



Phone : +91-80-26998448  
E-mail : jkniranjan@bhel.in

ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड  
**Bharat Heavy Electricals Limited**

(A Government of India Undertaking)  
ELECTRONICS DIVISION

P.B. No 2606, Mysore Road, Bangalore - 560 026

An ISO 9001, ISO 14001, ISO 45001 & ISO/IEC 27001-2005 Company

Sealed quotations are invited under two part bid system for entering into annual rate contract for the supply of 4.5kV 1200A IGBTs as per BHEL technical specification.

RFQ NO and date	JKNM210001 dated 15.04.2021
RFQ due date & time	Due Date/Day: 13.05.2021 THURSDAY Time : 13:00 HRS
Date, Time & Venue of Part-I Bid Opening	13.05.2021 after 13.30 hrs (IST) New Engineering Building 6th Floor Bharat Heavy Electricals Limited PB NO 2606, Mysore road, Bangalore-560 026. INDIA
Date, Time & Venue of Price Bid opening (Part-II)	Will be intimated later for techno-commercially accepted Bidders
Address for Communication & Contact Person in BHEL	Mr. Jitendra Kumar Niranjana Ms. Nirmala Simon SA - MM Department, BHEL Electronics Division, PB NO 2606, Mysore road, Bangalore-560 026. INDIA Email: <a href="mailto:jkniranjan@bhel.in">jkniranjan@bhel.in</a> , <a href="mailto:nirmala.simon@bhel.in">nirmala.simon@bhel.in</a> Telephone number: +91 80 26998448, +91 80 26998435

## REQUEST FOR QUOTATION

	<b>BHARAT HEAVY ELECTRICALS LIMITED</b> Electronics Division PB No. 2606, Mysore Road Bangalore - 560026 INDIA	RFQ NUMBER: <b>JKNM210001</b>  RFQ DATE : 15.04.2021	Due Date/Day: 13.05.2021 THU Time : 13:00 HRS Tender Box : Reception Area Opening Venue: SUB ASSLY PUR
MMI:PU:RF:003	(address for communication) :		(for all correspondence)
		Purchase Executive : Jitendra Kumar Phone : 080 26998448 Fax : E-mail: jkniranjan@bhel.in	

SI No.	Description	Qty	Unit	Delivery qty	Delivery Date
1	DV0688173315 IGBT 4500V 1200A * HSN/SAC : 8536 Test Certificate IGBT 4500V 1200A. PURCHASE SPECIFICATION: PS4062320	18,000	NO	AS PER PO	AS PER PO

Total Number of Items - 1

1.  
2.

### TWO PART BID - SUBMIT TECHNICAL AND PRICE BID IN SEPARATE SEALED COVERS

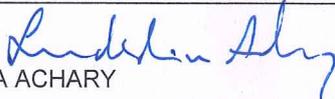
**NOTES:**

1. This RFQ is governed by:
    - a) INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at <http://edn.bhel.com> (**RFQ-PO Terms & Conditions**)
    - b) Any other specific Terms and Conditions mentioned.
  2. Bidders / Representatives who would like to be present during opening of offers are required to furnish authorization letter for the same.
- \* The HSN/SAC no mentioned against the line items in the RFQ are indicative only.

For and On behalf of BHEL.

