

Coimbatore Institute of Technology, Coimbatore

Invites bids from eligible bidders for the supply of goods given below

Bids have to be submitted through GeM portal only.

Technical Specification & Terms and Conditions
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Name of the Item:

“Supply of 800 KVA, Oil immersed 11/0.433 kV, Oil Cooled (ONAN), Distribution Transformer as per Energy efficiency level 3 losses as IS-1180 along with OLTC + RTCC panel with AVR”

Quantity Required: 1 No

Bid Number: GEM/2021/B/971872 Dated: 13-01-2021

Bid End Date/Time: 03-02-2021 17:00:00

Description	Unit	Particulars
Rated Output	kVA	800
Service		Outdoor
No Load Voltage Ratio	kV	11 / 0.433
High Voltage	kV	11
Low Voltage	kV	0.433
Altitude (Above mean sea level)	Meters	1000
Winding Construction		double wound copper
No of Phases		Three
Rated Frequency	Hz	50
Material of conductor		Electrolytic Copper.
Type of Cooling		ONAN
Vector group		Dyn11
HV Side Current Rating	A	41.99
LV Side Current Rating	A	1066.72
Temperature rise above ambient temperature		
Oil temperature rise	°C	40
Winding temperature rise	°C	45
Type of Tap Changer - On load Tap Changer - CTR / OLG Make 11 kV unidirectional power flow.		OLTC
Taps to be Provided on	HV/ LV	HV for HV variation
Tap Range	In positive side	% 9 %
	in negative side	% 15 %
	Number of Steps	16
Terminal Arrangement.	HV side	Bushings
	LV side	Busduct
Total Losses (No-load loss + Load loss) @ 50% Load, Rated Frequency & 75°C (Energy efficiency level-3)	W	2147 (Max)
Total Losses (No-load loss + Load loss) @ 100% Load, Rated Frequency & 75°C (Energy efficiency level-3)	W	5837 (Max)
Impedance at 75 ⁰ C at principal tap (+/-10% Tolerance)	%	5 (IS Tol)
Insulation Level (Impulse / Power Freq HV/ LV)		HV: 75 KVP / 28 KV rms / LV: N.A. / 03 KV rms

Description	Unit	Particulars
Class of Insulation		Class- A
Standard Reference for Transformer		IS 1180
Grade of Transformer Oil		IS : 335
No load current at rated voltage & Freq	%	Approx. 2% of FLRC
Orientation between HV & LV		180° (opposite to each other)
Standards		IS-1180, Part 1, 2014-Amendment 1 August,2016

Note:

- Supply of cable lugs and glands, cable termination kit, boots etc for HV and LV cable terminals are in CIT scope.
- LV and LVN Bushing inside the LV Cable box: 1.0 KV/2000 A Epoxy type of Epothane.
- 1No. LV Additional Neutral bushing of 1.0 KV/ 1000 Amps Epoxy type of Epothane / Baroda bushing make shall be brought out for solid earthing.

List of Fittings

S. No	Description	Qty
1.	Rating & Terminal Marking Plate	1
2.	Earthing Terminals	2
3.	Lifting Lugs	4
4.	Drain Valve with blanking plate	1
5.	Filter Valve with blanking plate	1
6.	Conservator	1
7.	Conservator Oil filling hole with cap	2
8.	Oil Level indicator with min. marking	1
9.	Dehydrating Breather	1
10.	Conservator Drain Plug	2
11.	Air Release Device	1
12.	Thermometer Pocket with Mercury inglass bulb thermometer	1
13.	Explosion vent with double diaphragm	1
14.	Rollers Bi directional	4
15.	Radiators (Detachable Type)	4
16.	Bare Bushings HV	3
17.	Bus Duct LV	1
18.	Separate Neutral Terminal	1

S. No	Description	Qty
19.	On Load Tap Changer	1
20.	O.T.I with Alarm & Trip Contacts	1
21.	Buchholz relay with Alarm & Trip Contacts	1
22.	Radiator Valves	8
23.	Marshalling Box	1
24.	Drain Valve with blanking plate (OLTC)	1
25.	Filter Valve with blanking plate (OLTC)	1
26.	Current Transformer	1
27.	OLTC surge relay Shut of valves	1
28.	RTCC	1
29.	AVR	1
30.	W.T.I with Alarm & Trip Contacts	1
31.	M.O.G with LOLA Contacts	1
32.	Inspection cover on tank	
33.	Equalizer pipe	1
34.	Buchholz relay Shut of valves	1
35.	Shut off valve for oil surge relay	1
36.	Bottom Drain cum Sampling Valves	1

Bidder Scope of Job:

- Successful bidder will arrange to send GA drawings for our approvals before processing order.
- Successful bidder will have to provide Test certificate as per IS-1180 Level 3 test certificate along with the supply of Transformer.
- Successful bidder will have to provide the list of spares / Oils/ Consumables along with the Transformer.
- Successful Bidder will have to provide Pollution Control certificate for the Transformer if applicable.
- Successful Bidder will have to depute representative to assemble units of Transformer which are dispatched in dismantled condition at our premises at no extra cost & also at the time of commissioning of Transformer at site.

Delivery/Job Completion Period:

“Supply of 800 KVA, Oil immersed 11/0.433 kV, Oil Cooled (ONAN), Distribution Transformer as per Energy efficiency level 3 losses as IS-1180 along with OLTC + RTCC panel with AVR” within 12 weeks from receiving PO (Purchase Order)/WO (Work Order)/LOI (Letter of Intent) from CIT.

Introduction

The bidder means the firm or company with whom the order is placed and shall be deemed to include the bidder, successors, representatives, heirs, executors and administrators.

Whenever there is a duplication of clause in the terms and conditions, the clause which is beneficial to CIT will be considered applicable at the time of any dispute.

Minimum qualification required to the Bidders:

- The Contract shall be for the full quantity as described above.
- Corrections if any, shall be made by crossing out, initialling, dating and rewriting.
- All duties and other levies payable by the supplier under the contract shall be included in the unit price.
- Applicable taxes shall be quoted separately for all the items.
- The price quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- The price should be quoted in Indian rupees only.
- Each bidder should submit only one quotation.
- Sealed quotation should be submitted.
- GST / VAT certificate should be produced along with quotation
- IT returns (Form 16) for the last 3 years should be attached.
- Average turnover for the last three years should be more than Rs. 25 crores. Audited Statements of accounts are to be enclosed.
- Bid must be quoted with One-year on-site warranty and it will be started from the date of the satisfactory Supply and Installation of Equipment.
- Vendors with experience of supplying and installing equivalent 800 kVA capacity or more than this capacity setups at various Tamilnadu state government organizations, University or reputed institutions stature should quote.
- Transformer should be tested in in-house NABL accredited testing centre in Tamilnadu.
- Type test certificate should be produced for 800 kVA or above 800 kVA at 11 kV / 22 kV ratings.
- Vendors Should have supplied atleast one number of 10 MVA transformer in the last two years duration.
- Vendors should have own service centre or authorized service centre in Tamilnadu region.
- BIS Certificate should be produced.

For detailed Terms and Conditions, please refer:

<https://www.teqip.in/docs/procman.pdf>