



**BHARAT HEAVY ELECTRICALS LTD.**  
(A GOVT. OF INDIA UNDERTAKING)  
P.O BHEL Jhansi - 284129, INDIA  
Tel.:0510-277001/2412260 Fax: 2412120  
Email : mmx@bheljhs.co.in

## PURCHASE ENQUIRY

ENQ NO/DT: E1820028 26/03/23  
REV NO/DT: 1 26/03/23

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OUR ABOVE ENQUIRY OF PREVIOUS REV & DATE IS AMENDED WITH FOLLOWING CHANGED / ADDED ITEMS.

Eng Due on: 24-04-23 MONDAY  
Close at: 13:15 Open at: 14:00  
Matcat: 181004 RIP BUSHING  
Validity: 120 days from Technical bid opening date  
IEM:  
TOP: See Special Remarks  
RA: RA not applicable

REQUIRED: TEST CERT

Est. Value: Item wise  
Bid Type: TWO BID  
Tot Item: 1  
Delivery: FOR Jhansi  
E-Proc: Yes

ITEM NO : 1 PSL QTY/UM: 1.00 NO  
MATL CODE : TR172629N608 PO QTY /UM: 1.00 NO  
DESTINATION: JS

DESCRIPTION	DELIVERY	QUANTITY (PSL UM)
72.5KV, 2000AMPS 300CT LENGHT OIL-AIR RIP BUSHING. MOUNTING SHALL BE SIMILAR TO AS PER ATTACHED ANNEXURE & BCE-3-1181.	APR-23	1.00

### SPECIAL REMARKS:

- ENQUIRY IS FLOATED IN TWO BID SYSTEM THRU E-PROCUREMENT (<https://eprocurebhel.co.in>) TO PROCURE THE ITEM MENTIONED IN THE DESCRIPTION.
- TECHNICAL- COMMERCIAL MANDATORY SHEET AND TECHNICAL SPECIFICATION IS UPLOADED AT OUR E-PROCUREMENT PORTAL i.e <https://eprocurebhel.co.in>. ANY DEVIATIONS SHALL BE CLEARLY MENTIONED IN THE TECHNICAL BID ITSELF. DEVIATION SHEETS CAN BE ATTACHED SEPARATELY.
- SUBMISSION OF TENDER DOCUMENTS THROUGH OTHER THAN E-PROCUREMENT MODE SHALL NOT BE ACCEPTED.
- PLEASE QUOTE WITH FIRM RATES OTHERWISE OFFER WILL BE BY-PASSED.
- GUARANTEE AND TEST CERTIFICATE IS REQUIRED IN TRIPLICATE ALONGWITH EACH SUPPLY.
- TYPE TEST REPORT TO BE SUBMITTED ALONG WITH THE OFFER WHICH IS NOT OLDER THAN FIVE YEARS.
- DRAWING WITH DETAILS SHALL BE SUBMITTED ALONGWITH OFFER. PLEASE SUBMIT DRAWINGS ALONGWITH TECHNO - COMMERCIAL OFFER.
- SUCCESSFUL VENDOR TO START MANUFACTURING ONLY AFTER DRAWING APPROVAL FROM BHEL.
- LOADING SHALL BE APPLICABLE FOR NON ACCEPTANCE OF NIT TERMS AND CONDITIONS.
- INSPECTION BY CUSTOMER/TPI AT SUPPLIER WORKS.
- NO TENDER FEES IS APPLICABLE.
- RA NOT PROPOSED.
- TENDER EVALUATION WILL BE IN INR ON TOTAL COST TO BHEL ON FOR BHEL JHANSI BASIS.
- DELIVERY QUOTED IN ENQUIRY IS TENTATIVE ONLY. SUPPLIERS TO QUOTE THEIR OWN DELIVERY TIME.
- BEFORE START OF MANUFACTURING, SUPPLIER HAS TO TAKE MANUFACTURING CLEARANCE FROM BHEL.
- BUSHING SHALL BE TESTED AS PER IEC-60137. BUSHING TEST REPORTS TO BE SUPPLIED ALONG WITH EACH BUSHING.
- OFFER IS SOUGHT ONLY FROM BHEL APPROVED/REGISTERED VENDORS. HENCE FOR QUALIFYING IN THE ENQUIRY, VENDOR TO GET THEMSELVES REGISTERED/ APPROVED IN BHEL BEFORE PRICE BID OPENING.
- APPLICABLE DRAWING AND QUALITY PLAN IS ATTACHED WITH ENQUIRY DOCUMENT.
- ENQUIRY IS FLOATED AS GLOBAL OPEN TENDER.





