

BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL

TRANSFORMER ENGINEERING DEPARTMENT

FORM NO: TRE-2003A

Sht 1 of 1 sheet

ANNEXURE TO INDENT-CUM-ENQUIRY - **240624135**

DTD.:-

DESCRIPTION OF ITEM

: COPPER WINDING WIRE-GLUED CONTINUOUSLY TRANSPOSED CW

WORK ORDER NO.

: 61229-A-520-01 (NOA NO.: TBCB/765KV/PHASE-II/RAJ PART G/TR01/G7/R /NOA-I/07, DTD:30/03/2022

62210-A-520-01 (NOA: 5002002074/TRANSFORMER/DOM/A00-CC CS-1/NOA-I/NR-I/150027, DTD: 24.06.2022)

62214-A-520-01 & 62215-A-520-01 (NOA: 5002002164/TRANSFORMER/DOM/A04-CC CS-5, DTD: 14.07.2022)

CUSTOMER

: M/s PGCIL

TABLE OF WEIGHTS & DIMENSIONS OF COPPER WINDING WIRE - GLUED CONTINUOUSLY TRANSPOSED CW

			WO: 61229A52001 & 62214A52001			WO: 62210A52001 & 62215A52001		
			ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6
1	CABLE SIZE	mm×mm	21//1.40 × 7.40	27//1.45 × 6.80		19//1.55 × 7.55	25//1.50 × 7.25	
2	RADIAL PAPER	mm	0.7	1.04		0.7	1.04	
3	GRADE OF ENAMEL	--	F & EPOXY COATED	F & EPOXY COATED		F & EPOXY COATED	F & EPOXY COATED	
4	0.2% PROOF STRESS	MPa	180 (Tol.: -0%, +20%)	180 (Tol.: -0%, +20%)		180 (Tol.: -0%, +20%)	180 (Tol.: -0%, +20%)	
5	MAX. COVERED SIZE							
	i) RADIAL	mm	18.70	24.81		18.65	23.87	
	ii) AXIAL	mm	16.74	16.22		17.04	17.12	
6	MIN. COVERED SIZE							
	i) RADIAL	mm	18.20	24.16		18.15	23.22	
	ii) AXIAL	mm	16.49	15.97		16.79	16.87	
7	NO. OF DRUMS		2	2	2	2	2	2
8	LENGTH PER DRUM	m	2813.0	1897.0	1664.5	2878.5	1830.5	1726.5
9	TOTAL BARE WEIGHT	Kg	10650.5	8779.0	7703.0	11166.5	8670.0	8177.0
10	TOTAL COVERED WEIGHT	Kg	11195.0	9301.5	8161.5	11719.0	9173.0	8651.5
11	COVERED WEIGHT PER DRUM	Kg	5597.5	4650.8	4080.8	5859.5	4586.5	4325.75
12	MIN. WINDING DIAMETER	mm	1590	2212		1680	2300	
13	CROSS SECTION AREA OF SINGLE STRAND	mm ²	10.14	9.64		11.4825	10.655	

NOTES:

- Length per drum should not be less than specified for all drums except the drums from which sample has been taken.
- Items 1 to 6 must conform to specification TRE-036 & AA 28129 with changes as above (specifications copy attached). Resistivity of copper at 20 degC to be max. 0.01777 Ω mm²/m.
- The paper insulation shall conform to specification TRE218 (specification copy attached). Additional test parameters as specified in Cl. No. 1.3 of PGCIL approved MQP: CC/QA/SMQP/01 Rev 00 to be also included in paper test report. Paper to be of attached POWERGRID approved make.
Minimum no. of layers of paper covering for item -1&4: 2 nos. of 50 micron thick paper & 8 nos. of 75 micron thick paper and for item - 2, 3, 5 & 6: 7 nos. of 63 micron thick paper & 8 nos. of 75 micron thick paper.
- Quality plan no. QA/TCB/QAP/B0/55 Rev.01 and PGCIL approved MQP: CC/QA/SMQP/01 Rev 00 shall be followed (copy attached).
- Items to be supplied with wax coating as per Cl. No. 10.3.5 of specification AA28127 (specification copy attached).

REV	DATE	ALT CKD	REV	DATE	ALT CKD	REV 00	SIGN	DATE
						PREP		20/07/22
						CKD		20/7/22

DWI/TCB/TRE/010