**Technical Specification code:** GRI-GRI-MAT-E&C-0024
Version no. 01 dated 20/12/2022

**Subject:** GSCT007 Toroidal current transformers for MV cable for indoor

**Application Areas**
Perimeter: *Global*
Staff Function: -
Service Function: -
Business Line: *Enel Grids*

**CONTENTS**



THE HEAD OF GLOBAL NETWORK COMPONENTS
**Fabrizio GASBARRI**

## 1 DOCUMENT AIMS AND APPLICATION AREA

This document prescribes the technical characteristics, the performance, and the testing methods for indoor toroidal current transformers to be used in Enel compact type air insulated switchboard of Liberty substation (GSCM690). It applies for the Enel Group Distribution Companies located in the countries listed below:

| Country | Distribution Company |
|---|---|
| Argentina | Edesur |
| Brazil | Enel Distribuição Rio<br>Enel Distribuição Ceará<br>Enel Distribuição São Paulo |
| Chile | Enel Distribución Chile |
| Colombia | Enel Codensa |
| Iberia | e-distribución |
| Italy | e-distribuzione |
| Peru | Enel Distribución Peru |
| Romania | Enel Distributie Banat<br>Enel Distributie Dobrogea<br>Enel Distributie Muntenia |

**Table 1 - Distribution Companies**

*This document shall be implemented and applied to the extent possible within the Enel Grids Business Line and in compliance with any applicable laws, regulations and governance rules, including any stock exchange and unbundling-relevant provisions, which in any case prevail over the provisions contained in this document.*

### 1.1 Related documents to be implemented at country level

This document doesn't require implementation of further documents.

Anyway, each Enel Grids Company can issue, under the supervision of Enel Grids Global Network Components a detailed document, according to the provisions of the present document and in case of specific needs.

## 2 DOCUMENT VERSION MANAGEMENT

| Version | Date | Main changes description |
|---|---|---|
| 01 | 20/12/2022 | Issuing of "GSCT007 Toroidal current transformers for MV cable for indoor" technical specification |

## 3 UNITS IN CHARGE OF THE DOCUMENT

Responsible for drawing up the document:

- Enel Grids: Engineering and Construction / Components and Devices Design/ Network Components unit.

Responsible for authorizing the document:

- Enel Grids: Head of Network Components unit.
- Enel Grids: Head of Quality unit.

## 4 REFERENCES

- Integrated Policy for Quality, Health and Safety, Environment, Anti-Bribery and Information Security;
- Stop Work Policy;
- ISO 9001 - Quality Management System – Requirements;
- ISO 14001 - Environmental Management System - Requirements with guidance for use;
- ISO 45001 - Occupational Health and Safety Management System - Requirements with guidance for use;
- ISO 37001 - Anti-bribery Management System - Requirements with guidance for use;
- ISO/IEC 17000 - Conformity assessment – Vocabulary and general principles;
- ISO/IEC 17020 - General criteria for the operation of various types of bodies performing inspection;
- ISO/IEC 17025 - General requirements for the competence of testing and calibration laboratories;
- ISO/IEC 17050-1 - Conformity assessment - Supplier's declaration of conformity - Part 1: General requirements (ISO/IEC 17050-1:2004, corrected version 2007-06-15);
- ISO/IEC 17050-2 - Conformity assessment - Supplier's declaration of conformity - Part 2: Supporting documentation (ISO/IEC 17050-2:2004);

- ISO/IEC 17065 - Conformity assessment – Requirements for bodies certifying products, processes and services;
- IEC 61869-1 “Instrument transformers - Part 1: General requirements”;
- IEC 61869-2 “Instrument transformers - Part 2: Additional requirements for current transformers”;
- Material Specification MAT-O&M-NCS-2021-0033-EGIN “GSCG002 Technical Conformity Assessment”;
- Material Specification MAT-E&C-NC-2021-0057-GIN “GSCG003 Employer’s Information Requirements for supplier components”;
- Working instruction WKI-QPT-CMQ-2020-0019-EGIN “Contractual Requirements for Components and Materials Quality management”;
- Construction Specification CNS-O&M-S&L-2021-0032-EGIN “Barcode specification;

### 4.1 Laws

#### 4.1.1 Argentina

- Norma IRAM.

