

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	05-11-2024 13:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	05-11-2024 13:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	90 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Heavy Industries And Public Enterprises
Department Name/विभाग का नाम	Department Of Heavy Industry
Organisation Name/संगठन का नाम	Bharat Heavy Electricals Limited (bhel)
Office Name/कार्यालय का नाम	10090001-edn Bangalore
Total Quantity/कुल मात्रा	1
Item Category/मद केटेगरी	Synchronous Motor_ Motor Set (3-phase) (BHEL Material code: KA9012410223)
GeMARPTS में खोजी गई स्ट्रिंग / Searched Strings used in GeMARPTS	SYNCHRONOUS MOTOR MOTOR SET
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Synchronous servo motor, ICU Bed, Starter Motor Assembly, Electric Cars (V4), Vehicle Wiper Motor, vortex mixers, DC WINCH MOTOR, Motor cooling fan, Induction Motor Fan Cover, Induction Motor as per IS 12615, IS 325
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	<ul style="list-style-type: none"> • Starter Motor Assembly • Synchronous servo motor
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Additional Doc 1 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Do you want to show documents uploaded by bidders to all bidders participated in bid?/	No
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	No

Bid Details/बिड विवरण	
ITC available to buyer/क्रिेता के लिए उपलब्ध आईटीसी	Yes
Type of Bid/बिड का प्रकार	Two Packet Bid
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Payment Timelines	Payments shall be made to the Seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation
Arbitration Clause	No
Mediation Clause	No

EMD Detail/ईएमडी विवरण

Required/आवश्यकता	No
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ePBG Detail/ईपीबीजी विवरण

Required/आवश्यकता	No
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MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	No
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. 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 and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. 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 MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

Synchronous Motor_ Motor Set (3-phase) (BHEL Material Code: KA9012410223) (1 set)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	Download
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Input Tax Credit(ITC)/इनपुट कर क्रेडिट(आईटीसी) and/ तथा Reverse Charge(RCM)/रिवर्स प्रभार (आरसीएम) Details

ITC on GST/जीएसटी पर इनपुट कर क्रेडिट	ITC on GST Cess/जीएसटी उपकर कर क्रेडिट
100%	NA

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	K. Neeraja	560026,Deepanjali Nagar	1	30

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

1. Scope of Supply

Scope of supply (Bid price to include all cost components) : Only supply of Goods

2. Generic

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

3. Generic

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

4. **Generic**

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

5. **Generic**

While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

6. **Buyer Added Bid Specific ATC**

Buyer Added text based ATC clauses

A. PRE-QUALIFICATION REQUIREMENT (PQR)

Bidder should submit documentary evidence for PQC, for evaluating the eligibility of Bidder as per **Buyer s pecification document** in this bid.

B. Payment Timelines:

Type of Bidder	Payment Terms (Number of days)
Micro & Small Enterprises (MSEs)	45 days from CRAC date
Medium Enterprises	60 days from CRAC date
Non MSME	90 days from CRAC date

C. Contact Details:

Engineering Dept.	Tender Dept.
Mr. Shailesh Kumar/ Sr. Manager	Mr. Dinesh Kumar Bhagat/ Manager
e-mail: shailesh.kumar@bhel.in	e-mail: dkbhagat@bhel.in
Tel: 080 26998262	Tel: 080 26998108

Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any

Category item bunched with it.

4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

---Thank You/धन्यवाद---



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SECTION-A

COE/412/LCI-MM-01

REV. NO. 0

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GENERAL INSTRUCTION TO BIDDERS

FOR

PURCHASE SPECIFICATION PS/412/LCI-MGS rev 0

THREE PHASE SYNCHRONOUS MOTOR-MOTOR SET

APPROVED BY:

SUDHA IYENGAR S

PREPARED

CHECKED

ISSUED

DATE _____

SHAILESH KUMAR

A PRAMANICK

COE

20.09.2024



SECTION-A

COE/412/LCI-MM-01

Rev - 0

PAGE 02 OF 02

GENERAL INSTRUCTION TO BIDDERS FOR PURCHASE SPECIFICATION PS/412/LCI-MGS rev 0, THREE PHASE SYNCHRONOUS MOTOR-MOTOR SET

1. All required documents against this tender / specification shall be submitted in English only.
2. Bidders are required to offer Three Phase Synchronous Motor- Motor set.
3. In order to accept the Technical offers / proposals from Bidders for the item mentioned in the specification certain Pre-qualification criteria are required to be met by Bidder.
4. Pre-qualification requirements (PQR) are clearly mentioned in section B of this document, COE/412/LCI-MM-01. Bidder to read the same carefully and submit the details required for BHEL's acceptance.
5. In case Bidder does not meet the Pre-qualification requirements, their offer will be Rejected and Bidder's Technical offers will not be evaluated further.
6. **Evaluation methodology:** BHEL shall initially open Bidder's PQR documents only as per the specification for review & acceptance. Only after acceptance of PQR documents, BHEL shall open Bidder's Technical offers for evaluation.
7. Bidders are required to submit offers in three parts as detailed below:
 - **Part-I (PQR documents)**