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20.A bidder shall not have conflict of interest with other bidders.

Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a) they have controlling partner (s) in common;Or
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; Or
- c) they have the same legal representative/agent for purposes of this bid; Or
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, Or
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid; Or
- f) In cases of agents quoting in offshore procurements, on behalf of the principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:

- 1. The principal manufacturer directly or through one Indian agent on his behalf; and

- 2. Indian/foreign agent on behalf of only one principal, ?

Or

- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid,

Or

- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business.

21.REV00 NOT ISSUED.REV01 FIRST ISSUE.

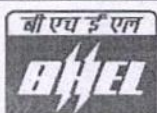
In case the bidder has not submitted PAN No, TIN No. and E-mail ID, the bidder has to submit the same along with the copy of PAN No and TIN No. Else his offer will be liable to be rejected.

If you are not in a position to quote due to any reason, you must send regret letter titled enquiry no. etc, failing which you may not be considered for sending future enquiries.

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ENCLOSERS:





JSC140/M2053


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FOR AND ON BEHALF OF  
BHARAT HEAVY ELECTRICALS LTD

  
26/3/23  
RAHUL KUMAR  
DY MANAGER (TRFR MM)  
Email:-rahulkumar.r@bhel.in

\*\*\*\*\* END OF PURCHASE ENQUIRY \*\*\*\*\*

## NOTE :

- \* THE BIDDER IS INFORMED THAT THE GENERAL TERMS & CONDITIONS OF ENQUIRY (JHS 2055A Rev 03) WHICH ARE UPLOADED AT <https://www.bheljhs.co.in/apps/sip/index.php> AT (TERMS & CONDITION -> FOR ENQUIRY ) LINK, ARE TO BE READ BY THE BIDDER BEFORE SUBMITTING QUOTE IN THE ENQUIRY. BHEL SHALL CONSTRUCE THE PARTICIPATION BY THE BIDDER IN ENQUIRY AS ACCEPTANCE TO THE GENERAL TERMS AND CONDITIONS OF ENQUIRY.
- \* SUPPLIERS ARE REQUESTED TO INFORM US WITH VALID CERTIFICATE, IF THEY ARE REGISTERED UNDER MSMED ACT'2006. (APPLICABLE FOR INDIAN SUPPLIERS ONLY).
- \* FOR SUPPLIERS SUPPLYING FROM OUTSIDE THE LOCAL AREA OF BHEL JHANSI, ENTRY TAX WILL BE APPLICABLE. SUPPLIERS SHOULD NECESSARILY INDICATE RATE OF ENTRY TAX SEPARATELY WHEREVER APPLICABLE. THEY SHOULD ALSO MENTION THE ENTRY TAX CHARGED SEPARATELY IN THE INVOICE.
- \* FOR SUPPLIERS SUPPLYING FROM OUTSIDE UP, IN CASE THE OFFER IS SILENT ON ENTRY TAX, IT SHALL BE LOADED SUITABLY WITH THE APPLICABLE RATES
- \* IN CASE IF THERE IS ANY DIFFERENCE BETWEEN THE 'SPECIAL REMARKS/ANNEXURES' OF THE ENQUIRY AND THE PREPRINTED TERMS & CONDITIONS (REF JSC140/M2053), THE REQUIREMENT GIVEN IN REMARKS WILL PREVAIL.
- \* Reference Sl. No. 2(B) of General Terms and Conditions regarding option for offer submission through Email addressed to [tenderbox.jhs@bhel.in](mailto:tenderbox.jhs@bhel.in) , please note that the maximum mail size including attachments should not exceed 20 MB , otherwise the offer shall not be delivered due to size limitation and bidder sending mail attachments more than 20 MB will have no claim whatsoever on the subject tender . Also due to any technical snag , if offer has not reached [tenderbox.jhs@bhel.in](mailto:tenderbox.jhs@bhel.in) , it will be bidder's sole responsibility to ensure offer submission through alternate routes before the due date and time .BHEL will not entertain any such claim for non-receipt of offer on time .

