

	<p><b>AJMER VIDYUT VITRAN NIGAM LIMITED</b>  <b>(MATERIAL MANAGEMENT WING)</b>  Corporate Identification Number (CIN) – U40109RJ2000SGC016482  Regd. Off. Vidyut Bhawan, Panchsheel Nagar, Makarwali Road, Ajmer-305004  Phone: +91-145-2644529, FAX: +91-145-2644542,  E-mail - <a href="mailto:semmajmer@gmail.com">semmajmer@gmail.com</a> Website – <a href="http://www.avvnl.com">www.avvnl.com</a></p>
---	--

**SPECIFICATION NO. AVVNL/SE/MM/E2A3/TN-1087 FOR SUPPLY OF SINGLE POLE & THREE POLE LT MCCB AGAINST TENDER NOTICE-1087**

Availability of tender documents on web site:	26.12.2016 at 2.00 PM site on wards
Last date & time for down loading of tender documents:	03.01.2017 at 5:00 PM
Last date & time for online (E-tendering) Tender/offer:-	03.01.2017 at 5:00 PM
Date & time of online opening of tender	04.01.2017 at 2:00 PM
RISL Processing Fee (Non Refundable)	Rs. 1000/-
Cost of Specification (Non Refundable)	Rs. 2500/-
Validity	120 days from the next date of opening of techno commercial Bid
Earnest money	Rs. 2,00,000 (Rs. Two Lac Only) or exemption Certificate of vendor registration of Class "A" category or above
Tendering Qty.	60,080 Nos.
Contact person (Authorized Bid Signatory)	Superintending Engineer (MM), AVVNL, Ajmer
Correspondence Address	Panchsheel, Ajmer
Mobile No.	9414004258
Telephone & Fax No.	0145-2644529/ 0145-2644542
Website & E-Mail:	1. Web.- <a href="http://www.avvnl.com">www.avvnl.com</a>
	2. E-mail:- Web:- <a href="http://risl.rajasthan.gov.in">http://risl.rajasthan.gov.in</a> , Email:- <a href="mailto:info.risl@rajasthan.gov.in">info.risl@rajasthan.gov.in</a>
Address Of RISL:-	<p align="center">Rajcomp Info Services Limited (RISL)  1<sup>st</sup> Floor, Yogna Bhawan, Tilak Marg, C-Scheme, Jaipur (Rajasthan)  Phone:-0141-5103902, 4031900 Fax: - 0141-2228701  Web:- <a href="http://risl.rajasthan.gov.in">http://risl.rajasthan.gov.in</a>, Email:-<a href="mailto:info.risl@rajasthan.gov.in">info.risl@rajasthan.gov.in</a></p>

## **INDEX (TN-1087)**

Section-I	Instructions to bidders	
Section-II	General Conditions of Contract	
Section III	Technical Specification	
Schedule-I	Schedule of Requirement	
Schedule-II	Prices	
Schedule-III	Details of Standards	
Schedule-III A	Pre Qualification Requirement (PQR)	
Schedule-III B	Proforma For Bank Guarantee In Lieu Of Furnishing Of Type Test Certificate	
Schedule-IV	Price Schedule (Bill of Quantity)	<b><u>To be uploaded On line on website</u></b>
Schedule-IVA	Details of tendered quantity, quantity offered along with justification with reference to qualifying Requirement.	<b><u>The bidder is required to justify quantity offered as per qualifying requirement.</u></b>
Schedule V	Departure from Guaranteed Technical Particulars	
Schedule V(A)	Guaranteed Technical Particulars.	
Schedule VI (A)	Departure from the requirement of Technical Specification.	
Schedule VI (B)	Departure from commercial terms & conditions of specification	
Schedule VII	List of Past Supplies	
Schedule VII A	C.A. Certificate for Quantity Justification.	
Schedule VIII	Delivery schedule.	
Schedule IX	List of equipment & technical hands available with the bidding firm.	
Schedule X	General Particulars about the bid in brief.	

1. The bidders, in their own interest are requested to read very carefully the tender document before submitting the bid only through online on website <http://www.eproc.rajasthan.gov.in/nicgep/app>. The bidders can download bid documents and submit their bids upto 5.00 p.m. one day prior to schedule date of opening of respective bid mentioned above.

The Tender process fee Rs.1,000/- paid by Demand Draft/Banker's Cheque in favour of MD,RISL, Jaipur and **cost of tender specification and EMD amount (wherever applicable)** paid by Demand Draft/Banker's Cheque in favour of Sr.AO (EA & Cash), AVVNL, Ajmer (payable at Ajmer) can be deposited in the office of the Superintending Engineer (MM), AVVNL, **VIDYUT BHAWAN, MAKARWALI ROAD, PUNCHSHEEL, AJMER-305004** upto 2.00 p.m. **upto one WORKING day prior to schedule date of opening of respective bid. However the bidders who possess valid vendor registration issued by AVVNL as per Clause No. 1.5.3 of Section-II (General Condition of Contract)** for supply of quoted items under appropriate category are not required to furnish Earnest Money Deposit. The Central and State Govt. undertakings are exempted from furnishing of Earnest money subject to furnishing of such certificate / documentary evidence in support of their being Govt.

(Central/State) undertaking. **They shall upload the proof of such valid registration/exemption certificate with their bid.**

2. The bidders are required to **upload the** receipt of deposing all above payments along with their tender at the relevant place on the scheduled date & time otherwise their bids are liable to be rejected
3. Eligible bidders should submit their bid well in advance instead of waiting till last date. AVVNL will not be responsible for non-submission of Bid due to any website related problems.

**Note :-** All eligible interested bidders are required to get enrolled on e-Tendering portal <http://www.eproc.rajasthan.gov.in/nicgep/app>.

**Schedule – I****SCHEDULE OF REQUIREMENT**

<b>Name of the Item</b>	<b>Approx. Quantity (Nos.)</b>
<b>1) Three Pole Moulded Case Circuit Breakers (MCCBs)</b>	
i) Frame size 100 Amp. with fixed overload release setting 32 Amp. suitable for 16/10 KVA Three Phase DT.	19,674
ii) Frame size 200 Amp. with fixed overload release setting 110 Amp. suitable for 63 KVA Three Phase DT.	406
<b>2) SP MCCB for Single Phase Distribution Transformer for</b>	
i) 60 Amp. Frame Size / Fixed Overload release Setting 25 Amp. suitable for 5/10 KVA Single Phase DT.	40,000

**NOTE:-The quantities as mentioned in the schedule of requirements are tentative and may increase/decrease as per the requirement of the Nigam.**

**SCHEDULE- II**

**PURCHASE OF SINGLE POLE & THREE POLE LT MCCB AGAINST TN-1087**

**PRICE ARE `FIRM`**

**Schedule – III**

**AJMER VIDYUT VITRAN NIGAM LIMITED**  
**A Govt. of Rajasthan Undertaking**  
**Prescribed technical specification for supply of**

(Name of Material/Equipment/Machinery/T&P etc.)

