



Bid Number/बोली क्रमांक (बिड संख्या) GEM/2024/B/5242294 Dated/दिनांक : 02-08-2024

## Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण			
Bid End Date/Time/बिड बंद होने की तारीख/समय	12-08-2024 17:00:00		
Bid Opening Date/Time/बिंड खुलने की तारीख/समय	12-08-2024 17:30:00		
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	15		
ltem Category/मद केटेगरी	RELAY, NUMERIC ROTOR EF (STAGE 1 & 2) (BHEL Material code: SA0483660124)		
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		
Bid to RA enabled/बिंड से रिवर्स नीलामी सक्रिय किया	Yes		
RA Qualification Rule	H1-Highest Priced Bid Elimination		
ITC available to buyer/क्रेता के लिए उपलब्ध आईटीसी	Yes		
Type of Bid/बिंड 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		

Bio	l Details/बिड विवरण
Payment Timelines	Payments shall be made to the Seller within <b>90</b> 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
EMD Detail/ईएमडी विवरण	
Required/आवश्यकता	No
ePBG Detail/ईपीबीजी विवरण Required/आवश्यकता	No
Troquir oujon Tr Tr	
Splitting/विभाजन	
Splitting/विभाजन Bid splitting not applied/बोली विभाजन लागू नहीं किया	· गया.
Splitting/विभाजन Bid splitting not applied/बोली विभाजन लागू नहीं किया	· गया.
Splitting/विभाजन Bid splitting not applied/बोली विभाजन लागू नहीं किया MII Purchase Preference/एमआईआई खरीद वरीयता	गया.

1. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .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.

2. 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.

- 3. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:
  - i. If number of technically qualified bidders are only 2 or 3.
  - ii. If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
  - iii. In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
  - iv. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1
  - v. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1

# RELAY, NUMERIC ROTOR EF (STAGE 1 & 2) (BHEL Material Code: SA0483660124) (15 pieces)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	<u>Download</u>
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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	Dinesh Kumar Bhagat	560026,MANAGER STORES,- GI Bharat Heavy Electricals Limited Electronics Division, Mysore Road, Bangalore - 560026 Karnataka India	15	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

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

#### 3. 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.

#### 4. 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 %.

#### 5. Generic

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

#### 6. 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.

#### 7. 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. Prabhat Kumar/ DGM Mr. Dinesh Kumar Bhagat/ Manager

e-mail: prabhat.kumar@bhel.in e-mail: dkbhagat@bhel.in

Tel: 080 26998866 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 <u>attached categories</u>, 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---



## PRE-QUALIFICATION CRITERIA FOR ROTOR EARTH FAULT RELAY

PQC:408-011

**REV. NO. 00** 

	7,	4-10			Page 1 c	of 1
MUST NOT	-65	SI. No.	CF	RITERIA	DOCUMEN	T REQUIRED
CALS LIMITED. IT MU ST OF THE COMPANY.	Ī	1.	/supplier of Roto	ld be manufacturer or Earth Fault relay. ed to detect earth fault circuit.	Self-certific OEM/ OEM for dealers.	ation for Certification
O CONFIDENTIAL  Y OF BHARAT HEAVY ELECTRI  ETRIMENTAL TO THE INTERE		2.	certificates com standard mention specification PS, 13 of 2 (specific	Test certificates for similar item may be submitted.  5/408/2078 clause no.  cation) on the date of offer against the		
COPY RIGHT AND CONFIDENTIAL THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.		3.	fault relay or sho	shall submit the cated for Rotor Earth ould have supplied the against an earlier	user pe certifica satisfac operati earth fa 2 years plant. b) Referen custom c) Purchal	on of Rotor ault relay for in a power nce list of ers. se order along with and delivery
THE	REV	/ 00		AP	PROVED	sam
				R.R	RUKMANI	GT
				PREPARED	ISSUED	DATE
			SER-OTTER	ARUN KUMAR	408	29/03/2021

# Technical specification: material code :SA0483660124 RELAY, NUMERIC ROTOR EF (STAGE 1 & 2)

NUMERIC TYPE ROTOR EARTH FAULT RELAY (STAGE 1 & 2) WITH LCD DISPLAY AND

POTENTIAL FREE CONTACTS.

GENERATOR EXCITATION VOLTAGE: UPTO 600V DC.

