


मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान भोपाल Maulana Azad National Institute of Technology Bhopal (भारत सरकार, शिक्षा मंत्रालय के अधीन राष्ट्रीय महत्व का संस्थान) (An Institution of National Importance under MoE, Govt. of India)			
			
सीमित निविदा पृच्छताछ <b>LIMITED TENDER ENQUIRY</b>			
सामग्री/वस्तु का नाम Name of Goods/Items		<b>Three Phase Dual Converter Based Drive</b>	
Website	<a href="http://www.manit.ac.in">www.manit.ac.in</a>	Fax No:	0755-2670562
Email Address:	<a href="mailto:info@manit.ac.in">info@manit.ac.in</a>	Telephone No:	0755-4051000, 0755-4052000

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मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान, भोपाल	
Maulana Azad National Institute of Technology Bhopal	
(भारत सरकार, शिक्षा मंत्रालय के अधीन राष्ट्रीय महत्व का संस्थान)	
(An Institution of National Importance under MoE, Govt. of India)	
No. MANIT/EE/2025/019	दिनांक / Date: 17/09/2025
निविदा आमंत्रण सूचना	
NOTICE INVITING TENDERS	
सामग्री / वस्तु का नाम Name of Goods/Items	<b>Three Phase Dual Converter Based Drive</b>
<p>उपरोक्त सामग्री / वस्तु के लिए निविदाएँ आमंत्रित की जाती हैं। इच्छुक निर्माता/अधिकृत भागीदार/ एंजिनियर्स, अधिक जानकारी के लिए संस्थान के वेबसाइट <a href="http://www.manit.ac.in">www.manit.ac.in</a> और CPPP वेबसाइट <a href="http://www.eprocure.gov.in/epublish/app">www.eprocure.gov.in/epublish/app</a> पर लागू-इन कर सकती हैं। निविदा दस्तावेज डाउनलोड कर विधिवत रूप से उप-कुलसचिव (भण्डार एवं क्रय) मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान, भोपाल – 462003 जमा किया जा सकता है।</p> <p>सम्पूर्ण निविदा मय दस्तावेज प्रस्तुत करने की अंतिम तिथि 08/10/2025 अपरान्ह 12.00 बजे तक है। संस्थान निदेशक, बिना कोई कारण बताए किसी या संपूर्ण निविदा को पूर्ण या आंशिक रूप से स्वीकार या अस्वीकार करने का अधिकार सुरक्षित है।</p>	
	कुलसचिव
<p>Tenders are invited for aforesaid Goods/ Items. Interested Manufacturers/ Authorized Partner/Agencies may log on Institute website <a href="http://www.manit.ac.in">www.manit.ac.in</a> and CPPP website <a href="http://www.eprocure.gov.in/epublish/app">www.eprocure.gov.in/epublish/app</a> for further details. Tender Document can be downloaded and the duly completed be submitted to the Deputy Registrar (Stores &amp; Purchase) Maulana Azad National Institute of Technology- Bhopal- 462003.</p> <p>Last date of submission of complete tender document is 08/10/2025 up to 12.00 hours. The Director of the Institute reserves the right to accept or reject any or the entire tender in full or in part without assigning any reason whatsoever.</p>	
	Registrar

मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान, भोपाल  
Maulana Azad National Institute of Technology Bhopal