S.No.	Technical specification which material/equipment/Machinery/T&P shall confirm	Name of IS/other standard specification to which material should confirm	Other particulars if any.	to
-------	--	--	---------------------------	----

Certified that we agree to all the aforesaid technical specification except at S.No..... for which our technical specification shall be as under:-

S.No.	Technical specification which material/equipment/Machinery/T&P shall confirm	Name of IS/other standard specification to which material should confirm	Other particulars if any.	to
-------	--	--	---------------------------	----

**(Signature)**

Name & Designation  
with seal of the bidder.

## **SCHEDULE-III-A**

# **QUALIFICATION REQUIREMENT**

### **ITEM:- SINGLE POLE & THREE POLE LT MCCB**

### **TN-1087**

The bidder should fulfill following qualifying requirements for successful participation in the tender along with relevant documentary evidence supporting each qualifying requirement without which the offer shall be considered non-responsive & rejected.

#### **1.0 STATUS OF BIDDER:-**

- a) The bidder should be a Manufacturer of offered items. The offers from sole selling agent/ authorized dealers shall not be entertained.
- b) Old/ New suppliers:- Any bidder located within or outside the state of Rajasthan has participated for the first time in a particular Discom & meeting minimum qualification requirement and has supplied the tendered material/or of higher rating in other utility shall be treated as an old supplier. Rajasthan's firms although supplied in past but not meeting minimum quantity supplied criterion including altogether new units which have not supplied any quantity but having adequate & required manufacturing and testing facility and technical know-how of the tendered material shall be considered as new firms and would be eligible for trial order only. In case of supply made to the licensed power utility outside India, the C.A. certificate furnished by firm shall be considered.

#### **2.0 PAST SUPPLY & PERFORMANCE CRITERIA :-**

The bidder shall meet both past supply and performance criteria as detailed below for opening of tenders:-

##### **2.01 PAST SUPPLY:-**

- 2.01.1 The bidder is required to quote for minimum **10%** of tendered quantity failing which their offer may be considered Non-Responsive.
- 2.01.2 The bidder should have designed, manufactured / fabricated, tested and supplied to utility / Discoms / Govt. Departments at least 2 X QQ (QQ being the quoted quantity) of similar item / higher rating of tendered material / equipment in last 3 financial years from the date of opening of technical-commercial bid.

**Note:** Requirement of quantity manufactured, minimum quantity to be offered and amount of Bank Guarantee to be furnished in absence of test certificate shall be reduced to 25% for Rajasthan based units.

2.01.3 In support of fulfillment of the past supply criteria, the bidder shall furnish documentary evidence in the form of certificate from Chartered Accountant in the enclosed prescribed proforma only. This prescribed proforma should be furnished either in original or copy duly attested by Notary. The bidder shall also sign and affix seal on the C.A. Certificate. The certificate should have membership number with the name & address of the chartered accountant. Certificate should clearly indicate the quantity supplied, period of supply, voltage Class, Rating of the MCCBs etc. in the format prescribed, any deviation to format or information diverted format, will not be considered and rejected.

Note:-The material supplied and accepted for same/higher rating for Turnkey projects to a licensed power utility/Govt. shall be considered for the purpose of evaluating criteria. The certificate given by C.A. shall indicate above quantity separately.

## 2.02 **PERFORMANCE CRITERIA:-**

2.02.1 i) If a bidder has supplied up to 50% of ordered quantity in previous tender up to date of opening of subsequent tender and scheduled delivery period expired, the bid of such bidder will not be opened in the Discom for that item.

ii) However, if the supplies have been completed for a quantity more than 50% but not completed up to date of opening of subsequent tender and scheduled delivery period expired, the quantity equal to the quantity pending in previous tender for that item shall be reduced from the subsequent tender quantity to be allocated to the bidder.

## 3.0 **TYPE TEST CRITERIA:-**

3.01 The bidder shall furnish valid and authenticated type test certificates from a Govt. approved / Govt. recognized / NABL Accredited laboratory / ILAC i.e. International Laboratory Accredited Laboratory (in case of foreign laboratory) of similar rating and design of tendered material/ equipment. Such type test certificates should not be older than 5 years as on the date of bid opening. For this purpose date of conducting type test will be considered.

The type test certificate by in house laboratory of tendering firm even if it is a Govt. approved / Govt. recognized / NABL accredited / ILAC accredited, shall not be accepted, in case of their own tender. This will not apply if tendering firm is Govt. company / public Sector undertaking.

3.02 The bidder should furnish documentary evidence in support of the laboratory whose type test have been furnished, that the said laboratory is a Govt. / a Govt. approved / a Govt. recognized / NABL accredited laboratory / ILAC accredited (in case of foreign laboratory).



3.03 The type test certificates shall be furnished either in original or copy duly attested by notary.

3.04 The bids of only those bidders shall be considered to be meeting the type test criteria who furnishes complete type test certificate with the bid as per above provision.

However, in the following cases the bid of the bidder may be considered meeting the type test criteria if the bidder furnishes an undertaking stating that valid type test certificate from a Govt. / Govt. approved / Govt. recognized / NABL accredited / ILAC accredited laboratory shall be furnished from first lot (without asking any delivery extension) along with bank guarantee with the technical bid from a Nationalized / Scheduled Bank in prescribed proforma at Schedule-III C or DD/ Pay Order amounting to Rs.5 Lac / Rs.1.5 Lac / Rs.0.5 Lac in case where the value of the purchase (corresponding to tendered quantity) under consideration is more than 1.5 Crore / up to 1.5 Crore/ Upton 0.5 Crore respectively. The initial validity of Bank Guarantee shall be nine months with claim period of three months in addition.

- i) A new Rajasthan based unit who does not possess valid type tests reports subject to technically competent.
- ii) Where one or more type tests) is/ are older than 5 years.
- iii) Where new type tests have been added in the specification.
- iv) Where some changes in respect of type test procedure of existing type tests have been introduced in the relevant standard.
- v) Where a new item is being purchased by Nigam for the first time.
- vi) The Rajasthan & outside Rajasthan firm who does not possess valid type tests certificates, if type test reports of higher rating are furnished.

#### **4.0 POOR RECORD OF PERFORMANCE AND DELIVERY :**

The bidder who have been black listed in any of the state Discom or with whom business relations have been severed in Ajmer Discom shall not be considered. Severment of business relations will be done in case of following circumstances for the period and with the recovery mentioned against each:

i) When vendor does not accept order awarded on its accepted price and terms and conditions or does not comply with contractual formalities.	Forfeiture of EMD/cancellation of vendor registration to recover amount of EMD along with severment of business relations for three years from the date of issue of order.
ii) When vendor complies with contractual formalities but does not commence supplies.	Levy of maximum recovery on account of delay in delivery along with severment of relations for a period of 2 years from the date of issue of order or in next

	two bids whichever is later along with forfeiture of EMD / cancellation of vendor registration.
--	---

### **5.0 (A) Black listing of a firm:**

After having given Show Cause Notice of 30 days, and having established & cogent reasons for blacklisting of the firm as given below, the firm should immediately be blacklisted for a period of 5 years indicating reasons of doing so, in the letter itself, and a copy of such blacklisting should be given to the firm, with the approval of CLPC:-

(i) There are sufficient and strong reasons to believe that the supplier or his employee has been guilty of malpractices such as manhandling/misbehavior with Government official by supplier or his partner/employee, bribery, corruption or abatement of such a offence in a position where he could corrupt Nigam's official, fraud, vitiating fair tender process including substitution of or interpolation in tender, mis-representation, pilfer-aging or unauthorized use or disposal of Nigam's material issued for specific work etc.

