

**Volume – I**

**Tender Notification for**

**RATE CONTRACT FOR THE PROCUREMENT OF  
VARIOUS RATINGS OF AIR CIRCUIT BREAKER IN  
BRPL**

**CMC/BR/24-25/RB/PR/RJ/1204**

**Due Date for Submission of Bids: 28.06.2024**

**BSES RAJDHANI POWER LTD (BRPL)  
BSES Bhawan, Nehru Place, New Delhi-110019  
Corporate Identification Number: U74899DL2001PLC111527  
Telephone Number: +91 11 3009 9999  
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**Section – I**  
**REQUEST FOR QUOTATION**

**Tender Notification: CMC/BR/24-25/RB/PR/RJ/1204**

**Rate Contract for the Procurement of Various Ratings of  
Air Circuit Breaker in BRPL**

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**SECTION – I: REQUEST FOR QUOTATION****1.0 Event Information**

**1.01** BRPL invites sealed tenders for supply of Air Circuit Breaker from the manufacturers. The bidder must qualify the technical requirements as specified in clause 2.0 stated below. The sealed envelopes shall be duly super scribed as — **“BID FOR RATE CONTRACT FOR THE SUPPLY OF AIR CIRCUIT BREAKER FOR VARIOUS SITES OF BRPL ,TENDER NOTICE CMC/BR/24-25/RB/PR/RJ/1204 DUE FOR SUBMISSION ON DT. 28.06.2024”**.

Sl. No.	Item Description	Specification	Requirement	Estimated Cost
			Total Qty.	
<b>BRPL, DELHI</b>				
1	Various Ratings of ACB for Various Sites in BRPL	SECTION V	3033 Nos	25 Cr

**Note: Quantity may vary to any extent of +/- 30% of above mentioned total quantity.**

**1.02** The schedule of specifications with detail terms & conditions can be obtained from address given below against demand draft/Pay Order of **Rs.1180/- with GST-**, drawn in favour of **BSES RAJDHANI POWER LTD**, payable at New Delhi. The sale of tender documents will be issued from **09.06.2024** onwards on all working days upto **20.06.2024**. The tender documents can also be downloaded from the website **“www.bsesdelhi.com”**.

In case tender papers are downloaded from the above website, then the bidder has to enclose a demand draft covering the cost of bid documents as stated above in a separate envelope with suitable superscription —**“Cost of Bid Documents: Tender Notice Ref: CMC/BR/24-25/RB/PR/RJ/1204”**. This envelope should accompany the Bid Documents.

**1.03** Offers will be received upto **1000 Hrs. on dt. 28.06.2024** as indicated earlier and will be opened at the address given below dt. **28.06.2024 at 1415 Hrs.** in the presence of authorized representatives of the bidders. The schedule of specifications with detail terms & conditions are enclosed. It is the sole responsibility of the bidder to ensure that the bid documents reach this office on or before the due date.

**HEAD OF THE DEPARTMENT, 1st FLOOR, ‘C’ BLOCK,  
CONTRACTS & MATERIALS DEPARTMENT, BSES RAJDHANI POWER LTD,  
BSES BHAWAN,  
NEHRU PLACE, NEW DELHI-110019.**

**1.04** BRPL reserves the right to accept/ reject any or all Tenders without assigning any reason thereof and alter the quantity of materials mentioned in the Tender documents at the time of placing purchase orders. Tender will be summarily rejected if:

- i) Earnest Money Deposit (EMD) @ 1% (One percent) of the Tender value i.e. **Rs.25,00,000/-** is not deposited in shape of Bank Draft in favour of BSES RAJDHANI POWER LTD, payable at New Delhi or Bank Guarantee executed on favour of BSES RAJDHANI POWER LTD.
- ii) The offer does not contain “FOR, NEW DELHI price indicating break-up towards all taxes & duties”.
- iii) Complete Technical details are not enclosed.
- iv) Tender is received after due time due to any reason.

**1.05** BRPL reserves the right to reject any or all bids or cancel/ withdraw the invitation for bids without assigning any reason whatsoever and in such case no bidder/ intending bidder shall have any claim arising out of such action time of placing purchase orders.

## **2.0 Qualification Criteria:-**

The prospective bidder must qualify all of the following requirements to be eligible to participate in the bidding. Bidders who meet following requirements will be considered as successful bidder and management has a right to disqualify those bidders who do not meet these requirements.

- 1) The bidder should have own manufacturing facility in India for 400 Amp, 1250 Amp, 2000 Amp or higher ratings of ACB.  
Or  
The bidder should be an authorized panel/enclosure manufacturer of ACB manufacturer (OEM) established in India since last 3 years. If the Bidder is an authorized panel/enclosure manufacturer of OEM, a letter of authorization from OEM shall be submitted along with the bid. Also, such bidder shall submit a backup warranty from OEM along with bid on NIT terms & conditions. *Manufacturing and factory incorporation certificate / Undertaking .The details of manufacturing units, locations and works from where supply against this tender shall be proposed to be furnished.*
- 2) The bidder should have supplied minimum 300 numbers LT ACBs of 400 A ratings or higher ratings in last 5 years from the date of bid opening to any utilities/SEB's/PSU's/reputed company wherein the end user shall be Utility/SEB's/PSU's.  
*i. Summary list of executed Purchase orders, ii. Purchase order copies  
iii Material delivery clearance certificate copy or Delivery completion certificates or Invoice Copies*
- 3) Performance certificate for minimum 2 year satisfactory performance for ACB of similar rating or higher ratings supplied in last 7 years from the date of bid opening from at least two utilities/ SEB's/ PSU's/ reputed company wherein the end user shall be utilities/ SEB's/ PSU's.

In case of bidder has a previous association with BRPL/BYPL for similar product and service, the performance feedback for that bidder by BRPL/BYPL shall only be considered irrespective of performance certificate issued by any third organization.-  
*Performance certificates*

- 4) The bidder should have servicing, repairing, testing & refurbishment facility in INDIA with necessary spares and testing equipments for providing prompt after sales service for ACB..- *Relevant Details/certificates/Undertaking ,(Details of the set-up available shall be brought out in the offer. the bidder shall also submit undertaking along with the bid confirming the infrastructure details submitted).*
- 5) The bidder should have manufacturing capacity of minimum 50 nos. ACB's per month.-  
*Installed Capacity Certificate.*
- 6) The bidder must possess valid ISO 9001:2015 certification.- *Valid copy of Certification*
- 7) Bidder should have Average Annual Sales Turnover of Rs 10 Crores or more in last three (3) Financial Years (i.e., FY 2021-22, 2022-23 & 2023-24).. *Balance Sheet / Duly certified CA certificate to be submitted*
- 8) The Bidder shall submit an undertaking that “No Litigation” is pending with the BYPL or its Group/Associates Companies as on date of bid opening.- *Self Undertaking*
- 9) An undertaking (self-certificate) that the bidder has not been blacklisted/debarred by any central/state government institution/Electricity utilities as on date of bid opening- *Self Undertaking*
- 10) The bidder must have valid PAN No., GST Registration Number, in addition to other statutory compliances. The bidder must submit the copy of registrations and submit an undertaking that the bidder shall comply all the statutory compliances as per the laws/rules etc. before the start of the work- *Relevant Statutory Documents Copy/Self Undertaking*

**In case bidder is an authorized panel/enclosure manufacturer of ACB manufacturer (OEM) established in India since last 3 years; the credentials of the OEM can be submitted as compliance to the QC requirements mentioned above against below mentioned points:**

- 11) The bidder should have supplied minimum 300 numbers LT ACBs of 400 A ratings or higher ratings in last 5 years from the date of bid opening to any utilities/SEB's/PSU's/reputed company wherein the end user shall be Utility/SEB's/PSU's. *i. Summary list of executed Purchase orders, ii. Purchase order copies iii Material delivery clearance certificate copy or Delivery completion certificates or Invoice Copies*
- 12) Performance certificate for minimum 2 year satisfactory performance for ACB of similar rating or higher ratings supplied in last 7 years from the date of bid opening

from at least two utilities/ SEB's/ PSU's/ reputed company wherein the end user shall be utilities/ SEB's/ PSU's.

In case of bidder has a previous association with BRPL/BYPL for similar product and service, the performance feedback for that bidder by BRPL/BYPL shall only be considered irrespective of performance certificate issued by any third organization.-  
*Performance certificates*

- 13) The bidder should have servicing, repairing, testing & refurbishment facility in INDIA with necessary spares and testing equipments for providing prompt after sales service for ACB.- *Relevant Details/certificates/Undertaking* ,(Details of the set-up available shall be brought out in the offer. the bidder shall also submit undertaking along with the bid confirming the infrastructure details submitted).
- 14) The bidder should have manufacturing capacity of minimum 50 nos. ACB's per month.- *Installed Capacity Certificate.*

### 3.0 Bidding and Award Process

Bidders are requested to submit their questions regarding the RFQ or the bidding process after review of this RFQ. BRPL response to the questions raised by various bidders will be distributed to all participating bidders through website.

#### a. Time schedule of the bidding process

The bidders on this RFQ package should complete the following within the dates specified as under:

S.No.	Steps	Activity description	Due date
1	Technical Queries	All Queries related to RFQ	On or before 22.06.2024 1500 Hrs.
2	Technical Offer	Documentary evidence in support of qualifying criteria. Technical Literature/ GTP/ Drawings/ Type test report, if any, etc., Testing facilities, any other relevant document, acceptance to commercial terms & conditions viz. delivery Schedule/ Period, Payment terms, PBG etc. Quality assurance plan, Deviation from the specification, list of plant & machinery and testing equipments Unpriced items.	28.06.2024, 1000 Hrs
3	Commercial Offer	Prices for Power Transformer and Break up regarding basic price and taxes. Delivery commitment	28.06.2024, 1000 Hrs
4	Opening of technical bid	As per RFQ	28.06.2024, 1415 Hrs

This is a two part bid process. Bidders are to submit the bids (a) Technical Bid (b) Price Bid. Both these parts should be furnished in separate sealed covers superscribing with specification no., validity etc, with particulars as **Part-I “Technical Particulars & Commercial Terms & Conditions”** and **Part-II “Financial bid”** and these sealed envelopes should again be placed in another sealed cover which shall be submitted before the due date & time specified.

**Bidders are requested to submit the bid in one original plus one copy in duplicate.**

- **The Part-I (Technical Bid)** - Technical Bid should not contain any cost information whatsoever. In case of Bids where the qualification requirements, technical suitability and other requirements are found to be inadequate, Part-II “Financial Bid” will be returned unopened.
- **The Part-II (Financial Bid)** - Qualified bidders will be intimated after technical evaluation of all the bids is completed. The date and time of same shall be intimated in due course to the qualified bidders. Notwithstanding anything stated above, the Purchaser reserves the right to assess bidder’s capability to perform the contract, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final.

#### **4.0 Award Decision**

Purchaser intends to award the business on a lowest bid basis, so suppliers are encouraged to bid competitively. The decision to place purchase order / letter of acceptance solely depends on purchaser on the cost competitiveness across multiple lots, quality, delivery and bidder’s capacity, in addition to other factors that Purchaser may deem relevant.

The purchaser reserves all the rights to award the contract to one or more bidders so as to meet the delivery requirement or nullify the award decision without any reason.

BSES reserves the right to split the tender quantity amongst techno commercially qualified bidders on account of delivery requirement in tender, quantity under procurement etc.

Splitting of tender quantity amongst more than one bidder shall be governed by below mentioned guidelines:

- If the quantity is to be split among 2 bidders, it will be done in the ratio of 70:30 on L1 price.
- If the quantity is to be split among 3 bidders, it will be done in the ratio of 60:25:15 on L1 price.
- In case quantity needs to be distributed and order splitting is required, distribution of quantity shall be maximum among three (3) bidders.

In the event of your bid being selected by purchaser (and / or its affiliates) and your subsequent DEFAULT on your bid; you will be required to pay purchaser (and / or its affiliates) an amount equal to the difference in your bid and the next lowest bid on the quantity declared in RFQ.