Jitendra Kumar  
Sub-Assembly

1 OF 1

		 <b>EDN BANGALORE</b>	<b>PRE QUALIFICATION CRITERIA (PQC)</b> <b>FOR 4.5 kV 1200 A IGBT</b> <b>GROUP: SUB ASSEMBLY ENGG</b>	Ref: 406/PQC/IGBT
			REV NO 03	
			PAGE 01 OF 01	
<b>COPY RIGHT AND CONFIDENTIAL</b> The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest of the company.		<b>PRE QUALIFICATION CRITERIA (PQC).</b>		
		<p>1.0 ) The bidder shall be an Original Equipment Manufacturer (OEM) of IGBT          OR          Vendor authorised by OEM of IGBT, supported with valid authorisation letter from OEM for supplies to Indian region.</p> <p>2.0 ) Offer shall be for new IGBT and not for any used or refurbished item.</p> <p>3.A ) The bidder shall be a supplier of IGBTs rated for 4.5 kV 1200 A for usage in traction converters of propulsion system. Bidder shall supply IGBTs as per BHEL's Purchase Specification No. PS 4062320 Rev No: 00. These IGBTs shall have an approval for series production by Indian Railways and also proven in BHEL make propulsion system of 6000 HP AC loco.</p> <p>3.B ) Bidders who are not meeting the criteria as in "3.A" above, will not qualify in techno-commercial Bid ( Part –I Bid) and their price Bid ( Part II Bid) will not be opened. For such offers BHEL shall pre evaluate and approach RDSO/Indian Railways with details furnished by the bidder along with their offers for approval for development order. The bidder shall also co-ordinate and provide all necessary documents to Indian Railways / RDSO as required. These bidders will be considered only for a development order of 1 set = 80 nos of IGBTs. Bidder shall supply these IGBTs at L1 price as finalized in this tender. Further BHEL will take up with Indian Railways/ RDSO for evaluation and obtaining necessary approval for regular use in BHEL make propulsion system.</p> <p>4.0 ) Documents Submission</p> <p>a) Bidder to submit compliance to Purchase Specification No. PS 4062320 Rev No: 00 along with data sheet.</p> <p>Bidders who are not meeting the criteria as in 3.A shall submit following documents</p> <p>i) Proof of Supply of this or higher rating IGBTs used in rolling stock application directly or through any agency to Indian Railways for reference.</p> <p>ii) Type test report along with data sheet for proposed IGBT with clause wise compliance.</p> <p>5.0 ) Reference Documents.</p> <p>a) Purchase Specification no. PS 4062320 Rev No: 00.</p>		
		APPROVED BY  SADASHIVA ACHARY		
		PREPARED BY  T J GIRISH	ISSUED BY SAE/406	DATE 24.03.2021



**PURCHASE SPECIFICATION  
FOR 4.5kV 1200A IGBT**

PS4062320

REV. NO: 00

PAGE : 00 OF 02

**SPECIFICATION FOR 4.5kV 1200A IGBT**

**REVISION HISTORY SHEET**

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REV. NO.	DATE	NATURE OF CHANGE	REASONS	PREPARED BY	APPROVED BY
00	20.06.2019	FIRST ISSUE	-----	Hari Kalluru	T J GIRISH

APPROVED BY T J GIRISH *[Signature]*

PREPARED BY  
*K. Han*  
Hari Kalluru

ISSUED BY  
SAE

DATE  
20.06.2019



# PURCHASE SPECIFICATION

PS4062320

REV. NO: 00

## FOR 4.5kV 1200A IGBT

PAGE : 01 OF 02

**Introduction:** BHEL EDN is manufacturing propulsion system for 6000HP AC LOCO used in Indian Railways. Power converters of these propulsion systems are build using 4500V 1200A IGBTs. Following are general specification of IGBT used for manufacture of power modules.

**Description:** Insulated Gate Bipolar Transistor (IGBT) module

S.NO	Parameter	Value
1	Collector-emitter voltage VCES	4500V
2	DC collector current IC	1200A at Tc ≥ 80 °C
3	Peak collector current	2400A (min.)
4	Gate-emitter voltage VGES	± 20V (max.)
5	Isolation voltage Visol	7kV (min.)
6	Junction operating temperature Tvj(op)	125 deg. C (min.)
7	Collector-emitter saturation voltage VCEsat	4.5 V (typ.) at IC = 1200 A, Tvj = 125 °C
8	Short circuit pulse width tpSC	10µS at Tvj = 125 °C
9	Gate-emitter threshold voltage VGE(TO)	7.5 V (typ.)
10	Internal gate resistance Rgint	2 Ω (typ.)
11	Module stray inductance L CE	20nH (max.)
12	Emitter-collector voltage VEC	4 V (typ.) at IC = 1200 A, Tvj = 125 °C
13	switching energy loss Esw (Eon + Eoff)	11.5 J (typ.) *
14	Reverse recovery energy Erec	3.6 J (typ.) *