AUXILIARY SUPPLY: 230V AC, +10%, -15%,

MOUNTING: FLUSH MOUNTING,

DIELECTRIC TEST VOLTAGE: 2KV, 50HZ, 1 MIN.,

ALSTOM TYPE NUMBER: MX3IPG2A 72 WITH ACCESSORY

X2/IPG2A.11 OR

EQUIVALENT,

ABB TYPE: REK510 WITH ACCESSORY REJ601 OR EQUIVALENT,

OTHER MANUFACTURERS SHALL QUOTE THEIR EQUIVALENT TYPE NO.,

PURCHASE SPECIFICATION: PS-408-2078

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10				REV: 00
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Copy Right And Confidential  The Information On This Document Is The Property Of Bharat Heavy Electricals Limited. It Must Not Be Used Directly Or Indirectly In Any Way Detrimental To The Interest Of The Company.		PURCHASE SPECIFIC FOR ROTOR EARTH FAUL	TRELAY	MAY BE THE ON THE WANTED BY THE WANTED BY THE STATE OF TH
	Revision: 00	Reviewed by	: R. Rukmani PRuk	many
	The action of the	Provide and the second		
		Prepared by	Issued by	Date
	in the second	Arun Kumar	CE-Engg. (GCE) - 408	29/03/2020

# **Purchase Specification** A4-11 1.0 APPLICATION: The Information On This Document Is The Property Of Bharat Heavy Electricals Limited . It Must Not Be Used Directly Or Indirectly In Any detected immediately and the machine should be isolated. Way Detrimental To The Interest Of The Company. rotor winding of the synchronous machine and ground. with password protection. Copy Right And Confidential 2.0 SPECIFICATION:

PS / 408 / 2078

**REV: 00** 

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This purchase specification is for Numerical Type Rotor Earth Fault relay used to detect earth faults (Stage 1 & 2) in the excitation circuit of Synchronous machine.

The excitation field circuit remains isolated during normal operating conditions and can be exposed to abnormal mechanical or thermal stress due to vibrations, overcurrent during running conditions. This may result in the breakdown of the insulation between the field winding and the rotor. Hence detection of Rotor earth fault and clearing the fault is more critical otherwise it causes severe magnetic imbalance and heavy rotor vibrations leading to severe damage to synchronous machine. Therefore, it is essential that any occurrence of an insulation failure to be

Basic principle of rotor earth fault detection is based on injection of AC Low voltage between

Rotor earth fault relay shall be numerical type and all accessories as required including earth fault sensing device and display unit shall be supplied. Potential free contacts for alarm, trip and healthy status. Parameter settings shall be easily editable & these values shall be stored permanently even if there is failure in Auxiliary supply. Editing the values shall be permitted only

The supplier shall confirm in writing, the complete clause wise compliance with the specification.

Sl. No.	Description	Compliance
	Technical data	
1.	Numerical type rotor earth fault relay complete with injection and display unit.	
2.	Application: Detecting rotor earth fault stage 1 & 2 in the excitation circuit of Synchronous machine.	
3.	Auxiliary supply: 230VAC +10% -15%	
4.	Generator rated excitation voltage : 600V DC (minimum)	
5.	i) For parameters settings ii) Dynamic display of Resistance*  * Resistance shall be displayed in terms of ohms (or) equivalent earth current (A)	
6.	LED's are required for stage-1 (alarm) ,Stage-2 (trip) & relay healthy status	