In case any supplier is found unsatisfactory during the delivery process, the award will be cancelled and BRPL reserves the right to award other suppliers who are found fit.

**Quantity Variation:** The purchaser reserves the rights to vary the quantity by +/- **30%** of the tender quantity.

**Repeat Order:** BRPL reserves the right to place repeat order at the same rates & terms and conditions as per this tender against additional requirement subject to mutual agreement between BRPL & supplier.

**5.0 Market Integrity:**

We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms & Conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserves the right to exclude a bidder from participating in future markets due to the bidder’s violation of any of the rules or obligations contained in the Terms & Condition. Bidders who violate the marketplace rules or engage in behavior that disrupts the fair execution of the marketplace restricts a bidder to length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace.
- Breach of the terms of the published in Request For Quotation.

**6.0 Supplier Confidentiality**

All information contained in this RFQ is confidential and may not be disclosed, published or advertised in any manner without written authorization from BRPL. This includes all bidding information submitted.

All RFQ documents remain the property of BRPL and all suppliers are required to return these documents to BRPL upon request.

Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

**7.0 Contact Information**

All communication as regards this RFQ shall be made (i) in English, (ii) in writing and (iii) sent by mail, facsimile to:

	<b>Technical</b>	<b>Commercial</b>
Contact Name	Mr. Amit Tomar Copy to Mr. Sheshadri Krishnapura	Ms Rachna Jain Copy to Mr. Pankaj Goyal
Address	BSES RAJDHANI POWER LTD, 2nd Floor, B Block, Nehru Place, New Delhi – 110019	C&M Deptt. 1st floor, D- Block, BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi -110019
Email-ID	<a href="mailto:amit.as.tomar@relianceada.com">amit.as.tomar@relianceada.com</a> <a href="mailto:sheshadri.krishnapura@relianceada.com">sheshadri.krishnapura@relianceada.com</a>	<a href="mailto:rachna.jain@relianceada.com">rachna.jain@relianceada.com</a> <a href="mailto:pankaj.goyal@relianceada.com">pankaj.goyal@relianceada.com</a>

**SECTION – II**

**INSTRUCTION TO BIDDERS (ITB)**

**RATE CONTRACT FOR THE SUPPLY OF VARIOUS  
RATINGS OF ACB IN BRPL**

**CMC/BR/24-25/RB/PR/RJ/1204**

**1.00** BSES Rajdhani power Ltd, hereinafter referred to as the Purchaser are desirous of implementing the various Systems Improvement/Repair & Maintenance works at their respective licensed area in Delhi. The Purchaser has now floated this tender for procurement of ACB as notified earlier in this bid document.

**2.00 SCOPE OF WORK**

The scope shall include Design, Manufacture, Testing at works conforming to the Technical Specifications enclosed along with Packing, Forwarding, Freight and Unloading and proper stacking at Purchaser's stores.

**3.00 DISCLAIMER**

3.01 This Document includes statements, which reflect various assumptions, which may or may not be correct. Each Bidder/ Bidding Consortium should conduct its own estimation and analysis and should check the accuracy, reliability and completeness of the information in this Document and obtain independent advice from appropriate sources in their own interest.

3.02 Neither Purchaser nor its employees will have any liability whatsoever to any Bidder or any other person under the law or contract, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage whatsoever which may arise from or be incurred or suffered in connection with anything contained in this Document, any matter deemed to form part of this Document, provision of Services and any other information supplied by or on behalf of Purchaser or its employees, or otherwise a rising in any way from the selection process for the Supply.

3.03 Though adequate care has been taken while issuing the Bid document, the Bidder should satisfy itself that Documents are complete in all respects. Intimation of any discrepancy shall be given to this office immediately.

3.04 This Document and the information contained herein are Strictly Confidential and are for the use of only the person(s) to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient's professional advisors).

**4.00 COST OF BIDDING**

The Bidder shall bear all cost associated with the preparation and submission of its Bid and Purchaser will in no case be responsible or liable for those costs.

**B BIDDING DOCUMENT**

**5.00 BIDDING DOCUMENTS**

5.01 The Scope of Work, Bidding Procedures and Contract Terms are described in the Bidding Documents. In addition to the covering letter accompanying Bidding Documents, the Bidding Documents include:

**Volume –I**

- a) Request for Quotation (RFQ) - Section – I
- b) Instructions to Bidders (ITB) - Section – II
- c) General Conditions of Contract - Section - III
- d) Quantity and delivery requirement - Section –IV
- e) Technical Specifications (TS) - Section –V

**Volume – II**

- a) Bid Form - Annexure – I
- b) Bid Format - Annexure – II
- c) Price Schedule - Annexure – III
- d) Commercial Terms & Conditions - Annexure - IV
- e) No Deviation Sheet - Annexure - V
- f) Qualification Criterion - Annexure - VI

5.02 The Bidder is expected to examine the Bidding Documents, including all Instructions, Forms, Terms and specifications. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect will may result in the rejection of the Bid.

**6.00 AMENDMENT OF BIDDING DOCUMENTS**

6.01 At any time prior to the deadline for submission of Bids, the Purchaser may for any reasons, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by Amendment.

6.02 The Amendment shall be part of the Bidding Documents, pursuant to Clause 5.01, and it will be notified in writing by Fax/e-mail to all the Bidders who have received the Bidding Documents and confirmed their participation to Bid, and will be binding on them.

6.03 In order to afford prospective Bidders reasonable time in which to take the Amendment into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of Bids.

**C PREPARATION OF BIDS**

**7.00 LANGUAGE OF BID**

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

**8.00 DOCUMENTS COMPRISING THE BID**

The Bid prepared and submitted by the Bidder shall comprise the following components:

- a) Bid Form ,Price & other Schedules (STRICTLY AS PER FORMAT)and Technical Data Sheets completed in accordance with Clause 9.0, 10.0, 11.0 and Technical Specification;
- b) All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.
- c) Power of Attorney or Authorization letter indicating that the person(s) signing the Bid have the authority to sign the Bid and thus that the Bid is binding upon the Bidder during the full period of its validity, in accordance with clause 12.0.

#### **.9.00 BID FORM**

9.01 The Bidder shall complete an “Original” and another one “Copy” of the Bid Form and the appropriate Price & Other Schedules and Technical Data Sheets.

#### **9.02 EMD**

Pursuant to Clause 8.0(b) above, the bidder shall furnish, as part of its bid, a EMD amounting to 1% of the total bid value (FOR Destination) i.e. Rs. **25,00,000/-**. The EMD is required to protect the Purchaser against the risk of Bidder’s conduct which would warrant the security’s forfeiture.

The EMD shall be denominated in the currency of the bid, and shall be in the following form:

- a) A bank guarantee issued by any scheduled bank strictly as per the form at enclosed and shall be valid for a period of thirty (30) days beyond the validity of the bid.
- b) Bank Draft in favour of BSES RAJDHANI POWER LTD, payable at New Delhi.

Unsuccessful bidders’ EMD will be discharged or returned as promptly as possible as but not later than thirty (30) days after the expiration of the period of bid validity.

The successful bidder’s EMD will be discharged upon furnishing the performance security. The EMD may be forfeited:

- a) If the Bidder:
  - i) Withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form; or
- b) in the case of a successful Bidder, if the Bidder fails:
  - i) to sign the Contract, or
  - ii) to furnish the required performance security.

#### **10.00 BID PRICES**

10.01 Bidders shall quote for the entire Scope of Supply with a break-up of prices for individual items. The total Bid Price shall also cover all the Supplier's obligations mentioned in or reasonably to be inferred from the Bidding Documents in respect of Design, Supply, Transportation to site, all in accordance with the requirement of Bidding Documents The Bidder shall complete the appropriate Price Schedules included herein , stating the Unit Price for each item & total Price.

10.02 The prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during execution of the supply work, breakup of price constituents, should be there. Prices quoted by the Bidder shall be—Firm “and not subject to any price adjustment during the performance of the Contract. A Bid submitted with an adjustable price quotation will be treated as non -responsive and rejected.

### **11.00 BID CURRENCIES**

Prices shall be quoted in **Indian Rupees (INR) only**.

### **12.00 PERIOD OF VALIDITY OF BIDS**

12.01 Bids shall remain valid for **120 days** post bid date.

12.02 Notwithstanding Clause12.01 above, the Purchaser may solicit the Bidder’s consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing by Fax/e-mail.

### **13.00 ALTERNATIVE BIDS**

Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions of Clause 22.03 & 22.04 regarding the rejection of Bids, which are not substantially responsive to the requirements of the Bidding Documents.

### **14.00 FORMAT AND SIGNING OF BID**

14.01 The original Bid Form and accompanying documents (as specified in Clause9.0),clearly marked "Original Bid", plus one copy must be received by the Purchaser at the date, time and place specified pursuant to Clauses15.0 and16.0. In the event of any discrepancy between the original and the copies, the original shall govern.

14.02 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. Such authorization shall be indicated by written Power-of-Attorney accompanying the Bid.

14.03 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.

## **D SUBMISSION OF BIDS**

## **15.0 SEALING AND MARKING OF BIDS**

- 15.01 Bid submission: One original & one Copy (hard copies) of all the Bid Documents shall be sealed and submitted to the Purchaser before the closing time for submission of the bid.
- 15.02 The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be superscribed with —**Technical & EMD**. The Financial bid shall be inside another sealed envelope with superscription — **Financial Bid**. Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original and Copy. The envelopes should be superscribed with —“**Tender Notice No, Due date of submission, Tender opening date**”.
- 15.03 The Bidder has the option of sending the Bids in person. Bids submitted by Telex/ Telegram/ Fax will not be accepted. No request from any Bidder to the Purchaser to collect the proposals from Airlines/Cargo Agents etc shall be entertained by the Purchaser.

## **16.0 DEADLINE FOR SUBMISSION OF BIDS**

- 16.01 The original Bid, together with the required copies, must be received by the Purchaser at the address specified not later than **1500 HRS on 06.01.2023**.
- 16.02 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with Clause 9.0, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

## **17.0 ONE BID PER BIDDER**

Each Bidder shall submit only one Bid. A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

## **18.00 LATE BIDS**

Any Bid received by the Purchaser after the deadline for submission of Bids prescribed by the Purchaser, pursuant to Clause 16.0, will be declared "Late" and rejected and returned unopened to the Bidder.

## **19.00 MODIFICATIONS AND WITHDRAWAL OF BIDS**

- 19.01 The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission.

## **E. EVALUATION OF BID**

## **20.00 PROCESS TO BE CONFIDENTIAL**

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other

persons not officially concerned with such process. Any effort by a Bidder to influence the Purchaser's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

## **21.00 CLARIFICATION OF BIDS**

To assist in the examination, evaluation and comparison of Bids, the Purchaser may, at its discretion, ask the bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

## **22.00 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS**

- 22.01 Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order.
- 22.02 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.
- 22.03 Prior to the detailed evaluation, Purchaser will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.
- 22.04 Bid determined as not substantially responsive will be rejected by the Purchaser and/or the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

## **23.0 EVALUATION AND COMPARISON OF BIDS**

- 23.01 The evaluation of Bids shall be done based on the delivered cost competitiveness basis.
- 23.02 The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated. Subsequently, the Financial Proposals along with supplementary Financial Proposals, if any, of Bidders with Techno-commercially Acceptable Bids shall be considered for final evaluation.
- 23.03 The Purchaser's evaluation of a Bid will take into account, in addition to the Bid price, the following factors, in the manner and to the extent indicated in this Clause:
- (a) Supply Schedule
  - (b) Deviations from Bidding Documents



Bidders shall base their Bid price on the terms and conditions specified in the Bidding Documents. The cost of all quantifiable deviations and omissions from the specification, terms and conditions specified in Bidding Documents shall be evaluated. The Purchaser will make its own assessment of the cost of any deviation for the purpose of ensuring fair comparison of Bids.

- 23.04 Any adjustment in price, which results from the above procedure, shall be added for the purposes of comparative evaluation only to arrive at an "Evaluated Bid Price". Bid Prices quoted by Bidders shall remain unaltered.