\* Test condition: VCC ≥ 2600 V, IF = 1200 A, Tvj = 125 °C, VGE = ±15 V, Ls : 150 nH (typ.), inductive load

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# PURCHASE SPECIFICATION

PS4062320

REV. NO: 00

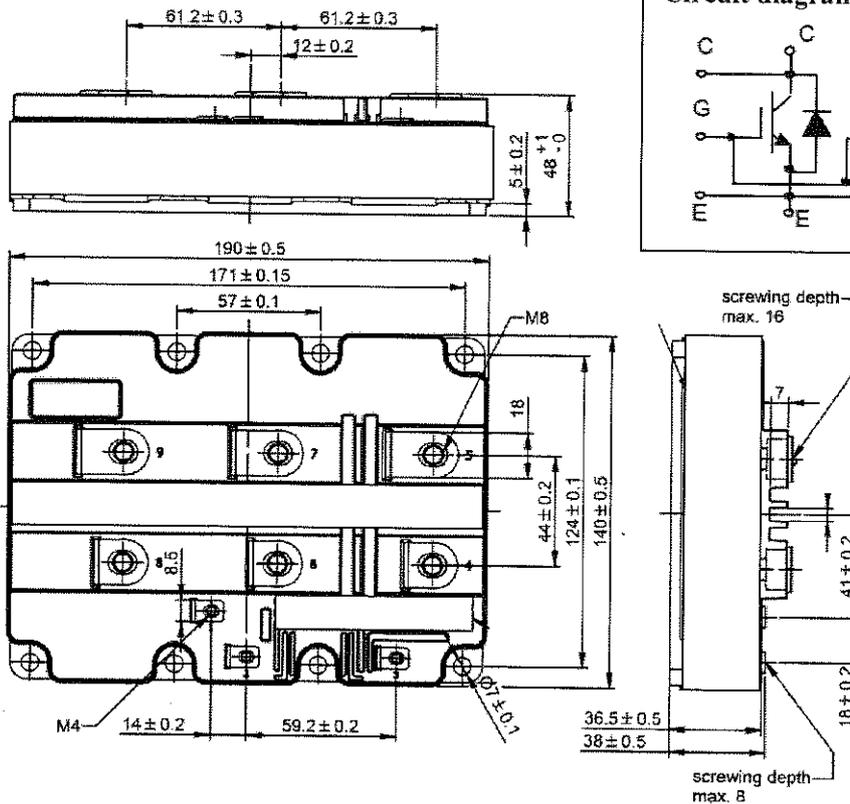
## FOR 4.5kV 1200A IGBT

PAGE : 02 OF 02

- |    |  |   |
|----|--|---|
| 15 | IGBT thermal resistance junction to case<br>Rth(j-c)IGBT   | 11 K/kW (max.)  |
| 16 | Diode thermal resistance junction to case<br>Rth(j-c)DIODE | 20 K/kW (max.)  |
| 17 | Contact thermal resistance case to heatsink<br>Rth(c-h)    | 7 K/kW (max.)   |
| 18 | Mass   | 2 Kg (max.)   |
| 19 | Dimensions   | 190x140 mm. For detailed dimensions refer below drawing |

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Outline drawing (for dimensional purpose only)



Acceptance Criteria: Accepted based on Test report / COC.

---END---

# **ADDITIONAL TERMS AND CONDITIONS**

## **RFQ NO. JKNM210001**

This RFQ is for the purpose of entering into Rate Contract (RC) only for the supply of IGBTs.

This RFQ is also governed by INSTRUCTIONS TO BIDDERS/SELLERS and GENERAL CONDITIONS OF CONTRACT FOR PURCHASE available at <http://edn.bhel.com> (RFQ-PO Terms & Conditions), on bidder request through e-mail, the document shall be shared. The special terms and conditions mentioned below supersedes the general conditions of contract, for contradictory clauses if any.

