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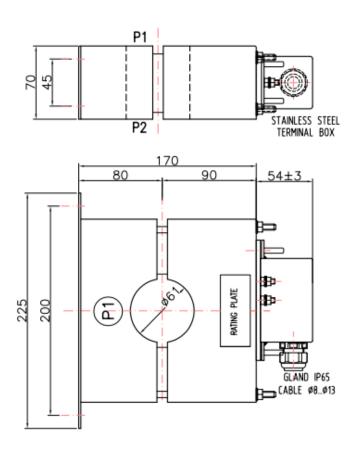
# LOW VOLTAGE OUTDOOR SPLIT CORE RING CURRENT TRANSFORMERS – TCE/1860-A and TCE/1592-A

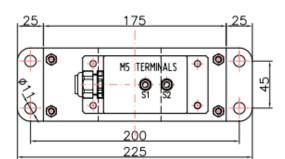
# - HANDLING, STORAGE, ERECTION, COMMISSIONING AND MAINTENANCE INSTRUCTION -

## 1. FOREWORD:

All our current transformers comply with IEC 61869-2 Standards.

The models TCE/1860-A and TCE/1592-A are a split core ring type low voltage current transformer for outdoor installation, composed by two semi cores: the part without secondary terminal box called "fixed part" and the part with terminal box called "mobile part". TCE/8160-A and TCE/1592-A is supplied with the two parts assembled.





# 2. RECEIPT OF THE GOODS:

On receipt of the goods, check carefully the packing conditions and after unpacking check the integrity of the product. If it has been damaged, issue a claim to the forwarder and inform us.



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#### 3. HANDLING AND ERECTION:

Avoid any shocks. Shifting and transport of this light weight item can be done by hands.

### 4. COMMISSIONING:

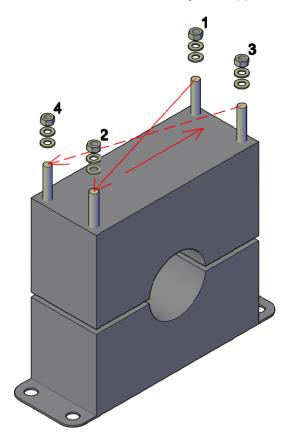
The operations must be done with disconnected circuits, by expert and qualified technicians, respecting the a.m. IEC standards and European safety prescription.

<u>Installation</u> can be done outdoor, ambient air temperature must be included between  $\frac{-5^{\circ}C}{-5^{\circ}C}$  and altitude must not exceed 1000m.

To identify the product and to properly connect the current transformer check the relevant drawing, rating plate on the current transformer and the terminal markings.

To mount properly the product:

- 4.01 remove the four lateral M6 nuts and washers
- 4.02 gently separate the mobile part from the fixed part, shifting along the M6 threaded bars axis
- 4.03 fasten the fixed part to the customer's support structure using appropriate screws or tie rods
- 4.04 position the primary cables in the semi circumference of fixed part
- 4.05 <u>check that the two contact surfaces of the two semi cores are perfectly clean</u> (dust and dirt will compromise accuracy). It is possible to use pure alcohol for cleaning.
- 4.06 reassembly the fixed part to the mobile parts using M6 nuts (part of the supply): tighten the screw above on the left, the screw down on the right, the screw down on the left, the screw above on the right. Repeat this sequence increasing gradually the tightening torque from 1 Nm up to 1,5 Nm, taking care of the alignment of the semi cores surfaces
- 4.07 Pay attention to maintain the perfect alignment of the two parts, and to do not stress and move the contact between the two parts.
- 4.08 Use Thread-locking fluid, applied before or after assembly, depending on the type.



Fasten in crossed counterclockwise order (sequence 1-2-3-4)

Each joint place: N°1 M6 washer N°1 M6 splt washer N°1 M6 self locking nuts in crossed counterclockwise order (1Nm tightening)

After all four nuts are set, tight up to 1,5 Nm

Apply thread locking fluid, before or after the assembly, depending on the type



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Before putting in working the current transformer make sure that all connections have been properly made; in particular check that:

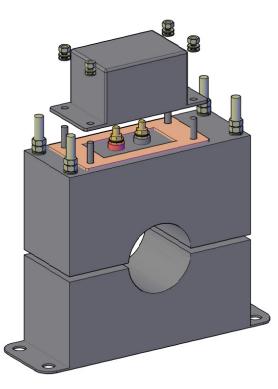
- secondary terminals are connected to the rated load or that they are short-circuited. (AVOID WORKING WITH OPEN CIRCUIT ON SECONDARY TERMINALS)

- one of the secondary terminals is earthed

- reassembly secondary teminals box using a torque 2 Nm for the M5 self locking nuts (provided) and using thread-locking fluid, applied before or after assembly, depending on the type

-all the data indicated in the rating plate (rated primary and secondary current, rated frequency, rated burden, accuracy class) have been respected.

-PRIMARY CABLE MUST BE INSULATED, OR RATED VOLTAGE OF PRIMARY CIRCUIT MUST BE LOWER OR EQUAL TO 0,72KV



#### 5. MAINTENANCE:

Annual check of:

- 5.01 external aspect of the current transformer,
- 5.02 tightening of the screws or the tie rods of the fixing structure
- 5.03 tightening of the screw of the fixing screws of the two parts
- 5.04 tightening of terminals and connections
- 5.05 cleaning of the external surface

#### 6. STORAGE:

To be stocked indoor, in not polluted air and with normal level of humidity. Air temperature must be included between -40°C and +80°C.