## **F. AWARD OF CONTRACT**

### **24.0 CONTACTING THE PURCHASER**

- 24.01 From the time of Bid submission to the time of contract award, if any Bidder wishes to contact the Purchaser on any matter related to the Bid, it should do so in writing.
- 24.02 Any effort by a Bidder to influence the Purchaser and/or in the Purchaser's decisions in respect of Bid evaluation, Bid comparison or Contract Award, will result in the rejection of the Bidder's Bid.

### **25.0 THE PURCHASER 'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS**

The Purchaser reserves the right to accept or reject any Bid and to annul the Bidding process and reject all Bids at anytime prior toward of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

### **26.0 AWARD OF CONTRACT**

The Purchaser will award the Contract to the successful Bidder whose Bid has been Determined to be the lowest-evaluated responsive Bid, provided further that the Bidder has been determined to be qualified to satisfactorily perform the Contract. Purchaser reserves the right to award order other bidders in the tender, provided it is required for progress of project & provided he agrees to come to the lowest rate.

### **27.0 THE PURCHASER'S RIGHT TO VARY QUANTITIES**

The Purchaser reserves the right to vary the quantity i.e. increase or decrease the numbers/quantities without any change in terms and conditions during the execution of the Order.

### **28.0 LETTER OF INTENT/ NOTIFICATION OF AWARD**

The letter of intent/ Notification of Award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the

lowest (L1). The successful Bidder shall be required to furnish a letter of acceptance within 7 days of issue of the letter of intent /Notification of Award by Purchaser.

## **29.0 PERFORMANCE BANK GUARANTEE**

Bidder shall initially submit the PBG with in 28 days of placement of RC for 1% of RC Value (including GST) valid till RC validity period plus three month claim period. If there is extension in RC validity date, the BG shall be extended accordingly .

Upon submission of the performance security, the EMD shall be released.

Thereafter bidder shall submit PBG on Purchase Order (PO) basis for 10% of the PO value (including GST).The Performance Bond shall be valid for a period of twenty four months (24) from the date of the commissioning or thirty months (30) from the date of receipt of material (last consignment of PO) at site/stores whichever is earlier plus 3 months towards claim period.

## **30.00 CORRUPT OR FRADULENT PRACTICES**

30.01 The Purchaser requires that the Bidders observe the highest standard of ethics during the procurement and execution of the Project. In pursuance of this policy, the Purchaser:

- (a) Defines, for the purposes of this provision, the terms set forth below as follows:
  - i) "Corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them ,or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; and
  - ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders (prior to or after Bid submission) designed to establish Bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition.
- (b) Will reject a proposal forward if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question ;
- (c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.

30.02 Furthermore, Bidders shall be aware of the provision stated in the General Conditions of Contract.

**SECTION – III**

**GENERAL CONDITIONS OF CONTRACT (GCC)**

**RATE CONTRACT FOR THE SUPPLY OF VARIOUS  
RATINGS OF AIR CIRCUIT BREAKER IN BRPL**

**CMC/BR/24-25/RB/PR/RJ/1204**

**GENERAL TERMS AND CONDITIONS****1.0 General Instructions**

- 1.01 All the Bids shall be prepared and submitted in accordance with these instructions.
- 1.02 Bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Purchaser will in no case shall be responsible or liable for these costs.
- 1.03 The Bid should be submitted by the Bidder in whose name the bid document has been issued and under no circumstances it shall be transferred/ sold to the other party.
- 1.04 The Purchaser reserves the right to request for any additional information and also reserves the right to reject the proposal of any Bidder, if in the opinion of the Purchaser, the data in support of RFQ requirement is incomplete.
- 1.05 The Bidder is expected to examine all instructions, forms, terms & conditions and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a Bid not substantially responsive to the Bid Documents in every respect may result in rejection of the Bid. However, the Purchaser's decision in regard to the responsiveness and rejection of bids shall be final and binding without any obligation, financial or otherwise, on the Purchaser.

**2.0 Definition of Terms**

- 2.01 "Purchaser" shall mean BRPL Limited, on whose behalf this bid enquiry is issued by its authorized representative / officers.
- 2.02 "Bidder" shall mean the firm who quotes against this bid enquiry issued by the Purchaser. "Supplier" or "Suppliers" shall mean the successful Bidder and/or Bidders whose bid has been accepted by the Purchaser and on whom the "Letter of Acceptance" is placed by the Purchaser and shall include his heirs, legal representatives, successors and permitted assigns wherever the context so admits.
- 2.03 "Supply" shall mean the Scope of Contract as described.
- 2.04 "Specification" shall mean collectively all the terms and stipulations contained in those portions of this bid document known as RFQ, Commercial Terms & Condition, Instructions to Bidders, Technical Specifications and the Amendments, Revisions, Deletions or Additions, as may be made by the Purchaser from time to time.
- 2.05 "Letter of Acceptance" shall mean the official notice issued by the Purchaser notifying the Supplier that his proposal has been accepted and it shall include amendments thereto, if any, issued by the Purchaser. The "Letter of Acceptance" issued by the Purchaser shall be binding on the "Supplier" The date of Letter of Acceptance shall be taken as the effective date of the commencement of contract.

- 2.06 “Month” shall mean the calendar month and “Day” shall mean the calendar day.
- 2.07 “Codes and Standards” shall mean all the applicable codes and standards as indicated in the Specification.
- 2.08 “Offer Sheet” shall mean Bidder's firm offer submitted to BRPL in accordance with the specification.
- 2.09 “Contract” shall mean the “Letter of Acceptance” issued by the Purchaser.
- 2.10 “Contract Price” shall mean the price referred to in the “Letter of Acceptance”.
- 2.11 “Contract Period” shall mean the period during which the “Contract” shall be executed as agreed between the Supplier and the Purchaser in the Contract inclusive of extended contract period for reason beyond the control of the Supplier and/or Purchaser due to force majeure.
- 2.12 “Acceptance” shall mean and deemed to include one or more of the following as will be stipulated in the specification:
- a) The written acceptance of material by the inspector at suppliers works to ship the materials.
  - b) Acceptance of material at Purchaser site stores after its receipt and due inspection/ testing and release of material acceptance voucher.
  - c) Where the scope of the contract includes supply, acceptance shall mean issue of necessary equipment / material takeover receipt after installation & commissioning and final acceptance.
- 3.0 Contract Documents & Priority**
- 3.01 Contract Documents: The terms and conditions of the contract shall consist solely of these RFQ conditions and the offer sheet.
- 3.02 Priority: Should there be any discrepancy between any term hereof and any term of the Offer Sheet, the terms of these RFQ shall prevail.
- 4.0 Scope of Supply - General**
- 4.01 The “Scope of Supply” shall be on the basis of Bidder’s responsibility, completely covering the obligations, responsibility and supplies provided in this Bid enquiry whether implicit or explicit.
- 4.02 Bidder shall have to quote for the Bill of quantities as listed in Section – IV of this RFQ.
- 4.03 Quantity variation and additional requirement if any shall be communicated to successful bidder during project execution.
- 4.04 All relevant drawings, data and instruction manuals.

**5.0 Quality Assurance and Inspection**

- 5.01 Immediately on award of contract, the bidder shall prepare detailed quality assurance plan / test procedure identifying the various stages of manufacture, quality checks performed at each stage, raw material inspection and the Customer hold points. The document shall also furnish details of method of checking, inspection and acceptance standards / values and get the approval of Purchaser before proceeding with manufacturing. However, Purchaser shall have right to review the inspection reports, quality checks and results of suppliers in house inspection department which are not Customer hold points and the supplier shall comply with the remarks made by purchaser or his representative on such reviews with regards to further testing, rectification or rejection, etc.
- 5.02 Witness and Hold points are critical steps in manufacturing, inspection and testing where the supplier is obliged to notify the Purchaser in advance so that it may be witnessed by the Purchaser. Final inspection is a mandatory hold point. The supplier needs to proceed with the work past a hold point only after clearance by purchaser or a witness waiver letter from BRPL.
- 5.03 The performance of waiver of QA activity by Purchaser at any stage of manufacturing does not relieve the supplier of any obligation to perform in accordance with and meet all the requirements of the procurement documents and also all the codes & reference documents mentioned in the procurement document nor shall it preclude subsequent rejection by the purchaser.
- 5.04 On completion of manufacturing the items can be dispatched only after issue of shipping release by the Purchaser.
- 5.05 All testing and inspection shall be done without any extra cost.
- 5.06 Purchaser reserve the right to send any material out of the supply to any recognized laboratory for testing and the cost of testing shall be borne by the Purchaser. In case the material is found not in order with the technical requirement / specification, the charges along with any other penalty which may be levied is to be borne by the bidder. To avoid any complaint the supplier is advised to send his representative to the stores to see that the material sent for testing is being sealed in the presence of bidders representative.
- 5.07 Bidder has to sign quality agreement before supply of the material.

**6.0 Packing, Packing List & Marking**

- 6.01 Packing: Supplier shall pack or shall cause to be packed all Commodities in boxes and containers and otherwise in such a manner as shall be reasonably suitable for shipment by road or rail to BRPL without undue risk of damage in transit.
- 6.02 Packing List: The contents of each package shall be itemized on a detailed list showing the exact weight and the extreme outside dimensions (length, width and height) of each container or box. One copy of the packing list shall be enclosed in each package delivered. There shall also be enclosed in one package a master packing list identifying each individual package,

which is part of the shipment. On any packaging where it is not feasible to place the packing list inside the container, all pertinent information shall be stenciled on the outside and will thus constitute a packing list.

## **7.01 Prices basis for supply of materials**

Bidders require quoting their prices on Landed Cost Basis and separate price for each item. For Supply to BRPL Delhi the price shall be inclusive of packing, forwarding, GST and freights. The above supply prices shall also include unloading at site stores. Transit and storage insurance will be arranged by BRPL; however bidder to furnish required details in advance for arranging the same by BRPL.

## **8.0 Variation in taxes, duties & levies:**

- 8.01 The total order value shall be adjusted on account of any variations in Statutory Levies imposed by Competent Authorities by way of fresh notification(s) within the stipulated delivery period only. However, incase of reduction in taxes, duties and levies, the benefits of the same shall be passed on to BUYER.
- 8.02 No other Taxes, Duties & Levies other than those specified above will be payable by BUYER except in case of new Levies, Taxes & Duties imposed by the Competent Authorities by way of fresh notification(s) subsequent to the issue of PURCHASE ORDER but within the stipulated delivery period.
- 8.03 Notwithstanding what is stated above, changes in Taxes, Duties & Levies shall apply only to that portion of PURCHASE ORDER not executed on the date of notification by Competent Authority. Further, changes in Taxes, Duties & Levies after due date of Delivery shall not affect PURCHASE ORDER Terms and Value.
- 8.04 PURCHASE ORDER value shall not be subject to any variation on account of variation in Exchange rate(s).

## **9.0 Taxes & Duties on raw materials & bought out components:**

- 9.01 Taxes & Duties on raw materials & bought out components are included in Order Value and are not subject to any escalation or variation for any reason whatsoever.
- 9.02 Taxes & Duties on raw materials & bought out components procured indigenously are included in Order Value and are not subject to any escalation or variation for any reason whatsoever.

## **10.0 Terms of payment and billing**

### **10.01 For Supply of Equipments:**

- 100% payment shall be made within 45 days from the date of receipt of material at store/ site against submission of 10 % performance bank guarantee. (Refer 10.01)

10.02 Bidder to submit the following documents against dispatch of each consignment:

- i) Consignee copy of LR
- ii) Supplier detailed invoice showing commodity description, quantity, unit price, total price and basis of delivery.
- iii) Original certificate issued by BRPL confirming receipt of material at site and acceptance of the same.
- iv) Dispatch clearance / inspection report in original issued by the inspection authority
- v) Packing List.
- vi) Test Reports
- vii) Guarantee Certificate.
- viii) Insurance policy to be obtained by supplier

### **11.0 Price Validity**

11.01 All bids submitted shall remain valid, firm and subject to unconditional acceptance by BRPL Delhi for 120 days post bid-date. For awarded suppliers, the prices shall remain valid and firm till contract completion.