एक नजर में महत्वपूर्ण जानकारियाँ		
IMPORTANT INFORMATION AT A GLANCE		
निविदा क्रमांक एवं दिनांक Tender No & Date		No. MANIT/EE/2025/019 Date: 17/09/2025
निविदा का कार्यक्षेत्र / SCOPE OF TENDER		
सामग्री/ वस्तु का संक्षिप्त विवरण Brief Description of Goods/Items	संख्या Quantity	टिप्पणी Remarks
<b>Three Phase Dual Converter Based Drive</b>	<b>01 No.</b>	संलग्नक- I पर विस्तृत विवरण Detailed Specification at Annexure-I
निविदा की अनुमानित लागत Estimated cost of Tender	<b>Rs. 3,18,600.00</b>	
आपूर्ति एवं स्थापना का स्थान Location of Supplies & Installation	Electrical Engineering Department at Institute	
निविदा दस्तावेज की उपलब्धता Availability of Tender Document	<a href="http://www.manit.ac.in">www.manit.ac.in</a> <a href="http://www.eprocure.gov.in/epublish/app">www.eprocure.gov.in/epublish/app</a>	
निविदा जमा करने के अंतिम दिनांक एवं समय Last Date & Time of Submission of Tender	<b>08/10/2025 up to 12:00 hours</b>	
निविदा खुलने की दिनांक एवं समय Date & Time of Opening of Bids	<b>08/10/2025 at 15:00 hours</b>	
निविदा वैधता की अवधि Tender Validity period	<b>60 days</b> from the date of opening of the Technical Bid	
वितरण/ आपूर्ति की अवधि Delivery/ Supply period	<b>04 to 06 weeks</b> from the date of issue of Supply Order	
वारंटी अवधि Warranty Period	Two year (s) from the date of successful Installation & Commissioning of equipments/ items	
बोली सुरक्षा/ बयाना राशि Bid Security/ EMD	As per slab mentioned in the document.	
निष्पादन सुरक्षा राशि Performance Security Amount	As per slab mentioned in the document	

<b>बोलीदाता के लिये निर्देश / अनुदेश / INSTRUCTIONS TO BIDDERS</b>		
<b>1</b>	<b>Scope of Supplies &amp; Work:</b>	
	a	The Goods/ Items shall be supplied as per the Bill of Quantity and Specifications mentioned in <b>ANNEXURE-I</b> . However higher specification of equipment may be considered subject to their cost economics competitiveness.
	b	Bidder should supply illustrated leaflet giving technical details of Goods/ Item and attach the same with the tender to facilitate evaluation.
	c	No option(s) regarding price of Goods/ Items shall be entertained in the price bid. Bidder should quote the price of only one best & appropriate model of Good/Item available with them.
	d	Purchase Preference will be given to “Make in India products” as defined in Purchase Preference with Local Content (PP-LC) Policy. Accordingly, bidders with Local Content less than or equal to 20% will be treated as “Non Local Supplier”. The prescribed LC shall be applicable on the date of Bid opening. The bidder shall submit an undertaking along with the bid stating the bidder meets the mandatory minimum LC requirement and such undertaking shall become a part of the contract. Local content certificate from practicing Cost Accountant or practicing Chartered Accountant giving the percentage of local content shall be acceptable. The local content certificate shall be submitted along with each invoice raised.
	e	Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs). If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY.
	f	Start-ups as recognized by Department for Promotion of Industry and Internal Trade (DPIIT), claiming EMD exemption and relaxation in turnover as prescribed in the certificate / Start Up scheme of DPIIT.
	g	Bidder may be asked to supply sample of offered product/item before supply in bulk quantities.
	h	Where ISI certification marked goods are available in market, procurement should generally be limited to goods with those or equivalent marking only. The warranty/AMC required must be specified
	i	After the supply of Goods/ Items & Accessories as mentioned in the <b>ANNEXURE-I</b> , the bidder has to execute its installation at the designated location(s). No extra cost shall be paid for this reason.
<b>2</b>	<b>Delivery of Supplies &amp; Installation:</b>	
	a	The purchaser interested for complete delivery of equipments along with Installation, Testing and Commissioning within the period as mentioned at IMPORTANT INFORMATION AT GLANCE sheet. However, the bidder has an option to submit the best delivery with installation time.