**Acceptance to salient Terms & Conditions of the Enquiry E1820028 i.e. Techno Commercial Bid**

*Important: This format is to be submitted in original, along with Part-A of bid, duly signed by the bidders, as proof of acceptance.*

Sl.No	DESCRIPTION	TO BE FILLED BY THE VENDOR
A-	Name of the Supplier with Telephone No./Fax No./Email	
B-	Name and Designation of Contact person	
C-	Address of the works at which inspection/delivery is offered.	

Sl. no.	Particulars	Supplier's Confirmation
1-	Complete acceptance to Technical terms & conditions including Technical/Purchase Specs as mentioned in <b>ENQUIRY</b>	<input type="checkbox"/> Accepted
2-	Participation by the Bidders in the tender shall be construed as acceptance of the bidder to the General Terms and Conditions JHS2055A-Rev-03 uploaded at <a href="https://jhs.bhel.com/apps/sip/enq_terms/enq_tems_current.pdf">https://jhs.bhel.com/apps/sip/enq_terms/enq_tems_current.pdf</a>  We confirm that we have read the GTC with applicable revision, and accepts the same.	<input type="checkbox"/> Accepted
3-	Acceptance for finalization of price bid Part-B through online Bidding (Reverse Auction)	<input type="checkbox"/> Accepted
4-	Conformance / Test Certificate/Guarantee Certificate (along with supply) as specified in enquiry will be provided.	<input type="checkbox"/> Yes
5-	<b>Delivery</b> period on FOB/CIF, /FOR basis from date of PO issue/Drawing approval, whichever is later.	.....Days.

6-	<b>Taxes and Duties (For indigenous bidders only):</b> -Extra as applicable.  a). CGST (Mention N.A if not applicable)  b). SGST (Mention N.A if not applicable)  c). IGST (Mention N.A if not applicable)	<input type="checkbox"/> Accepted  a).....%  b).....%  c).....%
7-	<b>Taxes and Duties (For Foreign bidders only):-</b> All taxes and duties in their country will be borne by them only and in India same shall be to BHEL account. Refer GTC (JHS2055A-Rev-03) for more detail and same shall prevail.	<input type="checkbox"/> Accepted
8-	<b>Price Bid</b> submitted as per attached price bid format only (Copy of blank price Bid is submitted).	<input type="checkbox"/> Accepted
9-	Acceptance for prices on firm basis and no PVC is applicable.	<input type="checkbox"/> Accepted
10-	Acceptance for prices finalization through reverse auction (R.A) i.e. Acceptance to participation in R.A	<input type="checkbox"/> Accepted
11-	<b>a). Terms of delivery on F.O.R BHEL Jhansi basis</b> (for indigenous bidders).  <b>b). Terms of delivery on F.O.B Load Port basis or CIF, basis.</b> (For Foreign bidders) (Pl mention name of Load Port)	<input type="checkbox"/> Accepted  <input type="checkbox"/> Accepted  Load Port.....
12-	<b>Validity</b> - Quoted prices are valid for 120 days from date of tender opening.	<input type="checkbox"/> Accepted
13-	<b><u>Payment Terms (For indigenous bidders)</u></b> - 100 % payment within 90 days (45 days for MSE / NSIC registered suppliers as per relevant act in force) from the date of receipt of material and submission of clear and admissible bill, subject to acceptance of material at BHEL, on direct presentation of the documents. In case of dispatch of material to site directly, site certification for receipt of materials is required unless otherwise provided for in the PO. Any deviation from the above payment terms, if accepted (by BHEL), shall be loaded @ SBI base rate (as on date of Part I bid opening) + 6%, for the purpose of bid evaluation.	<input type="checkbox"/> Accepted  <input type="checkbox"/> Accepted