### **12.0 Performance Guarantee**

12.01 Bidder shall initially submit the PBG with in 28 days of placement of RC for 1% of RC Value (including GST) valid till RC validity period plus three month claim period. If there is extension in RC validity date, the BG shall be extended accordingly .

Upon submission of the performance security, the EMD shall be released..

Thereafter bidder shall submit PBG on Purchase Order (PO) basis for 10% of the PO value (including GST).The Performance Bond shall be valid for a period of twenty four months (24) from the date of the commissioning or thirty months (30) from the date of receipt of material (last consignment of PO) at site/stores whichever is earlier plus 3 months towards claim period. It shall be in accordance with one of the following terms:

- a) Depositing pay order /demand draft of the relevant amount directly with BRPL at the address listed above or as otherwise specified by BRPL, either of which shall constitute the Performance Bond hereunder; or
- b) Bank guarantee from any nationalized bank in favour of BSES RAJDHANI POWER LTD (BRPL). The performance Bank guarantee shall be in the format as specified by BRPL.

### **13.0 Forfeiture**

13.01 Each Performance Bond established under Clause 10.0 shall contain a statement that it shall be automatically and unconditionally forfeited without recourse and payable against the



presentation by BRPL of this Performance Bond to the ICICI Bank at Mumbai, or to the relevant company/ correspondent bank referred to above, as the case may be, together with a simple statement that supplier has failed to comply with any term or condition set forth in the Contract.

- 13.02 Each Performance Bond established under will be automatically and unconditionally forfeited without recourse if BRPL in its sole discretion determines that supplier has failed to comply with any term or condition set forth in the contract.

#### **14.0 Release**

All Performance Bonds will be released without interest within seven (7) days from the last date up to which the Performance Bond has to be kept valid (as defined in Clause 10.0) except for the case set forth in Clause 21.0.

#### **15.0 Defects Liability Period**

- 15.01 The bidder to Guarantee the materials / items supplied against any defect of failure, which arise due to faulty materials, workmanship or design for the entire defects liability period. The Defect liability period shall be for 10 years with maintaining resistance less than 5 ohms from the date of commissioning or 6 months from the date of delivery whichever is earlier. If during the defects liability period any materials / items are found to be defective, these shall be replaced or rectified by the bidder at his own cost within 30 days from the date of receipt of intimation.

#### **16.0 Return, Replacement or Substitution.**

BRPL shall give Supplier notice of any defective Commodity promptly after becoming aware thereof. BRPL may in its discretion elect to return defective Commodities to Supplier for replacement, free of charge to BRPL, or may reject such Commodities and purchase the same or similar Commodities from any third party. In the latter case BRPL shall furnish proof to Supplier of the cost of such substitute purchase. In either case, all costs of any replacement, substitution, shipping, labour and other related expenses incurred in connection with the return and replacement or for the substitute purchase of a Commodity hereunder should be for the account of Supplier. BRPL may set off such costs against any amounts payable by BRPL to Supplier. Supplier shall reimburse BRPL for the amount, if any, by which the price of a substitute Commodity exceeds the price for such Commodity as quoted in the Bid.

#### **17.0 Effective Date of Commencement of Contract:**

- 17.01 The date of the issue of the Letter of Acceptance shall be treated as the effective date of the commencement of Contract.

#### **18.0 Time – The Essence of Contract**

- 18.01 The time and the date of completion of the “Supply” as stipulated in the Letter Of Acceptance / Purchase order issued to the Supplier shall be deemed to be the essence of the “Contract”. The Supply has to be completed not later than the aforesaid Schedule and date of completion of supply.

**19.0 The Laws and Jurisdiction of Contract:**

- 19.01 The laws applicable to this Contract shall be the Laws in force in India.
- 19.02 All disputes arising in connection with the present Contract shall be settled amicably by mutual consultation failing which shall be finally settled as per the rules of Arbitration and Conciliation Act, 1996 at the discretion of Purchaser. The venue of arbitration shall be at Mumbai in India

**20.0 Events of Default**

- 20.01 Events of Default. Each of the following events or occurrences shall constitute an event of default ("Event of Default") under the Contract:
- a) Supplier fails or refuses to pay any amounts due under the Contract;
  - b) Supplier fails or refuses to deliver Commodities conforming to this RFQ/ specifications, or fails to deliver Commodities within the period specified in P.O. or any extension thereof
  - c) Supplier becomes insolvent or unable to pay its debts when due, or commits any act of bankruptcy, such as filing any petition in any bankruptcy, winding-up or reorganization proceeding, or acknowledges in writing its insolvency or inability to pay its debts; or the Supplier's creditors file any petition relating to bankruptcy of Supplier;
  - d) Supplier otherwise fails or refuses to perform or observe any term or condition of the Contract and such failure is not remediable or, if remediable, continues for a period of 30 days after receipt by the Supplier of notice of such failure from BRPL.

**21.0 Consequences of Default.**

- a) If an Event of Default shall occur and be continuing, BRPL may forthwith terminate the Contract by written notice.
- b) In the event of an Event of Default, BRPL may, without prejudice to any other right granted to it by law, or the Contract, take any or all of the following actions;
  - i) present for payment to the relevant bank the Performance Bond;
  - ii) purchase the same or similar Commodities from any third party; and/or
  - iii) recover any losses and/or additional expenses BRPL may incur as a result of Supplier's default.

**22.0 Penalty for Delay**

- 22.01 If supply of items / equipments is delayed beyond the supply schedule as stipulated in purchase order then the Supplier shall be liable to pay to the Purchaser as penalty for delay, a sum of 1% (one percent) of the contract price for every week delay or part thereof for undelivered quantities.

22.02 The total amount of penalty for delay under the contract will be subject to a maximum of ten percent (10%) of the contract price for undelivered quantities.

22.03 The Purchaser may, without prejudice to any method of recovery, deduct the amount for such damages from any amount due or which may become due to the Supplier or from the Performance Bond or file a claim against the supplier.

### **23.0 Force Majeure**

#### 23.01 General

An "Event of Force Majeure" shall mean any event or circumstance not within the reasonable control directly or indirectly, of the Party affected, but only if and to the extent that:

- i) Such event or circumstance materially and adversely affects the ability of the affected Party to perform its obligations under this Contract, and the affected Party has taken all reasonable precautions, due care and reasonable alternative measures in order to prevent or avoid the effect of such event on the affected party's ability to perform its obligations under this Contract and to mitigate the consequences thereof.
- ii) For the avoidance of doubt, if such event or circumstance would not have materially and adversely affected the performance of the affected party had such affected party followed good industry practice, such event or circumstance shall not constitute force majeure.
- iii) Such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Contract.
- iv) Such Party has given the other Party prompt notice describing such events, the effect thereof and the actions being taken in order to comply with above clause.

23.02 Specific Events of Force Majeure subject to the provisions of above clause, Events of Force Majeure shall include only the following to the extent that they or their consequences satisfy the above requirements:

23.03 Mitigation of Events of Force Majeure Each Party shall:

- i) Make all reasonable efforts to prevent and reduce to a minimum and mitigate the effect of any delay occasioned by an Event of Force Majeure including recourse to alternate methods of satisfying its obligations under the Contract;
- ii) Use its best efforts to ensure resumption of normal performance after the termination of any Event of Force Majeure and shall perform its obligations to the maximum extent practicable as agreed between the Parties; and
- iii) Keep the other Party informed at regular intervals of the circumstances concerning the event of Force Majeure, with best estimates as to its likely continuation and what measures or contingency planning it is taking to mitigate and or terminate the Event of Force Majeure.

23.04 Burden of Proof In the event that the Parties are unable in good faith to agree that a Force Majeure event has occurred to an affected party, the parties shall resolve their dispute in

accordance with the provisions of this Agreement. The burden of proof as to whether or not a force majeure event has occurred shall be upon the party claiming that the force majeure event has occurred and that it is the affected party.

- 23.05 Termination for Certain Events of Force Majeure. If any obligation of any Party under the Contract is or is reasonably expected to be delayed or prevented by a Force Majeure event for a continuous period of more than 3 months, the Parties shall promptly discuss in good faith how to proceed with a view to reaching a solution on mutually agreed basis. If a solution on mutually agreed basis cannot be arrived at within a period of 30 days after the expiry of the period of three months, the Contract shall be terminated after the said period of 30 days and neither Party shall be liable to the other for any consequences arising on account of such termination.
- 23.06 Limitation of Force Majeure event. The Supplier shall not be relieved of any obligation under the Contract solely because cost of performance is increased, whether as a consequence of adverse economic consequences or otherwise.
- 23.07 Extension of Contract Period due to Force Majeure event The Contract period may be extended by mutual agreement of Parties by way of an adjustment on account of any period during which an obligation of either Party is suspended due to a Force Majeure event.
- 23.08 Effect of Events of Force Majeure. Except as otherwise provided herein or may further be agreed between the Parties, either Party shall be excused from performance and neither Party shall be construed to be in default in respect of any obligations hereunder, for so long as failure to perform such obligations shall be due to and event of Force Majeure."

#### **24.0 Transfer And Sub-Letting**

- 24.01 The Supplier shall not sublet, transfer, assign or otherwise part with the Contract or any part thereof, either directly or indirectly, without prior written permission of the Purchaser.

#### **25.0 Recoveries**

- 25.01 Whenever under this contract any money is recoverable from and payable by the bidder, the purchaser shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum due to which any time thereafter may become due from the supplier in this or any other contract. Should the sum be not sufficient to cover the full amount recoverable the bidder shall pay to the purchaser on demand the remaining balance.

#### **26.0 Waiver**

- 26.01 Failure to enforce any condition herein contained shall not operate as a waiver of the condition itself or any subsequent breach thereof.

#### **27.0 Indemnification**

- 27.01 Notwithstanding contrary to anything contained in this RFQ, Supplier shall at his costs and risks make good any loss or damage to the property of the Purchaser and/or the other Supplier engaged by the Purchaser and/or the employees of the Purchaser and/or employees of the

other Supplier engaged by the Purchaser whatsoever arising out of the negligence of the Supplier while performing the obligations under this contract.

**SECTION – IV: QUANTITY AND DELIVERY REQUIREMENT**

Sl. No.	Item Description	Specification	Requirement	Delivery Schedule	Location
BRPL,DELHI					
1	Supply of Various Ratings of ACB	SECTION V	3033 Nos	In lots as per PO /BRPL requirement.	Stores BRPL Delhi
TOTAL					

**BID FORM**

**Supply of Various Ratings of ACB**

To  
Head of the Department Contracts & Materials BSES Rajdhani Power Ltd BSES Bhawan, Nehru  
Place New Delhi– 110019  
Sir,

We understand that BRPL is desirous of procuring “Various Ratings of ACB” in its licensed distribution network area in Delhi. Having examined the Bidding Documents for the above named works, we the undersigned, offer to deliver the goods in full conformity with the Drawings, Conditions of Contract and specifications for the sum of AS PER PRICE BID ENCLOSED or such other sums as may be determined in accordance with the terms and conditions of the contract .The above amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.

If our Bid is accepted, we undertake to deliver the entire goods as per delivery schedule given by you from the date of award of purchase order/letter of intent.

If our Bid is accepted, we will furnish a performance bank guarantee for an amount of 10% (Ten) percent of the total contract value for due performance of the Contract in accordance with the General Conditions of Contract.

We agree to abide by this Bid for a period of 120 days from the date fixed for bid opening under clause 9.0 of GCC, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

We declare that we have studied the provision of Indian Income Tax Law and other Indian Laws for supply of equipments/materials and the prices have been quoted accordingly.

Unless and until Letter of Intent is issued, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest, or any bid you may receive.

There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract, Clause 19 of GCC .

Dated this.....day of.....20.....  
Signature..... In the capacity of.....  
.....duly authorized to sign for and on behalf of (IN BLOCK CAPITALS).....