1. Separate offer in English language addressed to the Purchase Executive shall be made for this RFQ in two parts.

**Two Part Bid:** Offer shall be made in Two parts as detailed below:

**“Pre - Qualification Criteria (PQC) & Techno-commercial Bid: (Part I Bid)”:** Documents related to PQC & Unpriced offer i.e. “Techno-commercial Bid” with filled in BHEL Standard commercial terms and conditions along with purchase specification, integrity pact, GFR certificate as per BHEL format, certificate for preference to Make in India as per BHEL format (If Applicable), etc if any to be placed in a sealed cover super scribed with RFQ No., Due Date and “Pre-Qualification Criteria & Techno-commercial Bid: (Part I Bid)”,

**“Price Bid (Part II Bid)” :** Priced offer i.e ‘Price bid’ of the offered item to be placed in a separate sealed envelope super scribed with RFQ No, Due date and “Price Bid (Part II Bid)”.

All the TWO sealed envelopes shall be placed in another sealed envelope super scribed with RFQ No & Due date.

First pre-qualification bid & Techno commercial (Part-I bid) will be opened on due date.

The PQC & techno-commercial bids received against this RFQ will be evaluated on techno commercial & PQC parameters.

With due intimation to the Bidders, Price bids of qualified Bidders in Part-I bid only will be opened.

For offers not having required Bidder approval from RDSO/Indian railways through BHEL and suitable for development purpose will be dealt as per Clause 3.B of PQC.

2. Pre-qualification criteria is attached herewith.

3. If any, Type test charges in rupees / in foreign currency (for import quote) to be indicated separately in the price bid and BHEL will consider all type test charges for arriving lowest price. (Same to be confirmed in techno-commercial bid without price.)

4. This RFQ is for entering into a Rate contract for 18,000 Nos. of IGBTs used in Traction converter. Validity of the RC will be **18 months** from the award of rate contract. Firm orders will be placed during the tenure of rate contract. Prices will remain **firm** till the validity of RC or till the completion of supplies against the purchase orders placed against this rate contract whichever later. Please note that these quantities are projections based on the current business scenario and expected orders from customers. In the eventuality of business not coming through, BHEL is not obligated to exhaust the ordering of RC quantities.

5. **Required delivery Period:** As per our production plan, 2000 Nos. of IGBT's are required per month. Preferred delivery of 1st lot of IGBT to commence within 4 months from the date of PO. In line to BHEL requirement, Bidder to quote best delivery schedule from the date of purchase order.

6. **Rescheduling of Deliveries:** BHEL reserves the right of postponement, rescheduling or staggering of delivery based on the project schedule.

7. **Non acceptance of RC:** Offer will be liable for commercial rejection for non-acceptance of clause no 4 & 6.

8. **Terms of delivery :**

**EXW/FCA/CIP Bangalore Airport (For foreign bidders)**

**Door Delivery to BHEL EDN Stores, Bangalore with Freight and Insurance paid.** (For Indigenous Bidders)

Note: Deviated Delivery terms and corresponding **loading factors** mentioned in clause I (i) of instructions to bidders (DOC No. BHEL: EDN: ITB- SHOP: REV 03).

9. **Payment:** BHEL standard terms of payment:

**For Indian bidders:** 100% within 45 days credit.

**For foreign bidders:** 100% sight draft with 45 days credit.

Note: Deviated payment terms and corresponding **loading factors** mentioned in clause I (ii) of instructions to bidders (DOC No. BHEL: EDN: ITB- SHOP: REV 03).

10. **Penalty:** As per Clause 15 of GCC.

Note: Deviated penalty terms and corresponding **loading factors** mentioned in clause I (iii) of instructions to bidders (DOC No. BHEL: EDN: ITB- SHOP: REV 03).

11. Rates and other terms and conditions agreed upon shall remain firm till the completion of tenure of rate contract or till completion of supplies against purchase orders placed under rate contract, whichever is later.

12. **The Price variation Clause (PVC) is not applicable.**

13. **Exchange rate Variation clause (ERV):** ERV is applicable as per predefined formula. ERV is only applicable when vendor mention the same in his offer. Vendor to clearly mention the **base currency** & its **exchange rate to INR**.

