

सरदार वल्लभभाई राष्ट्रीय प्रोद्योगिकी संस्थान सूरत-३९५००७. SARDAR VALLABHBHAI NATIONAL INSTITUTE OF TECHNOLOGY SURAT-395007.

No. DoEE/Seed Money/ 1267/2022-23

Date: 22/08/2022

To,

Sub: Enquiry for Supply and installation of the following item:

1) 3-phase induction motor coupled with dc generator with encoder

You are requested to quote your prices for supply of the stores listed overleaf. The quotations may be sent to the undersigned in a sealed envelope and subscribed as: "Quotation with reference to Enquiry No: DoEE/Seed Money/1267/2022-23. Dated: 22/08/2022 for Department of Electrical Engineering" Your quotation should reach the undersigned on or before **Date:** 11/09/2022 at 5:00 PM.

The quotations should be furnished with the following information.

- The <u>Make or Brand/Model</u> of each item should be specifically stated and wherever necessary, complete set of specifications and dimensions should be given.
- If asked, samples should accompany the quotations or provide the demonstration in the department at any stage of purchase without claiming ant financial benefits.
- GST, Sales tax, Insurance charges, Packing and Transportation charges, General tax, Central Sales
 tax, Custom duty, Installation & commissioning Charges & any additional charges should be <u>clearly</u>
 <u>specified in Annexure II.</u>
- 4. The period of validity of the quotation should be at least 60 Days. Offers subject to prior sale may please be avoided.
- 5. The delivery period is to be clearly mentioned in the quotation.
- The mode of delivery of the stores may be mentioned. The delivery should be F.O.R. Surat and at specified laboratory of the Department of Electrical Engineering of SVNIT, Surat.
- All concessions available to an educational institution should be specified and also taken into account while quoting.
- 8. This Institute is located within the limits of Surat Municipal Corporation (SMC) & exempted from the paying of Octroi duty on incoming goods from outside limits of SMC.
- 9. This Institute is registered with the Dept. of Scientific & Industrial Research (DSIR) for the purpose of availing custom duty exemption & central excise duty exemption, and hence the certificate to this effect will be issued wherever it is necessary on demand.

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- Payment is normally made by cheque drawn on the S.V.N.I.T Branch Office of State Bank of India, Surat-395007 after satisfactory installation, successful testing of stores and official procedure from account section of the institute.
- 11. Your Specification & terms-conditions should be as per the format attached **Annexure-I & II** must be on your company letterhead & signed by an authorized person.
- 12. Offered quotation may be rejected if any ambiguity is found in offered specification, terms & conditions supplied by the party specified in the tabular format.
- 13. Preference may be given to the supplier having status of authorized dealer of manufacturer, with a view to ensure reliable after sales service for the item. Also satisfactory report from the previous clients.
- 14. Provide photograph of quoted item with specifications.
- 15. Items accepted after satisfactory performance in our laboratory according to our requirement.
- 16. The Director reserves the right to accept stores, which are not strictly in conforming to the specifications but otherwise, found suitable. If stores do not comply with specifications or found in non-working condition, the same is to be taken from the institute, at the cost and responsibility of the supplier.
- 17. Any enquiry may send in the following address:

To

The Director,

(Kind attentation, Head, Department of Electrical Engineering)

SVNIT Surat, Ichchhanath, Surat-395007, Gujarat

Ph 0261-2201561, 2201562 (office, DoEE)

