



Bid Number/बोली क्रमांक (बिड संख्या): GEM/2023/B/3453058 Dated/दिनांक : 16-05-2023

## Bid Document/ बिड दस्तावेज़

Did Dataile for Comm				
Bid Details/बिड विवरण				
Bid End Date/Time/बिंड बंद होने की तारीख/समय	26-05-2023 15:00:00			
Bid Opening Date/Time/बिड खुलने की तारीख/समय	26-05-2023 15:30:00			
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	32			
ltem Category/मद केटेगरी	NUMERIC TYPE ROTOR EARTH FAULT RELAY (STAGE 1 & 2) (Q3)			
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	Certificate (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 buyerक्रेता 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 preregistered with GeM)	No			

Bid 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				
	No			

Required/आवश्यकता	No

#### Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

#### MII Purchase Preference/एमआईआई खरीद वरीयता

Mil Purchase Preference/एमआइआइ खराद वरावता   Tes	MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
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#### MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes	
		i .

- 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 .In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.
- 2. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs 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 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 OUANTITY.

- 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

#### NUMERIC TYPE ROTOR EARTH FAULT RELAY (STAGE 1 & 2) (32 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)

D 17 4	
Brand Type/ब्रांड का प्रकार	Unbranded

#### 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.	ក្ <del>នាស្ត្រភា ស្ត្រាស្ត្រភា</del> Address/ប		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	32	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
. , p = 0. =	1

Micro & Small Enterprises (MSEs) 45 days from CRAC date
Medium Enterprises 60 days from CRAC date
Non MSME 90 days from CRAC date

**C. Risk Purchase** - In case of failure of supplier, BHEL at its discretion may make purchase of the material s/ services not supplied/ rendered in time at the RISK & COST of the supplier. Under such situation, the supplier who fails to supply the goods in time shall be wholly liable to make good to BHEL any loss due to risk purchase. In case of invocation of risk purchase, BHEL shall get Balance work/ supply done at supplier risk and cost, which shall be recovered from supplier out of dues of this contract, any other contract with BHEL and balance amount, if any shall be required to be deposited by supplier.

#### 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. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

- 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.
- 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. 01** 

Page 1 of 1 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. SI. CRITERIA DOCUMENT REQUIRED No. 1. The bidder should be manufacturer Self-certification for OEM/ OEM /supplier of Rotor Earth Fault relay. Certification for dealers. These relay is used to detect earth fault in the excitation circuit. 2. The bidder shall have valid test Test certificates for rotor earth fault relay certificates complying with relevant CONFIDENTIAL may be submitted. standard mentioned in the technical specification PS/408/2078 clause no. 13 of 2 (specification) on the OR date of submission of offer against the tender. Purchase order copies along with invoice and delivery challan of item supplied to RIGHT AND OR BHEL against an earlier purchase order. The bidder should have supplied item to BHEL against an earlier purchase order. 3. bidder shall submit The a) At least one end user performance documents indicated for Rotor certificate regarding satisfactory operation of Rotor earth fault relay Earth fault relay for 2 years in a power plant. b) Reference list of customers. c) Purchase order copies along with OR invoice and delivery challans The bidder should have supplied OR item to BHEL against an earlier Purchase order copies along with invoice purchase order. and delivery challan of item supplied to BHEL against an earlier purchase order. REV 01 **APPROVED** PRABHAT KUMAR **PREPARED ISSUED** DATE 408 19/04/2023

MATERIAL CODE	MATERIAL DESCRIPTION
	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%,
SA0483660124	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

dera La cont	बिएचई प्रत <b>सिम्मेर</b>			PS / 408 / 2078
10				REV: 00
	A4-10		P	age: 01 of 04
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 FAULT	T RELAY	And the property of transmit is and Araculation between the present of the second in the present of the second in
	Revision: 00	Reviewed by:	R. Rukmani PRuk	many
	The second second	Total Control of the		
		Prepared by	Issued by	Date
	y/hourst	Arun Kumar	CE-Engg. (GCE) - 408	29/03/2020

# **Purchase Specification** A4-11 1.0 APPLICATION: faults (Stage 1 & 2) in the excitation circuit of Synchronous machine. The Information On This Document Is The Property Of Bharat Heavy . 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: Electricals Limited

PS / 408 / 2078

**REV: 00** 

Page: 02 of 04

This purchase specification is for Numerical Type Rotor Earth Fault relay used to detect earth