	b	The material shall be inspected on receipt at site and bidder shall be responsible for any damage during the transit of Goods/Items.
	c	The insurance cover including insuring the goods against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery/ installation shall be obtained by bidder in his own name and not in the name of purchases.
3	<b>Warranty &amp; After Sales Services:</b>	
	a	The bidder shall offer on-site comprehensive warranty of equipments as mentioned at IMPORTANT INFORMATION AT GLANCE sheet at the designated location & shall cover each and every part of the equipments including parts having limited life etc. The purchaser is not liable to pay any extra charges on any account during warranty period.
	b	The bidder shall ensure to render after sales services during the warranty period to the satisfaction of purchaser.
4	<b>Eligibility Criteria:</b>	
	a	Bidder should be a Company/Partnership firm/ Proprietary firm/ Agency and operational from at least 03 years (Three) as on close date of tender. Copy of registration shall be attached.
	b	The Bidder must have supplied Goods/ Items in last three years to Central/State government/ Quasi-Government organization/ Public listed company in India. Copies of Purchase Order (PO) shall be attached.
	c	Bidder should have minimum annual turnover (Double value of estimated cost of tender) in last year .CA certification in this regard is to be submitted.
	d	The Earnest Money Deposition slip/ proof of payment.
	e	Bidder should have GST Number & Income PAN both.
	f	OEM Authorization Letter
5	<b>Earnest Money Deposit:</b>	
	The bidder is instructed to submit EMD in the form of DD/FDR/RTGS/NEFT/BG/Bank deposition slip along with bid to prove the transfer of payment to the purchaser's Account as per EMD slab mentioned below:	
	<b>Tender Value</b>	<b>EMD Rate</b>
	Less than 2.50 Lakhs	NIL
	Between 2.50 lakhs to 25.00 Lakhs	2% of Tender Value rounded off in nearest in 100 rupees.
	a	Purchaser's Bank Account details:
		<b>Account Name</b>
		<b>Bank Name</b>
		<b>Bank A/c No.</b>
		<b>Bank IFS Code</b>
		Director MANIT Bhopal
		State Bank of India
		10020150107
		SBIN0001608
	b	The EMD will be returned to the unsuccessful bidders soon after placement of order and successful bidder shall get its EMD after supply of material.
	c	The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category. Manufacturers for goods and service providers for services are eligible for exemption from EMD under MSE Category. Traders are excluded from the purview of this policy.
6	<b>Amendment of Tender Document:</b>	
	a	At any time prior to the date submission of bids, the purchaser, may, for any reason, whether at its own initiative or in response to a clarification sought by a prospective bidder, amend bid document by issuing corrigendum. The corrigendum will be notified/ published in e-tendering website <a href="http://www.eprocure.gov.in/epublish/app">www.eprocure.gov.in/epublish/app</a> and Institute website only.

7	<b>Price Bid</b>	
	a	The Prices should be quoted in Indian Rupees only.
	b	Purchaser (being a research Institution) is registered with the Department of Scientific & Industrial Research (DSIR) for the purpose of availing custom duty exemption in terms of GoI Notification No. 51/96-Customs dated 23 July 1996. The bidder should quote their prices considering the exemption certificate. If any certification needed by bidder, may be given to avail this benefit.
	c	Bidder shall take into account all costs including unloading at the location of purchaser, cartage etc. for giving delivery of material at site(s) before quoting the rates. In this regard no claim what so ever shall be entertained.
	d	The bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted unit prices.
	e	The price quoted in price bid shall be firm but subject to change in rate of applicable taxes if any.
	f	The Bidder should avoid the use of vague term such as “Extra as applicable”. Such offers shall be treated as non-responsive.
	g	No extra payment shall be paid on account of any discrepancy in nomenclature of items. The bidder shall seek clarifications if any before submitting the tender.
8	<b>Bid Submission:</b>	
		The bidder is instructed to give their offline offer through Single bid system for this tender. The tender must be placed in a properly sealed envelope super-scribed “ <i>Tender for the Supply of Three Phase Dual Converter Based Drive.</i> ” with tender inquiry number and its due date addressed to The Director, Maulana Azad National Institute of Technology- Bhopal- 462003 and must reach the office of <b>The Deputy Registrar- Stores &amp; Purchase, Maulana Azad National Institute of Technology, Bhopal</b> on or before as mentioned at IMPORTANT INFORMATION AT GLANCE sheet. The sealed Envelop should be consisting of followings:
	a	Copy of Certificate of Registration of firm, GST Number and Income Tax PAN.
	b	Proof of submission of EMD amount
	c	Copy of Purchase Order (PO) received from government shall be attached.
	d	Certificate mentioning of Turnover for the last year and OEM authorization letter.
	e	<b>BOQ Annexure-I and Price Bid Annexure-II</b> duly filled and signed.
9	<b>Evaluation of Bids:</b>	
	The Institute may evaluate all the required Goods/Items in this tender together or independent depending upon nature of items & compatibility and compare the quotations determined to be substantially responsive i.e. which	
	a	are properly signed;
	b	Confirm to the eligibility criteria of the vendor; and
	c	Confirm to the terms & conditions, and technical specifications.
	d	In case, required goods/items in this tender are independent and complete in nature. Institute may evaluate independently as far as price is concerned for placing order(s).
10	<b>Validity of Tender:</b>	
	a	The tender shall be valid as mentioned at IMPORTANT INFORMATION AT GLANCE sheet. Terms and financial details submitted in the bid shall be treated as firm during the validity period.