(ii) Where a supplier or his partner or his representative has been convicted by a court of Law for offences involving moral turpitude in relation to the business dealing or where security considerations including suspected disloyalty to the Nigam/state so warrant the blacklisting.

(iii) If the State Bureau of Investigation or any other authorized investigating agency recommends for blacklisting after completing the investigation.

Note: - 1 If a supplier after having tendered for a supply or after negotiations gives application voluntarily vitiating the fair tendering process; it shall also tantamount to malpractice.

Note:-2 A register containing the reasons for blacklisting the supplier as also the names of all the partner of the suppliers and the allied concerns coming within the effective influence of the blacklisted supplier will be maintained.

Note: - 3 A register of black listed supplier will be maintained which will not only include suppliers enlisted with the Enlisting Authority but also black listed suppliers in Nigam.

Note :-4 A Black listed supplier (i) shall not be entitled for registration in any of the Discom (ii) shall not be awarded any supply order in future in any Discom during the notified period.(iii) his registration if any shall stand cancelled immediately and his registration security /EMD/S.D. shall stand forfeited. (iv) In case of blacklisting of the firm by any one of Discom for the cogent prescribed reason(s) as stipulated above, the same shall be applicable to all the three Discoms and as a consequence of blacklisting, all the pending orders to that firm, will be cancelled in all three (3)

Discoms with immediate effect. However in respect of completed/executed contract G.P. obligations as well as other liabilities shall be fulfilled by the supplier.

**(B) Severment of Business relation:**

(a) After having given Show Cause Notice of 30 days, and having established & cogent reasons for Severment of business relation as given below, the firm should immediately be severed the business relations for a period of 2 to 3 years indicating reasons of doing so, in the letter itself, and a copy of such severment should be given to the firm, with the approval of CLPC:-

(i) The supplier continuously refuses to pay Nigam dues without showing adequate reasons and where the purchasing authority is satisfied that no reasonable dispute attracting reference to Settlement Committee or Court of Law exists for the supplier's action of non-supply.

(ii) When vendor does not accept LOI/detailed purchase order awarded on its accepted prices and terms & conditions or does not comply with the contractual formalities.

(iii) When vendor/supplier who otherwise completed contractual formalities but does not commence supplies on the date of opening of technical bid of the fresh tender/completion of schedule delivery period whichever is later.

**Note-1**-In case supplier does not deposit outstanding dues towards Nigam, even after completion of severment period, the period of severment will continue.

2. Severment done purely/ mainly on account of non-deposition of dues against the supplier/vendor/contractor could be lifted by CLPC, if the dues are deposited prior to the expiry of such severment period.

3. Severment done by one Discom for non-supply of material and /or corresponding non-recovery of dues will not be effective in other Discoms except in respect of common purchase cases of three Discom.

4. On severment of business, the EMD/SD/vendor registration security will be forfeited.

5. The orders in execution satisfactorily will not be cancelled other than the order on which severment have been done.

**(C) DEBARMENT**

Reasons on which Debarment can be made:-

(i) The competent authority may debar the supplier on account of his performance or other disabilities, if it is no longer considered fit to remain under vendor registration as per his obligation under vendor registration.

(ii) If at any subsequent stage of inspection of firms after award of contract, it is found that firm does not have sufficient tech. staff or required/necessary technical equipments, the purchasing authority can debar the firm for one year or next tenders whichever is later. The debarment will be lifted only on re-inspection of firm's works; the defects noticed earlier are fully rectified to the satisfaction of Nigam.

(iii) When contract agreement executed and supplies commenced but could supply only up to 50% of ordered quantity and scheduled delivery period expired, then the firm can be debarred for one year or next tender whichever is later in that Discom only for that particular item/rating/ capacity/size etc.

(iv) The suppliers who have been awarded contract for supply of material is not adhering to the periodic delivery schedule, the contract awarding authority reserve the right to terminate the contract and may debar the firm in participating in tender for a period of 2 to 3 years.

Note:-1. On debarment, the EMD/ SD/Vendor Registration security shall be forfeited.

Note:-2. If the firm is debarred in one Discom for any reasons then the same should not be applicable in other Discom subject to exception that in case of common Discoms purchases such debarment of a firm would be applicable to all three Discoms for that particular item and rating/capacity/size etc.

## **6.0 APPEALS AND APPLICATIONS:-**

Appeal against the order of blacklisting, severment and debarment can be filed before BOD within a period of 3 months from the date of intimation. The letter of appeal will be addressed to the order placing authority. Who will process the case for placing the matter in B.O.D. with in a period 60 days. The BOD may reduce or waive the penalty, if sufficient reasons/supporting documents are furnished by the supplier.

### **GENERAL CONDITIONS : - (ALL CONDITIONS BE DULY SIGNED & SEALED)**

- I) The bidder shall clearly indicate the deviations such as 'Technical Deviation & Commercial Deviations' in the prescribed proforma only. The deviations indicated elsewhere in the bid shall not be accepted.
- II) The bidder must clearly fill up each and every particular of guaranteed technical particulars annexed with Technical Specifications otherwise he will be responsible for Technical Non-responsiveness.
- III) All documents required in the prescribed format are to be furnished along with the bid itself only except an attested copy of BIS license (wherever it is required), failing which the bid will be summarily rejected.

- IV) However, a copy of BIS License may be submitted by the bidder up to the official working hours of one working day prior to the schedule / notified date of opening of price bid.

-----

**BANK GUARANTEE IN LIEU OF FURNISHING OF TYPE TEST CERTIFICATE**

(On Rajasthan Non-Judicial Stamp Paper of 100/-)

To,

The Superintending Engineer (MM)  
Ajmer Vidyut Vitran Nigam Limited  
Reg. Off. Vidyut Bhawan, Makarwali Road,  
Panchsheel Nagar, Ajmer-305004.

Dear Sir,

Whereas Ajmer Vidyut Vitran Nigam Limited, Ajmer (hereinafter called the Purchaser) has issued a tender enquiry under TN\_\_\_\_\_ for procurement of \_\_\_\_\_ (name of material).

Whereas M/s \_\_\_\_\_ (hereinafter called the bidder) has furnished a bid for supply of \_\_\_\_\_ to the Superintending Engineer (MM), Ajmer Vidyut Vitran Nigam Limited, Ajmer or his nominated officer(s).

Whereas in accordance with the provision of the specification of the aforesaid TN\_\_\_\_\_, the bidder can deposit a bank guarantee in lieu of the requirement of furnishing the type test certificates.

Whereas M/s \_\_\_\_\_ (the bidder) have requested us (Name of the Bank) to furnish the bank guarantee, in lieu of the type test certificate, for an amount equivalent to Rs.\_\_\_\_\_ (in words also) only.

Under this Bank Guarantee, we (Name of the Bank) hereby undertake unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to the purchaser on his first demand without whatsoever right of objection on our part and without his first claim to the bidder, in the amount not exceeding (amount of guarantee in figures and words).

Payment pursuant to this undertaking will be demanded by the purchaser from the Bank and will be met by the Bank without question in the case in which the bidder, on receipt of the order and/ or after the acceptance of this tender, makes default in furnishing the required type test certificates. As to whether the occasion or ground has arisen for such demand the decision of the Superintending Engineer (MM), Ajmer Vidyut Vitran Nigam Limited shall be final.

