

Detailed Specification

Enquiry:MM/172/G29809

Contact Details

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Please submit your offer for supply of the following items as per the instructions, technical specifications and other terms and conditions specified herein/ attached.

Note:

1. The delivery period mentioned in the BoQ is our indicative requirement. You may offer your earliest delivery period.

Please refer our above referred enquiry number in all correspondence.

SL No.	Material Code	Detailed Specification/s	Quantity	Unit of Measure
1	671308125	Current Transformer, 110 KV, 125/1, 0.2S with specifications in attached Data Sheet No: CD-ELE-110-CT-125/1	7	Set

SPECIAL TERMS AND CONDITIONS

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- (1) Type test certificate number is required along with offer.
- (2) Duly filled & Signed GTP (GUARANTEED TECHNICAL PARTICULARS OF CURRENT TRANSFORMER) shall be submitted by the bidder along with the offer.
- (3) Vendor shall submit General Arrangement (GA) Drawing for approval in the event of an order.
- (4) PDI is required.
- (5) Type & Routine Test certificates are required

TECHNICAL SPECIFICATION FOR 110 kV, 125/1 A, 0.2S CURRENT TRANSFORMER

SCOPE:

This specification covers the design, manufacture, assembly, testing at the manufacturer's works, supply & delivery of oil filled current transformers of 110 KV voltage class for metering services.

STANDARD:

The current transformers and accessories covered by this specification shall comply with the requirement of the latest edition of the following standards unless otherwise stated in this specification

IS: 2705 (Part-I-IV) : Specification for current Transformers.

IS: 4201: Application guide for current transformers.

IS: 5621/2099: Specification for Bushings/hollow insulators for alternating voltages above 1000V.

IS: 335: Specification for insulation oil for transformers and switchgears

IEC: 60044-1: Current Transformer.

DEVIATION:

Normally the offer should be as per Technical Specification without any deviation. But any deviation felt necessary to improve performance, efficiency and utility of equipment must be mentioned in the Deviation Schedule with reasons duly supported by documentary evidence. Such deviations suggested may or may not be accepted by FACT. Deviations not mentioned in Deviation schedule will not be considered.

TESTS AT FACTORY AND TEST CERTIFICATES:

- i) Each C.T. shall comply with the requirements of routine test as specified in IS: 2705 Part (1 and 2). Test shall be conducted by a NABL accredited agency and provide seal on secondary terminals.
- ii) All Routine tests at manufacturer's works on all CTs shall be carried out and Test Reports are to be submitted to FACT along with inspection call letter. Dielectric Dissipation Factor ($\tan \delta$) is to be measured at manufacturer's works for all CTs. The measured $\tan \delta$ values indicating sl. No. of CTs are to be submitted along with submission of inspection offer.

TEST REPORTS AND TYPE TESTS:

Current Transformer offered should be similar with ones on which type testing has been carried out as per relevant IS and IEC. Three sets of complete test report of all test (including Type Test of CT as well as for Silicon composite or condenser insulator), as stipulated in the relevant IS & IEC, carried out in Govt. recognized Test House or Laboratory /NABL accredited laboratory shall have to be submitted by successful bidder positively along with submission of drawings during detailed Engineering.



DATA SHEET		110 KV CURRENT TRANSFORMER	CD-ELE-110-CT-125/1
Sl.No.	Item Description	Specifications	
1.1	Ratio	125 / 1 A	
1.2	Rated Primary Current (A)	125	
1.3	Rated Secondary Current (A)	1	
1.4	Accuracy Class	0.2S	
1.5	Burden	15VA	
1.6	Power frequency (Hz)	50	
1.7	Type	Oil cooled	
1.8	Number of secondary winding	One	
1.9	Extended current rating (max:)	120%	
1.10	Rated System Voltage (KV)	110	
1.11	Highest System Voltage (KV)	123	
1.12	Earthing	Effective earthing provisions	
1.13	1 min. Power Frequency withstand voltage (KV rms)	275	
1.14	Impulse withstand test Voltage (KVp)	650	
1.15	Short time current rating (KA/1 Sec)	40	
1.16	Type of mounting	Pedestal	
1.17	Limit of temp. rise of windings degree C at rated current	55 degree C	
1.18	Installation	Outdoor type	
1.19	Secondary terminal box	SS fasteners with tamper free security sealing arrangement shall be provided for CTs	
1.20	Name plate	Stainless steel	
1.21	External Tap on Secondary Windings	Nil	
2	Primary terminal connectors	Required. Suitable for wolf conductor termination	
3	Operation & service manuals	Required	
4	Test	As per IS: 2705 in NABL accredited test facility	
5	Type of Metering System	3 Phase, 4 Wire	
6	CTs of Single ratio dedicated for metering	Required	

Prakash

GUARANTEED TECHNICAL PARTICULARS OF CURRENT TRANSFORMER

(To be filled in and signed by the Bidder)