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.	Sl. No. Description				
	Technical data				
1.	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.	LCD Display				
	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**

PS / 408 / 2078

**REV: 00** 

Page: 03 of 04

		Sl. No.	Description	Compliance
		7.	i) Potential free Output relay contacts: minimum 4 nos.	
			ii) Minimum current carrying capacity of contacts: 1A at	
	>		24VDC (+10%, -15%)	
	Any		iii) Output contacts shall be self-reset type and Hold type.	
Of Bharat Heavy Indirectly In Any			Selection of reset type shall be programmable.	
		8.	Rotor earth fault Stage-1 (Alarm) settings :-	
ة <u>د</u>	ect		i) Setting Range: 200 4000 ohms x in steps of 100 ohms	
Q J	dir		(or) equivalent earth current to resistance to be	
,	) i		furnished.	
1	01.5		ii) Operating time delay: 0.05 50 s in steps of 0.01s	
Š	ope :tly ny.		Selection of these settings to be programmable type	
, C	ri rec ıpa	9.	Rotor earth fault Stage-2 (Trip) settings :-	
2	Di Di Com		i) Setting Range: 200 4000 ohms x in steps of 100 ohms	
-	s 1 sed se (		<ul><li>(or) equivalent earth current to resistance to be furnished.</li></ul>	
+	U S		ii) Operating time delay: 0.05 50 s in steps of 0.01s	
Š	Be t Of		Selection of these settings to be programmable type	
}	It Must Not Be Used Directly Or The Interest Of The Company.	10.	i) Date and time shall be programmable type	
ial D	it N	10.	ii)Password protection (or) suitable protection shall be provided	
enti	ns Aus e Ir		for parameters entry	
fide Tr	It I It I Th	11.	Dielectric test: <b>Test Voltage as per RFQ</b> , 50 Hz 1 min	
Confidential	d. Jo	12.	Impulse test as per IEC 60255 : 5 KV 1.2 μs / 50 μs	
d C	Fire morniation on this Document is the Froperty Electricals Limited. It Must Not Be Used Directly Or I Way Detrimental To The Interest Of The Company.	13.	Type tests	
Copy Right And	Lim		1) Shock and Vibration test as per IEC 60255 (or) Equivalent IEC	
ht.	lls ]		standard	
Rig	iiio ica Oet		2) Dielectric test as per IEC 60255	
py o	e r ectr ay l		3) Impulse test as per IEC 60255	
Co	Ele Wa		4) Environmental test as per IEC 60068 (or) Equivalent IEC	
			standard	
			5) Electromagnetic tests	
			A. Burst disturbance test as per IEC 61000 / IEC 60255 (or)	
			Equivalent IEC standard	
			B. Electrostatic discharge test as per IEC 61000 / IEC	
			60255(or) Equivalent IEC standard	
			C. Radiated electromagnetic test as per IEC 61000 / IEC	
			60255 (or) Equivalent IEC standard	
			D. Fast transient disturbance test as per IEC 61000 / IEC	
			60255 (or) Equivalent IEC standard	
			E. Surge immunity test as per IEC 61000 / IEC 60255(or)	
			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	
			oozoo (or) Equivalent lee standard	

	ब एच ई एल <b>मिंगू हा</b> A4-11	Purchase Specification	PS / 408 / 2078 REV: 00 Page: 04 of 04
And Confidential ation On This Document Is The Property Of Bharat Heavy Limited. It Must Not Be Used Directly Or Indirectly In Any	14.  15.  16.  3.0 SUPPLI 3.1 BIDDIN  Supp and p proce i) Cor Qui rea ii) Tec dra iii) Typ ear  4.0 Tests	lier shall provide the following information along with the offer. In the point wise compliance statement / documents required, will not be consisted.  Impliance to this specification and material description in the potation / Purchase Order. List of deviations, if any, clause numbers on thereof, wherever applicable shall be clearly brought out. In the potation of the potation of the provided provided in the clause of the potation of the potation of the clause of the potation of the potati	Request For er-wise with dimensional considered for further
	1. 2.	e tests (conducted on every batch / item & reports to be submitte earance)  Insulation / Dielectric withstand test Operational test like Visual, Display, LED, inputs, Outputs.  Report on operation of relay for various resistance / current settland Stage-2 operation.	
	5.0 PACKING	NG m shall be properly packed to ensure that there are no damages	/ dislocation of parts

## 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.