**Formula to incorporate Exchange rate variation clause (ERV):**

**Considering:**

Rate quoted in INR in the offer is **A**

Exchange Rate of foreign currency to INR in the offer is **B**

*Exchange rate of foreign currency to INR on part-I bid opening date is **C***

For calculation of comparison statement (CS) after price bid opening: Exchange rate of SBI card rate on the **date of Part-I Bid opening** will be considered. If corrigendum is issued for extending due date for submission, even then **Part-I Bid opening date before corrigendum** will be considered.

**Formula to derive unit rate in INR for comparison statement (CS) with ERV clause:**

**INR Rate** = *Rate quoted in INR in the offer (A) X Exchange rate of foreign currency to INR on part-I bid opening date (C) / Exchange Rate of foreign currency to INR quoted in offer (B)*

**After Ordering, formula to derive unit rate in INR for calculating Invoice value as per ERV clause:**

Date of Invoice will be considered for rate of exchange as per SBI card rate. Suppose Exchange rate to INR of foreign currency on date of Invoice is **D**

**INR rate** = *Rate quoted in INR in the offer (A) X Exchange rate of foreign currency to INR on date of Invoice (D) / Exchange Rate of foreign currency to INR quoted in offer (B)*

14. **Reverse Auction:** BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. On bidder request through e-mail, the document shall be shared. RA shall be conducted among the techno-Commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking."

15. **Order Splitting:** BHEL reserve the right to Split the rate contract quantity in the ratio of **70:30** to L1, and L2 Bidders respectively subjected to L2 Bidder accept to supply as per L1 negotiated price. In case, L2 Bidder does not accept to supply as per L1 negotiated price, the counter offer will be extended to subsequent Bidder's i.e. L3, L4, L5.... In case no subsequent Bidder accept to supply at

L1 price, balance quantity will be ordered on L1 only. The decision of BHEL shall be final on this matter.

16. Purchase Order shall be placed from time to time depending on actual requirement of BHEL during the tenure of the contract as per clause no. 15.

17. Validity of the offer shall be for 90 days from date of tender opening.

18. Offers with non-acceptance of BHEL terms are liable for rejection.

19. **Evaluation of offers:** L1 Bidder (lowest Bidder) will be decided based on 'Cost to BHEL' value after considering the applicable loading factors and other costs including packing & forwarding, applicable duties, taxes, etc if it is in the scope of BHEL. The evaluation currency for this RFQ shall be INR.

20. **Model Clause / Certificate as per Annex-III (Tenders) of Restrictions Under Rule 144 (xi) of the General Financial Rules (GFRs) 2017, Dated 23.07.2020:** Bidders should compulsorily submit the certificate in the format provided in Annexure-1.

For details, refer Government of India circular No F. No.6/18/2019-PPD issued by Ministry of Finance dt 23.07.2020.

21. **Model Clause / Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 13.06.2020.:** Being Global tender, Non-Local supplier whose local content **is less than 20% are also eligible to participate.** Certificate in the format as per Annexure-2 shall be considered for Class-I local supplier whose local content is more than 50% for purchase preference.

To claim purchase preference, supplier shall be required to provide the certificate from the statutory auditor or cost auditor of the company (in case of company) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

For details, refer Government of India Circular No. P-450212/2017-PP (BE-II) issued by ministry of Commerce and Industry, DPIIT (Public Procurement Section) dt 16.09.2020 and its subsequent revisions.

22. **GEM (Government E-Marketplace) Seller ID: (Applicable to Only Indian Bidders)** As per Circular No 6/9/2020-PPD dt 24.08.2020 from Ministry of Finance: For placing the Purchase order worth Rs. 25 Lakhs & above (Inc. of Taxes), supplier should mandatory have Unique GEM (Government E-Marketplace) Seller ID. Please ensure the same.

