ECE INDUSTRIES LTD.
TRANSFORMER TESTING DEPARTMENT
DELHI ROAD, SONEPAT-131001
TRANSFORMER TEST REPORT

Certificate No TC-6922

REPORT NO. -	**ECE/F/ 2024/053**	**DATED:**	**05.04.2024**
ULR No. -	**TC69222400000000053F**	**SHEET NO:**	**1**
DISCIPLINE -	**ELECTRICAL TESTING**	**GROUP:**	**TRANSFORMER**

TRANSFORMER DETAILS

TRANSFORMER RATING	:	2900 kVA, 33/0.800 kV
REFERENCE STANDARD	:	IS : 2026, IEC : 60076
Sr. No.	:	PVJ/46051
NAME OF CUSTOMER	:	M/s PVJ Power
ADDRESS OF CUSTOMER	:	Dabhota Industrial Area, Nalagarh, HP - 174101
SCHEDULE OF TESTS	:	AS PER SHEET
CONDITION OF SAMPLE	:	GOOD
SAMPLE RECEIPT DATE	:	05.04.2024
TESTING DATE	:	05.04.2024
REMARKS	:	THIS COVERS TYPE TEST & SPECIAL TEST

NO. OF PHASE (S)	3 Φ	
TRANSFORMER TYPE	Power Transformer Out Door Type (Aluminium Wound)	
WINDING DESIGNATION	HV	LV
TERMINAL NOTATION	1U,1V,1W, 1N	2u,2v,2w
ONAF RATING (KVA)	2900	
RATED LINE VOLTAGE (kV) ONAF	33	0.8
RATED LINE CURRENT (A) ONAF	50.74	2092.89
GUARANTEED % IMPEDENCE	7%	
RATED FREQUENCY (Hz)	50	
CONNECTIONS	STAR	DELTA
VECTOR GROUP	Ynd_{11}	
INSULATION LEVELS (kV)	LINE TERMINALS	
HV (KV)	LI - 170 AC- 70	
LV (KV)	LI - 40 AC - 10	

Remarks : 1) Tests done & observed values are given in subsequent sheets.
2) Test Results relate only to the sample Tested.
3) This test report cannot be reproduce in part under any circumstances.

Tested By	Reviewed/Authorised	
AM (Testing)	Manager Testing	. . .
ECE Industries Ltd.	ECE Industries Ltd.	. . .
		. . .

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ULR No. -	**TC69222400000000053F**	**SHEET NO:**	**2**

LIGHTNING IMPULSE TEST REPORT

Reference Standard : IS : 2026, IEC : 60076

HV = 170 kV_p LV = 40 kV_p

VOLTAGE LIMIT

HV Reduced wave (50 to 70 %) =	85.00	to	119.00	kV_p
HV Full Wave (± 3%) =	164.90	to	175.10	kV_p
LV Reduced wave (50 to 70 %) =	20.00	to	28.00	kV_p
LV Full Wave (± 3%) =	38.80	to	41.20	kV_p

TIME LIMIT

T_1 =	1.2	µsec. (± 30 %) =	0.84	to	1.56	µsec.
T_2 =	50	µsec. (± 20 %) =	40	to	60	µsec.

Terminal Tested : HV

1U, 1V, 1W

TERMINALS TESTED :-		HV-U Phase -Tap No. 1			HV-V Phase - Tap No. 3			HV-W Phase - Tap No. 7		
SI. NO.	WAVEFORM	PEAK VOLTAGE	Time (µsec.)		PEAK VOLTAGE	Time (µsec.)		PEAK VOLTAGE	Time (µsec.)	
		kV_p	Front time	Tail time	kV_p	Front time	Tail time	kV_p	Front time	Tail time
1	Reduced Wave	112.40	1.147	49.119	110.70	1.192	49.114	112.50	1.183	49.261
2	Full Wave	169.10	1.163	49.380	169.10	1.164	49.340	169.70	1.161	49.185
3	Full Wave	169.30	1.163	49.316	169.60	1.162	49.286	169.70	1.165	49.187
4	Full Wave	169.30	1.160	49.319	169.70	1.161	49.250	169.80	1.161	49.246

Terminal Tested : LV

2U, 2V, 2W

TERMINALS TESTED :-		LV-U Phase			LV-V Phase			LV-W Phase		
SI. NO.	WAVEFORM	PEAK VOLTAGE	Time (µsec.)		PEAK VOLTAGE	Time (µsec.)		PEAK VOLTAGE	Time (µsec.)	
		kV_p	Front time	Tail time	kV_p	Front time	Tail time	kV_p	Front time	Tail time
1	Reduced Wave	25.57	1.277	50.773	25.34	1.269	50.840	25.35	1.269	50.606
2	Full Wave	40.11	1.264	50.279	40.18	1.259	50.223	40.42	1.254	50.018
3	Full Wave	40.31	1.270	50.252	40.37	1.264	50.204	40.37	1.258	50.178
4	Full Wave	40.08	1.269	50.195	40.31	1.259	50.092	40.48	1.259	50.063

Results :- All windings withstand Impluse Voltage & Found Ok as per standard

ECE INDUSTRIES LIMITED Delhi Road, Sonepat-131001

Tested By
AM (Testing)
ECE Industries Ltd.

Reviewed/Authorised By
Manager Testing
ECE Industries Ltd.