**FORMAT FOR EMD BANK GUARANTEE**

*(To be issued in a Non Judicial Stamp Paper of Rs.50/-purchased in the name of the bank)*

Whereas [name of the Bidder] (hereinafter called the “Bidder”) has submitted its bid dated [date of submission of bid] for the supply of [name and/or description of the goods] (hereafter called “the Bid”). KNOW ALL PEOPLE by these presents that WE [name of bank]at[Branch Name and address],having our registered office at[address of the registered office of the bank](herein after called —“the Bank”),are bound unto BSES Rajdhani Power Ltd., with its Corporate Office at BSES Bhawan Nehru Place, New Delhi -110019, (herein after called —the “Purchaser”) in the sum of \_\_\_\_\_ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this \_\_\_ day of \_\_ 20\_\_.

THE CONDITIONS of this obligation are:

If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or

If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:

fails or refuses to execute the Contract Form ,if required; or  
fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/GENERAL CONDITIONS.;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that is its demand the purchaser will note that amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including thirty (30) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the bank)

Signature of the witness

**PRICE FORMAT**

ENQUIRY NO & DATE: NIT: CMC/BR/24-25/RB/PR/RJ/1204

**PRICE SCHEDULE**

ITEM DESCRIPTION	QTY AS PER RFQ	UOM	EX-WORKS RATE/UNIT	CGST (%)	CGST AMOUNT	SGST (%)	SGST AMOUNT	IGST (%)	IGST AMOUNT	FREIGHT	LANDED RATE/UNIT	TOTAL LANDED COST (INR)
400 Amp ACB	2198	Nos										
1250 Amp ACB	513	Nos										
2000 Amp ACB	213	Nos										
3200 Amp ACB	109	Nos										

Note: 1.Prices shall be Firm

2.The prices received without break up of ex works, Freight, GST are liable for rejection

3. Pls. Indicate the exact percentage of taxes in figures and words.

4. If there is a discrepancy between the unit price and the total price THE UNIT PRICE shall prevail.

5. Bidders are requested to attach the covering letter head alongwith the price bid indicating reference no and date.

Bidders seal & signature



Enquiry No. : CMC/BR/24-25/RB/PR/RJ/1204

**COMMERCIAL TERMS AND CONDITIONS**

S/NO	ITEM DESCRIPTION	AS PER BRPL	CONFIRMATION OF BIDDER
1	Validity of prices	120 days from date of offer	
2	Price basis	Firm, FOR Delhi store basis, Prices shall be inclusive of all taxes & duties, freight upto Delhi stores. Unloading at stores be in vendor's scope Transit insurance in BRPL scope	
3	Payment Terms	100% payment within 45 days after receipt of material at stores	
4	Delivery schedule	As per our requirement	
5	Defect Liability Period	Warrant shall be 10 years with maintaining resistance less than 5 Ohms from the date of commission or 6 months from the date of delivery whichever is earlier.	
6	Penalty for delay	1% per week of delay of undelivered units or part thereof subject to maximum of 10% of total PO value of undelivered units	
7	Performance Bank Guarantee	<p>Bidder shall initially submit the PBG within 28 days of placement of RC for 1% of RC Value (including GST) valid till RC validity period plus three month claim period. If there is extension in RC validity date, the BG shall be extended accordingly .Upon submission of the performance security, the EMD shall be released.</p> <p>Thereafter bidder shall submit PBG on Purchase Order (PO) basis for 10% of the PO value (including GST).The Performance Bond shall be valid for a period of twenty four months (24) from the date of the commissioning or thirty months (30) from the date of receipt of material (last consignment of PO) at site/stores whichever is earlier plus 3 months towards claim period.</p>	

**ANNEXURE - V**

ENQUIRY NO: CMC/BR/24-25/RB/PR/RJ/1204

**NO DEVIATION SHEET**

SL NO	SL NO OF TECHNICAL SPECIFICATION	DEVIATION, IF ANY

**SIGNATURE & SEAL OF BIDDER**

**NAME OF BIDDER**

## **FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT**

(To be signed & stamped by the bidder along-with bid)

BSES Rajdhani Power Ltd (BRPL) intends to use reverse auction through SAP-SRM tool as an integral part of entire tendering process. All bidders who are techno-commercially qualified on the basis of tender requirements shall participate in the reverse auction.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid:-

1. In case of bidding through Internet medium, bidders are advised to ensure availability of all associated infrastructure as required to participate in the reverse auction event. Inability to bid due to telephone glitch, internet response issues, software & hardware hangs/failures, power failures or any other reason shall not be the responsibility of BRPL.
2. In case bidder fails to participate in the reverse auction event due to any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid submitted by them as a part of tender shall be considered as bidder's Final .No Regret offer.Any off-line price bids received from a bidder in lieu of non-participation in the reverse auction event shall be rejected by BRPL.
3. The bidder is advised to understand the auto bid process t safeguard themselves against any possibility of non-participation in the reverse auction event.
4. The bidder shall be prepared with competitive price quotes during the day of reverse auction event.
5. The prices quoted by bidder in reverse auction event shall be on FOR Landed cost BRPL Store/site basis inclusive of all relevant taxes, duties, levies, transportation charges etc.
6. The prices submitted by the bidder during reverse auction event shall be binding on the bidder.
7. The bidder agrees to non-disclosure of trade information regarding bid details e.g.purchase, identity, bid process/technology, bid documentation etc.
8. BRPL will make every effort to make the bid process transparent. However award decision of BRPL will be final and binding on the bidder.
9. The prices submitted during reverse auction event shall be binding on the bidder.
10. No request for Time extension of the reverse auction event shall be considered by BRPL.

**Seal & Signature of Bidder**

**CHECK LIST**

<b>Sl No</b>	<b>Item Description</b>	<b>YES/NO</b>
<b>1</b>	<b>INDEX</b>	<b>YES/NO</b>
<b>2</b>	<b>COVERING LETTER</b>	<b>YES/NO</b>
<b>3</b>	<b>BID FORM (UNPRICED) DULY SIGNED</b>	<b>YES/NO</b>
<b>4</b>	<b>BILL OF MATERIAL (UNPRICED)</b>	<b>YES/NO</b>
<b>5</b>	<b>TECHNICAL BID</b>	<b>YES/NO</b>
<b>6</b>	<b>ACCEPTANCE TO COMMERCIAL TERMS &amp; CONDITIONS</b>	<b>YES/NO</b>
<b>7</b>	<b>FINANCIAL BIDS (IN SEALED ENVELOPE)</b>	<b>YES/NO</b>
<b>8</b>	<b>EMD IN PRESCRIBED FORMAT</b>	<b>YES/NO</b>
<b>9</b>	<b>DEMAND DRAFT OF RS 1180/- DRAWN IN FAVOUR OF</b>	<b>BSES RAJDHANI POWER LTD</b>
<b>10</b>	<b>POWER OF ATTORNEY/ AUTHORISATION LETTER FOR SIGNING THE BID</b>	<b>YES/NO</b>

**SECTION – V**  
**TECHNICAL SPECIFICATIONS (TS)**

**VARIOUS RATINGS OF ACB**

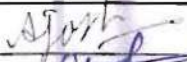



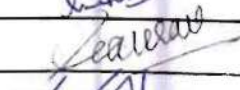

**CMC/BR/24-25/RB/PR/RJ/1204**

**The detailed technical specifications of Air Circuit Breaker**

# BSES

## Technical Specification of LT Air Circuit Breaker

Specification no – BSES-TS-19-LTACB-R1

Rev:	1	
Date:	20 June 2024	
Prepared by	Ashish Joshi	
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Reviewed by	Puneet Duggal	
	Amit Tomar	
Approved by	Gaurav Sharma	
	Gopal Nariya	

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**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER****1. SCOPE OF SUPPLY**

This specification covers the design, engineering, manufacture, assembly and testing at manufacturer's works and supply of Manual / Motorised LT ACB (as per the tender requirement) along with all hardware and accessories required for installation and operation. Note that Quotation shall be provided for both type of ACB for each rating.

**2. CODES & STANDARDS**

2.1	IS:8623	Specification for factory built assemblies of switchgear & control gear for voltages up to and including 1000V AC/1200 V DC.
2.2	IS 60947-1	Specification for Low-voltage Switchgear and Control gear - Part 2 : Circuit Breakers
2.3	IS:10118	Code of practice for selection, installation and maintenance switchgear and control gear
2.4	IS:16227	Current transformers
2.5	IS:3231	Electrical relays for power system protection
2.6	IS:1248	Electrical Indicating instruments
2.7	IS:4794	Switches and push buttons
2.8	IS:6005	Code of practice of phosphating iron and steel
2.9	IS:5082	Wrought Aluminium and aluminium alloys for electrical purposes
2.10	IS 3043	Code of practice for Earthing
2.11	IS 5	Colours for ready mixed paints and enamels
2.12	IEC 60529	Degree of protection provided by enclosure (IP code)

**3. SERVICE CONDITION**

The material to be supplied against this specification shall be suitable for satisfactory operation under following climatic condition

<b>3.1</b>	<b>Location</b>	<b>At various location in the Delhi</b>
3.2	System Configuration	3 Phase 4 Wire with neutral solidly grounded
3.3	Supply Voltage	415 volt +/- 10%
3.4	Supply frequency	50Hz
3.5	Location	Outdoor
3.6	Maximum ambient temperature (°C)	50
3.7	Minimum ambient temperature (°C)	0
3.8	Maximum altitude above mean sea level (m)	1000
3.9	Relative Humidity (%)	100
3.10	Rainy month	June to October
3.11	Maximum Rainfall (mm)	1450
3.12	Wind Pressure (Kg/Sq.m)	195
3.13	Seismic Zone	Zone IV as per IS : 1893

**4. GENERAL FEATURES**

4.1	ACB mounting	Fixed type
4.2	Line-Load Reversibility	Required

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

4.3	Terminals	Suitable for connection with aluminium busbars with phase barriers & shrouds
4.4	Operating mechanism	<ul style="list-style-type: none"> <li>a. Motorized LT ACB – Automatic motor wound spring charging mechanism, with manual charging facility</li> <li>b. Manual LT ACB - manual spring charging, stored energy type</li> <li>c. Motorized/manual mechanism shall be as per requirement mentioned in tender</li> <li>d. Antipumping &amp; Trip free feature</li> <li>e. One O-CO operation after failure of charging motor</li> </ul>
4.5	Operation counter	4 digit minimum, non-reversible
4.6	Operating handle	Required for manual spring charging
4.7	Spring Charging Motor	Motor shall be rated for 240V AC $\pm$ 10%, 50Hz $\pm$ 5%, capable of satisfactory operation for the application and duty as required by the driven equipment.
4.8	Local control (For both Manual & Motorized ACB)	ON / OFF push buttons or lever with transparent shutter & locking facility
4.9	Remote control (For Motorized ACB)	GSM based module to be provided for remote closing/ opening of the breaker through SMS from mobile phone of authorized O&M personnel.
4.10	Closing coil	Closing coil shall operate correctly at all values of voltage between 85% & 110% of the rated voltage.
4.11	Tripping coil	Shunt trip shall operate correctly at all values of supply voltage between 70% & 110% of rated voltage.
4.12	ACB auxiliary contacts	6 NO + 6 NC minimum
4.13	ACB operating knob sealing	Possible in OFF condition
4.14	Release and Tripping Mechanism	Microprocessor based release with true RMS based sensing
4.15	Protections Required	Overload, short-circuit, Instantaneous& earth fault
4.16	Neutral bus bar protection	CT Required
4.17	Access to releases, coils & add on type replaceable parts to ACB	From front only
4.18	ACB indications	<ul style="list-style-type: none"> <li>a. Separate ON / OFF / TRIP</li> <li>b. Spring charge status</li> </ul>
4.19	ACB ingress protection (without enclosure)	IP2X minimum
4.20	Pollution degree as per IS	2 – non-conductive pollution
4.21	ACB temperature rise limits	As per table 2 & 3 of IS 13947-1
4.22	Hardwares	
4.22.1	Nuts and bolts materials	Hot Dip Galvanised
4.22.2	Washers and spring washers Materials	Carbon steel

**5. OPERATIONAL FEATURES**

5.1	Number of phases	Three phase & neutral
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**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