## **SPECIAL CONDITIONS OF CONTRACT**

### **INTEGRITY PACT (IP)**

**REF.: RFQ NO. JKNM210001**

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**This “Special Conditions of Contract” will form an integral part of the contract as and when the RFQ culminates into a Purchase Order / Contract.**

**Integrity commitment will be applicable in the tender process and execution of contracts.**

- (a) IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

Details of IEM for this tender is furnished below:

Name : Sh. Arun Chandra Verma, IPS (Retd.)  
Address : Flat No. C -1204,  
C Tower, Amrapali, Platinum Complex, Sector 119, Noida (U.P.)  
Email : [acvermal@gmail.com](mailto:acvermal@gmail.com)

&

Name : Sh Virendra Bahadur Singh, IPS (Retd.)  
Address : H. No. B-5/64, Vineet Khand, Gomti Nagar, Lucknow – 226010  
Email : [vbsinghips@gmail.com](mailto:vbsinghips@gmail.com)

- (b) The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.
- (c) Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to the above IEM. All correspondence with the IEMs shall be done through email only.
- (d) *Note:* No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc on the tender issued. All such

clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below:

Name:	Jitendra Kumar Niranjan	Name:	Nirmala Simon
Department	SA-MM	Department	SA-MM
Address	: BHEL EDN, NEB 6 <sup>TH</sup> Floor Mysore Road, P B No. 2606 Bangalore – 560026	Address	: BHEL EDN, NEB 6 <sup>TH</sup> Floor Mysore Road, P B No. 2606 Bangalore – 560026
Phone	+91 80 2699 8448 / 9442035749	Phone	+91 80 2699 8435/ 9449869972
Email	jkniranjan@bhel.in	Email	nirmala.simon@bhel.in
Fax	+91 80 26989228	Fax	+91 80 26989228

**RFQ No. : JKNM210001 dated 15.04.2021  
(BIDDER CONTACT DETAILS)**

**Supplier Name** :  
**Offer Ref** :  
**Contact Details** :

<b>Registered Office:-</b> Address :  Telephone No. : Email :
<b>Manufacturing plant:-</b> Address :  Telephone No. : Email :
<b>Ordering party (To be filled if different from Manufacturer)</b> Address :  Telephone No. : Email :
<b>Contact person :-</b> Name : Office Address :  Telephone No. : Mobile No. : Email :
<b>Contact person in India (if any) :-</b> Name : Office Address :  Telephone No. : Mobile No. : Email :

**Signature of Tenderer with Seal**

**Purchase Qualification Criteria (PQC) RFQ No. : JKNM210001 dated 15.04.2021**

**Supplier Name :**

PQC Criteria		
	Particulars	Bidder's Confirmation. Attach relevant documents wherever required. (YES/NO)
1	The bidder shall be an Original equipment Manufacturer (OEM) of IGBT OR Bidder authorized by OEM of IGBT to be supported with valid authorization letter from OEM for supplies to Indian Region.	
2	Offer shall be for new IGBT and not for any used or refurbished item.	
3.A	The bidder shall be the supplier of IGBTs rated for 4.5 kV 1200 A for usage in traction converters of propulsion system. Bidder shall supply IGBTs as per BHEL's Purchase Specification No. PS 4062320 Rev No: 00 dated 20.06.2019, which is approved for series production by Indian railways and also proven in BHEL make propulsion system.	
3.B	Bidders who are not meeting the criteria as in "3.A" above, will not qualify in techno commercial Bid ( Part –I Bid) and their price Bid ( Part II Bid) will not be opened. For such offers BHEL shall pre evaluate and approach RDSO/Indian Railways with details furnished by the bidder along with their offers for approval. The bidder shall also co-ordinate and provide all the necessary documents to Indian Railways /RDSO as required. These bidders will be considered only for a development order of 1 set = 80 Nos. of IGBTs. Bidder shall supply these IGBTs at L1 price as finalized in this tender. Further BHEL will take up with Indian Railways/ RDSO for evaluation and obtaining necessary approval for regular use in BHEL make propulsion system.	
4	<p><b>Document Submission.</b></p> <p>a) Bidder to submit compliance to purchase Specification No. PS 4062320 Rev No: 00 dated 20.06.2019 along with data sheet.</p> <p>Bidder who are <b>not meeting the criteria as mentioned in Point No. 3.A</b> shall submit following documents.</p> <p>as in 3.A shall submit following documents</p> <p>b) Proof of Supply of this or higher rating IGBTs used in rolling stock application directly or through any agency to Indian Railways to be submitted for reference.</p> <p>c) Type test report along with data sheet for proposed IGBT with clause wise compliance.</p>	
<p><b>Signature of tenderer with Seal</b></p>		