14-	<b>Terms of payment (For Foreign Bidders): -</b> Our Standard Payment terms is: (i) 100% Payment through CAD or (ii) 100% payment will be considered by irrevocable and unconfirmed Usance LC with 120 days' interest free credit, to be reckoned from the date of Bill of Lading	(i) <input type="checkbox"/> Accepted  (ii) <input type="checkbox"/> Accepted
15-	No <b>Advance payment</b> terms will be accepted.	<input type="checkbox"/> Accepted
16-	<b><u>Liquidated Damage / Penalty</u></b> - Failure to supply by the time specified in the order will make the supplier liable to pay unconditional penalty of 1/2% of the price of the goods in arrear (delayed and not supplied) per week or part thereof, subject to a maximum of 10% of the order value unless agreed otherwise.	<input type="checkbox"/> Accepted
17-	<b><u>Risk Purchase</u></b> - If the material is not supplied within stipulated delivery indicated in PO, BHEL shall have the option to purchase the material from other sources at the supplier's risk & cost.	<input type="checkbox"/> Accepted
18-	<b><u>Guarantee:</u></b> In Case an order is placed, supplier shall be required to guarantee for smooth and satisfactory performance of the equipment for a period of 24 months from the date of receipt at BHEL Jhansi and certificate must be issued to this effect. Necessary instruction booklets for operation and maintenance are to be sent with supply, where applicable.	<input type="checkbox"/> Accepted
19-	Please furnish shipping Dimension & Weight of consignment in your offer.(For Foreign Suppliers)	No. of package ----- Dimension of each package 1- Length ----- 2- Width ----- 3- Height ----- 4- Weight -----
20-	"The Bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud prevention Policy displayed on BHEL website <a href="http://www.bhel.com">http://www.bhel.com</a> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice."	<input type="checkbox"/> Accepted
21	(i).Indian Supplier has to provide 15 Days advance intimation for inspector deputation on vendor works. Further dispatch clearance will be given within 4 days of submission of report to BHEL/CUSTOMER. Vendor to take care of other elements of inspection such as Inspection duration, Inspection report submission,	(i). <input type="checkbox"/> Accepted

	<p>arrangement of Packing, transportation duration from Supplier works to BHEL Jhansi etc. to meet delivery dates of PO.</p> <p>(ii).For Foreign suppliers, 45 Days advance intimation is required for vendor deputation on vendor works. Further dispatch clearance will be given within 7 days of submission of report to BHEL/Customer. All other things will be same as above.</p>	<p>(ii) .<input type="checkbox"/> Accepted</p>
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**Notes: -**

- 1) If rates are disclosed in covering letter or through any other format along with techno-commercial bid (Part-I), offer may not be considered.
- 2) **Evaluation of bid** will be done on landed cost to BHEL basis. Offers will be loaded for the deviation(s), if any, suitably. Hence, please quote accordingly.
- 3) In case of non-acceptance of BHEL L.D. clause, the suitable loading up to 10% maximum shall be done on supplier's quoted rate to derive the L-1 Status.
- 4) In case of CIF, Mumbai incoterm, freight and insurance shall be added up to BHEL, Jhansi for arriving at L1/L2 status. Loading shall be done as per BHEL Freight forwarder contract.
- 5) In case of FOB, load port delivery term, supplier offer will be loaded for Freight and insurance from Load port to BHEL, Jhansi.
- 6) Additional loading for Custom handling charges, DO charges, Destination charges shall be done as applicable on supplier for arriving at L1/L2 status.