	b	In exceptional circumstances, prior to the expiry of the bid validity period, the purchaser may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing.			
11	<b>Notification of Award:</b>				
	a	Prior to the expiry of the period of bid validity, the purchaser shall notify the successful bidder, in writing, that its bid has been accepted. The notification letter shall specify the sum that the purchaser will pay to the bidder in consideration of the <i>Supply of Goods/ Items</i> with the details of selected location.			
	b	Purchase/ Contract order shall preferably be issued in favour of bidder. Bidder may request in advance for issuance of Purchase/ Contract order in favour of OEM of product. In this case billing and payment shall be made to OEM only.			
12	<b>Performance Security Deposit:</b>				
	The bidder is required to submit Performance Security in the form of DD/FDR/RTGS/NEFT/BG/Bank Deposit after installation of material along with the bill to the Institute as per slab mentioned below:				
	<b>Order/ Contract Value</b>		<b>PSD Rate</b>	<b>PSD Period</b>	
	Less than 2.50 Lakhs		NIL	Warranty period plus two month extra	
	Between 2.50 lakhs to 25.00 Lakhs		5% of Tender Value rounded off in nearest in 100 rupees.		
	a	Purchaser's Bank Account details:			
		<b>Account Name</b>	<b>Bank Name</b>	<b>Bank A/c No.</b>	<b>Bank IFS Code</b>
		Director MANIT Bhopal	State Bank of India	10020150107	SBIN0001608
	b	In case of breach of contract, performance security shall be forfeited and the bidder shall be blacklisted for such period as decided by the competent authority in addition to cancellation of order.			
	c	Performance Security shall be returned to the bidder without any interest, whatsoever, after completion warranty period as specified in the tender.			
13	<b>Penalty Clause:</b>				
	a	The bidder shall indicate the period within which the ordered quantity will be supplied along with Installation & Commissioning of Goods/ Items. The bidder shall note that in case bidder fails to do so within the period of delivery indicated by the bidder in price bid of this tender, penalty @ 0.50 % on total value of the PO per week of delay would be levied subject to maximum 20 weeks. It means, the bidder shall have the liability of delayed supply to the maximum of 20 weeks after expiry of scheduled delivery date.			
14	<b>Terms of Payment:</b>				
	a	The Payment shall be made within 30 days by purchaser after supply and installation of Goods/ Items.			
15	<b>Jurisdiction:</b>				
	a	In the event of any dispute the legal matter shall be subjected to the jurisdiction of Bhopal court only.			
16	Details of Contact Persons for Query if any				
Name		Dr. Giribabu Dyanamina	Dr. Sanjeev Singh		
Designation		Associate Professor	Professor		
Tel No		7206519665	9465237795		
Email		dgiribabu208@gmail.com	sschauhan@manit.ac.in		



मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान, भोपाल  
Maulana Azad National Institute of Technology Bhopal

