

**MATERIAL SPECIFICATIONS CELL**

TECHNICAL SPECIFICATION

OF

STANDARD CT & STANDARD PT BURDEN BOX SET  
(FOR INSTRUMENT TRANSFORMERS)

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**TECHNICAL SPECIFICATION OF STANDARD CT & STANDARD PT BURDEN BOX SET**

**1.0 SCOPE**

This specification covers design, manufacture, testing, supply & delivery of Standard CT & Standard PT Burden box (for Instrument Transformers) for error testing of instrument transformers (VT and CT) with all required accessories.

**2.0 CLIMATIC CONDITION**

- i) Maximum Ambient Air Temperature 55°C
- ii) Minimum Ambient Air Temperature 05°C.
- iii) Maximum Relative Humidity Upto 95% (non-condensing)
- iv) Storage Temperature -20°C to 70°C
- v) Storage Humidity Upto 95% (non condensing)
- vi) Max. Altitude 1000 meter

**3.0 GENERAL & CONSTRUCTION REQUIREMENTS.**

**3.01 Burden box for CT**

Rated current	Power Factor	Burden
5 A	Unity	1.25, 2.5, 3.75, 5, 7.5, 10, 15, 20VA
	0.8 lag	
1A	Unity	
	0.8 lag	

**3.02 Burden box for PT**

Rated Voltage	Power Factor	Burden
110V	Unity	12.5, 25, 50, 100VA in steps
	0.8 lag	
63.5V	Unity	
	0.8 lag	

3.03 CT/PT Burden setting accuracy:  $\pm 4\%$  of step selected

3.04 Test frequency: 50 $\pm$ 5 Hz

3.05 After sales support: The after – sales service support / warranty services has to be provided.

3.06 Technical evaluation: Technical evaluation of offer of the equipment shall be carried out

3.07 Connecting leads and suitable accessories shall be provided

3.08 Documentation:

Sufficient no. of Operating/Service Manuals shall be provided along with supplied material

**4.0 CALIBRATION CERTIFICATE**

The calibration of equipment shall be carried out at approved laboratory by National Board of Accrediation of Laboratories (NABL). The manufacturers calibration certificates for all other equipment under supply with report from NABL approved laboratory shall be submitted for approval of C.E. (Testing & QC) before commencement of supply. Validity of calibration certificate shall be one year.

The equipment shall be type tested for IP 54 degree of protection as per IS: 12063/ IEC 60529 against ingress of dust, moisture & vermin. The type test certificate shall be submitted along with the offer

#### **5.0 PRE DESPATCH INSPECTION**

The inspection shall be carried out at the place of manufacturer unless otherwise agreed upon by the manufacturer and purchaser at the time of purchases. For imported equipments the supplier/bidder shall offer the equipment at the authorized service centre /works of the original manufacturer in India or at the supplier's works/Testing centre. The manufacturer shall offer to the inspector representing.

#### **6.0 NAME PLATE & MARKING:**

Equipment shall have name plate clearly visible, effectively secured against removal and indelibly and distinctly marked with all essential particulars as per relevant standards. Following details shall be marked on the Name Plate

Manufacturer's name & address:

Serial no.

Purchase Order No.

Month and Year of manufacture

Name of purchaser: MSEDCL

Guarantee: Five Years

ISI mark if applicable

#### **7.0 GUARANTEE**

The instrument shall be guaranteed for the period of **Five** years from the date of Dispatch.

#### **8.0 PACKING**

The instrument shall be suitably packed in order to avoid damage or disturbance during transit or handling. Each instrument may be suitably packed in the first Instance to prevent ingress of moisture and dust and then placed in a cushioned carton of a suitable material to prevent damage due to shocks during transit. The lid of the carton may be suitably sealed. A suitable number of sealed cartons may be packed in a case adequate strength with extra cushioning if considered necessary. The cases may then be properly sealed against accidental opening in transit. The packing cases may be marked to indicate the fragile nature of the contents.

The following information shall be furnished with the consignment:

- i) Name of consignee.
- ii) Details of consignment
- iii) Destination
- iv) Total Weight of consignment.
- v) Sign showing upper / lower side of the crate.
- vi) Sign showing fragility of the material.
- vii) Handling and unpacking instructions