**Signature of Supplier & seal** : .....

**Date** : .....

**Name of contact person** : .....

**Cell No.** : .....

**Landline with STD code & E-mail** : .....

## **ANNEXURE-A**

### **Technical specification of RIP Bushing**

1. Bushings shall be robust and designed for adequate cantilever strength to meet the requirement of seismic condition, substation layout and movement along with the spare Transformer with bushing erected and provided with proper support from one foundation to another foundation within the substation area. The electrical and mechanical characteristics of bushings shall be in accordance with IEC: 60137/DIN 42530. All details of the bushing shall be submitted for approval and design review.
2. Bushing for voltage of 52 kV and above shall be RIP bushing with composite polymer insulator.
3. RIP type bushing shall be provided with tap for capacitance and tan delta test. Test taps relying on pressure contacts against the outer earth layer of the bushing is not acceptable.
4. Mounting dimensions of bushing shall be as per drawing mentioned at drg. No. 000-T-E-A-001-R02.
5. Porcelain used in bushing manufacture shall be homogenous, free from lamination, cavities and other flaws or imperfections that might affect the mechanical or dielectric quality and shall be thoroughly vitrified, tough and impervious to moisture.
6. Polymer / composite insulator shall be seamless sheath of a silicone rubber compound. The housing & weather sheds should have silicon content of minimum 30% by weight. It should protect the bushing against environmental influences, external pollution and humidity. The interface between the housing and the core must be uniform and without voids. The strength of the bond shall be greater than the tearing strength of the polymer. The manufacturer shall follow non-destructive technique (N.D.T.) to check the quality of jointing of the housing interface with the core. The technique being followed with detailed procedure and sampling shall be finalized during finalization of MQP.

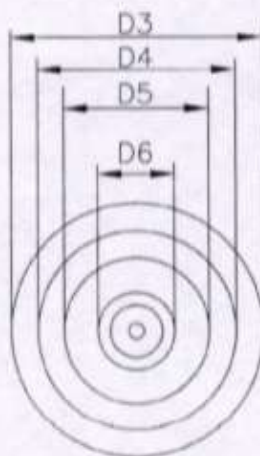
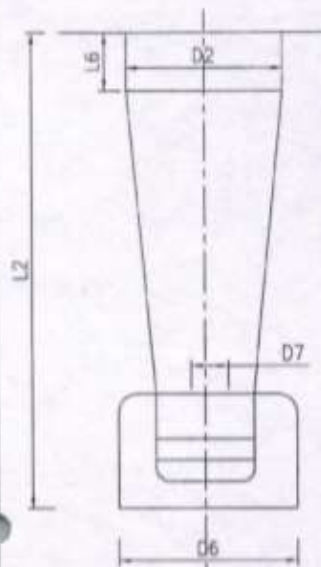
The weather sheds of the insulators shall be of alternate shed profile as per IEC 60815-3. The weather sheds shall be vulcanized to the sheath (extrusion process) or moulded as part of the sheath (injection moulding process) and free from imperfections. The vulcanization for extrusion process shall be at high temperature and for injection moulding shall be at high temperature & high pressure. Any seams / burrs protruding axially along the insulator, resulting from the injection moulding process shall be removed completely without causing any damage to the housing. The track resistance of housing and shed



material shall be class 1A4.5 according to IEC60587. The strength of the weather shed to sheath interface shall be greater than the tearing strength of the polymer. The composite insulator shall be capable of high pressure washing. End fittings shall be free from cracks, seams, shrinks, air holes and rough edges. End fittings should be effectively, sealed to prevent moisture ingress, effectiveness of sealing system must be supported by test documents. All surfaces of the metal parts shall be perfectly smooth with the projecting points or irregularities which may cause corona. All load bearing surfaces shall be smooth and uniform so as to distribute the loading stresses uniformly.