The liability of the Bank shall not at any time exceed Rs.\_\_\_\_\_ (Rupees \_\_\_\_\_).

The undertaking will be determined on but will not withstanding such determination, continue to be in force till the expiry of 3 months from that date.

No indulgence or grant of time by the purchaser to the bidder without the acknowledgement of the Bank will discharge the liabilities of the Bank under this guarantee.

The guarantee herein contained shall not be affected by any change in the constitution of the bidder.

All disputes arising under the said guarantee between the Bank and the bidder or between the bidder and the purchaser pertaining to the guarantee shall be subject to the jurisdiction of Courts only at Ajmer in Rajasthan.

The Bank further undertakes not to revoke this guarantee during its currency except with the previous consent of the Superintending Engineer (MM), Ajmer Vidyut Vitran Nigam Limited, Ajmer.

Notwithstanding anything contained herein before, the Bank's liability under this guarantee i.e. restricted to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) and the guarantee shall remain in force upto \_\_\_\_\_. Unless demand or claim in writing is presented on the Bank within three months from that date, the Bank shall be released and discharged from all liabilities there-under. However, the validity of the bank guarantee shall be extended as and when required by the purchaser.

IN WITNESS WHEREOF the Bank has executed these presents the \_\_\_\_\_ day \_\_\_\_\_ month \_\_\_\_\_ and year \_\_\_\_\_.

Yours faithfully,

(Bankers)  
EXECUTANT

Witnesses:

1.

2.





**SCHEDULE-IV `A`****Must be filled-in by the tenderer and attach with technical bid (Part-I)**

To,

The Superintending Engineer (MM),  
Ajmer Vidyut Vitran Nigam Limited,  
Ajmer.

Dear Sir,

With reference to your invitation to tender against specification No. AVVNL/SE/MM/E2A3/TN-1087 we agree to supply the following quantity:-

S. No	Particulars of item	Tendered Quantity (Nos.)	Qty. Offered	Justification of quantity offered as per Qualifying Requirement.	Status of Type Test Certificates.
1	2	3	4	5	6
1.	<b>THREE POLE MCCBs</b>				
	i) Three Pole Moulded Case Circuit Breakers (MCCBs) of frame size 100 Amp (continuous current ratings) with fixed overload settings of 32 Amp suitable for installation on 16/10 KVA Three Phase Distribution transformers(DTs)	19,674			
	ii) Three Pole Moulded Case Circuit Breakers (MCCBs) of frame size 200 Amp (continuous current ratings) with fixed overload settings of 110 Amp suitable for installation on 63 KVA Three Phase Distribution transformers(DTs)	406			
2.	<b>SINGLE POLE MCCBs</b>				
	i) Single Pole Moulded Case Circuit Breakers (MCCBs) of frame size 60 Amp (continuous current ratings) with fixed overload settings of 25 Amp suitable for installation on 5 KVA single Phase Distribution transformers (DTs).	40,000			

1. The offer is valid for a period of 120 days from the date of opening of this tender.
2. The Prices are `FIRM`
3. It is noted that the quantities as mentioned in the specification are approximate and we agree to supply any quantity as per your requirement.
4. The delivery shall strictly be in accordance with our delivery clause as given in **Schedule-VIII** of this specification. In case we fail to deliver the material as indicated in the clause No. 1.23 of G.C.C. (Schedule-II), we are liable to pay recovery for delay in delivery as per clause No. 1.24 of this Schedule-II of this specification.  
The material shall conform to your specification No. AVVNL/SE/MM/E2A3/TN-1087 and as per relevant ISS in all respect.
5. We confirm that we agree to all the terms & conditions as well as the technical stipulations of your specification No. AVVNL/SE/MM/E2A3/TN-1087 and there are no deviations other than as specified in the **Schedule VI (A&B)**.

Yours faithfully,

Signature of tenderer  
with stamp

Dated

**Schedule – V**



**AJMER VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**

Statement of guaranteed technical particulars and other performance data for supply of  
..... (Name of material) against specification  
no.....

---

S.No.      Particulars of technical & other performance data guaranteed.

---

---

Certified that we agree to all the aforesaid technical particulars and other performance data except following :-

---

S.No.	Particulars of technical & other Performance data	Reasons for deviations/departure.
-------	---	-----------------------------------

---

---

**(Signature)**  
Name & Designation  
with seal of the bidder.

Schedule – V(A)



**GUARANTEED TECHNICAL PARTICULARS FOR MOULDED CASE  
CIRCUIT BREAKER AGAINST TN-1087  
(TO BE FURNISHED ALONG WITH TENDER)**

<b>S.N.</b>	<b>Description</b>	<b>Technical Particulars Offered</b>
1a.	Name of the manufacturer & Address of office.	
b.	Address of works	
2.	Make	
3.	Type and Model of MCCB	
3.	Number of Poles	
4.	Rated frequency , Hz.	
5.	Utilization category.	
6.	Standards to which confirms to for:	
	a- Accuracy	
	b-protection/ safety	
7.	Rated Operating Current, Frame size Amp(In)	
8.	Conventional thermal current(Ith)	
9.	Rated Operational Voltage, Volts	
10.	Fixed Overload release setting (Amp)	
11.	Rated Insulation Voltage ,(Ui)	
12.	Rated service short ckt. Breaking capacity, Ics (KA rms) at 0.4 pf.	
13.	Rated ultimate short ckt. Breaking capacity, Icu (KA rms) at 0.4 pf.	
14.	Rated short Ckt. Breaking capacity, Ics (KA) is 100% of ultimate breaking capacity, Icu.	

15.	Power factor for short ckt. (Max.)	
16.	Temperature dependent or independent with reference ambient.	
17.	In case of thermal type of release, the manufacturer shall state the influence of variations in the ambient temperature range of (-) 5 degC to (+) 50 deg C. and further effect on rating and performance with every 5 deg C increase in ambient up to (+) 75 deg C.	
18.	Deration permissible and actual duration up to max. temperature of 80 deg C.	
	Ambient temperature of surroundings of MCCB in operation	Derating of MCCB in % from its standard rating at reference temperature of 50 degC.
i	55 DegC	
ii	60 DegC	
iii	65 DegC	
iv	70 DegC	
v	75 DegC	
vi	80 DegC	
19.	Power loss and milli volt drop values.	
20.	Protection against Over load.	
21.	Withstand voltage.	
22.	Type of operating mechanism with Operating principle.	
23.	Type of release.	
A	Overload release.	
B	Short circuit release.	
24.	Whether Short circuit release is at (N x In) Amp and type of release Fixed/Variable.	
25.	Is Rated short time withstands current of offered MCCB is 12 x In	

	as per IS.	
26.	Whether time-current characteristics is as per specifications with limit of de-rating with temperature rise.	
27.	Whether the MCCB is having disconnecting functions with positive isolation features.	
28.	Whether the MCCB is having flexible mounting with line-load reversibility features i.e. no-change in rating & breaking capacity of MCCB when mounted in different orientations and with line & load connections changed.	
29.	Type of input-output terminal Screw type or cage-clamp type.	
30.	Whether clearance between terminals is as per requirement of specifications clause 3.2.6.	
31.	Weight of the MCCB	
32.	Dimensions of the MCCB	
33.	Whether samples submitted with offer as specified.	
34.	Whether Instructions and operating manual supplied with each MCCB.	
35.	Details of Type test report enclosed with offer.(To be verified during inspection in case successful bidder)	

**Name of Firm**  
**Signature of Bidder**  
**Designation & Seal**  
**Date**

**Schedule – VI (A)**



**AJMER VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**

**DEPARTURE/DEVIATION FROM TECHNICAL SPECIFICATION**

The bidder shall state under this schedule the departure from the Purchaser's specification in respect of technical is as under:-

---

S.No.	Main Deviations from Technical Specification.
-------	---

---

---

Certified that we agree to all the technical specification of the NIT except for the deviation to the extent indicated above.