5.2	Rated Operational Voltage(V)	415V
5.2	Rated Insulation Voltage (V)	1000V
5.4	Rated Impulse Voltage	8 kV for main circuit
5.5	Category of utilization	B
5.6	Rated Ultimate breaking capacity at rated voltage	Icu = 50 kA minimum
5.6.1	Rating up to 2000A	50 kA (minimum)
5.6.2	Rating 2500A above	65 kA (minimum)
5.7	Rated Service breaking capacity at rated voltage Ics	Ics =100% Icu
5.8	Rated short term withstand current for 1 sec at rated voltage – Icw	Icw = 100% Icu
5.9	Rated making current ampacity – Icm	Icm = 220% Icu
5.10	Number of operating cycles at rated current (open + close)without changing arcing contact	5000
5.11	Number of mechanical operating cycles (open + close)	20000

**6. TYPE -1 ACB OF ALL RATINGS - MEASUREMENT &PROTECTION**

6.1	Microprocessor release	Self-powered, not tapped from neutral, Setting panel with locking arrangement
6.1.1	Tripping characteristic	With long time & short time characteristics
6.1.2	Overload setting	40% -100% In, steps of 10%.
6.1.3	Overload setting time delay	2.5 s to 40 s minimum three settings
6.1.4	Short Circuit Setting	100% - 800% of In, steps of 10%.
6.1.5	Short Circuit Setting time delay	50ms - 400 ms in steps of 50ms
6.1.6	Instantaneous setting	400% - 1500% of In & OFF
6.1.7	Earth fault setting	10- 100 % of In, steps of 10%
6.1.8	Earth fault setting time delay	50ms - 400 ms in steps of 50ms
6.1.9	Measurements required in release	<ul style="list-style-type: none"> <li>a. Phase wise current</li> <li>b. Phase wise voltage</li> <li>c. Power factor</li> <li>d. Maximum current with date and time</li> </ul>
6.1.10	Other release requirements	<ul style="list-style-type: none"> <li>a. Release should have backlit display.</li> <li>b. Release should be plug in type and easily replaceable in field.</li> <li>c. Release should have RS485 port for remote communication on open Modbus protocol.</li> <li>d. Separate fault indication shall be provided for each protection stage i.e overload, short circuit.</li> </ul>

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

		<ul style="list-style-type: none"> <li>e. 10 fault records shall be provided on FIFO basis with time stamp.</li> <li>f. Earth fault protection should not operate during neutral unbalance.</li> </ul>
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**7. TYPE -2 ACB FOR ALL RATINGS - MEASUREMENT & PROTECTION**

7.1	Microprocessor release	Self-powered, not tapped from neutral, Setting panel with locking arrangement
7.1.1	Tripping characteristic	With long time & short time characteristics
7.1.2	Overload setting	40% -100% In, steps of 10%.
7.1.3	Overload setting time delay	2.5 s to 40 s minimum three settings
7.1.4	Short Circuit Setting	100% - 800% of In, steps of 10%.
7.1.5	Short Circuit Setting time delay	50ms - 400 ms in steps of 50ms
7.1.6	Instantaneous setting	400% - 1500% of In & OFF
7.1.7	Earth fault setting	10- 100 % of In, steps of 10%
7.1.8	Earth fault setting time delay	50ms - 400 ms in steps of 50ms
7.1.9	Measurements required in release	<ul style="list-style-type: none"> <li>a. Phase wise current</li> <li>b. Phase wise voltage</li> <li>c. Power factor</li> <li>d. Maximum current with date and time</li> </ul>
7.1.10	Other requirements	<ul style="list-style-type: none"> <li>a. Release should have backlit display.</li> <li>b. Release should be plug-in type and easily replaceable in field.</li> <li>c. Separate fault indication shall be provided for each protection stage i.e overload, short circuit and earth fault</li> <li>d. Release should store 10 fault records on FIFO basis with date and time stamp.</li> <li>e. Release should have RS485 port for remote communication on open Modbus protocol. It should be able to transmit all measured, monitored and recorded data to SCADA from this port including status of DIs and DOs.</li> <li>f. Release should have 2DIs for CB On and Off status shall be wired to DIs through auxiliary switch.</li> <li>g. Remote time synchronization through SCADA should be possible</li> <li>h. Earth fault function should not operate during neutral unbalance. Same will be verified during inspection.</li> </ul>

**8. BUSBAR**

8.1	Material	High conductivity electrolytic grade aluminium
8.2	Bus bar size	a) Suitable for carrying rated continuous current i.e. 400A/1250A/2000A/3200A depending upon the breaker rating. Current density should be 1A per sqmm.

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

		<ul style="list-style-type: none"> <li>b) Size of neutral busbar should be same as phase busbar.</li> <li>c) Busbar shall be designed for maximum of 40 degrees temperature rise over ambient.</li> <li>d) Bus bars shall be colour coded with heat resistant sleeves for R,Y,B phases and black sleeves for neutral (from left to right).</li> </ul>
8.3	Clearances	<ul style="list-style-type: none"> <li>a) All live parts of the ACBs shall have adequate clearance between the phase to phase and phase to earth / body of enclosure as per the standard. All the clearance shall be more than the minimum standard laid down as per IS standard.</li> </ul>
8.4	Bus bar arrangement	<ul style="list-style-type: none"> <li>a) All the busbars are to be extended on rear side incorporating proper arrangement for connecting LT XLPE/PVC cables.</li> <li>b) Busbar to be extended in such a way that adequate insulation is provided between the enclosure and busbar.</li> <li>c) Inter phase barriers to be provided on both incoming and outgoing side busbar.</li> <li>d) Barriers shall also be provided between incoming and outgoing also.</li> <li>e) Entry / exit of rear side busbar from the LT ACB shall have separate openings for I/C &amp; O/G circuits. Separate openings shall be provided for each phases and shall be sealed with FRP covers.</li> <li>f) Phases shall be separated with phase barriers with polycarbonate sheets.</li> </ul>
8.5	Cable termination	Arrangement shall be as shown in annexure-A. Appropriate working clearances have to be maintained and are subject to approval during detailed engineering stage.
8.5.1	3200A ACB	<ul style="list-style-type: none"> <li>a) Incomer – 3 nos. x 1C x 1000sqmm cable per phase.</li> <li>b) Outgoing – 8 nos x 4C x 300sqmm cable</li> </ul>
8.5.2	2000A ACB	<ul style="list-style-type: none"> <li>a) Incomer – 3 nos. x 1C x 630sqmm cable per phase.</li> <li>b) Outgoing – 6 nos x 4C x 300sqmm cable</li> </ul>
8.5.3	1250A ACB	<ul style="list-style-type: none"> <li>a) Incomer – 3 nos. x 1C x 630sqmm cable per phase.</li> <li>b) Outgoing – 6 nos x 4C x 300sqmm cable</li> </ul>
8.5.4	400A ACB	<ul style="list-style-type: none"> <li>a) Incomer – 2 nos. x 4C x 300sqmm cable</li> <li>b) Outgoing – 2 nos x 4C x 300sqmm cable</li> </ul>
8.6	Earthing	<ul style="list-style-type: none"> <li>a) The earth bus of 50x6mm Aluminium shall run throughout the length of the panel at the bottom of the board.</li> <li>b) Two number Earthing bolts of size M8 to be provided with suitable green colour earth logo.</li> </ul>

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER****9. CURRENT TRANSFORMER**

9.1	Type	Cast-resin type, Class-E insulation, rated for 120% current Continuous
9.2	Provision	Shall be provided in all the phases and neutral for overcurrent and earth fault protection. All the CTs shall be integral part of ACB in all the phases. Separate CTs shall be connected in the neutral for detecting earth fault.
9.3	Secondary current	1A
9.4	Protection CT Class	5P10
9.5	Metering CT Class	1.0
9.6	Rated Burden	Shall be 2 times the connected burden

**10. TERMINALS AND WIRING**

10.1	Secondary Wiring	
10.1.1	Grade and type	1100 V grade, PVC insulated, FRLS type stranded flexible copper wire.
10.1.2	Ferruling	Each wire shall bear an identifying ferrule or tag at each end or connecting point.
10.1.3	Size	2.5sqmm copper (minimum)
10.2	Terminals	
10.2.1	Grade	1100V grade, moulded piece terminals complete with insulated barriers, washers, nuts and lock nuts.
10.2.2	Power terminals type	Stud type, nut driver operated
10.2.3	Control terminals type	Stud type, screw driver operated suitable for minimum 6sqmm wire.
10.2.4	Spare terminals	20% spare terminals should be provided in each terminal block.
10.2.5	Accessibility	Placement of terminal shall enable proper cable termination. Terminals shall be readily accessible for inspection and maintenance.
10.2.6	Marking	The terminals shall be serially numbered to facilitate installation and maintenance.

**11. METERS, INDICATIONS AND PUSH BUTTONS**

11.1	Meters	
11.1.1	Type	Digital with inbuilt phase selector
11.1.2	Accuracy Class	1.0
11.1.3	Auxiliary Supply	240V AC with 10% tolerance

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

11.2	Indicating Lamps	Indicating lamps shall be of low wattage cluster LED type.
11.2.1	ACB On	Red
11.2.2	ACB Off	Green
11.2.3	ACB Trip	Amber
11.3	Push Buttons	For manual operation of incomer ACBs

**12. TYPE-1 ACB – ENCLOSURE REQUIREMENTS**

12.1	Type	Enclosure shall be suitable for outdoor installation. All the welding shall be continuous type.
12.2	Ingress Protection	IP55 supported by CPRI/ERDA test report. Change in enclosure design has to be validated by CPRI/ERDA
12.3	Enclosure Sheet material and Thickness	a) Minimum 2.5 mm CRCA sheet for load bearing members b) Minimum 2.0 mm CRCA sheet for doors and covers c) No welds, rivets, hinges or bolts shall be visible from outside. d) Make of CRCA sheet to be TATA/SAIL/JINDAL
12.4	Canopy	Suitable canopy to be provided on the enclosure for preventing rain water accommodation. Canopy to be extended at both front and rear side.
12.5.1	Doors and covers	a) A main door shall be provided at front of ACB enclosure. Main door shall be opened vertically. Suitable bonnet type locking arrangement shall be provided to hold the door at open position. b) Handle shall be provided to open the main door. c) The front cover shall have a viewing window of required size for monitoring the close, open, trip and spring charge status of breaker from outside without opening the door. The viewing window shall be transparent, steel reinforced glass material which shall be fixed on the front cover by using neoprene gasket and suitable screws/rivets. d) An operation door shall be provided on main door to carry out operations of ACB. Only operation buttons and spring charge position shall be accessible through operation door. All other parts of ACB shall be sealed to ensure complete safety of operator in event of any internal arc within ACB enclosure. [R1] e) Operation door shall be right openable at 135 degrees. Stopper shall also be provided to keep door in open while operation. [R1] f) Doors shall have solid continuity with main frame of ACB through flexible copper wire. g) Doors shall be non-removable type and hinges shall be concealed type. h) The door of the ACBs shall be lockable and shall be fitted with neoprene gaskets. i) Doors shall have padlocking arrangements. [R1]

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

		<ul style="list-style-type: none"> <li>j) Hole with knockout shall be provided for RS 485 cabling work in future under the canopy preferably in top-right side at front door (main Door).</li> <li>k) Separate terminal block shall be provided for RS485 terminals with proper marking. [R1]</li> <li>l) All doors and covers shall have U shape flange to ensure compliance of Ingress protection of IP55.</li> </ul>
12.5.2	Operation Interlocks	<ul style="list-style-type: none"> <li>a) It should not be possible to close the breaker without properly closing the main door of ACB enclosure.</li> <li>b) It should not be possible to open the main door until breaker is in trip position or open position. [R1]</li> </ul>
12.6	Door Hinges	Door Hinges shall be Anti-theft type
12.7	Pressure Release Device (PRD)	<ul style="list-style-type: none"> <li>a) A suitable resettable PRD shall be provided to move out hot gases in case of any internal arc in ACB enclosure. [R1]</li> <li>b) Position of explosion vent shall be rear side of top cover of ACB enclosure to ensure safety of operator. [R1]</li> </ul>
12.8	Mounting of the panel	<ul style="list-style-type: none"> <li>a) ACB with enclosure shall be suitable for mounting on poles/plinth.</li> <li>b) ACBs of all the ratings i.e, 400A/1250A/2000A/3200A shall have bolted stand of 900mm and ACBs of each rating mentioned shall have busbar arrangement inside the breaker enclosure with appropriate support insulator.</li> </ul>
12.9	Paint	
12.9.1	Surface Preparation	By 7 tanks Pre-treatment process or shot blasting method.
12.9.2	Colour shade of powder coating	632 as per IS 5/ Light orange 557 as per IS 5 (As per Tender Document)
12.9.3	Paint thickness	70 microns (minimum)

