



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

REPORT NO. - ECE/F/2025/135 DATED: 13.09.2025  
ULR No. - TC6922250000000135F SHEET NO: 1  
DISCIPLINE - ELECTRICAL TESTING GROUP: TRANSFORMER

**TRANSFORMER DETAILS**

|                              |                                                  |
|------------------------------|--------------------------------------------------|
| TRANSFORMER RATING           | : 5000 kVA, 33/0.400*2 kV                        |
| REFERENCE STANDARD           | : IEC : 60076                                    |
| Sr. No.                      | : IN49025                                        |
| NAME OF CUSTOMER             | : M/s PVJ Power Solutions Pvt Ltd                |
| ADDRESS OF CUSTOMER          | : Dabhota Industrial Area, Nalagarh, HP - 174101 |
| SCHEDULE OF TESTS            | : AS PER SHEET                                   |
| CONDITION OF SAMPLE          | : GOOD                                           |
| SAMPLE RECEIPT DATE          | : 13.09.2025                                     |
| TESTING DATE                 | : 13.09.2025                                     |
| NO. OF PHASE (S)             | 3 $\Phi$                                         |
| TRANSFORMER TYPE             | Step Down Distribution Transformer               |
| WINDING DESIGNATION          | HV LV                                            |
| TERMINAL NOTATION            | 1U,1V,1W 2u,2v,2w,2n                             |
| ONAF RATING (KVA)            | 5000                                             |
| RATED LINE VOLTAGE (kV) ONAF | 33 0.400*2                                       |
| RATED LINE CURRENT (A) ONAF  | 87.48 3608.44                                    |
| GUARANTEED % IMPEDENCE       | 9%                                               |
| RATED FREQUENCY (Hz)         | 50                                               |
| CONNECTIONS                  | DELTA STAR                                       |
| VECTOR GROUP                 | DYn11Yn11                                        |
| INSULATION LEVELS (kV)       | LINE TERMINALS                                   |
| HV (KV)                      | LI - 170 AC- 70                                  |
| LV (KV)                      | LI - NA AC - 3                                   |

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

  
(Ashwani Kumar)  
TM (Testing)  
ECE Industries Ltd.

  
(A. K. Gupta)  
DGM (Testing)  
ECE Industries Ltd.





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DATED: 13.09.2025

ULR No. - TC69222500000000135F

SHEET NO: 2

**LIGHTNING IMPULSE TEST REPORT**

Reference Standard : IEC : 60076 (Part - 3)

HV = 170 kV<sub>p</sub>

**VOLTAGE LIMIT**

HV Reduced wave (50 to 70 %) = 85.00 to 119.00 kV<sub>p</sub>

HV Full Wave (± 3%) = 164.90 to 175.10 kV<sub>p</sub>

**TIME LIMIT**

T<sub>1</sub> = 1.2 μsec. (± 30 %) = 0.84 to 1.56 μsec.

T<sub>2</sub> = 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. 4)             |               |              | HV-W Phase (Tap No. 7)             |               |              |
|---------------------|--------------|------------------------------------|---------------|--------------|------------------------------------|---------------|--------------|------------------------------------|---------------|--------------|
| SL NO.              | WAVEFORM     | PEAK<br>VOLTAGE<br>kV <sub>p</sub> | Time (μsec.)  |              | PEAK<br>VOLTAGE<br>kV <sub>p</sub> | Time (μsec.)  |              | PEAK<br>VOLTAGE<br>kV <sub>p</sub> | Time (μsec.)  |              |
|                     |              |                                    | Front<br>time | Tail<br>time |                                    | Front<br>time | Tail<br>time |                                    | Front<br>time | Tail<br>time |
| 1                   | Reduced Wave | 102.80                             | 1.306         | 44.730       | 104.60                             | 1.294         | 44.784       | 105.70                             | 1.298         | 44.857       |
| 2                   | Full Wave    | 169.20                             | 1.360         | 48.865       | 166.10                             | 1.350         | 48.660       | 166.80                             | 1.356         | 48.728       |
| 3                   | Full Wave    | 169.60                             | 1.354         | 48.972       | 167.20                             | 1.352         | 48.723       | 168.00                             | 1.354         | 48.703       |
| 4                   | Full Wave    | 169.10                             | 1.355         | 48.944       | 167.70                             | 1.356         | 48.733       | 168.10                             | 1.356         | 48.741       |

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

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Reviewed/Authorised By

  
(Ashwani Kumar)  
T.M. (Testing)  
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(A. K. Gupta)  
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