**TECHNICAL BID**  
**RFQ NO JKNM210001 DATED 15.04.2021**

**SUPPLIER NAME:**

	<b>Particulars</b>	<b>Bidder's Confirmation</b> (Acceptable / Not Acceptable) Please indicate deviations, if any.
1.	<b>IGBTs 4.5kV 1200A as per BHEL</b> purchase Specification no PS 4062320 Rev No 00 dated 20.06.2019 & shall comply with.	Please confirm
2.	<b>Certificate of conformance/ Test report</b> to be issued for each lot mentioning technical details and the same to be submitted along with BHEL shipping documents.	Please confirm

**Signature of Tenderer with Seal**

**COMMERCIAL TERMS**

**RFQ No. : JKNM210001 dated 15.04.2021**

**Supplier Name :**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Bidder's Confirmation</b> Please indicate deviations, if any.
1.A	<b>Currency of offer:</b> Please specify the currency of your offer	
1.B	<b>Exchange rate Variation (ERV) clause is applicable or not: Mention the Base Currency for ERV clause (For Quote in INR)</b>	
2.	<b>Terms of Payment</b>	
	<b>i) For Foreign Bidders</b> a. BHEL standard payment term is 100% sight draft with 45 days credit	Please confirm
	<b>ii) For Indian Bidders</b> BHEL standard payment term is 100% payment with 45 days credit,	Please confirm
3.	<b>Terms of Delivery</b>	
	<b>i) For Foreign Bidders</b> EXW(Location)/FCA (Name of Gate way Airport)/CIP Bangalore Airport	Please confirm
	<b>ii) For Indian Bidders</b> Door Delivery to BHEL Stores, Bangalore with Freight and Insurance paid	Please confirm
4.	<b>Country of origin:</b> Please specify country of origin.	Country of origin:
5.	<b>Validity:</b> Quotation should remain valid for 90 days from the RFQ due date.	Quotation Validity :
6.	<b>Delivery Schedule required by BHEL</b> As per our production plan, 2000 Nos. of IGBT's are required per month. Preferred delivery of 1st lot of IGBT to commence within 4 months from the date of PO. Bidder to quote best delivery schedule from the date of purchase order. <b>If Staggered, Lot size &amp; Delivery Schedule to mention.</b>	Bidder delivery schedule :

7	<b>Penalty for delayed delivery:</b> 0.5 % per week for undelivered portion subject to a maximum of 10 %. Loading factor will be applicable for non-acceptance of penalty clause, Non- Acceptance: 10% Partial Acceptance (X%): (10- X)%	Acceptable / Not Acceptable
8.	<b>Price basis:</b> <b>Firm:</b> Till the completion of tenure of rate contract or till completion of supplies Price to be quoted <b>per IGBT</b> .	Please confirm
9.	<b>GFR Certificate attached: (Mandatory as per Annexure-I)</b> <b>Refer clause-18 of ADDITIONAL TERMS AND CONDITIONS</b>	Please confirm
10.	<b>MII certificate attached:</b> <b>Refer clause-19 of ADDITIONAL TERMS AND CONDITIONS</b>	Please confirm
11.	<b>Bank Account Details of Foreign suppliers</b>	Provide Details
12.	<b>Mention the Government E-Marketplace (GeM) Seller ID</b> <b>(Applicable for only INDIAN BIDDERS):</b>	Provide Details

Place:

Date:

**Signature of Tenderer with Seal**

# UNPRICED BID

RFQ No. : JKNM210001 dated 15.04.2021

Supplier Name :  
Offer Ref :

Sl. No.	Item Description	Quantity offered	Currency
1	DV0688173315 IGBT 4500V 1200A * HSN/SAC : 7318 Test Certificate IGBT 4500V 1200A. PURCHASE SPECIFICATION: PS4062320	18,000 Nos.	

**NOTE:**

Technical and commercial terms shall be as per techno-commercial bid.