#### 4.1.2 Brazil

- NR-10 - segurança em instalações e serviços em eletricidade.

#### 4.1.3 Chile

- NSEG 5. E.n.71 - Reglamento de Instalaciones Eléctricas de Corrientes Fuertes.

#### 4.1.4 Colombia

- RETIE - Reglamento Técnico de Instalaciones Eléctricas.
- Ley 400 de 1997.

#### 4.1.5 Italy

- D.Lgs n. 81 of the 9th of April 2008 and subsequent modifications.

#### 4.1.6 Peru

- Código Nacional de Electricidad Suministro.

#### 4.1.7 Romania

- Legea securităţii şi sănătăţii în muncă nr.319/2006, cu modificările şi completările ulterioare.

### 4.1.8 Spain

- R.D. 614/2001, de 8 de junio, sobre disposiciones mínimas para la protección de la salud y seguridad de los trabajadores frente al riesgo eléctrico.
- R.D. 337/2014, de 9 de mayo, por el que se aprueban el Reglamento sobre condiciones técnicas y garantías de seguridad en instalaciones eléctricas de alta tensión y sus Instrucciones Técnicas Complementarias ITC-RAT 01 a 23.
- R.D. 223/2008, de 15 de febrero, por el que se aprueban el Reglamento sobre condiciones técnicas y garantías de seguridad en líneas eléctricas de alta tensión y sus instrucciones técnicas complementarias ITC-LAT 01 a 09.

**Group Pillar References:**

- The Code of Ethics of Enel Group;
- The Enel Group Zero Corruption Tolerance Plan (ZTC);
- Human Rights Policy;
- Organization and Management Model as per Legislative Decree No. 231/2001;
- Enel Global Compliance Program (EGCP).

## 5 ORGANIZATIONAL PROCESS POSITION IN THE PROCESS TAXONOMY

Value Chain/Process Area: Engineering and Construction

Macro Process: Devices and Components Development

Process: Standard Catalog Management

## 6 DEFINITIONS AND ACRONYMS

| Acronym and Key words | Description |
|---|---|
| **Medium Voltage (MV)** | System with a nominal operative voltage between the phases higher than 1 kV to 35 kV included. NOTE: The boundary value between medium voltage and high voltage depends on local and historical circumstances or on common usage. Nevertheless for internal standardization purposes, medium voltage is defined as a system with a nominal operative voltage between the phases higher than 1 kV to 35 kV included” |

| | |
|---|---|
| **Technical Conformity Assessment (TCA)** | A "conformity assessment"[1] with respect to "specified requirements"[2] consists in functional, dimensional, constructional and test characteristics required for a product (or a series of products) and quoted in technical specifications and quality requirements issued by Enel Group distribution companies. This also includes the verification of conformity with respect to local applicable regulation and laws and possession of relevant requested certifications |
| **Type A documentation** | Not confidential documents used for product manufacturing and management from which it is possible to verify the product conformity to all technical specification requirements, directly or indirectly |
| **TCA report** | Document describing the activities carried out for TCA |

[1] Definition 2.1 of ISO/IEC 17000
[2] Definition 3.1 of ISO/IEC 17000

# 7 DESCRIPTION

## 7.1 List of Components

Components are identified with the Global Types indicated in the following table, also indicating the codes that are to be determined (TBD).

