QUICK GUIDE (SCS / Pt100 INSTALLATION NOTES)

RULES FOR PROPER INSTALLATION OF SENSORS AND SCS BOX

In order to ensure safe and reliable operation of the system to control the temperature of the transformer, you must follow the instructions provided in this document for installation and connection of the SCS BOX and Pt100 to the monitoring unit.

Each SCS BOX is made on specific request of the manufacturer of the transformer; in relation to the application and the safety standards of the transformer, the configurations of the SCS and its construction specifications can be vary.

The installer / user of the product is responsible for the proper installation of the product and its safety.

SAFETY REGULATIONS

⚠️ **WARNING:**

Carefully read the manual before you start installation or functional testing of the cassette SCS or the probes. Keep the instructions for future reference.

⚡ Do not approach or touch the wiring box SCS and probes if the transformer is in operation. Each operation of SCS or probes must be performed with the transformer off. Always follow the safety indications given by the manufacturer of the transformer and or the system on which you are working.

⚠️ All the operations on the product must be performed by a qualified technician only.

Failure to follow these instructions can result in damage, fire or electric shock, with possible serious injury!

LIQUIDS

Do not expose the equipment to dripping or splashing liquids, do not place in places where humidity is over 90% and never touch with wet hands during thunderstorms.

CLEANING

Before cleaning the BOX SCS always disconnect the power cord of the unit, use a dry cloth to dust, no solvents or detergents, and compressed air.

OBJECTS

Never insert objects into the BOX SCS. If this happens, unplug the unit and call a technician.

USE ONLY FOR QUALIFIED PERSONNEL

The purchased item is a sophisticated electronic device that is absolutely not suitable for use by untrained personnel. All operations must be performed by a qualified technician.

ACCESSORY

The use of accessories or spare parts not original may damage the unit and endanger the safety of the user. In case of failure contact technical support.

POSITIONING

Install the probes and SCS in places protected from splashes of water and sunlight. Do not place near heat sources exceeding the parameters specified in this manual. Place on a stable surface, away from vibration. Place the unit as far away from any strong magnetic fields.
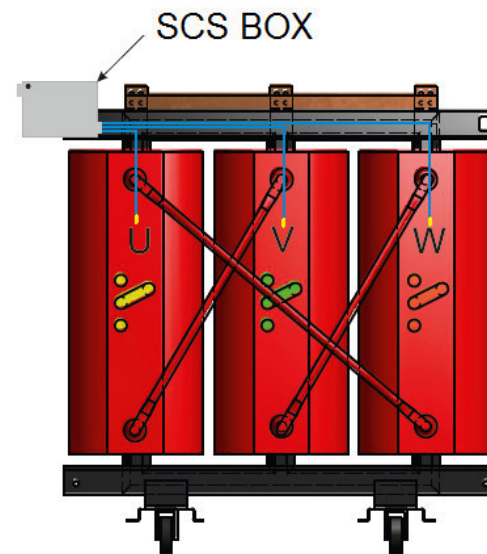
MAINTANANCE

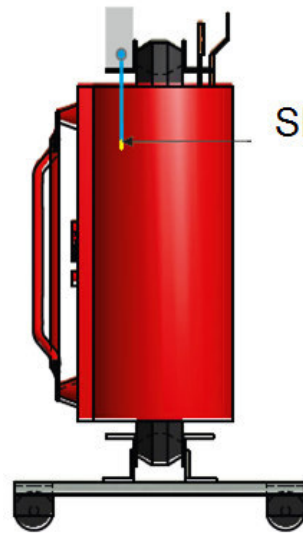If any faults occur always contact qualified personnel.

MOUNTING SCS BOX

The SCS box must be mounted on one side of the transformer respecting the following guidelines:

- Maintain a safe distance between the windings voltage and the SCS BOX. The safety distance must be specified by the manufacturer of the transformer according to the voltage on the primary and secondary windings.
- Do not place the SCS BOX near the hot air flow coming from the windings or the core.
- Working temperature range of the SCS BOX: -20°C a 120°C.
- Maximum humidity 90% (non-condensing)
- Location place protected from splashing water and sunlight.

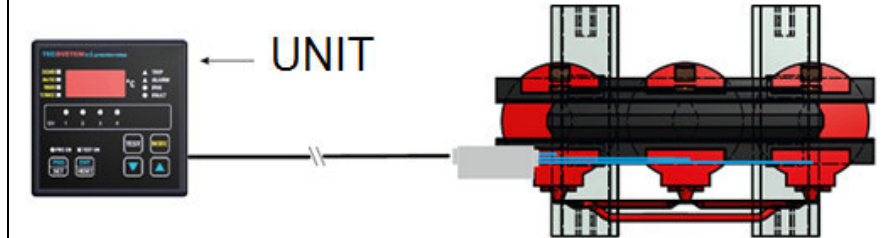### POSITIONING OF SENSORS INSIDE THE TRANSFORMER

Sensors should be inserted into the secondary of the transformer respecting the following guidelines:

- The probe must be inserted inside the secondary winding for about 30-40% of the total height of the column of the transformer.
- Avoid from any occlusion into the channel where the sensor has to be placed.
- The cable of the Pt100 must be laid in a linear mode, without creating windings and must be protected and secured by a special duct
- The sensor type installed must comply with the rules of the security measures for the tensions on which it is applied. The installer / user of the transformer is responsible for the proper installation of the product and its safety.

CONNECTING SCS BOX TO THE MONITORING UNIT

To ensure a safe connection between the Pt100 sensor and the temperature monitoring unit, you must strictly perform the following rules:
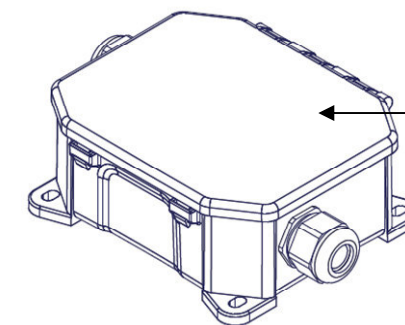

Installation rules:

- Every sensor must be connected using a 3 wire cable with minimum section of 0,35 mm² and maximum of 1 mm².
- Extension cable must be shielded with tinned copper covering at least the 80% of the surface.
- Wires has to be twisted together.
- Shield must be connected to ground from only one terminal, choosing the side of the monitoring unit.
- Cable transporting data signals from the sensors must not be close to energy cables either low or high voltage.
- Sensor and data cables must be positioned as linear as possible without creating windings.
- Terminals, if present, must be very tight crimped to avoid false connection.

Installation not in accordance with the rules set by TECSYSTEM, within the application of the transformers / electric motors, can cause: incorrect temperature readings, alarms or abnormal tripping, RTD faults , damge to the Pt100 inputs of the temperature monitoring unit.

Note: for better contact with the spring terminal of the SCS BOX, do not use crimp terminals. Insert the stripped wires.

TO DOWNLOAD THE COMPLETE MANUAL " SCS / Pt100 INSTALLATION NOTES", * USE THE QR CODE SIGNED BY OUTSIDE SCS PRODUCT OR CONNECTED TO THE WEBSITE TECSYSTEM (www.tecsystem.it)

MANUAL

INSTRUCTION

TECHNICAL INFORMATION

Mail: ufficiotecnico@tecsystem.it — tel: 02/4581861

Sede amministrativa -Offices&Factory-
Via Leonardo da Vinci, 54/56 –
20094 Corsico (MI) - Italy
Tel. +39 024581861 - Fax +39 0248600783
www.tecsystem.it

* download the QR CODE READER application to your smartphone / tablet and you will be ready to read all Q codes