The hollow silicone composite insulators shall comply with the requirements of the IEC publications IEC 61462 and the relevant parts of IEC 62217. The design of the composite insulators shall be tested and verified according to IEC 61462 (Type & Routine test)

7. No arcing horns shall be provided on the bushings.
8. RIP Bushing shall be specially packed to avoid any damage during transit and suitable for long storage, with non-returnable packing wooden boxes with hinged type cover. Without any gap between wooden planks. Packing Box opening cover with nails/screws type packing arrangement shall not be acceptable. Bushing oil end portion shall be fitted with metal housing with positive dry air pressure and a suitable pressure monitoring device shall be fitted on the metal housing during storage to avoid direct contact with moisture with epoxy. Alternatively, oil filled metal housing with suitable arrangement for taking care oil expansion due to temperature variations shall also be acceptable. Manufacturer shall submit drawing/ documents of packing for approval during detail engineering. Detail method for storage of bushing including accessories shall be brought out in the instruction manual.
9. Tan delta measurement at variable frequency (in the range of 20 Hz to 350 Hz) shall be carried out on each condenser type bushing (OIP & RIP) at Transformer manufacturing works as routine test before despatch and the result shall be compared at site during commissioning to verify the healthiness of the bushing.
10. If the bushing Tan delta goes beyond 0.005 or increase is more than 0.001 within the warrantee period w.r.t. pre-commissioning values, the contractor shall arrange to replace the defective bushing by new one. No temperature correction factor shall be applicable for tan delta.
11. Tan  $\delta$  value of RIP (Resin Impregnated Polymer) condenser bushing shall be 0.005 (max.) in the temperature range of 20°C to 90°C. The measured Tan  $\delta$  value at site should not exceed by 0.001 w.r.t. factory results (measured at approx. similar temperature conditions) during warrantee period.



VOLTAGE RATING KV	420	245	145	72.5	52
BIL (KV.)	1425	1050	650	325	250
CREEPAGE (MM) (Min.)	10500	6125	3625	1810	1300
CURRENT RATING (A) (Min.)	800	1250	1250	2000	800
L2±5 (FOR DIFF. VALUES OF L6.)	1640	1130	1230	600/800	695
L6 (MIN.)	400	300	100/300	300	100
D2 (Max.)	350	270	165	115	165
D3±2	720	450	335	225	335
D4±1	660	400	290	185	290
D5xN	24x12	20x12	15x12	15x6	15x12
D6 (MAX)	350	270	165	115	115
D7 (Min)	60	48	—	38	—

NOTE:

1. ALL DIMENSIONS ARE IN MM
2. NO POSITIVE TOL. WHERE MAX. DIMENSION SPECIFIED AND NO NEG. TOL. WHERE MIN. DIMENSION IS SPECIFIED

# APPLICABLE FOR SHUNT REACTOR

PREPARED BY	CHECKED BY	APPROVED BY	TITLE	DRG NO
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	STD. DIMN. FOR RIP- CONDENSER BUSHINGS (LOWER PORTION)	000-T-E-A-001-R02



5.04.00 **Tests on Transformer bushings**

5.04.01 Routine tests as per IS: 2099

- a) Measurement of dielectric dissipation factor (Tan- Delta) and capacitance at ambient temperature.
- b) Dry power frequency voltage withstand test.
- c) Measurement of Partial discharge quantity
- d) Power frequency voltage withstand test of tap insulation.
- e) Pressure test on liquid filled and liquid insulated bushings.
- f) Tightness test at flange or other fixing device.

