

TECHNICAL SPECIFICATION FOR RESIN CAST LT CURRENT TRANSFORMER

GENERAL TECHNICAL REQUIREMENT:

Rated Voltage	: 240 V(Phase to Neutral), 415V (ph-ph)
Rated Current (I Basic)	: 5 Amps balanced & unbalanced load
Rated Frequency	: 50 Hz.
Accuracy class	: 0.5
Power Factor	: Unity to Zero (all power factor lag / or lead).
Temperature	: The standard reference temperature for performance will be 27 °C.
supply system variation	: Voltage Vref + 20% to -30% Frequency 50 Hz ±5%
Highest system voltage	: 660 V
Current Transformer Ratio	: 200/5A or 100/5 Amps

CONSTRUCTION:

CORE MATERIAL:

Material	: Low loss, CRGO M4 or better grade (Core losses will not exceed 0.8 Watts/Kg. at 1.5 tesla)
Thickness	: Less than or equal to 0.27 mm.

COPPER WIRE:

Material	: Enameled wire as per IS 4800 Part IX / IEC 317
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INSULATION:

Coil will be insulated with Electrical grade polyester tape.
Outer insulation will be with vacuum mixed, homogenous Resin casting.
Minimum 2 mm thickness of resin above the coil of the CT will be provided.

SECONDARY TERMINAL:

A three core (2.5mm) PVC insulated flexible multi strand copper wire lead will come out directly from the CT as secondary terminal. Two wires will be used for CT incoming & outgoing. Proper colour coding / identification will used to identify the CT leads.

Alternatively secondary terminals are as per enclosed drawings. Two nos of male terminals are provided with check nuts and washers.

Secondary lead/terminals will be secured during casting against loosening while connection.

MOUNTING CLAMP:

M.S. (1.6 mm thick) uniformly hot dip galvanized

It will be properly tightened to secure CT against vibration.
It will have suitable insulation distance from primary.

RATING PLATE

Self-adhesive, laminated, printed label will be having following details:

Ratio, Burden & Accuracy Class

Applicable Standard

I.L.

STC Rating

Continuous thermal current

Caution against open secondary

Batch no.

Manufacturer's name

Manufacturing month and year.

TECHNICAL SPECIFICATION FOR PILFER PROOF BOX FOR LTTV METER

TECHNICAL DETAILS:

The box will be suitable to house one number three-phase four wire LT energy meter, 1 No. TTB and 4 no. CTs.

The specification of metallic box is as follows:

The offered meter box will be made of minimum 1.6 mm CRCA sheet. The offered meter box will have two portions, the upper portion will be to house the three phase energy meter & TTB and the lower portion of the box is intended for housing four nos. LT CTs. Both the portions will be independent from each other and if one portion is closed, it will not be possible to approach the same by opening of the other portion and vice versa. Meter box will have roof tapering down to both sides for easy flow of rainwater.

The upper portion of the meter box will contain a door, which will be provided with a window for taking the readings of the meter. The window will be made of toughened glass minimum 3mm thickness. The viewing window will have a proper Shade /arrangement to protect meter display from direct sunlight.

A general arrangement for fixing the meter will be made inside the box. The arrangement of fixing the meter will not be specific to only one type of meter. It will be possible to fix other meters also which are slightly bigger or smaller than the meters offered by us. To fix the other type of meter, the meter mounting plate has to be replaced accordingly. CTs will be mounted on the lower portion of the box on MS channel.

Each box cover will be fixed on minimum two hinges fixed with screws from inside not visible from outside. Each box cover will be able to open by a minimum of 120 degrees. Soft rubber gasket for protection from ingress of dust and moisture will be provided on all around the both of doors. Suitable handles will be provided on both the doors for opening of doors.

The door of the box will be provided with two nos. knobs & sealing studs to make it tamper proof.

The offered meter box will be of Light gray colour. For earthing of all metal parts, earthing bolt and nut with washer of min. M6 dia will be provided. Box will be provided with 4 nos. fixing clamps having minimum 6 mm dia for mounting purpose, clamps are provided at all four corners of metering box.

The over all dimensions of the offered meter box will be suitable for housing energy meter, TTB and 4 nos. of LT CTs respectively. The clearance of sufficient sizes as desired by CSO in the tender specification will be provided from all sides and front of the meter.

For cable entry and exit 4 nos. holes of internal dia for entry PVC LT cable of requisite primary current rating will be provided. For incoming and outgoing cable, gland of suitable inner dia will be provided.

Name plate: The Purchase order No. & Date, Month and Year of manufacture will be printed or marked on the top cover of the box. The manufacturer's name will be printed or marked on the bottom half of the box such that it will not be removed easily. Name plate will be made of Aluminum sheet & fixed through 2 nos. of rivets.

The typical arrangement of Meter, TTB and CTs are as shown in drawing no. GEN-M-2163. However the exact dimensions and other details will be furnished at the time of submission of drawings for approval if contract is awarded to us.