**सामग्री की मात्रा एवं विवरण**  
**BILL OF QUANTITY AND SPECIFICATION**

SN	Name of Product/ Items	Quantity	Remarks
1	<p><b><u>THREE PHASE DUAL CONVERTER BASED DRIVE</u></b></p> <p>This set up is used to study the speed control procedure DC motor using SCR based Dual Converter. This set up must consists of</p> <ol style="list-style-type: none"> <li>Dual Converter Power Module to be operated as both three phase and single phase</li> <li>PWM Controller</li> <li>DC motor Load set up</li> <li>Accessories (Transformer with IGR)</li> </ol> <p><b>a. <u>SCR POWER MODULE</u></b></p> <p>The power module consists of SCRs for 3 Phase Dual Converter. This power module can be used for DC Motor in <b>open loop speed control application</b> by external PWM controller interfacing</p> <ul style="list-style-type: none"> <li>SCR based 3 phase Controlled Dual Converter</li> <li>12 numbers of SCR, Ratings @ 1200V @ 25A, fixed With proper heat sink for cooling and</li> <li>Snubber circuit</li> <li>12 numbers of Pulse amplifier &amp; 1:1 Pulse transformer for pulses isolation</li> <li>One number of 3 Phase 230/9V supply synchronizing transformer &amp; ZCD Circuit is required for SCR Pulse generation</li> <li>MCB for input power ON/OFF</li> <li>SCR outputs and AC inputs are terminated in banana connector for waveform.</li> <li><b>Specifications- Input- 0-415VAC, Output – 0-200V AC/DC @ 10A</b></li> </ul> <p><b>B. PWM CONTROLLER</b></p> <ul style="list-style-type: none"> <li>High-Performance DIGITAL controller with Internal Flash Program Memory</li> <li>12 Numbers of PWM Outputs up to 15KHZ of switching frequency</li> <li>Internal EEPROM &amp; Five 16-bit Timers</li> <li>Power, Programming and Test LED's</li> <li>2MB PROM &amp; 24 Mhz clock speed</li> <li>QEP Sensor /Hall sensor/Speed sensor(Proximity)Interface connector on front panel</li> <li>PWM increment &amp; decrement key &amp; Reset switch is provided</li> <li>20 X 4 LCD screen &amp; PWM outputs are terminated by Front panel Connector</li> <li>230VA INPUT with Power ON/OFF switch</li> </ul> <p><b><u>C. PMDC MOTOR WITH LOAD SET UP</u></b></p> <ul style="list-style-type: none"> <li><b>Type</b> : PMDC Motor</li> </ul>	<b>01 No.</b>	

	<ul style="list-style-type: none"> <li>• <b>Power</b> : 100/150W</li> <li>• <b>Voltage</b> : 48V</li> <li>• <b>Speed</b> : 1500/3000 RPM</li> <li>• <b>Feedback sensor</b> : Proximity sensor</li> <li>• <b>Loading</b> : Spring balance loading</li> </ul> <p><b>Spring balance loading</b></p> <ul style="list-style-type: none"> <li>• One number Brake DRUM with spring balance set up is coupled with the above motor</li> <li>• Two numbers of dial indication ( 0-10KG) for Load measurement in Kg</li> </ul> <p><b><u>D. 3 PHASE TRANSFORMER WITH IGR</u></b></p> <ul style="list-style-type: none"> <li>• Two number of 230/48V Vac @ 10A step down transformer is required.</li> <li>• 3 number of IGR-3A (Inter group reactor) is required - with different tapings</li> </ul> <p>Field supply (48V@10A) is required for motor Field excitation.</p> <p>Delivery upto Power Electronics Lab, EE Dept. MANIT Bhopal</p> <p><b>Warranty</b> : Minimum two year</p>		
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NB: Drawing/ Design is enclosed herewith.

We confirm with our acceptance to the technical specification as given above.

Date:		BIDDER'S NAME & SIGNATURE WITH SEAL
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				<b>ANNEXURE- II</b>		
<b>FORMAT FOR SUBMISSION OF BID PRICE</b>						
To,						
The Director						
MANIT- Bhopal- 462 003						
Sub:		<b>Tender Document dated 00/00/2025</b>				
SN	Product Description with make & Model	Discounted unit price	Qty	Qty Price	GST	Total Price
1	2	3	4	5	6	7(5+6)
1	<b>Three Phase Dual Converter Based Drive</b>		<b>01 No.</b>			
Total offered Price						
Total ( In Words):						
Delivery Period required:						
The followings things are confirmed and undertake by us that:						
a	The price quoted above are inclusive of statutory Levies & Taxes, Duties, Transportation and other charges (Insurance, Loading/ unloading, Packing & Forwarding charges, Installation etc.) at site.					
b	Taxes are subject to change/ revision.					
c	We agree with the terms and conditions specified in “Instructions to Bidders” and if selected, the execution of supplies would be made as per bill of Quantity & Specification.					
Date:		Signature of Authorized Bidder with proper rubber stamp				
		Name:				
		Designation:				
		Mobile No:				