Place:

Date:

**Signature of Tenderer with Seal**

## PRICE BID

**RFQ No.** : JKNM210001 dated 15.04.2021

**Supplier Name** :

**Offer Ref** :

Sl. No.	Item Description	Quantity offered	Price per IGBT	Currency
1	DV0688173315 IGBT 4500V 1200A * HSN/SAC : 7318 IGBT 4500V 1200A. PURCHASE SPECIFICATION: PS4062320	18,000 Nos.		

**NOTE:**

Technical and commercial terms shall be as per techno-commercial bid.

Place:

Date:

**Signature of Tenderer with Seal**

**ANNEXURE-I**

**ON BIDDERS LETTER HEAD**

**Date:**

To,

M/s Bharat Heavy Electricals Ltd.  
Electronics Division, Mysore Road,  
Bangalore – 560026

**Sub:** Model Clause / Certificate as per Annex-III (Tenders) of Restrictions Under Rule 144 (xi) of the General Financial Rules (GFRs) 2017, Dated 23.07.2020.

**Ref:** BHEL Tender / RFQ / NIT Number .....

I..... **[Write name of Authorized person]** Authorized signatory for M/s ..... **[Write Company Name]** have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India , we certify that this bidder M/s .....**[Bidder Name & address]** is not from such a country or , if from such a country **[Tick appropriate option & cut the other one]**, has been registered with the competent authority . We hereby certify that we fulfill all requirements in this regard and is eligible to be considered **[attach evidence of valid registration certificate with competent authority]**.

For M/s .....

Authorized Signatory  
(with company seal & Name)

**ANNEXURE-II**

**Date:**

To,

M/s Bharat Heavy Electricals Ltd.  
Electronics Division, Mysore Road,  
Bangalore – 560026

**Sub:** Model Clause / Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 13.06.2020.

**Ref:** BHEL Tender / RFQ / NIT Number .....

I..... (Authorized signatory for M/s .....) a 'Class-I Local Supplier' / 'Class-II Local Supplier' at the time of tender, bidding or solicitation hereby confirm that the item meets the Local Content requirement for 'Class-I Local Supplier' / 'Class-II Local Supplier' (Tick appropriate option & cut the other one) and the Local Content percentage is .....

The address is as below, where the local content / value addition is made:

[Factory Address]

For M/s .....

Authorized Signatory  
(With company seal & Name)

**INTEGRITY PACT**

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

\_\_\_\_\_, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

**Preamble**

The Principal intends to award, under laid-down organizational procedures, contract/s for

\_\_\_\_\_

\_\_\_\_\_. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

**Section 1- Commitments of the Principal**

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
- 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions:



## **Section 2 - Commitments of the Bidder(s)/ Contractor(s)**

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

## **Section 3 - Disqualification from tender process and exclusion from future contracts**

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

## **Section 4 - Compensation for Damages**

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to

demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

#### **Section 5 - Previous Transgression**

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors**

- 6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors:
- 6.2 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

#### **Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

#### **Section 8 - Independent External Monitor(s)**

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.



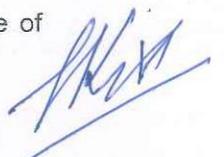
- 8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.9 IEM should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organisation.
- 8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.12 The word 'Monitor' would include both singular and plural.

### Section 9 - Pact Duration

- 9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.
- 9.2 If any claim is made/ lodged during currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

### Section 10 - Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.



- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.



For & On behalf of the Principal

ಜಿತ್ಯೆಂದ್ರ ಕುಮಾರ್ ನಿರಂಜನ್, ಉಪ ವ್ಯವಸ್ಥಾಪಕರು/ಉ.ಬೋ. - ೨೦.೦೦-೫೦೬೬  
 जितेंद्र कुमार निरंजन, उप प्रबंधक/एस.ए.-एम.एम.-क्रय  
 JITENDRA KUMAR NIRANJAN, DY. MANAGER/SA-MM-PURCHASE  
 BHEL-EDN, MYSURU ROAD, BENGALURU-560026

(Office Seal)

For & On behalf of the Bidder/

Contractor

(Office Seal)

Place

*Bangalore*

Date

Witness: \_\_\_\_\_

(Name & Address) \_\_\_\_\_

Witness: \_\_\_\_\_

(Name & Address) \_\_\_\_\_