the electrical transformer that the electric utility uses to bring power to a building.

Shepherd Transformers is in the field of manufacturing of AUTO TRANSFORMERS since 1980. We manufacture single phase, two phase and three phase in natural air cooled, forced air cooled and oil cooled version. The capacity is ranging from 500VA to 900KVA form 100V to 660V.

All above mentioned transformers are wound with high grade electrolytic super enameled copper wire/strips and fitted with prime quality CRGO low loss core (lamination) insulated with class F/H insulations, varnish with oven back class F/H insulation varnish, double vacuum impregnated. All Transformers are coated with Moisture Protection varnish. These Transformers are generally confirming to IEC 726, specifications. These Transformers are supplied either in open execution type for incorporating in side panel or in sheet metal enclosure suitable for indoor/outdoor application (as per clients specifications). Oil cooled Transformer are supplied with all required accessories and fittings.

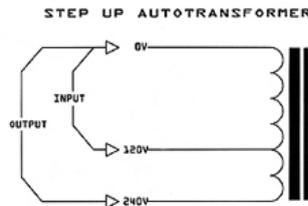
AUTOTRANSFORMERS, YIELD REDUCED SIZE AND COSTS

Frequently, in applications calling for simple voltage step-up or step-down, and where there is no requirement for electrical isolation, applying an autotransformer will result in significant size and weight reductions as well as cost. The power rating of an autotransformer is given by the expression:

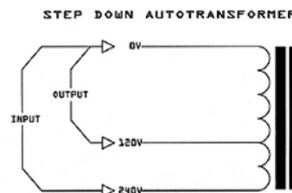
$$P_{\text{rated}} = P_{\text{out}} \times (V_{\text{hi}} - V_{\text{low}}) / V_{\text{hi}}$$

V_{low} = voltage from lower voltage tap (input or output)
 V_{hi} = voltage across higher voltage tap (output or input)

STEP UP AUTO-TRANSFORMER



STEP DOWN AUTO-TRANSFORMER



Applications :

For use in motors and other inductive loads. Both input and output voltages are tapped from a common windings rather than separate coils as in double-wound (isolating transformers). Not recommended for use with electronic controls, DC equipment or computer applications

Features :

- Low initial cost
- Small, compact size
- Low sound level
- Excellent voltage regulation
- Very high efficiency
- Available in open execution Type & enclosed type



Available in 50 /60 Hz for foreign installations.