Global types are associated with country codes (identification numbers) for the relevant countries of application.

| GS Type Code | Material Code (TAM) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Argentina | Chile | Italy | Romania | Spain | Brazil | Colombia | Peru |
| GSCT007/01 | TBD | TBD | - | - | TBD | - | - | - |
| GSCT007/02 | TBD | TBD | - | - | TBD | - | - | - |
| GSCT007/03 | TBD | TBD | 530039 | TBD | - | - | - | - |
| GSCT007/04 | TBD | TBD | 530038 | TBD | - | - | - | - |
| GSCT007/05 | TBD | TBD | 530037 | TBD | - | - | - | - |
| GSCT007/06 | TBD | TBD | - | - | TBD | - | - | - |
| GSCT007/07 | TBD | TBD | 530036 | TBD | - | - | - | - |
| GSCT007/08 | TBD | TBD | 530035 | TBD | - | - | - | - |
| GSCT007/09 | TBD | TBD | 530034 | TBD | - | - | - | - |
| GSCT007/10 | TBD | TBD | 530033 | TBD | TBD | - | - | - |
| GSCT007/11 | TBD | TBD | 530032 | TBD | TBD | - | - | - |
| GSCT007/12 | TBD | TBD | - | - | TBD | - | - | - |
| GSCT007/13 | TBD | TBD | - | - | TBD | - | - | - |
| GSCT007/14 | - | - | 530031 | TBD | - | - | - | - |
| GSCT007/15 | TBD | TBD | - | TBD | TBD | - | - | - |
| GSCT007/16 | TBD | TBD | - | TBD | TBD | - | - | - |
| GSCT007/17 | TBD | TBD | - | TBD | TBD | - | - | - |
| GSCT007/18 | TBD | TBD | - | TBD | TBD | - | - | - |
| GSCT007/21 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/22 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/23 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/24 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/25 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/26 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/27 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/28 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/29 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/30 | - | - | - | - | - | TBD | TBD | TBD |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GSCT007/31 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/32 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/33 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/34 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/35 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/36 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/37 | - | - | - | - | - | TBD | TBD | TBD |
| GSCT007/38 | - | - | - | - | - | TBD | TBD | TBD |

**Table 2 – Type codes**

### 7.2 Service conditions

Unless otherwise specified the normal service conditions defined in IEC 61869 series apply.

- The temperature category to be considered is -5/40 °C;
- For Colombia the altitude to be considered is 2700 m.

### 7.3 Technical characteristics

Global types associated with main ratings, requirements and service conditions prescribed are indicated in the following tables, where CT indicates current transformer; F indicates frequency; P indicates protection; M measuring; 2P protection with redundance; HP homopolar protection; $k_r$ is the rated transformation ratio; $I_{cth}$ is rated continuous thermal current; $I_p$ is the primary current; $I_{pn}$ is the primary nominal current.

The dimensions values d (d_min), D (D_max) and h (h max) are represented on Figure 1 (phase current transformer) and Figure 2 (homopolar current transformers).