Documents pertaining to Pre-Qualification requirements in line with the specification.
 - **Part-II (Technical bid)**

Technical bid shall be submitted in line with the Technical specs PS/412/LCI-MGS rev 0. Offer must include clause-by-clause confirmation of specification number, technical requirement as per BHEL specification & confirmation to BHEL specifications.
 - **Part-III (Commercial/Price bid)**
8. Vendor to provide clarification as and when needed by BHEL during the course of the tender processing.



SECTION-B

COE/412/LCI-MM-01

REV. NO. 0

PAGE 01 OF 02

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***PRE-QUALIFICATIONS
REQUIREMENT***

FOR

**PURCHASE SPECIFICATION PS/412/LCI-MGS rev 0
THREE PHASE SYNCHRONOUS MOTOR-MOTOR SET**

APPROVED BY:

SUDHA IYENGAR S

PREPARED

CHECKED

ISSUED

DATE

SHAILESH KUMAR

A PRAMANICK

COE

20.09.2024



SECTION-B

COE/412/LCI-MM-01

Rev - 0

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PRE QUALIFICATION REQUIREMENT (PQR) FOR PURCHASE SPECIFICATION PS/412/LCI-MGS rev 0., THREE PHASE SYNCHRONOUS MOTOR-MOTOR SET

Pre-Qualification Requirements (PQR) to be met by Bidders for THREE PHASE SYNCHRONOUS MOTOR-MOTOR SET as a part of Offer:

1. The following technical pre-qualification criteria must be met by suppliers intending to supply the **2.5 kW synchronous motor** –motor set. Compliance with these requirements will ensure that the vendor is capable of delivering a motor that meets the required performance, quality, and reliability standards.
2. Along with the documents related to PQR, following details shall also be included in the Offer:
 - a. Technical literature / Manuals of offered motor-motor set.
 - b. Unpriced purchase order (at least two no's) within last 3 years to be provided for any motors of 2.5 kW or above.
3. Manufacturing Experience:
 - a. The supplier must have a minimum of **5 years of experience** in the design, manufacturing, and supply of synchronous/induction/other motors of similar or higher rating (minimum 2.5 kW). Unpriced purchase order copies (at least two no's) within last 3 years to be provided for any motors of 2.5 kW or above.
4. Quality Certifications:
 - a. The supplier must be **ISO 9001:2015** certified or possess an equivalent quality management certification.
 - b. Compliance with applicable national/international standards (e.g., **CE, IEC, IEEE** etc. standards for electrical machines) is required. Relevant certificates should be provided.
5. Detailed Address of Manufacturing, testing & inspection facility.
6. Bidder shall have facility in India for servicing of offered Motor-Motor set.
7. If Bidder is not Original Equipment Manufacturer (OEM), then Bidder to include authorization letter from OEM for supply and servicing of the offered System. This authorization letter provided by OEM to Bidder shall indicate the Type and Duration of the agreement.
8. Bidder shall submit certificate for percentage of local content (value added in India) for the offered item along with the offer. (minimum of 20% of local content only will be considered).
9. Important note: In case Bidder does not submit details mentioned in the above clauses to meet the requirements of Pre-Qualification Requirements, offers will be rejected and bidder's technical offers/proposals will not be evaluated further. Please read carefully the General instructions.
10. Certificate of conformance to be submitted by vendor along with the supply/items.



PURCHASE SPECIFICATION

GROUP: T&PD COE

P.S NO.: PS/412/LCI-MGS

REV. NO : 00

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SPECIFICATION FOR 2.5 KW THREE PHASE SYNCHRONOUS MOTOR-MOTOR SET

REVISION HISTORY SHEET

REV. NO.	DATE	NATURE OF CHANGE	REASONS	PREPARED	APPROVED
00	28-08-2024	FIRST ISSUE	-----	Shailesh Kumar	A Pramanick

REVISIONS 00 DT: 28.08.2024

APPROVED BY: A PRAMANICK

PREPARED BY:
SHAILESH KUMAR

ISSUED BY
COE T&PD

DATE
28 .08.2024

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PURCHASE SPECIFICATION

GROUP: T&PD COE

P.S NO. : PS/412/LCI-MGS

REV. NO : 00

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1. SPECIFICATION

The intent of this specification is to define the requirements for the design, manufacture, testing, packing and supply of Synchronous Motor – Motor Set with 3-phase stator windings and Salient Pole on both the motors rotors.

