Assembly instructions

GENERAL PRESCRIPTIONS
- This assembly instruction includes the main guidelines to be followed during installation and servicing of the transformers manufactured by CTA TRASFORMATORI ELETTRICI (also called just “products”).
- The purpose of this shortform is to be intended just as an abstract from the applicable norms; the Norms shall be considered as premient compared to the recommendation below.
- The products shall be considered just as “components” of wiring and machinery thus servicing must be accomplished by qualified personnel only.
- Installation shall be made according to the state of the art, in full safety in order to avoid any hazard.
- Failure to observe the above instructions automatically invalidates the warranty and may cause serious damages of which the manufacturer is not responsible.

PRODUCT SPECIFICATIONS
- Single and three phase transformers for insulation, safety and power control. Related Norms EN 61558-2-2/-4/-6.
- Products to be installed into cabinets.
- Products not protected against direct and in direct contacts, (IP00), to be built in electric equipments.
- Products painted with special enamel (oven baked).
- All components and materials are class F.
- Rated Temperature: 25°C.
- Other features in our catalog.

INSTALLATION
- Do not exceed the rating printed on the product plate; rated power refers to a full duty with power factor of \((\cos \phi)\) equal to 1.
- For single phase transformers, class “F”, with an input voltage of 230 V and fully loaded, we advise to choose the unit with higher power ratings.
- Use input and output cables according to the Norms and with adequate section.
- Tighten properly the screw terminals in order to ensure a good connection.
- Do not use plug for the supply cord.
- Units shall be always to be protected by fuses or switch, as stated below.
- Install far from heat sources.
- In case of installation within enclosures, adequate holes for ventilation shall be made; for single phase units (up to 630VA) the power loss is available on catalogue; for bigger models can be estimated as 5% of the rated power.
- In case of room temperature exceeding 25°C the rated power shall be reduced accordingly to the charts (see catalogue).
- Installation in damp environment is allowed within proper enclosure only.
- Fluctuation in the supply voltage are reported, proportionally, to the output terminals.
- Products may operate at 50 Hz as well as at 60 Hz but, obviously, the frequency remains the same.
- Do not connect in parallel 2 or more transformers, even they have same ratings.
- Supply rated voltages are 230 V and 400 V, anyway the unit may operate at 220 V and 380 V. In that case the output voltage will be slightly lower.
- Single phase transformers up to 500 VA, connected to half duty loads (in order to avoid oversized power ratings) we recommend to refer to the chart in the catalogue.
- Safety Extra Low Voltage appliances do not need to be earthed.
Unless otherwise declared, all products shall be considered as class I, thus the earthing is mandatory. Please use the Ground terminals for wiring.

**ELECTRICAL PROTECTION**

**Primary:** the main supply cables shall be protected by a thermal switch “D” type or with fuses (model aM) as the in rush current may be considerable (up to 25 times the rated one even for few milliseconds).

**Secondary:** output circuitry shall be protected against short circuits as well as overloading (in case an overloading may occurs). As regards the protection against overload its ratings shall not exceed the overload current. In case of short circuit the triggering of the switch must occur within the time requested by domestic laws and Norms.

**HANDLING RECOMMENDATION**

In order to avoid any damage the following recommendation must be strictly followed:

- Do not lift the transformer by the terminals
- Do not open the terminals lid
- The proper wiring must be done as shown in photo

**N.B.** The electromechanical manufacturing products, such as transformer, inductance, etc are not affected by the prescriptions of the European Directive known as EMC directive (89/336 and 2004/108) since they have been proven to be low noise level components as regards the emitted electromagnetic fields, thus they may be considered almost passive components. For further information feel free to contact us.