



- Mining Transformer
- Lighting Transformer
- Loading Transformer
- Furnace Transformer
- Motor starting Auto Transformer
- Rectifier Transformer
- Ultra Isolation Transformer

Type of Transformer

- Single Phase
- Three Phase
- Three Phase to single Phase
- Three Phase to Two Phase (Scott)

Type of Transformer

- Double wound Transformer
- Auto wound Transformer

Type of cooling

- Natural Air cooled
- Natural Oil cooled

Salient features

- Ranging form 12V to 660V at 50 Hz / 60 Hz
- Capacity = 0.5 to 800 KVA
- Taps can be provided with OFF load Tap changer or using links.
- Conforms to IS2026,11171
- Class of insulation class B / F / H
- Efficiency better than 96%
- Regulation better than 5%

Natural Air cooled transformers are supplied in steel ventilated case, with screwed top cover. Input and output terminals are provided on the top of the transformer, inside the casing. Cable entry holes are provided on the sides of the M.S. casing. The transformers are suitable for floor mounting and are also supplied with M.S. Rollers for easy portability in case of large size transformers.

Natural oil cooled transformers are supplied in M.S. tanks in some cases, the tanks are provided with cooling radiators on two or all the four sides. As a standard practice, the tank is provided with oil fitting hole with cap, oil level indicator, drain plug, and earthing terminal. Input and output terminals are brought out generally on two opposite sides, either from the sides of the tanks or from the top of the tank. Plain unidirectional M.S. rollers are fitted on M.S. channels for base mounting.

'AE' also supply transformers in open execution without any enclosure, when they are to be mounted inside a control panel or a cubicle.

The description given below are for single phase, three phase and three phase to single phase double wound transformers. It is valid only for double wound transformers and for phase voltage between 24 volts and 660 volts at a frequency of 50 Hz. For voltages beyond this range and for other frequencies special quotations will be made on request.

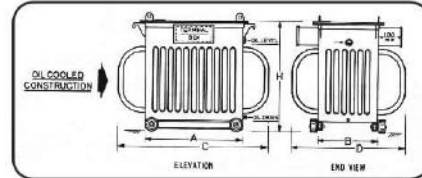
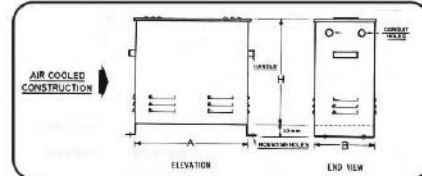
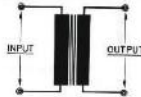
In case of Auto Wound Transformers though the entire range falls within our regular manufacture, their details depend very much on the transformation ratio, in addition to the capacity. Therefore special quotations should be obtained in individual cases. These include single phase and three phase Star-connected transformers. Auto-boosters and off-load line voltage correcting transformers.



SINGLE PHASE DOUBLE WOUND TRANSFORMERS

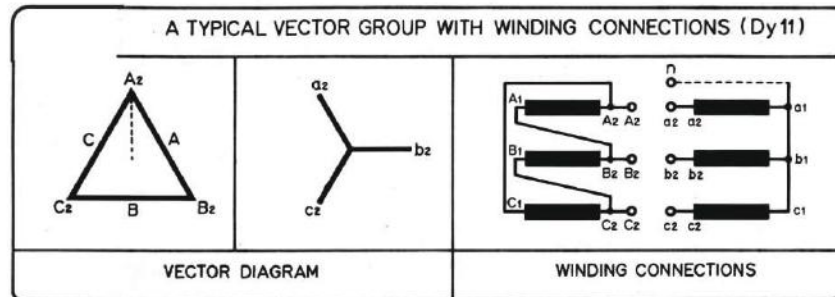
As stated before, these are made in natural air cooled construction or natural oil cooled construction. Extra off-load taps can be provided on request. The capacity of the transformer at the tap will be proportionately low corresponding to the tap voltage. The declared capacity will hold good only for the highest voltage on both input and output, unless the taps are specified as full capacity taps.

WINDING CONNECTIONS



THREE PHASE DOUBLE WOUND TRANSFORMERS

These transformers are generally manufactured in Delta/Star or Star/Delta connections. However, transformers can also be supplied suitable for Delta/Delta or Star/Star or Open/Open connections, on request against specific requirements. Enquiries or direct orders should clearly state the voltage and connection on the primary and secondary and whether the voltage are between phases or between phase and neutral. Extra off-load taps can be provided at extra cost. The capacity of the transformer at the tap will be proportionately reduced corresponding to the tap voltage. The declared capacity will hold good only for the highest voltage on both input and output unless the taps are specified at full capacity taps.



THREE PHASE TO SINGLE PHASE DOUBLE WOUND TRANSFORMERS

These transformers are very widely used where large single phase power is required. These are wound as open delta on the three phase input side and the windings on the secondary are connected in series for single phase output as per diagram shown below. - This type of construction gives on unbalance in the supply current, e.g. 14.5 Amp 10 kvA three phase to single phase transformer will have a current distribution as (1) Phase a: 14-5a (2) Phase B: 29Amp and (3) Phase C : 14.5Amp approximately when the supply voltage is 400 volts nominal. However, this unbalance is less severe than when a single phase load is connected between a phase and a neutral of between phase to phase.