**13. TYPE-2 ACB – ENCLOSURE REQUIREMENTS**

13.1	General	Enclosure shall comply with all requirements mentioned in section-12 above.
13.2	Additional Requirements	<ul style="list-style-type: none"> <li>a) Complete connections including incoming and outgoing busbars shall be inside the metal enclosure</li> <li>b) Appropriate support shall be provided to incoming and outgoing busbars through support insulators</li> <li>c) Stand of 900 mm height shall be integrated with the ACB enclosure.</li> <li>d) For ACBs of higher ratings i.e 2000A and above, incoming connection should be placed below the ACB and outgoing connection should be placed at the rear of ACB. Please refer annexure 'B' for reference design. [R1]</li> </ul>



**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER****14. NAME PLATES & MARKINGS**

14.1	Panel nameplate	<p>Nameplate shall be made of anodized Aluminium riveted on front and side of the enclosure panel.</p> <p>Nameplate shall be etched only. Nameplate clearly indicates the following:</p> <ol style="list-style-type: none"> <li>BSES Logo</li> <li>Property of BSES</li> <li>Name of manufacturer</li> <li>Name of customer</li> <li>Current rating, Voltage rating</li> <li>Type of panel</li> <li>PO no. &amp; Date</li> <li>ACB Serial no.</li> <li>Month &amp; year of manufacturing</li> <li>Guarantee period</li> <li>Manufacturer Call center no. &amp; email id</li> </ol>
14.2	Danger plate	<ol style="list-style-type: none"> <li>Danger plate shall be as per IS:2551</li> <li>Danger plate shall be anodized Aluminium plate riveted to the enclosure or danger marking can be screen printed on the front cover.</li> </ol>
14.3	Equipment ID Marking	<ol style="list-style-type: none"> <li>BSES Equipment ID shall be painted on two side of Enclosure (in Front &amp; on side of Enclosure).</li> <li>Equipment id details &amp; specification shall be providing you at the time of GTP approval</li> </ol>

**15. APPROVED MAKE OF ACB**

15.1	ACB	L&T/ Siemens/ ABB/GE/ Schneider/ C&S/ HPL/ Havells
15.2	Switch	Siemens/ L&T (Saizer)
15.3	HRC Fuse Links	GE/ Siemens/ L&T
15.4	Terminals	Connectwell/ Elmex/ Wago/ Phoenix
15.5	Push Buttons/Actuators	L&T/ Siemens/ Vaishno/Schneider
15.6	MCB	Datar/Legrand/Hager/Schneider/ABB
15.7	Indicating Lamps	Vaishno/ Binay/ Teknik/Siemens/C&S
15.8	PRD	ATVUS [R1]

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER****16. INSPECTION AND TESTING**

16.1	Type test	Type test report of breaker with the offered release from CPRI/ERDA has to be submitted.
16.2	Acceptance & Routine tests	As per IS:60947 part – 1 & 2

**17. PACKING, SHIPPING, HANDLING & SITE SUPPORT**

17.1	Packing Protection	The packing shall be fit to withstand rough handling during transit and storage at destination. The test set should be properly protected against corrosion, dampness & damage.
17.2	Packing for accessories and Spares	Robust non-returnable packing case with all the above protection & identification Label. The bidder should get the packing list approved before dispatching the material.
17.3	Packing Identification Label	On each packing case, following details are required:
17.4	Individual serial number	
17.5	Purchaser's name	
17.6	PO number (along with SAP item code, if any) & date	
17.7	Equipment Tag no. (if any)	
17.8	Destination	
17.9	Manufacturer / Supplier's name	
17.10	Address of Manufacturer / Supplier / it's agent	
17.11	Description	
17.12	Country of origin	
17.13	Month & year of Manufacturing	
17.14	Case measurements	
17.15	Gross and net weight	
17.16	All necessary slinging and stacking instructions	
17.17	Shipping	The seller shall be responsible for all transit damage due to improper packing.
17.18	Handling and Storage	Manufacturer instruction shall be followed.
17.19	Detail handling & storage instruction sheet / manual to be furnished before commencement of supply.	

**18. DEVIATIONS**

18.1	Deviation	Deviations from this Specification shall be stated in writing with the tender by reference to the specification clause/GTP/Drawing and a description of the alternative offer. In absence of such a statement, it will be assumed that the bidder complies fully with this specification. No deviation will be acceptable post order.
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**19. DOCUMENTS SUBMISSION**

Document submission shall be as per the matrix given below. All documents/drawing shall be provided in soft copy (in pen drive) for each section. Language of the documents shall be English only. Deficient/improper drawing submission may liable for rejection.

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

<b>S.No.</b>	<b>Detail of Document</b>	<b>For Tender</b>	<b>For Approval/Review</b>	<b>Final Submission</b>
1	Guaranteed Technical Particulars (GTP)	Required	Required	Required
2	Deviation Sheet, if any	Required	Required	Required
3	GA and Dimensional Drawing	Required	Required	Required
4	Installation Instructions		Required	Required
5	Manual/Catalogue	Required	Required	Required
6	Manufacturer's quality assurance plan and certification for quality standards		Required	Required
9	Type test reports of offered type and rating of breaker	Required	Required	Required
10	Make of Raw Materials	Required	Required	Required
11	Inspection and test reports, carried out in manufacturer's works			Required
12	Routine Test Certificates			Required
13	Test certificates of all the raw materials			Required
14	Deviation sheet	Required		

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER****ANNEXURE A – GUARANTEED TECHNICAL PARTICULARS**

<b>S. No.</b>	<b>Item descriptions</b>	<b>Specification Requirement</b>	<b>Data by Vendor</b>
1	<b>ACB Manufacturer</b>	Name	
1.1.1		Address	
1.1.2		Contact person	
1.1.3		contact telephone no	
1.1.4	ACB Brand name	Manufacturer catalogue reference	
1.2	ACB rated current at 50 Deg.C	400/1250/2000/3200A	
1.3	No of poles	3	
1.4	Rated Operational voltage	415V AC $\pm$ 10%	
1.5	Rated insulation voltage	1100V	
1.6	Rated impulse withstand voltage	8 kV	
1.7	Category of utilization	B	
1.8	Service supply for heating, lighting, power sockets and spring charging motor	240V AC $\pm$ 10%	
1.9	Rated ultimate breaking capacity at rated voltage for rating upto 2000A	Icu	
1.9.1	Ratings up to 2000A	50 kA minimum	
1.9.2	Rating 2500A above	65 kA minimum	
1.10	Rated service breaking capacity Ics	Ics = 100% Icu at rated voltage	
1.11	Rated short time withstand current for 1 sec.	Icw = 100% Ics at rated voltage	
1.11.1	Rated making current	Icm = 220% Icu	
1.12	Number of operating cycles at rated current (open + close) without changing arcing contacts	5000	
1.13	Number of mechanical operating cycles (open + close)	20000	
1.14	De-rating of ACB	0% at 50 Deg.C	
1.15	ACB clearance in air	As per table 13 of IS: 60947-1	
1.16	ACB temperature rise limits	As per table 2 & 3 of IS: 60947-1	
1.17	ACB mounting	Fixed	
1.18	ACB operating counter	4 digit minimum, non-reversible	
1.19	Line load reversibility	Provided	
1.20	ACB operation control	ON / OFF push buttons	
1.21	Safety shutter and racking interlock	Required	

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

<b>S. No.</b>	<b>Item descriptions</b>	<b>Specification Requirement</b>	<b>Data by Vendor</b>
1.22	Terminal size	Size in mm*mm	
1.23	Operating handle	Required	
1.24	ACB position indicator	ON / OFF / Trip / Spring charged	
1.25	ACB ingress protection (without enclosure)	IP 2X minimum	
1.26	Pollution degree as per IS	2 minimum	
1.27	Product Information as per clause 5 of IS:60947, part - 1	In addition name of the purchaser shall be marked on the front of the devices as BSES	
1.28	Tripping mechanism / releases with true RMS based sensing	microprocessor based	
1.29	Tripping characteristic requirement		
1.29.1	Overload setting	40 % to 100% In steps of 10%	
1.29.1.1	Time delay	2.5s to 40s minimum three settings	
1.29.2	Short circuit setting	100 % - 800 %In steps of 10%	
1.29.2.1	Time delay	50 - 400 ms in steps of 50 ms	
1.29.3	Instantaneous setting	400% - 1500% of In & OFF	
1.29.4	Earth fault setting	10 - 100 % of In, steps of 10%	
1.29.4.1	Time delay	50 - 400 ms ms in steps of 50 ms	
1.30	Release requirement	Self powered, not tapped from neutral	
1.31	Minimum primary current	Required for operation release	
1.32	ACB opening time	in ms	
1.33	ACB closing time	in ms	
1.34	ACB dimension	L X B X H in mm	
1.35	ACB weight	in Kg	
1.36	ACB watt loss at rated current (W)	At rated voltage and current	
<b>2</b>	<b>Busbars</b>		
2.1	Make		
2.2	Material and grade of buses	High conductivity electrolytic grade Aluminium	
2.3	Reference Standard		