Dr. Suresh Lakhimsetty
Assistant Professor

Dept. of Electrical Engineering

SVNIT, Surat

Yours faithfully,

Prof. A. K. Panchal Head, DoEE

DETAILED SPECIFICATIONS

Name of items	t be typed on supplier's letterhead & submitted along with the offer & separate sheet for it Required specifications			
items	3-Phase Induction Motor	quantity		
	➤ Input Voltage: 400 V / 415 V AC supply			
	> Phase: 3			
	> Rated Current: 7.5 A			
	➤ Power Rating: 3.7 kW			
	> Number of Poles: 4			
	> Rated frequency: 50 Hz			
	> Rotor Type: Squirrel Cage			
	> Insulation: F Class			
	Connection: Delta/Star (Access to 6 terminals of the stator winding)			
	> Rotor Speed: 1440 RPM – 1460 RPM			
	> Stator resistance/phase: 3.8 ohms to 4.5 ohms			
	> Rotor resistance/phase: 2.5 ohms to 3.2 ohms			
	> Frame Size: 112 mm			
	➤ Ambient Temperature: 50° C			
	Standards: CE, IEC60034-1, REF IS:325			
	> Duty: S1			
	Mounting: Foot Mounted (B3)			
	> Protection Class: IP55			
1) 3-phase	➤ Body Material: Cast Iron			
induction	➤ Efficiency: IE2			
motor coupled	> Capable of operate in flux weakening mode (i. e. running above the rated			
with dc	speed)	01		
generator				
with encoder	DC Machine			
encouci	➤ Power Rating: 3.7 kW			
	> Speed: 1500 RPM			
	> Armature Voltage: 440 V			
	> Armature Current: 10.5 A			
	➤ Field Voltage: 220 V DC			
	Field Current: 2 A			
	➤ Efficiency: 75 % or above			
	➤ Enclosure: IP23			
	➤ Insulation Class: F			
	➤ Field Type: Shunt			
	Armature and Field terminals should be made accessible either to connect as			
	separately excited or self-excited machine.			
	Encoder .			
	> Type: Incremental Type			
	> Input Voltage: 5 V DC or above			
	Output: Quadrature with A, B and Index Pulse			
	> Mounting: Face mounting			
	> Pulse Per Revolution: 1024 PPR			

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NOTE:

- 1. High quality 4 mm sturdy shrouded banana terminals to minimize shock possibility and to facilitate easy and safe wiring.
- 2. Both Induction motor and DC machine should be mounted on MS sturdy frame / coupling table with bushings to withstand mechanical vibrations.
- 3. Instruction manual with complete specifications (parameters like stator resistance (Rs), Rotor Resistance referred to stator (Rr), Stator leakage reactance (Lls), Rotor Leakage reactance referred to stator (Llr) and Magnetizing inductance (Lm)) should be provided.
- 4. Testing of machines should done at different loading conditions upto 125% of rated load and has to provide the test report by showing the corresponding current, slip, power factor and efficiency.
- 5. Both induction motor and DC shunt machine are should be mounted on a common C channel base and will be coupled with each other with jaw type flexible coupling on a frame/coupling table with bushings. The encoder must be attached to the shaft and provision must be provided to access the quadrature pulses A, B, index pulse and supply wires.

Sign of Party/Firm

(With full Address & stamped)

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QUOTATION SUMMERY SHEET

(This must be typed on supplier's letterhead & submitted along with the offer & separate sheet for items)

S. No.	ITEM NAME	UNIT PRICE	TOTAL PRICE
1	Make		
2	Modal		
3	Basic Price of the unit (Including accessories, spares etc.)		
4	GST/CST/VAT/Sales Tax etc.		
5	Packing & Forwarding charge		
6	Freight/Transportation charge (if any) (based on F.O.R destination at SVNIT, Surat)		
7	Insurance Charge, if Any(on Basic Price)		
8	Custom Duty/Excise Duty vide DSIR Certificate Only (Institute is exempted)		
9	Any additional charge, if any		
10	TOTAL PRICE		
11	Rebate/Concession for Academic Institute		
12	TOTAL NET PRICE (Final)	4 1	
	Terms & Conditions		
13	Warranty(if Any)		
14	Validity of Quotation(Minimum 60 days)		
15	Delivery Period		
16	Mode of Delivery		
17	Any other condition (if Any)		

NOTE: Any ambiguity or incomplete filling of SUMMARY SHEET will lead to rejection of offer without any reasons. Write N.A where information demanded is not applicable.

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Sign of Party/Firm

(With full Address & stamped)