| GS Type Code | CT Type | F [Hz] | $k_r$ [A/A] | Rated burden and accuracy class | $I_{cth}$ | Dimensions (mm) | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | d_min [mm] | D_max [mm] | h max [mm] |
| GSCT007/01 | P | 50 | 100/1 | 2 VA 1 – 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/02 | | | 300/1 | 2 VA 1 - 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/03 | | | 100/5 | 10 VA 1 – 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/04 | | | 300/5 | 10 VA 1 – 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/05 | | | 300/5 | 10 VA 1 - 5 P30 + ratio error ≤ 5% at 1% $I_n$ | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/06 | | | 600/1 | 2 VA 1 - 5 P20 | 120 % $I_{pn}$ | 70 | 200 | 120 |
| GSCT007/07 | | | 600/5 | 10 VA 1 - 5 P20 | 120 % $I_{pn}$ | 70 | 200 | 120 |
| GSCT007/08 | | | 1600/5 | 10 VA 0,5 – 5 P10 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/09 | | | 2000/5 | 10 VA 0,5 – 5 P10 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/10 | M | | 1600/5 | 10 VA 0,2 FS 5 | 120 % $I_{pn}$ | 140 | 240 | 120 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GSCT007/11 | | | 2000/5 | 10 VA 0,2 FS 5 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/12 | 2P | | 1600/5-5-5 | 10 VA 0,5 – 10 VA 5P20 – 10 VA 5P20 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/13 | | | 2000/5-5-5 | 10 VA 0,5 – 10 VA 5P20 – 10 VA 5P20 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/14 | HP | | 100/1 | 2 VA – ratio and phase error as shown on Table 5 | 800 A | 80x200 | 250x550 | 130 |
| GSCT007/15 | | | 200/1 | 2 VA - 10 P15 | 500 A | 90x400 | 250x550 | 130 |
| GSCT007/16 | | | 200/1 | 2 VA - 10 P15 | 600 A | 90x400 | 250x550 | 130 |
| GSCT007/17 | | | 200/1 | 2 VA - 10 P15 | 1000 A | 90x400 | 250x550 | 130 |
| GSCT007/18 | | | 20/1 | 2 VA - 10 P15 | 120 % $I_{pn}$ | 90x400 | 250x550 | 130 |

**Table 3 – List of Components I**

| GS Type Code | CT Type | F [Hz] | $k_r$ [A/A] | Rated burden and accuracy class | $I_{cth}$ | Dimensions (mm) | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | d_min [mm] | D_max [mm] | h max [mm] |
| GSCT007/21 | P | 60 | 100/1 | 2 VA 1 – 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/22 | | | 300/1 | 2 VA 1 - 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/23 | | | 100/5 | 10 VA 1 – 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/24 | | | 300/5 | 10 VA 1 – 5 P30 | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/25 | | | 300/5 | 10 VA 1 - 5 P30 + ratio error ≤ 5% at 1% $I_n$ | 120 % $I_{pn}$ | 60 | 200 | 120 |
| GSCT007/26 | | | 600/1 | 2 VA 1 - 5 P20 | 120 % $I_{pn}$ | 70 | 200 | 120 |
| GSCT007/27 | | | 600/5 | 10 VA 1 - 5 P20 | 120 % $I_{pn}$ | 70 | 200 | 120 |
| GSCT007/28 | | | 1600/5 | 10 VA 0,5 – 5 P10 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/29 | | | 2000/5 | 10 VA 0,5 – 5 P10 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/30 | M | | 1600/5 | 10 VA 0,2 FS 5 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/31 | | | 2000/5 | 10 VA 0,2 FS 5 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/32 | 2P | | 1600/5-5-5 | 10 VA 0,5 – 10 VA 5P20 – 10 VA 5P20 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/33 | | | 2000/5-5-5 | 10 VA 0,5 – 10 VA 5P20 – 10 VA 5P20 | 120 % $I_{pn}$ | 140 | 240 | 120 |
| GSCT007/34 | HP | | 100/1 | 2 VA – ratio and phase error as shown on Table 5 | 800 A | 80x200 | 250x550 | 130 |
| GSCT007/35 | | | 200/1 | 2 VA - 10 P15 | 500 A | 90x400 | 250x550 | 130 |
| GSCT007/36 | | | 200/1 | 2 VA - 10 P15 | 600 A | 90x400 | 250x550 | 130 |
| GSCT007/37 | | | 200/1 | 2 VA - 10 P15 | 1000 A | 90x400 | 250x550 | 130 |
| GSCT007/38 | | | 20/1 | 2 VA - 10 P15 | 120 % $I_{pn}$ | 90x400 | 250x550 | 130 |

**Table 4 – List of Components II**

| Current ($I_p/I_{pn}$) | Ratio error (%) | Phase shift (degrees) |
|---|---|---|
| 0,01 | ± 5 | ± 2 |
| 0,05 | ± 1 | |
| 1 | ± 1 | |
| 20 | ± 5 | |