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

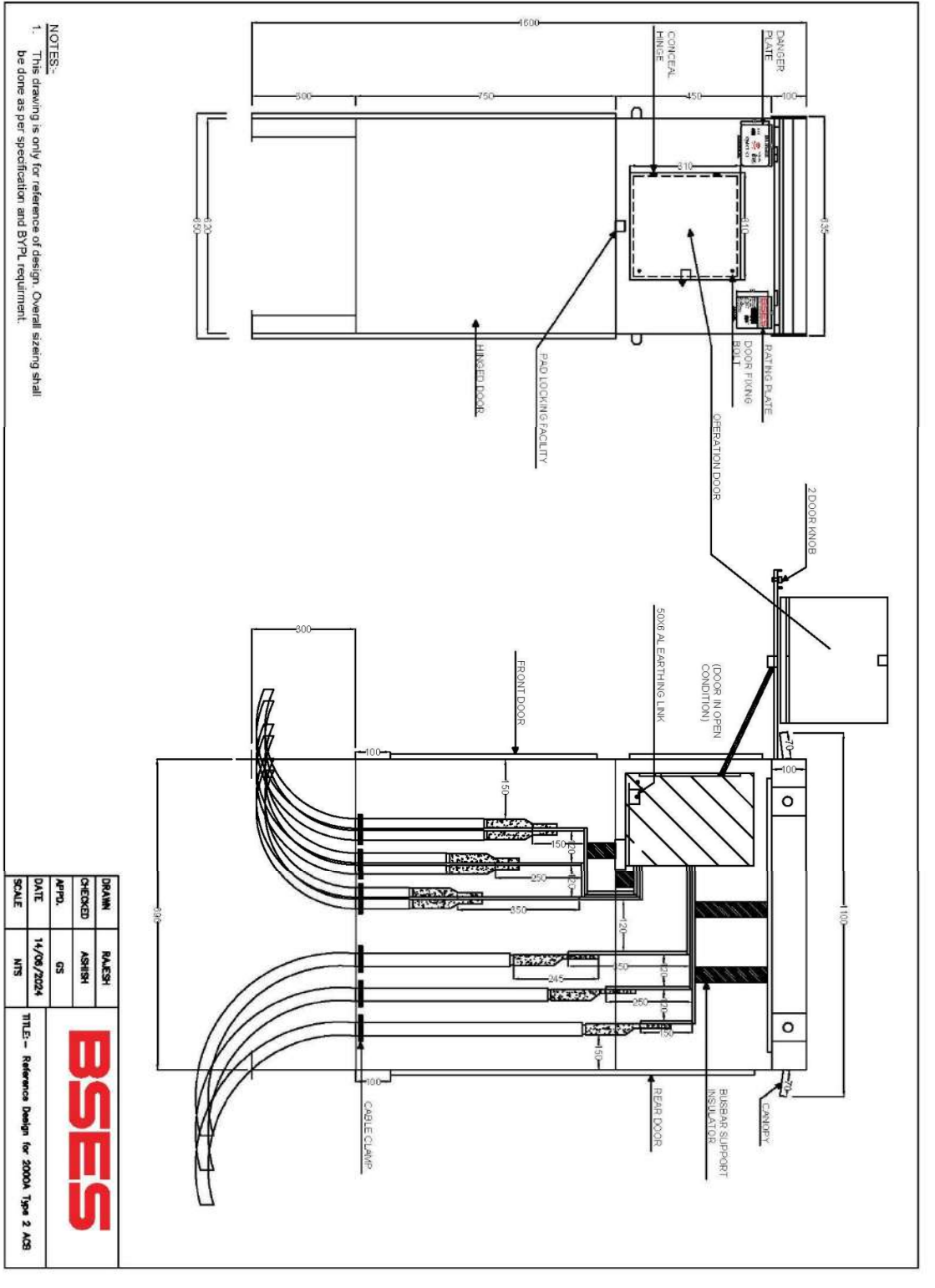
<b>S. No.</b>	<b>Item descriptions</b>	<b>Specification Requirement</b>	<b>Data by Vendor</b>
2.4	Continuous current (at site condition, 50 deg celcius ambient) within cubicle	3200A/2000A/1250A/400A	
2.5	Cross sectional area		
2.6	DC Resistance	Ohm/m/ph	
2.7	Skin-effect ratio		
2.8	Reactance	Ohm/m/ph	
2.9	Losses-middle phase	w/m/ph	
2.10	Minimum clearance of busbar	Required	
2.10.1	Phase to phase (mm)		
2.10.2	Phase to earth (mm)		
2.11	Busbar dimension	LxWxH (mm)	
2.12	Busbar insulation	Heat shrinkable sleeves rated for maximum operating voltage	
<b>3</b>	<b>Current Transformer</b>		
3.1	Make		
3.2	Type	Resin Cast	
3.3	Reference Standard		
3.4	CT ratios		
3.5	Class of Insulation	Class – E	
3.6	Protection class	5P20	
3.7	Metering class	1	
3.8	VA burden for Relaying CT-Incomer	Two times the connected burden	
<b>4</b>	<b>Control &amp; Indications</b>		
4.1	Push button		
4.1.1	Make and Model no.		
4.1.2	Type	Flush mounted type with touch proof terminals	
4.2	LEDs		
4.2.1	Make & Model no.		
4.2.2	Type	Flush mounted type with touch proof terminals	
<b>5</b>	<b>Terminal Blocks</b>		
5.1	Make & Model no.		
5.2	Spare terminals	Equal to 20% of active terminals in each TB	
5.3	Control terminals	Stud type, screw driver operated suitable for minimum 6sqmm wire	
<b>6</b>	<b>ACB Enclosure</b>		

**TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER**

<b>S. No.</b>	<b>Item descriptions</b>	<b>Specification Requirement</b>	<b>Data by Vendor</b>
6.1	Make of Enclosure		
6.2	Enclosure thickness		
6.2.1	Load bearing member	2.5 mm	
6.2.2	Doors and Covers	>=2mm	
6.3	Enclosure Material	CRCA Sheet	
6.4	Enclosure degree of protection	IP55	
6.5	Powder coating		
6.5.1	Colour shade of powder	632 as per IS 5/ Light orange 557 as per IS 5  (As per Tender Document)	
6.5.2	Minimum thickness of coating	70 microns minimum	
6.6	Danger plate		
6.7	Thickness of FRP plate between extended aluminium bus and frame		
6.8	Thickness of phase barriers provided between individual phases at incoming and outgoing		
6.9	Weight of ACB with enclosure	Kg	
6.10	Enclosure dimensions	LxWxH (mm)	
6.11	Marking on the panel as per specification		
<b>7</b>	<b>Tests</b>		
7.1	Confirmation to routine tests to be performed as per IS:60947	Yes/No	
7.2	Confirmation to routine tests to be performed (or report submitted) as per IS:60947	Type test report no. / date	
7.3	Confirmation of type test of IP55 to be performed (or report submitted)	Type test report no. / date	
7.4	Confirmation of Acceptance tests to be performed during inspection as per IS:60947	Yes/No	
8.0	Deviation sheet against each clause of the specification	To be submitted	

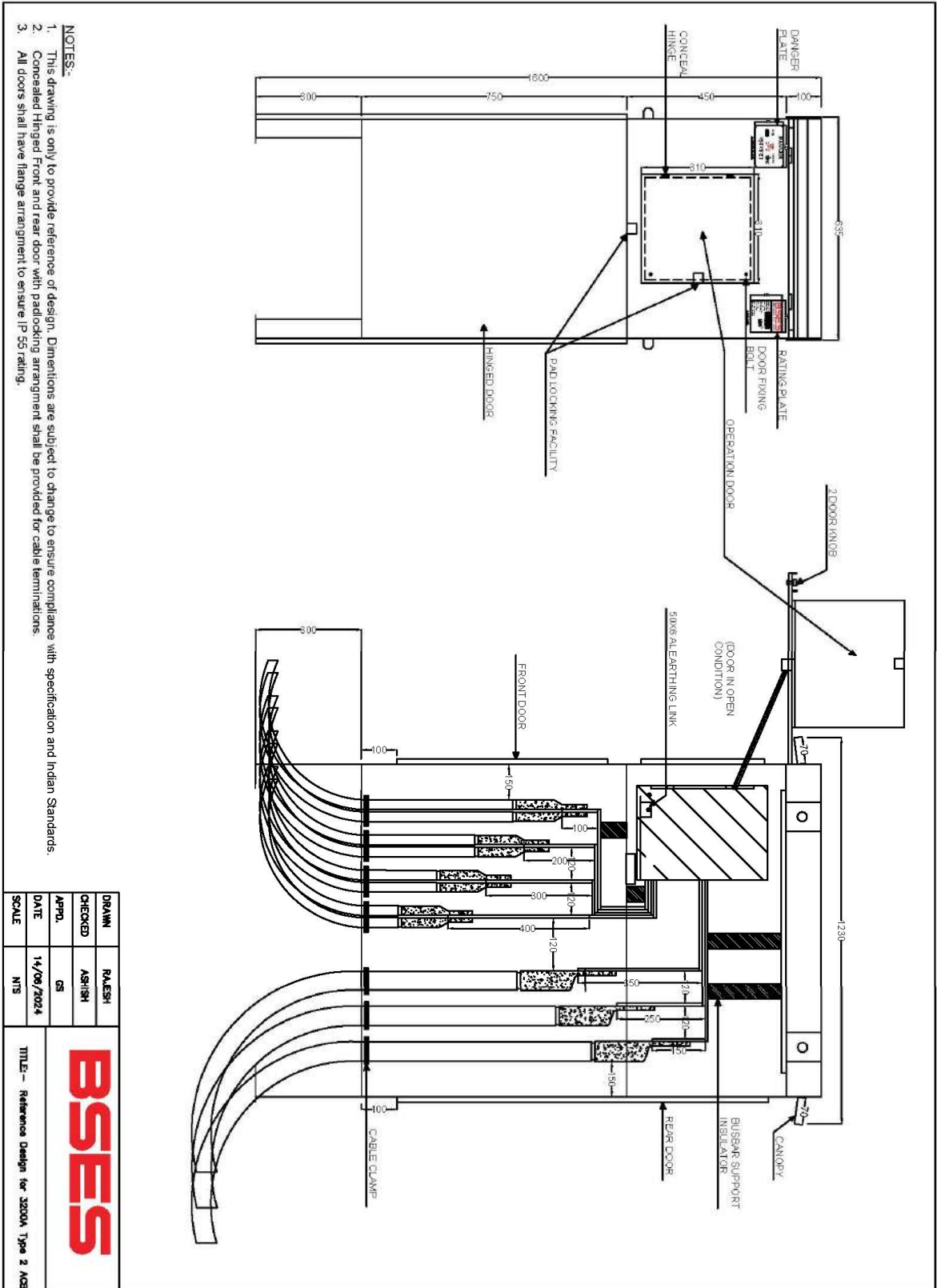
TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER

Annexure B: Reference Drawing for Type 2 ACB



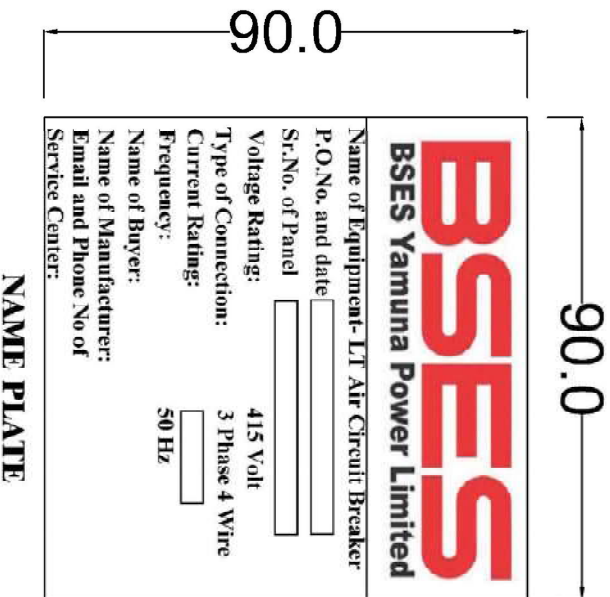
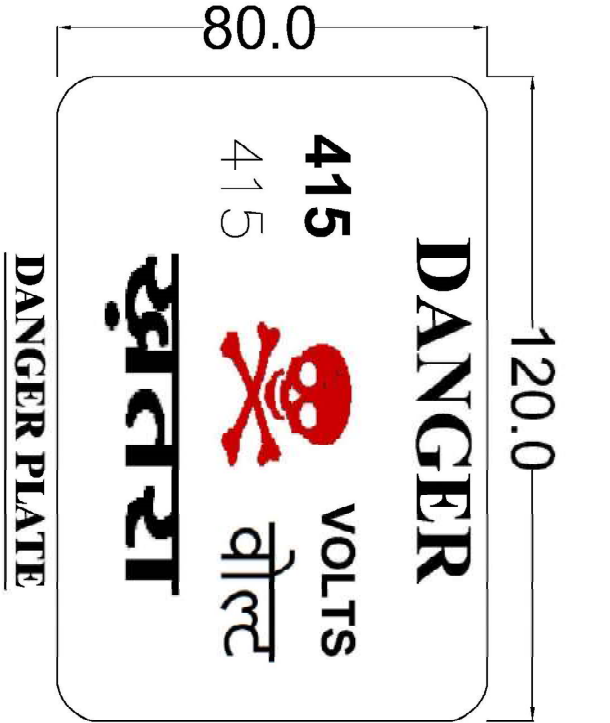


### TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER



DRAWN	RAJESH	<b>BSES</b>
CHECKED	ASHISH	
APPD.	GS	
DATE	14/09/2024	TITLE: Reference Design for 3200A Type 2 ACB
SCALE	NTS	

## TECHNICAL SPECIFICATION OF LT AIR CIRCUIT BREAKER



Danger Plate shall be as per IS 2551  
 Anodized Aluminum plate shall be used  
 riveted to the Enclosure.  
 Addition rating plate shall be provided on side of ACB  
 Enclosure & inside of ACB end

DRAWN	RAJESH
CHECKED	ASHISH
APPD.	GS
DATE	14/06/2024
SCALE	NTS

TITLE: — NAME PLATE & DANGER PLATE

**BSES**