



TRASFORMATORI ELETTRICI

INSTRUCTIONS AND INSTALLATION MANUAL

1. GENERAL DATA

T3T- Three phases Insulation Transformer & Auto-transformers

Applied transformers regulations:

1. EN 61558 – Transformers safety
2. CEI 14-4 – Power transformers
3. EN 60076-1 – Dry power transformers

Standard technical data (others characteristics are available on demand):

- Primary and secondary voltage: 400-400V; 230-400V; 400-230V
- Dielectric rigidity: >3KV
- Frequency: 50-60 Hz
- Protection class: IP00
- Ambient temperature: 40°C/F
- Heat class: F/H
- Vector group: DYN11-YNYN0
- VCC: ≤ 5%
- Protection box: IP21

2. INSTRUCTIONS FOR USE AND MAINTENANCE



Attention: dangerous voltages inside the machine!

Disconnect the machine from the current before opening the protection box or doing any operations with the transformers.



Installation and use of the machine is reserved for qualified staff only.

Before using the machine read carefully the instructions and installation manual.

2.1 GENERAL SAFETY STANDARDS

- The installer have to respect national and European installation standards.
- At package opening, check the machine integrity, paying attention to any possible windings damages



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- Before connecting the transformer check label and test report data
- Check the appropriate earthing net
- Every transformer has to be protected by appropriate protection breaker against short-circuit and over-load. The maximum electric load has not to exceed the rated power on the label
- Place the machine on a flat and stable surface
- Do not use the transformer in area, where inflammable materials are present
- Do not touch the transformer or its wrapping with wet hands or, in any case, do not make the transformer come in contact with liquids
- Use and place the transformer in protected area from atmospheric agents and at a some distance from sources of heat
- Do not cover the ventilation grilles while the transformer is working
- The constructor is not responsible for any consequences due to inaccurate use or connections to electrical systems which not meet in force regulations

3. DANGERS IDENTIFICATION AND PREVENTION MEASURES

- **Electrical risks**: the intervention on such circuits is reserved for qualified staff only
- **Fire risk**: in normal condition of handling, storage and use there are not any spontaneous auto-combustion risks

In case of fire: fumes and noxious vapor could come out from some units. In this case, it is necessary a good airing and put a breathing apparatus on
Do not use water during extinction

4. INSTALLATION AND USE

- **Installation ambient**: the transformer should be installed in an internal area with the following features:
 - Presence of appropriate fresh air recycle
 - Far from inflammable materials, sources of heat and direct exposure to solar heat
 - With no dust, corrosive agents and humidity
 - With a correct and levelled support
 - With free space around the transformer of at least 50 cm

- **Protection metal box:** usually the product is provided with a metallic box with protection class IP21. It means that it is protected against the introduction of solid bodies larger than 12cm and vertical fall of water drops
- **Handling:** handle and place the transformer with a pallet truck, whose forks have to be inserted into lower cracks or lift the transformer with appropriate straps, after having opened the cover and hooked the holes
- **Connection to electricity network:** the connection should be done with adequate cables to the rated current on the label and considering the distance. On the transformer there is a earth terminal, a screw on the lower side and screws on the metallic structure of the box. Everything has to be connected to the equipotential earth bar. In case of bar exit, put a little application of lead cream.



The transformer should be protected both in the output (secondary) and in the input (primary) with magnetic-thermic breakers or fuses, according to the condition of machine working and applied in force regulations.

It is forbidden the output and input contemporary earthing and to connect the output neuter to input neuter, if they are present.

5. OTHER USEFUL INFORMATION

- **Cleaning:** before cleaning the metallic box, disconnect the machine from the electricity and all the connected device. Clean the external side with denaturated alcohol . Do not wet electric parts
- **Handling:** the transformer does not need any handling
- **End of life cycle and disposal:** at its end of life cycle, the product (transformer, metallic box and others accessories) has not to be disposed with municipal waste, but have to be brought to appropriate separate refuse collection center or given to a company in charge for this kind of operation
- **Special equipment:** the product is not furnished with special equipmnet
- **Optional:**
 - Temperature probes PT100
 - Ventilation bars
 - Temperature control unit

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