**Table 5 - GSCT007/14 and GSCT007/34 ratio and phase shift error**

Other common requirements are:

| Parameter | Value |
|---|---|
| Highest Voltage for equipment ($U_m$) | 0,72 kV |
| Rated primary short circuit current ($I_{psc}$) | 16 kA |

**Table 6 – Common requirements**

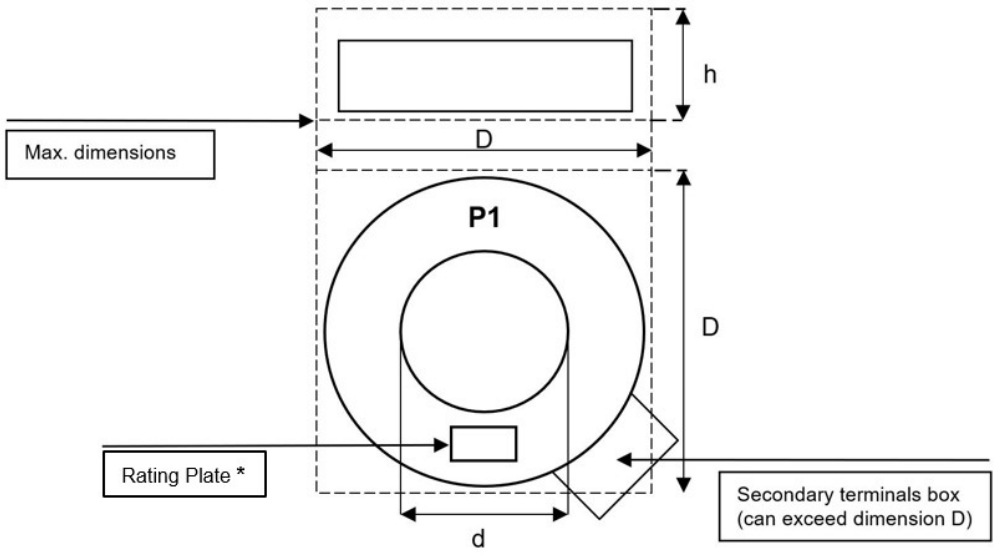


**Figure 1 - Example of toroidal current transformer**

(*) The rating plate, in compliance with IEC-61869 Series, shall be placed on the side identified as P1, except for the following codes, where the rating plate shall be placed on the side identified as P2 (on the opposite side of P1): GSCT007/08, GSCT007/09, GSCT007/10, GSCT007/11, GSCT007/12, GSCT007/13, GSCT007/28, GSCT007/29, GSCT007/30, GSCT007/31, GSCT007/32, and GSCT007/33.