2. TECHNICAL SPECIFICATION

- a. **Application:** This Motor – Motor Sets will be powered by Load Commutated Inverter based VFD
- b. **Rating:** 2.5KW each motor.
- c. **TYPE:** Both the Synchronous Motors will have 3 phase windings on the stator and Salient Poles on the rotors. Both motors rotor winding (Field windings) will be powered by DC Excitation systems through slip – ring brush assembly.
- d. **Ambient Temp:** 50 °C
- e. **Stator winding:** Second R phase winding to be phase-shifted from the first R phase winding by 30 electrical degrees. Windings of other phase also to be similarly phase shifted in the same direction. Since the motors are having 4 poles, the mechanical angle between the R-Phase windings is 15 degrees. During mounting of the motors, this 15-degree mechanical angle shift is to maintained.
- f. **Rotor winding:**
 - (i) Salient pole construction for both motors rotors.
 - (ii) DC/Field winding terminals connected to slip rings mounted on the motor shaft.
 - (iii) Suitable brush with external termination facilities are to be provided. Spring loaded brushes to be provided which will make contact with slip-rings with sufficient pressure to avoid sparking at slip ring – brush contact area. The external DC field current will pass through brush, slip ring, DC field winding on the salient pole.
- g. **Electrical Characteristics:**
 - (i) Power : 2.5 KW each motor
 - (ii) Voltage : 415 Volts RMS (Line to Line)
 - (iii) Stator current : Full load current: approximately 9 Amp
 - (iv) Rotor current : Approximately 1 A DC
 - (v) Nos of Poles : 4
 - (vi) Speed : 1500 RPM
 - (vii) Frequency : 50Hz
- h. **Mechanical Specifications:**
 - (i) Shaft: Robust design to withstand the torque and load requirements.
 - (ii) Winding material for Rotor and Stator shall be Copper.
 - (iii) Bearings: High-quality bearings with self-lubrication suitable for the motor's RPM and load.
 - (iv) Air cooling with built in fan with the motor.
 - (v) Coupling for connections to Load-Flange and gasket
 - (vi) Motor shall be mounted on suitable frame with nut and bolt.
 - (vii) Lifting provision
- i. **Insulation:**
 - (i) Insulation Class: Suitable for the specified voltage and temperature rise.

REVISIONS 00 DT: 28.08.2024

APPROVED BY: A PRAMANICK

PREPARED BY:
SHAILESH KUMAR

ISSUED BY
COE T&PD

DATE
28.08.2024



PURCHASE SPECIFICATION

GROUP: T&PD COE - DESIGN

P.S NO. : PS/412/LCI-MGS

REV. NO : 00

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3. RATING PLATE:

Stainless steel / Anodised aluminium rating plate shall have information as per IEC / NEMA. Following minimum information to be provided necessarily on the rating plate.

- a) Motor type
- b) IS followed
- c) Manufacturers name
- d) Manufacturers Sl. No for the Motor
- e) Year of manufacturing
- f) Class of insulation
- g) Max allowable temperature rise
- h) No of Phases
- i) Rated Frequency
- j) Rated Voltages
- k) Rated current for each winding
- l) Connection symbol
- m) Type of cooling
- n) Total weight

Details of rating plate to be submitted by the supplier for approval after placement of PO.

4. DOCUMENTS TO BE SUBMITTED AFTER PLACEMENT OF PO FOR APPROVAL:

Supplier shall furnish OGA drawing, Details of rating & diagram plate, & Data Sheet within one week from the date of placement of PO for approval of BHEL. All final Drawings should be submitted after approval including the following:

- (i) Data sheet
- (ii) Comprehensive documentation including user manual, wiring diagrams, and maintenance guidelines provided.
- (iii) Test certificates and guarantee certificates for the motor
- (iv) Instruction and Maintenance Manual.

5. WARRANTY:

Supplier shall provide the guarantee / warrantee for the offered for synchronous motor-motor 12 months from the date of commissioning or 18 months from the date of supply, whichever is earlier.

6. PACKING:

The motor should be suitably water proof packed for transportation to BHEL EDN Bangalore and should also be suitable for long term storage in a dusty environment and in open atmosphere.