**(Signature)**  
Name & Designation  
with seal of the bidder.

**Schedule – VI (B)**



**AJMER VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**

**DEPARTURE FROM COMMERCIAL TERMS & CONDITIONS OF THE  
SPECIFICATION**

The bidder shall state under this schedule the departure from the Purchaser's specification in respect of Commercial terms & conditions:-

---

S.No.	Main Deviations from Specification.
-------	-------------------------------------

---

---

Certified that we agree to all the commercial terms & conditions as laid down in General Conditions of Contract to the specification except for the deviation to the extent indicated above.

**(Signature)**

Name & Designation  
with seal of the bidder.



**Schedule – VII**



**AJMER VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking**  
**LIST OF PAST SUPPLIES**

The bidder shall state under this schedule whether material and equipments, similar to those offered in the tender have been previously supplied by him. A list shall be given of such orders executed by him together with information regarding the names of purchasing organizations, quantities supplied and when the supplies were effected. This list should be in form given below:-

S.No.	Detailed particulars of items supplied	Qty in Nos.	Order No. & Date	Name & details of purchasing authority	Date of Completion
1	2	3	4	5	6

If executed partially to be mentioned (Qty. in Nos..)	whether still to be executed	Delivery stipulated in order	Remarks
7	8	9	10

**Note:** Separate schedules are to be furnished by the bidder for past supply to the **JVVNL/AVVNL/JdVVNL**, other State Electricity Boards and other Departments /Organisations.

**(Signature)**

Name & Designation  
with seal of the bidder.

**SCHEDULE-VIIIA**

**TN-1087**

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that M/s. \_\_\_\_\_ (Complete with address) have manufactured and supplied the goods / equipments / material during the following financial year(s) to the Utilities / Government Departments / Discoms/ SEBs as detailed out below:

**FOR THE LAST THREE FINANCIAL YEARS FROM THE DATE OF OPENING OF TECHNO-COMMERCIAL BID.**

S.No	Financial year in which material supplied	Detailed Particulars of item(s) supplied	Name and particulars of purchasing authority	Order No. & date against which item(s) supplied	Unit	Ordered		Actual Supplied up to		Remarks
						Quantity	Value (Rs)	Quantity	Value (Rs)	
1	2	3	4	5	6	7	8	9	10	11

Signature ,  
Name & Designation  
With Seal of the Bidder  
Date \_\_\_\_\_  
Place \_\_\_\_\_

Signature of C.A  
Name :  
Address:  
  
Membership No

The above particulars are true and correct based on explanations, records and books of accounts produced before us. Further the above certificate issued on the request of the company

CA Firm (\_\_\_\_\_)

**Note:- The C.A. certificate must be signed by the bidder and C.A. firm. The details i.e. address of C.A. & membership No. shall clearly be mentioned on C.A. certificate. In case**

**C.A. certificate is not signed by the bidder/furnished without membership No. & address of C.A. then same may not be considered for which responsibility rests with the bidder.**

**Schedule – VIII**



**AJMER VIDYUT VITRAN NIGAM LIMITED**

**A Govt. of Rajasthan Undertaking  
DELIVERY SCHEDULE**

**PART-A**

The delivery schedule of the material by the Purchase Officer is as mentioned hereunder:-

<b>Sr. No.</b>	<b>Particulars of Material</b>	<b>Commencement period</b>	<b>Rate of supply per month</b>	<b>Period for completion of delivery of entire material</b>
1.	Three Pole LT MCCB	After 30 Days from the date of receipt of detailed Purchase Order.	_____ Nos. per month (to be quoted by tenderer)	Completion in <b>Six months</b> at equal monthly rate, thereafter.

**PART-B**

In case bidder deviates from the delivery schedule mentioned by the purchaser in Part-A then the delivery schedule shall be indicated/mentioned by the bidder as under:-

S.No.	Particulars of Material	Commencement period per Month.	Rate of supply per Month	Period for completion of delivery of entire material
-------	-------------------------	--------------------------------	--------------------------	--

- Note:**
1. During the commencement period the process of model assembly and submission of B.O.M. for approval shall be got completed.
  2. During the commencement period the contractual formalities shall be got completed.

**(Signature)**

Name & Designation  
with seal of the bidder.

## Schedule – IX



### AJMER VIDYUT VITRAN NIGAM LIMITED

#### A Govt. of Rajasthan Undertaking

List of Equipments and Technical Hands Available with the Firm

(To be filled in by the bidders & enclosed with the bid)


Manufacturers and / or their authorized agents who are quoting against this bid are requested to furnish the following information along-with the bid. The Purchaser will have the discretion to ignore the bid without the under noted particulars and/or ignore the bid particulars.

1.	Name and Address of Manufacturer	
2.	Whether firm is proprietorship/partnership/ Limited (Please give details and also enclose copy of memorandum of constitution of firm along with name of directors/ partners/proprietor & their address.	
3.	Place where works exist (indicate the name of the only one works from where you want to supply the offered material).	
4.	Details of machinery particularly with B.H.P. of each item installed.	
5.	Details of staff employed in the works	
6.	Date when started the manufacturing of item under reference	
7.	List of items manufactured.	
8.	Literature and drawings of items manufactured showing their description, size, design and other important technical particulars	
9.	Details of order so far, executed alongwith the names of organization to whom supplied.	
10.	Manufacturing capacity.	
11.	Is the workshop open for inspection by the representative of the board, if required?	
12.	Statement of financial resources and Banking Reference along with Balance-Sheet for previous two years	
13.	Testing facilities available for the manufactured articles in the testing laboratory of works.	
14.	Whether the Firm is a small/medium/large scale industry.	
15.	Registration No. with :-	
	i. Small Scale, National/State.	
	ii) DGTD	
	iii) State Industries Department	

**(Signature)**

Name & Designation  
with seal of the bidder.