## **Purchase Specification**

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	1	Sl. No.	Description	Compliance
	<b>i</b> ,	7.	i) Potential free Output relay contacts: minimum 4 nos.	
	<b>i</b> ,		ii) Minimum current carrying capacity of contacts: 1A at	
			24VDC (+10%, -15%)	
	av) Anj		iii) Output contacts shall be self-reset type and Hold type.	
110	не In л		Selection of reset type shall be programmable.	
+	ar ly ]	8.	Rotor earth fault Stage-1 (Alarm) settings :-	
ָ רַ	na. ect		i) Setting Range: 200 4000 ohms x in steps of 100 ohms	
Q J	I b		(or) equivalent earth current to resistance to be	
,	o /		furnished.	
1	irty Or		ii) Operating time delay: 0.05 50 s in steps of 0.01s	
	ope tly ny.		Selection of these settings to be programmable type	
ا '	rr rec ıpa	9.	Rotor earth fault Stage-2 (Trip) settings :-	
) ئے ا	ne Di on		i) Setting Range: 200 4000 ohms x in steps of 100 ohms	
٦ - ا	s 1 sed ne C		(or) equivalent earth current to resistance to be furnished.	
+	U. T. I.		ii) Operating time delay: 0.05 50 s in steps of 0.01s	
	nen Be t Of		Selection of these settings to be programmable type	
	cun lot rest	10.	i) Date and time shall be programmable type	
آھا	Do it N itei	10.	ii)Password protection (or) suitable protection shall be provided	
enti E.	dus fus e Ir		for parameters entry	
fide TT	On This Document is The Property Of Bharat Heavy d. It Must Not Be Used Directly Or Indirectly In Any To The Interest Of The Company.	11.	Dielectric test: <b>Test Voltage as per RFQ</b> , 50 Hz 1 min	
Confidential	Cn d. d	12.	Impulse test as per IEC 60255 : 5 KV 1.2 μs / 50 μs	
d C	The Information On This Document is The Property Of Bharat Heavy Electricals Limited. It Must Not Be Used Directly Or Indirectly In Any Way Detrimental To The Interest Of The Company.	13.	Type tests	
Copy Right And	The Information Electricals Limite Way Detrimental		1) Shock and Vibration test as per IEC 60255 (or) Equivalent IEC	
jht	rm ds rin		standard	
Riξ	nro rica Det		2) Dielectric test as per IEC 60255	
py	e 1 ecti ay ]		3) Impulse test as per IEC 60255	
် ပိ	EIC W		4) Environmental test as per IEC 60068 (or) Equivalent IEC	
			standard	
	<b>i</b> ,		5) Electromagnetic tests	
	<b>i</b>		A. Burst disturbance test as per IEC 61000 / IEC 60255 (or)	
	<b>i</b> ,		Equivalent IEC standard	
	<b>i</b> ,		B. Electrostatic discharge test as per IEC 61000 / IEC	
	<b>i</b> !		60255(or) Equivalent IEC standard	
	<b>i</b>		C. Radiated electromagnetic test as per IEC 61000 / IEC	
	<b>i</b> !		60255 (or) Equivalent IEC standard	
	<b>i</b>		D. Fast transient disturbance test as per IEC 61000 / IEC	
	<b>i</b> !		60255 (or) Equivalent IEC standard  E. Surge immunity test as per IEC 61000 / IEC 60255(or)	
	<b>i</b> ,		Equivalent IEC standard	
			F. Conducted radio frequency interference test as per IEC	
			61000 / IEC 60255 (or) Equivalent IEC standard	
			G. Power frequency immunity test as per IEC 61000 / IEC	
			60255 (or) Equivalent IEC standard	
	1		oozoo (or) Equivalent izo otanaara	

		ब एच ई एल <b>म्राह्म</b> A4-11	Purchase Specification	PS / 408 / 2078 REV: 00 Page: 04 of 04
	Electricals Limited. It Must Not Be Used Directly Or Indiaton Reavy Way Detrimental To The Interest Of The Company.	14.  15.  16.  3.0 SUPPLIE 3.1 BIDDIN  Supplie and portoces i) Come Quo reas ii) Tech draw iii) Type earli  4.0 Tests: 4.1 Routine dispatch cle	ier shall provide the following information along with the offer. Exing.  Inpliance to this specification and material description in the Rotation / Purchase Order. List of deviations, if any, clause numbers on thereof, wherever applicable shall be clearly brought out.  Innical Data sheets, Parameters setting details, mechanical owings.  In the test reports as mentioned in the clause no. 13 of 2.0 (specification test reports are not required, if the item has already been supplied iter purchase order.  It be conducted:  It tests (conducted on every batch / item & reports to be submitted.)	Request For er-wise with dimensional on) to be submitted. ed to BHEL against an
Cop	Elec	5.0 PACKIN	Report on operation of relay for various resistance / current setti and Stage-2 operation.  G  m shall be properly packed to ensure that there are no damages /	

# 6.0 ACCEPTANCE CRITERIA

during transit.

- 1. Dispatch clearance by purchaser after verification of routine test reports submitted.
- 2. On receipt of item at BHEL-EDN final acceptance will be by quality services of purchaser, verifying the conformance of item to this purchase specification and Inspection of item as per specification / drawings / documents at purchaser's works.