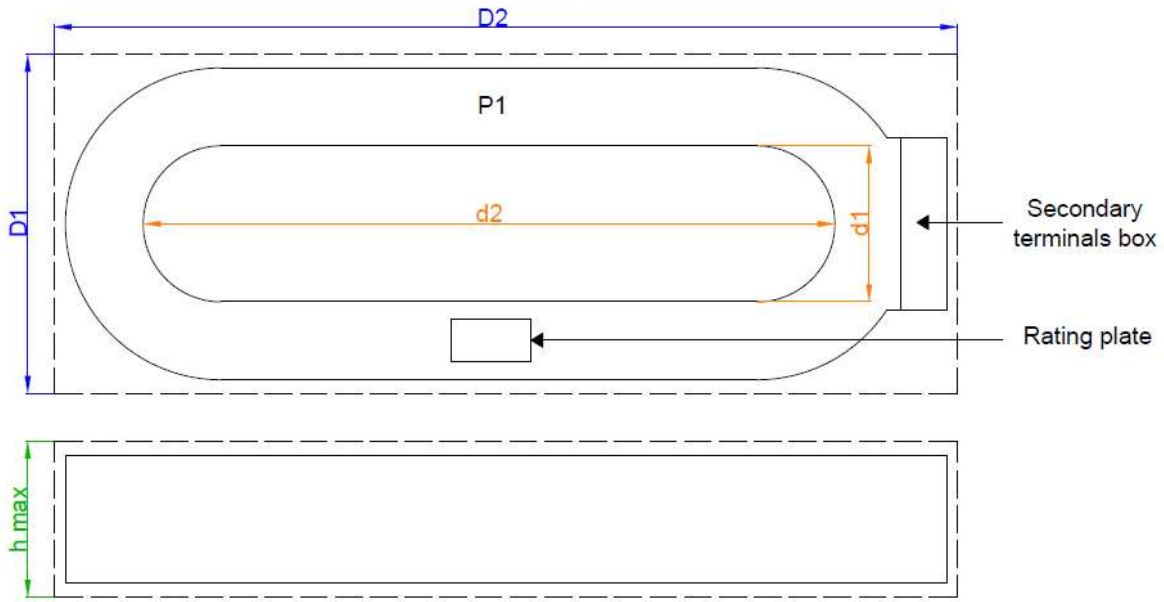


**Figure 2 - Example of homopolar current transformer**

| GS Type Code | d_min = d1 x d2 | | D_max = D1 x D2 | | h max [mm] |
|---|---|---|---|---|---|
| | d1 [mm] | d2 [mm] | D1 [mm] | D2 [mm] | |
| GSCT007/14 | 80 | 200 | 250 | 550 | 130 |
| GSCT007/15 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/16 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/17 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/18 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/34 | 80 | 200 | 250 | 550 | 130 |
| GSCT007/35 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/36 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/37 | 90 | 400 | 250 | 550 | 130 |
| GSCT007/38 | 90 | 400 | 250 | 550 | 130 |

**Table 7 - Homopolar current transformer dimensions**

## 7.4 Construction characteristics

### 7.4.1 General

Refers to IEC 61869-Series for indoor current transformer.

The current transformers shall be made in resin, the type of resin and the characteristics shall be defined in the manufacturer documentation.

The secondary terminals shall be realized with M6 screws, suitable for conductor of 4 ÷ 10 $mm^2$.

The secondary terminals shall be protected with a proper removable box suitable for cable connection.

The current transformer shall be manufactured without sharp edges.

### 7.4.2 Mechanical resistance of the terminals

Secondary terminals fixed on the resin shall be designed to withstand the mechanical stresses indicated in the following table:

| Thread diameters (M) | Tightening torque (Nm) |
|---|---|
| 6 | 3,0 |

**Table 8 – Mechanical resistance of therminals**

### 7.4.3 Manual and packaging

For each CT the manual for installation and operation, in the language of the Country to be delivered, shall be provided. It shall also include the procedures to be adopted for storage, transportation, and dismantling.

Packing for transportation and storage (which does not take part in the technical conformity assessment process) shall be compliant to the documents referring of each Country.

## 7.5 List of tests

### 7.5.1 General

Type, routine and special tests shall be performed in accordance with IEC 61869-1 and IEC 61869-2 for this typology of current transformers, with the additional tests prescribed in the following.

### 7.5.2 Special tests

For GSCT007/14 and GSCT007/34 is requested the following test.

1) Test with a protection complying with ENEL specifications connected to the CT secondary terminals with a series load such that a performance of 2 VA is obtained.