1	CT : GENERAL	
a)	Name of Manufacturer	
b)	Type & Model of the Manufacturer	
c)	Conforming Standards	
d)	Date of Last Type Test	
e)	Dead Tank or Live Tank Construction	
f)	Diameter of High Voltage Stud (mm) x Length (mm)	
g)	Total Height of the CT	
h)	Total Weight of the CT	
i)	Material Used in Primary Winding	
j)	Material Used in Secondary Winding	
k)	Rated voltage (KV)	
2	CT INSULATION LEVEL	
a)	1.2/50 micro second Impulse withstand voltage (dry) on primary winding (KV peak)	
b)	One minute power frequency withstand voltage(Dry) on primary winding (KV rms)	
c)	One minute power frequency withstand voltage(Wet) on primary winding (KV rms)	
d)	One minute power frequency withstand test voltage in secondary winding (KV rms)	
3	CT CURRENT	
a)	Rated primary current (Amp)	
b)	Rated secondary current (Amp)	
c)	Extended current rating (Amp)	
d)	Short time thermal rating of primary current for 1 sec and 3 sec	
e)	Rated dynamic current of primary (KAp)	
f)	Rated continuous thermal current (KA rms)	
g)	Temperature rise at rated continuous thermal current over 50oC Ambient Temp. (degree C)	
4	CT Bushing	
a)	Minimum creepage distance (mm)	
b)	Whether CT bushing is hermetically sealed or not	
5	CT :Details of Core	
a)	Current ratio	
b)	Accuracy Class/ALF/ISF	
c)	Kn/Ie/RCT at highest ratio	


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DGM(E&I)

PRE-QUALIFICATION CRITERIA

TENDER No. MM/172/G29809 Dated 24-07-2024

Sl No	Pre-Qualification Criteria (PQC) Conditions	Documents to be submitted along with bid	Remarks	Bidders compliance
1	The Bidder shall be Original Equipment Manufacturer (OEM) or their authorized dealer/ Channel Partner/ franchise of EHT current transformers.	A) In case of OEM, self-declaration along with details of manufacturing facility shall be submitted. B) Quotation from dealers/ channel partners/ franchise shall accompany an authorization letter from the Original Equipment Manufacturer (OEM) for quoting.	Relevant documents required	
2	The bidder shall have supplied at least ONE current transformer of 110 kV grade or above in any substations in India during the past seven years ending on the enquiry date.	A) Copies of relevant Purchase Orders or work orders. AND B) Copies of documents such as tax invoice or completion certificate from user.	Relevant documents required	
4	a) Average annual turnover of the bidder for the last three financial years ending on 31-03-2023 shall be at least Rs. 33/- Lakhs or above and b) Annual turnover for each year shall be at least Rs. 5 /- lakhs or above during the last three financial years ending on 31-03-2023	Self-attested copies of audited financial statements (Profit & Loss Account and Balance Sheet) for the last three financial years ending on 31-03-2023	Relevant documents required	

NOTE: -

- 1) All the documents submitted in proof of the PQ criteria shall be attested by the authorized signatory of the bidder. FACT shall be at liberty to verify the data / documents submitted by the Bidders with clients / users.
- 2) Pre-Qualified bids will only be considered for Technical Evaluation. Technically and commercially acceptable Bids will only be considered for Price Bid opening.
- 3) Submission of authentic documents for meeting the above technical and financial criteria is the prime responsibility of the Bidder. Wherever FACT has concern or apprehension regarding the authenticity/ correctness of any document, FACT reserves the right of getting the documents cross verified from the document issuing authority.
- 4) In case the bidder is submitting FACT P.O as testimonials for meeting PQ criteria, the bidder needs to mention only the P.O. No. Document submission is not mandatory in such cases.
- 5) **IMPORTANT:** In case of ambiguity or incomplete or non submission of required relevant documents along with bid, FACT reserves the right, at its option, to reject the Bidders Bid without assigning any reason and without notice.



COMPLIANCE STATEMENT

Sl. No.	Terms	Bidder confirmation
1	Type test certificate number is required along with offer.	
2	Duly filled & Signed GTP (GUARANTEED TECHNICAL PARTICULARS OF CURRENT TRANSFORMER) shall be submitted by the bidder along with the offer.	
3	Vendor shall submit General Arrangement (GA) Drawing for approval in the event of an order.	
4	PDI is required.	
5	Type & Routine Test certificates are required	
6	Please mention shortest possible delivery period.	
7	Please confirm : Price Basis – FOR FACT Stores (as per Gem T & C)	
8	Please confirm : Taxes and Duties - The Price offered in GEM is all inclusive of TAX. (as per Gem T & C)	
9	Please confirm : Payment Terms : 100% payment will be released within 10 days of the issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills as per GEM terms and conditions. (as per Gem T & C)	
10	Please confirm : Liquidated Damages: As per GeM – “@ 0.5% of the contract value of delayed quantity per week or part of the week of delayed period as pre-estimated damages not exceeding 10% of the contract value of delayed quantity without any controversy/dispute of any sort whatsoever”(as per GeM T & C)	

Note : All the above columns shall be filled properly, without leaving blanks. Please upload / return this document duly filled-in, along with your bid.