**GENERAL PARTICULARS ABOUT THE TENDER IN BRIEF**

	<p><b>AJMER VIDYUT VITRAN NIGAM LIMITED</b>  <b>(MATERIAL MANAGEMENT WING)</b>  Corporate Identification Number (CIN) – U40109RJ2000SGC016482  Regd. Off. Vidyut Bhawan, Panchsheel Nagar, Makarwali Road, Ajmer-305004  Phone: +91-145-2644529, FAX: +91-145-2644542,  E-mail - <a href="mailto:semmajmer@gmail.com">semmajmer@gmail.com</a> Website – <a href="http://www.avvnl.com">www.avvnl.com</a></p>
---	--

**SPECIFICATION NO. AVVNL/SE/MM/E2A3/TN-1087 FOR SUPPLY OF SINGLE POLE & THREE POLE LT MCCB AGAINST TENDER NOTICE-1087**

Availability of tender documents on web site:	26.12.2016 at 2.00 PM site on wards
Last date & time for down loading of tender documents:	03.01.2017 at 5:00 PM
Last date & time for online (E-tendering) Tender/offer:-	03.01.2017 at 5:00 PM
Date & time of online opening of tender	04.01.2017 at 2:00 PM
RISL Processing Fee (Non Refundable)	Rs. 1000/-
Cost of Specification (Non Refundable)	Rs. 2500/-
Validity	120 days from the next date of opening of techno commercial Bid
Earnest money	Rs. 2,00,000 (Rs. Two Lac Only) or exemption Certificate of vendor registration of Class "A" category or above
Tendering Qty.	60,080 Nos.
Contact person (Authorized Bid Signatory)	Superintending Engineer (MM), AVVNL, Ajmer
Correspondence Address	Panchsheel, Ajmer
Mobile No.	9414004258
Telephone & Fax No.	0145-2644529/ 0145-2644542
Website & E-Mail:	3. Web.- <a href="http://www.avvnl.com">www.avvnl.com</a>
	4. E-mail:- Web:- <a href="http://risl.rajasthan.gov.in">http://risl.rajasthan.gov.in</a> , Email:- <a href="mailto:info.risl@rajasthan.gov.in">info.risl@rajasthan.gov.in</a>
Address Of RISL:- Rajcomp Info Services Limited (RISL) 1 <sup>st</sup> Floor, Yogna Bhawan, Tilak Marg, C-Scheme, Jaipur (Rajasthan) Phone:-0141-5103902, 4031900 Fax: - 0141-2228701 Web:- <a href="http://risl.rajasthan.gov.in">http://risl.rajasthan.gov.in</a> , Email:- <a href="mailto:info.risl@rajasthan.gov.in">info.risl@rajasthan.gov.in</a>	

**VERY VERY IMPORTANT**

1. The bidders, in their own interest are requested to read very carefully the tender document before submitting the bid only through online on website <http://www.eproc.rajasthan.gov.in/nicgep/app>. The bidders can download bid documents and submit their bids **upto 5.00 p.m.** one day **prior** to schedule date of opening of respective bid mentioned above.
2. The Tender process fee Rs.1,000/- paid by Demand Draft/Banker's Cheque in favour of MD,RISL, Jaipur and **cost of tender specification and EMD amount (wherever applicable)** paid by Demand Draft/Banker's Cheque in favour of Sr.AO (EA & Cash), AVVNL, Ajmer (payable at Ajmer) can be deposited in the office of the Superintending Engineer (MM), AVVNL, **VIDYUT BHAWAN, MAKARWALI ROAD, PUNCHSHEEL, AJMER-305004** upto 2.00 p.m. **upto one WORKING day prior to schedule date of opening of respective bid. However the bidders who possess valid vendor registration issued by AVVNL as per Clause No. 1.5.3 of Section-II (General Condition of Contract)** for supply of quoted items under appropriate category are not required to furnish Earnest Money Deposit. The Central and State Govt. undertakings are exempted from furnishing of Earnest money subject to furnishing of such certificate / documentary evidence in support of their being Govt. (Central/State) undertaking. **They shall upload the proof of such valid registration/exemption certificate with their bid.**
3. The bidders are required to **upload the** receipt of deposing all above payments along with their tender at the relevant place on the scheduled date & time otherwise their bids are liable to be rejected.
4. Eligible bidders should submit their bid well in advance instead of waiting till last date. AVVNL will not be responsible for non-submission of Bid due to any website related problems.

**Note :-** All eligible interested bidders are required to get enrolled on e-Tendering portal <http://www.eproc.rajasthan.gov.in/nicgep/app>.

\*\*\*\*\*

## **SECTION - III**

### **TECHNICAL SPECIFICATION FOR SUPPLY OF MOULDED CASE CIRCUIT BREAKER AGAINST TN-1087.**

#### **3.1.1 SCOPE:**

This specification covers design, manufacture, assembly, testing at manufacturer's works before dispatch and delivery at Nigam stores any where in the jurisdiction of Ajmer Discom of Moulded Case Circuit Breakers (MCCBs) of specified current ratings and suitable for three/single phase LT circuits as mentioned hereunder.

#### **3.1.2 TECHNICAL REQUIREMENTS OF SPECIFICATIONS:**

##### **3.2.1 General description and Standards:**

The Moulded Case Circuit Breaker shall be generally confirming to IS: 13947-2/ 1993 or IEC: 60947-2 as amended up to date. The rated uninterrupted current of Three Pole MCCB shall be 200 Amp with the overload release set at 110 Amps (for MCCBs to be installed with 63 KVA Three Phase DT) and uninterrupted current of Three Pole MCCB shall be 100 Amp with the overload release set at 32 Amps (for MCCBs to be installed with 16/10 KVA Three Phase DT) and uninterrupted current of Single Pole MCCB shall be 60 Amp with the overload release set at 25 Amps (for MCCBs to be installed with 5 KVA Single Phase DT). The MCCB meeting the specified tripping characteristic shall be of utilization category-A (To be tested on test sequence 1, 2 & 3 of relevant IS) and fully type tested as per relevant standards and such type test certificates shall be furnished along with the tender.

The manufacturer should have valid ISI license/ applied with BIS for the tendered item shall be preferred. Document in support of having ISI License or have applied for the same with BIS shall be enclosed with the tender offer.

##### **3.2.2 Make and Models:**

The MCCB shall directly be purchased from the manufacturers. The make and offered model number shall be indicated invariably in the price schedule as well as Guaranteed Technical Parameters of the tender documents. All the Manufacturers shall enclose Credentials related with type-testing of their product as per the specifications of this tender and past supplies to the Govt. Purchasers and performance certificates from such users for performance and after sale services provided by the manufacturer. The offer found not furnishing the aforesaid information with tender documents might be ignored.

### 3.2.3 Electrical Ratings:

The MCCB's shall be manually independent and shall have quick make-quick break Mechanism and **push to trip facility**. The MCCB shall comply with the electrical parameters detailed as under:

S. N.	Parameters	Required parameter range/ ratings.	
		TP MCCB	SP MCCB
1.	Application	Outdoor enclosed type	
2.	Specified reference ambient temperature range for which overload release is independent.	(-) 5 degC to (+) 50 deg C	
3.	No. of Poles	Three	One
4.	Rated Insulation Level	660 Volt	660 Volt
5.	Rated operating voltage	415 Volts	240 Volts
6.	Impulse withstand voltage (kV)	8 k Volts	
7.	Continuous Operating Current rating (Frame size)	100, 200 Amps as specified in 3.2.1 above.	60 Amp. for 5 KVA Single Phase Distribution Transformers.
8.	Fixed Overload release setting Amp.	32 Amps MCCBs to be installed for 16/10 KVA Three Phase DTs. & 110 Amps MCCBs to be installed for 63 KVA Three Phase DTs.	25 Amp. for 5 KVA Single Phase Distribution Transformers
9.	Rated ultimate short circuit breaking capacity (Icu)	Not less than 18 KA at rated voltage and 0.4 PF.	
10.	Rated service short circuit breaking capacity (Ics)	100% of Icu at rated voltage and 0.4 PF.	
11.	Power Factor for Short Circuit (Max.)	0.4 (Lag)	
12.	Utilization Category.	"A" (IS: 13947/1993 as amended up to date)	
13.	Type of MCCB: Trip mechanism.	Hydro-magnetic / Thermal Magnetic with trip free mechanism.	
14.	Design.	Current limiting design with fast operating time & low thermal stress with compact size.	