The protection shall be calibrated according to the parameters related to the thresholds of interest, as summarized below:

| 67.1 Protection | |
|---|---|
| Delay time [T67.1] | 0,5 s |
| $I_o$ | 20 mA |
| $V_o$ | 5 V |
| Tripping zone | 61° - 257° |
| Reclosing delay time [TRR] | 0,4 s |
| Contact intervention time after reclosure [T67.1c] | 0,3 s |
| 67.2 Protection | |
| Delay time [T67.2] | 0,4 s |
| $I_o$ | 10 mA |
| $V_o$ | 2 V |
| Tripping zone | 60° - 120° |
| Reclosing delay time [TRR] | 0,4 s |
| Contact intervention time after reclosure [T67.2c] | 0,15 s |

**Table 9 – Calibration of protection for special tests**

The CT must be supplied in the primary winding with an input signal consisting of the following components:

- an asymmetrical component with a $500\sqrt{2}$ A crest and a time constant of 150 ms;
- an alternating component of 50 A rms.

In addition, to verify the operation of the protection, the homopolar voltage input must be supplied with a voltage of 100 V rms amplitude and a leading phase shift of 250° with respect to the alternating component of the current.

The CT must reproduce the alternating component at secondary so as not to delay excessively the tripping of the protection.

The test is successful if the delay caused on protection tripping is not greater than 100 ms.

2) Measurements for the determination of the full magnetization and the measurement of the secondary resistance of the CT.

### 7.5.3 Type tests

#### 7.5.3.1 Verification of the compliance to this technical specification

The characteristics of the components, including ratings and design requirements, shall be in compliance with this technical specification.

The visual inspection shall be performed to verify the absence of imperfections and defects.

#### 7.5.3.2 Additional accuracy test for GSCT007/05 and GSCT007/25

The prescription of the table in clause 6 for CTs with rated current ratio 300/5 shall be additionally verified. The accuracy in terms of ratio error at 1% In shall be less than 5% at rated burden and at ¼ of rated burden.

#### 7.5.3.3 Mechanical tests

To be performed on secondary terminals to verify the mechanical resistance prescribed in this document.

### 7.5.4 Routine tests

#### 7.5.4.1 Visual inspection

The visual inspection shall verify the compliance with this technical specification and the approved prototype and the absence of imperfections and defects.

## 7.6 Documentation

The documentation for approval of prototypes shall be arranged in accordance with the specific procedure for the Technical Conformity Assessment (TCA).

For delivery generally the CT shall be supplied with the following documentation:

- Drawings of the CT with overall dimensions, primary and secondary terminals arrangement;
- Tests report;
- Manual for installation and operation with clear indication for secondary terminals connections.

# 8 ANNEXES

## 8.1 Annex A - Check list for tender

Example of check list to be used for tender:

| **Global Standard:** | | | **To be filled by the Supplier** |
|---|---|---|---|
| GSCT007 ….. | | | |
| | | | |
| Enel Type: | CSCT007/1 | | **Supplier code:** |
| Enel Code: | …….. | | ….. |
| Enel Company: | All | | **Supplier Name:** |
| Country: | All | | …… |
| | | | |
| **Description** | **Required value** | | **Offered value:** |
| Highest voltage for equipment - Um (kV) | 0,72 | | …… |
| Rated power frequency withstand voltage (kV) | ---- | | …… |
| Rated lightning impulse withstand voltage (kV) | ---- | | …… |
| Rated frequency (Hz) | 50 | | …… |
| Rated transformation ratio Ipn/Isn (A/A) | 100/1 | | …… |
| Rated short-time thermal current - $I_{th}$ (kA) | 16 | | …… |
| Rated continuous thermal current - $I_{cth}$ (% of $I_{pr}$) | 120 % $I_{pn}$ | | |
| Accuracy class designation | 2 VA 1 – 5 P30 | | …… |
| Ambient temperature (°C) | -5 / + 40 | | …… |
| Type of resin insulation | Epoxy /poliuretanic resin | | …… |
| Overall dimensions (d_min x D_max x h max) (mm) | 60 x 200 x 120 | | …… |
| **Documentation** | | | …… |
| Drawing with overall dimensions | to be attached | | …… |
| Electrical scheme of instrument transformer | to be attached | | …… |
| List of deviations to technical specifications | No / List attached | | …… |

**Table 10 – Checklist for tender**