



BHARAT HEAVY ELECTRICALS LIMITED JHANSI (UP)

Guaranteed Technical Particulars for 33 kV Voltage Transformer (VT)

Type-13

Quantity: 03 Nos

Sl.	Particulars	Required parameters	Offered parameters
1.	Type	Indoor EM VT	
2.	Manufacture's Type and Designation	Oil filled, Single phase, hermetically sealed, 33kV EMVT	
3.	Rated primary voltage	$33000V/\sqrt{3}$ - $16500V/\sqrt{3}$ - $8250V/\sqrt{3}$	
4.	Standard to which the VT confirms	IS-3156-1992/IEC-44-2	
5.	Number of secondary winding	01 No.	
6.	Type of insulation used	Class "A"	
7.	Rated secondary voltage	$110 V/\sqrt{3}$	
8.	Rated secondary burden (VA)	30VA	
9.	Rated transformation ratio	$33000V/\sqrt{3} - 16500V/\sqrt{3} - 8250V/\sqrt{3} / 110 V/\sqrt{3}$	
9.a	Ratio selection	With tapping on secondary side	
10.	Rated thermal burden(VA)	30 VA	
11.	Accuracy Class	0.1	
12.	Rated Frequency	50Hz	
13.	Number of phases	Single Phase	
14.	Grade of oil	As per IS-335	
15.	Temperature rise 1.1 times rated voltage with rated burden	As per IS-3156/IEC-44-1	
16.	Rated voltage factor and time	1.2 cont. & 1.5 For 30 Second	
17.	Temperature rise for (12 above)	10° C.	
18.	One minute power frequency Dry withstand test voltage	70 kVrms	
19.	1.2/50micro Impulse wave withstand test voltage	170 kVp	

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ANNEXURE 'A'

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20.	One minute power frequency (dry) withstand test on secondary	3kKV rms
20.	Visual corona extinction voltage KV rms	As per IS-3156/IEC-44-1
21.	Seismic acceleration (Horizontal)	0.3g
22.	Total Creepage distance	900 mm
23.	Type of housing	Composite insulator / ceramic insulator
24.	Overall Dimensions	Drawings to be submitted by Vender
25.	Mounting details	600 mm X 600 mm/ To match existing fixing centre

NOTE:-

1. Paint : All external ferrous part of the CT/VT shall be painted with epoxy paint to shade 631 of IS-5.
2. The manufacturing process, quality assurance plan, vendor list of raw materials to be submitted for our review/approval.
3. All Type tests reports (not older than 5 year) as per IS-3156/IEC60044-2 shall be furnished for our reference along with the offer.
4. GTP of the CT/VTs to be submitted in given format as above.
5. OGA / Sectional View drawings to be submitted with the offer.
6. Design Review, GTP, OGA & R&D plate drgs with QAP and vender list etc. shall be got approved before manufacturing of CT/VT in case of order placed on you.
7. Instruments used during final testing shall be calibrated from NABL Accredited Lab/Agency. Calibration of all CTs & Instruments used during testing shall be done with the periodicity of 1 year by NABL Accredited Lab / Agency.
9. Testing / Inspection shall be done at supplier works by BHEL representative along with 3rd party inspection by NABL Accredited lab. Supplier shall confirm to arrange 3rd party inspection ((NABL Accredited lab) during final inspection. An advance notice of approx. two weeks shall be given prior to final testing.
10. CT/VTs shall be suitably packed prior to its transportation to avoid any transportation damage.

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NKS

Rajeev Agarwal
20/5/18

(राजीव अग्रवाल)
अपर महाप्रबन्धक
(गुणता एवं परीक्षा)
बी. एच. ई. एल. डी. डी.

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