5.04.02 **Type tests**

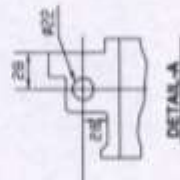
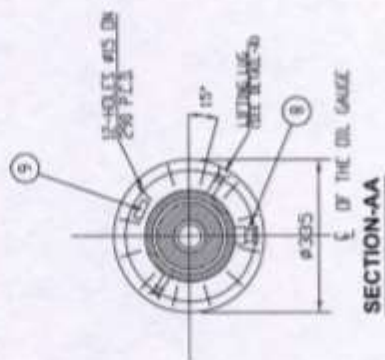
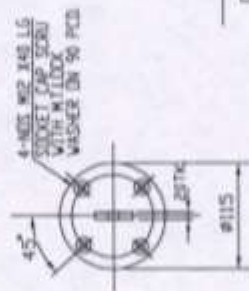
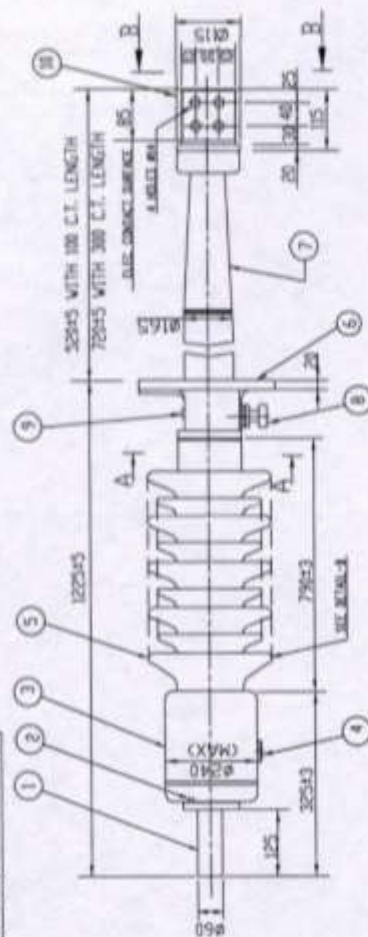
- a) Wet power frequency voltage withstand test.
- b) Dry and Wet switching impulse voltage withstand test.
- c) Temperature rise test
- d) Thermal stability test.
- e) Thermal short time current withstand test.
- f) Dynamic current withstand test
- g) Cantilever load withstand test.

Test for all other accessories and auxiliary equipments will be as per relevant IS.

The type test certificates for similar equipment shall be supplied by the vendor. In case a type test certificate for similar equipment is not available, the same will be conducted in presence of the purchaser or his representative.

ALL DIMENSIONS ARE IN MM.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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TECHNICAL DETAILS

RATED VOLTAGE RATED CURRENT WORKING WITHSTAND VOLTAGE ONE MINUTE BL STANDARDS APPLICABLE MINIMUM CREEPAGE DISTANCE ALTITUDE ANGLE OF MOUNTING APPLICATION	72.5 kV 3050 A 140 kV 305 MVD IS 2099/IEC137 1815 mm ≤ 1000 m ≤ 20° COLLAR
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QTY	U/L	DESCRIPTION	MAT
1	00	TOP TERMINAL	COPPER
1	00	PEELING PLUG	AL STEEL
1	00	TOP CAP	AL ALLOY
1	00	LEVEL GAGE	POURCEIN GLASS
1	00	PORTALIN INSULATOR	PORTALIN
1	00	MOUNTING FLANGE	AL ALLOY
1	00	BOTTOM PORTALIN	PORTALIN
1	00	TEST TAP	AL/NIOLO
1	00	RATING PLATE	AL ALLOY
1	00	BOTTOM TERMINAL	COPPER DRGING

TYPE OF PRODUCT

NAME OF CUSTOMER/PROJECT

100

NAME	SIGN	DATE	AS
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W	S.C. 50Y	66.34.10	66.34.10
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NAME	DATE	TIME
Mr. Zhang	10/10/2023	10:00
Ms. Li	10/10/2023	10:00

TO ASSY DRG	110M	110M
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0 538 01 01019	NO. ITEM
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1811-E-338  
BCE-3-1181  
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DATE	NO. OF SURVEYS
1997 JAN 1	1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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