### 3.2.4 Time-current characteristics:

The L.T. MCCB shall not cause any nuisance tripping due to switching current of motor & capacitor loads and shall have the following Time Current characteristics:

Multiple of normal current setting	Tripping time
1.05	More than 2.5 Hrs.
1.2	More than 10 minutes & less than 2 Hrs.
1.3	Less than 30 minutes.
1.4	Less than 10 minutes.
2.5	Less than 1 minute.



6.0	Less than 5 seconds.
12.0	Instantaneous (less than 40 milli seconds).

For above time / current characteristics, reference calibration temperature of the breaker shall be 50 Deg. C. Deration (Reduction in continuous rating due to increase in operating temperature), if any, up to ambient temp of 60 Deg. C. shall not exceed 10% of the current setting indicated above.

### 3.2.5 Additional features:

The Moulded Case Circuit Breaker shall have the following additional features:

- i The three-pole/ Single Pole MCCB to be provided on LV side having overload trip-release with inverse-time characteristics for overload-protection and magnetic trip-release for instantaneous tripping in the wake of short circuits.
- ii The MCCB shall be marked with "brand-name" of the manufacturer and Service breaking capacity, Ics in KA duly embossed on casing on front-side. The other particulars may be marked as per prescribed marking norms in IS:13947 and IEC: 60947-2 with standard practice of manufacturer.
- iii The contacts of MCCB shall be self-wiping type so as to keep the contacts clean and low milli-volt drop.
- iv The MCCB shall preferably have appropriate provision like position of switch different from ON & OFF state to indicate tripping of MCCB.It shall help avoid damages while handling the MCCB at site.
- v The MCCB shall have flexible mounting with line-load reversibility feature i.e. no-change in rating & breaking capacity of MCCB when mounted in different orientations and with line & load connections changed.
- vi The overload element of each pole of MCCB shall be individually calibrated and tested to ensure reliability. Every trip-latch shall be specially heat-treated, hardened & polished to grind finish to provide accurate tripping characteristics in close tolerance limits.
- vii In order to facilitate adequate safety to workmen while working on LT feeder beyond Distribution Transformer, the MCCB shall have suitable disconnecting functions with positive isolation feature as per provisions of relevant standard.
- viii In case of thermal type of release, the manufacturer shall be prepared to state the influence of variations in the ambient temperature range of (-) 5 degC to (+) 50 deg C. and further effect on rating and performance with every 5 deg C increase in ambient up to (+) 75 deg C.for the purpose of such derating following information shall be furnished with offer for the offered model of the MCCB by the bidder.
- ix) Purchaser at his option may ask the supplier to supply the MCCB with the extended terminal without any price implication, if at any stage he feels so. Extended terminal should be mounted on the MCCBs properly with help of plain washer backed with

spring washer. The correct sequence for termination on MCCBs (incoming & outgoing sides) and connection of cable on extended terminal are as follows:

- a) MCCB side: Extended terminal Lug Plain Washer Spring Washer Bolt of suitable size.
- b) Cable side: (Connection on Extended Terminal): Nut Spring Washer Plain Washer Ext. Terminal Lug Plain Washer Bolt of suitable size.
- x) The brand name of the MCCB along with Ics value in KA should be embossed/ engraved on front of the MCCBs to avoid spurious product.
- xi) The consecutive serial number on MCCBs of each rating shall be marked on casing on one side. The MCCB shall also marked tender number along with marking of **PROPERTY OF AVVNL .**

S.N.	Ambient temperature of surroundings of MCCB in operation	Derating of MCCB in % from its standard rating at reference temperature of 50 degC.
1	55 DegC	
2	60 DegC	
3	65 DegC	
4	70 DegC	
5	75 DegC	
6	80 DegC	

### 3.2.6 Type, Size and Clearance of input-output terminals:

The terminal of input-output side of MCCB shall be suitable either for bottle type lugs or for U-type lugs of size for various rating of MCCBs as mentioned below:

S.N.	Rating of MCCB IN Frame / fixed overload setting , Amp	Lugs suitable for Copper cable of size in sq.mm	Remarks
1	100/32 Amp (TP), 200/110 Amp (TP), 60/25 Amp (SP),	Terminals shall be either cage-clamp type to accommodate bottle type lugs or Screw type to accommodate U-type/Ring type lugs.	Clearance between phases shall be sufficient to insert either bottle/U-type/Ring Type lugs with 35 sq.mm copper cable.

**The aforesaid technical parameters of MCCB shall be specifically indicated in the relevant item of GTP. -In order to ensure proper clearance between phases after fixing of lugs; suitable phase-barriers shall be supplies with each MCCB as accessory.**

### 3.3 TYPE TESTS:

The following certificates for type tests are essentially required:

- 3.3.1 The bidder shall enclose type test certificate for all type and acceptance test of sequence of tests-I, II & III of IS13947/IEC60947-2 complete with certified drawings, Oscillograms and approved drawing carried out from any testing house as indicated in clause No. 3 of Qualifying Requirement (Schedule-III-A) for the make

and model quoted. It shall be essentially required to be furnished along with the offer clearly stating the ambient conditions under which test has been conducted. The type test certificates furnished with offer should not be older than 5 years from the date of opening of tender.

3.3.2 All the necessary tests/checks shall be carried out as per the stipulations of IS: 13947/1993-part-2 (latest amended) / IEC60947-2 or equivalent International standards.

**3.3.3 Verification of material and Type tests on sample MCCB of first lot:-**

- i) The successful supplier shall offer first lot of MCCBs comprising minimum 1,000 Nos. of MCCBs (or 20% of ordered quantity whichever is more) for inspection. After satisfactory inspection, testing & clearance from purchaser, the material shall be dispatched to Nigam's stores.
- ii) Three samples of each rating (**for Test Sequence-I, II & III**) for balance type test shall be selected & sealed by the purchaser from the first lot received in Nigam's stores and shall be sent for type tests as per clause No. 3.3 of specification at any testing house as indicated in Clause No. 3 of Qualifying requirement (Schedule-III-A). The type test charges shall be borne by the supplier. The purchaser however in first instance may pay testing charges to the testing agency, which shall be recovered by Sr.AO (CPC) from the bill of the supplier. **However, the requirement of arranging "type test" not to be insisted on the supplier who have arranged type test reports of Test Sequence- I, II & III of IS13947/IEC947-2 complete with certified drawings, Oscillograms and approved drawing of any NABL accredited test laboratories/ Govt. approved lab for the make and model before commencement of supply. The type test should not be older than Five years from the date of opening of tender.**
- iii) The supplies, at the option of purchaser, may be utilized in the field after successful testing of 1% quantity or 10 Nos. samples whichever is more of each rating from the quantity consigned to each store(s) in respect of the tests mentioned below, at purchaser's lab. The supplier can continue supplying material in anticipation of successful type test(s) results. The payment to supplier shall be released only after receipt of successful type test reports. However, in case of suppliers who have already got type tested of material of same rating or higher may be allowed to make 70% payment of the supplies.

- 1 Visual examination and overall dimensional checking and weight/ marking.

In case of failure of samples of lot/ sub-lot in the test(s) detailed above, the entire quantity of respective lot/sub-lot shall be rejected and shall have to be replaced by the supplier at his own cost. Repeated failure/ poor results in the testing may render cancellation of order.

**The successful testing of all samples in respect of tests mentioned above shall be the acceptability criteria of the lot/sub-lot.**

- iv) In case of successful type test results, supplies shall be continued. However, in case of failure in type test(s), double the sample of each rating shall be selected from the supplies already received to get them type tested as per clause 3.3.3(ii) above at supplier's cost. In case of failure of any samples in type test(s), the order of balance quantity including the quantity lying unused in the stores/ field shall be cancelled. The guarantee period of quantity already supplied & used shall be doubled and payment for used MCCBs shall be arranged after deducting 30% cost of consignment (s) used.
- v) However, purchaser may allow the supplier to re-offer the material after change/ modification in the design of MCCBs. The balance material shall be accepted only after successful type testing. The type testing charges shall be borne by the supplier.
- vi) Due notice shall be given to supplier for such sample selection and such testing thereof to enable them to be present for the same if so desired by them. If the supplier or his authorized representative fails to attend the sample selection and testing, the same shall be carried out unilaterally by the purchaser and the results thereof shall be binding upon the supplier.
- vii) The purchaser also reserves the right to get additional samples for all or any of the selected tests at purchaser's cost at any independent test house at any stage of supply if so considered necessary to ensure that the quality of MCCBs being offered for inspection is same as already got type tested. In case of failure, the guarantee period of the quantity already supplied by the supplier shall be doubled and purchaser reserves the right to cancel the balance quantity.

### **3.4 SAFETY REQUIREMENTS:**

The Moulded Case Circuit Breaker shall be designed and constructed in such a way as to avoid introducing any danger in normal use and under normal working conditions, so as to ensure especially Personal safety against electric shock/ against effects of excessive voltage and Safety against spread of fire etc. The Product should be produced from a special material which reduces electrical leakage through and across the moulding in a negligible minimum and all metal parts wherever provided should be well insulated. The metallic parts of the equipment shall not remain exposed.

The design of the equipment should be based on IEC: 60947-2 safety standards enabling safe operation.

### **3.5 PACKING:**

The packing of the equipment shall be such that it should not get damaged during transit. Each MCCB shall be supplied with a hard paper /card board carrying case suitable for easy portability, rugged use and to prevent damage during transit in addition to packing as per relevant clause of GCC. The MCCB should be immune to vibrations and shocks in normal transportation and handling.

### **3.6 INSPECTIONS AND TESTING:**

It shall be governed by clause 1.27 of General conditions of Contract. Before dispatch, the MCCBs shall be inspected and tested by the authorized inspecting officer/Agency of the Purchaser at the works of the manufacturer. The manufacturer/supplier shall furnish the details of routine and acceptance tests, which shall be arranged at the time of inspection required as per relevant ISS to ascertain testing at the manufacturer's works in presence of purchaser's representative with following.

**3.6.1** All Acceptance tests as laid down in the ISS/purchaser's specification of TN-1087 including following Routine & Acceptance Tests in addition to tests of test sequence I as per IS 13947/ 1993 shall also carried out at the works of manufacturer during inspections:

1. Visual examination and overall dimensional checking.
2. Inspection of wiring and electric operation test.
3. Verification of dielectric properties test.
4. High Voltage test at 2.5 KV for one minute between:
  - a)-Main circuit & earth.
  - b)-Each pole with other two poles shorted with MCCB in closed condition.
  - c)-Control circuit and earth.
  - d)-Shorted top and bottom terminals with MCCB in open conditions.
5. Insulation resistance test (IS: 8623) with 1000 V MEGGER between above points of S.N.4.
6. Checking availability of all special features such as line-load reversibility & positive isolation etc. and accessories specified.
7. Power frequency test(IS:8623)
8. Milli-volt drop (IS:5147)
9. Degree of protection(IS:8084)
10. Temperature rise test (conducted one sample of each rating out of 1000 Nos. or part thereof) in which contact resistance (mili volt) shall also be indicated.
11. Verification of time current characteristics (conducted one sample of each rating out of 1000 Nos. or part thereof).

**3.6.2** The criteria for selection of number of samples and for acceptance of lot shall be on 1% quantity or 10 Nos. samples whichever more of each rating is. Before dispatch, the MCCBs shall be inspected and tested by the authorized inspecting officer/Agency of the Nigam at the works of the manufacturer. The manufacturer/supplier shall furnish the details of tests, which shall be arranged at the time of inspection as per relevant ISS/IEC to ascertain routine testing at the manufacturer's works in presence of purchaser's representative.

**The successful testing of all samples in respect of tests mentioned at s.no. 3.6.1 to 3.6.2 above shall be the acceptability criteria of the lot/sub-lot.**

### **3.7 COMPLETENESS OF EQUIPMENT:**

Any fittings accessories or apparatus, which may not have been specifically mentioned in the specification, shall be deemed to be included and shall be supplied by the

supplier without any extra charges. The MCCB shall be a complete unit in all respect whether such details are mentioned in this specification or not.

### **3.8 MAINTENANCE AND GUARANTEE:**

It shall be governed by clause no. 1.40 of General Conditions of Contract except that the successful bidder shall have to provide the guarantee of 36 (thirty six) months from the date of receipt of material in Nigam's store. The MCCBs found defective within the above guarantee period shall be replaced by the supplier free of cost within a period of one month from date of intimation.

### **3.9 BID SAMPLES:**

Each bidder have to furnish one No. sample of each rating of Three Phase & single Phase MCCB along with their offer failing which their offer may be ignored.

### **3.10 PRICES:**

The quoted prices shall be all adjusted unit FOR destination price inclusive of Excise Duty and Central Sales tax / VAT , freight ,Insurance and entry tax etc in respect of MCCB. If any duty and/ or taxes are applicable at concessional rate, the same shall be clearly mentioned otherwise full rate of ED and CST/VAT shall be taken for working out prices for comparison. The prices shall be quoted with complete break-up of ex-works price along with applicable taxes & duties as mentioned above. **The prices are 'FIRM'.**

### **3.11 DELIVERY SCHEDULE:**

The bidders are required to indicate the delivery period in the schedule attached herewith. The commencement period shall include the time taken for conducting the type test and approval of drawings etc. The commencement period will be 30 days from the date of receipt of P.O. Further the monthly delivery quoted shall be such that the entire offered quantity shall be completed within a period of 6 months from date of receipt of P.O. excluding commencement period. The offers deviating in deliveries as per above schedule given, shall be considered as non-responsive. The monthly delivery shall be quoted irrespective of the offered / ordered quantity and offers with any conditional deliveries shall be considered as non-responsive.

\*\*\*\*\*