



परीक्षण रिपोर्ट TEST REPORT

केन्द्रीय विद्युत अनुसंधान संस्थान

(विद्युत मंत्रालय, भारत सरकार के अधीन एक स्वायत्त सोसायटी)

CENTRAL POWER RESEARCH INSTITUTE

(An Autonomous Society under Ministry of Power, Govt. of India)

एस टी एल के सदस्य

Member of STL

स्विचगियर परीक्षण तथा विकास केन्द्र

SWITCHGEAR TESTING & DEVELOPMENT STATION

गोविन्दपुरा, भोपाल - 462023

GOVINDPURA BHOPAL - 462023

दूरभाष/Telephone +91 (0) 755 - 2586682 फैक्स/Fax +91 (0) 755-2587774

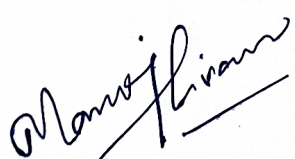
CENTRAL POWER RESEARCH INSTITUTE

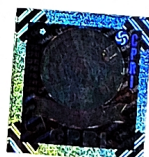


TEST REPORT

CPRI

Test Report Number	: CPRI BPLSTNC26T0235	Date: 10 June 2026
Name and Address of the Customer	: M/s. PVJ Power Solutions Pvt. Ltd., Dabhota Industrial Area Nalagarh, Himachal Pradesh – 174 101	
Name and Address of the Manufacturer	: M/s. PVJ Power Solutions Pvt. Ltd., Dabhota Industrial Area Nalagarh, Himachal Pradesh – 174 101	
Particulars of Sample tested	: 10 MVA, 3-Phase, 33/11kV, Power Transformer	
Type	: Outdoor	
Description of test sample	: 10 MVA, 3-Phase, 33/11kV, Power Transformer	
Serial Number	: PVJ/10000/01	
Number of Sample tested	: One	
Date of receipt of sample	: 02 June 2026	
Date(s) of Test(s)	: 03 June 2026 & 04 June 2026	
CPRI sample code number(s)	: STNA26S0285	
Particulars of test(s) conducted	: Chopped Wave Lightning Impulse test (LIC)	
Test in accordance with Standard/specification	: IS 2026-3:2018/IEC 60076-3: 2013.	
Sampling Plan	: Nil	
Customer's Requirement	: Nil	
Deviations, if any	: Nil	
Name of the witnessing persons		
Customer's Representatives	: Mr. Sunil Shakya	
Other than Customer's Representatives	: Nil	
Test subcontracted with address of the laboratory	: None	
Name and Address of External Service Provider (if applicable)	: Nil	
Documents constituting this report (in words)		
No. of Sheet(s)	: Six	
No. of Oscillogram(s)	: Thirty Six	
No. of Graph(s)	: Nil	
No. of Photograph(s)	: One	
No. of Test Circuit Diagram(s)	: One	
No. of Drawing(s)	: Two	


(Manoj Hirani)
Test Engineer




(Sarita Dongre)
Head of Division
Reviewed and Authorized By

TEST REPORT



CPRI

Test Report Number: CPRIBPLSTNC26T0235

Date : 10 June 2026

DESCRIPTION OF THE SAMPLE TESTED
(As assigned by the manufacturer)

Sample	:	10 MVA, 3-Phase, 33/11 kV, Power Transformer
Designation	:	Conventional
Rated Power (kVA)	:	10000
Rated Voltage HV (Volts)	:	33000
LV (Volts)	:	11000
Rated Current HV (Amps)	:	174.96
LV (Amps)	:	524.86
No. of Phases	:	Three
Insulation level LV (kV rms/kV Peak)	:	28/75
Insulation level HV (kV rms/kV Peak)	:	70/170
Type of Cooling	:	ONAN
Connection/Symbol (HV/LV)	:	Delta/Star (Δ/Y)
Frequency (Hz)	:	50
Guaranteed % Impedance at 75°C	:	8.35% (Tolerance: $\pm 10\%$)
X/R	:	-
Temperature rise of oil /Winding (°C)	:	50/55
Winding Material	:	Copper
Type of Winding	:	Disc Winding
Quantity of Oil (litres)	:	4500
Weight of Oil (kgs)	:	3645
Weight of core and winding (kgs)	:	10383
Total weight (Kgs)	:	18667
Vector group	:	Dyn11
Year of Manufacture	:	2026
Guaranteed no load loss	:	7000 Watts
Guaranteed load loss at 75°C	:	50000 Watts
Details of taps	:	-15% to +5% (9 taps in 8 steps of 2.5% each)

Tap No	Primary Voltage V	Secondary Voltage V	%Impedance	X/R Ratio
1	34650	11000	-	-
3	33000	11000	8.35%	-
9	28050	11000	-	-

(Manoj Hirani)
Test Engineer

190

PVJ POWER SOLUTIONS PVT.LTD.

DABHOTA , INDUSTRIAL AREA , NALAGARH (H.P.) - 174101

3 PHASE TRANSFORMER

MAKERS SL. NO.

PVJ/10000/01

STANDARD

IS:2026/2011

FREQUENCY

Hz 50

KVA

10000

TYPE OF COOLING

ONAN

VOLTS

H.V. 33000

VECTOR GROUP

DYN-11

NO LOAD

L.V. 11000

MASS OF OIL

KG. 3645

AMPERES

H.V. 174.96

VOLUME OF OIL

LTR. 4500

L.V. 524.86

CORE & WINDING

KG. 10383

IMPEDANCE VOLTS %

8.35%

TOTAL MASS

KG. 18667

WINDING

COPPER

YEAR OF MANUFACTURE

2026

INSULATION

H.V. LI-170 KV AC 70

TEMP. RISE OF OIL

50°C

LEVEL

L.V. LI-75 KV AC 28

TEMP. RISE OF WINDING

55°C

TAPPING

OCTC

CUSTOMER :-

ORDER NO :-

यह आरेखन सी.पी.आर.आई. द्वारा
जहाँ भी समुचित हो, केवल आयाम जाँच तक ही
सीमित है।

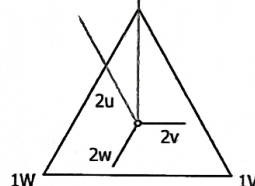
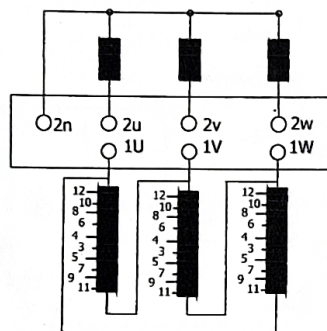
VERIFICATION OF THIS DRAWING
BY CPRI IS LIMITED TO DIMENSIONAL
CHECK ONLY WHEREVER POSSIBLE

यह आरेखन सी.पी.आर.आई. के परीक्षण रिपोर्ट

THIS DRAWING PERTAIN TO CPRI REPORT

क्रमांक / No..... से संबंधित है।

दिनांक / Date.....



VECTOR DIAGRAM
DYN-11

FOR HV VARIATION IN 2.5 % STEPS FROM +5% TO -15%

SWITCH POSITION NUMBER & %	SWITCH CONNECTION	HIGH VOL. ACROSS 1U-1V-1W (VOLTS)	LOW VOL. ACROSS 2U-2V-2W (VOLTS)
1. +5.0 %	3 - 4	34650	
2. +2.5 %	4 - 5	33825	
3. N	5 - 6	33000	
4. -2.5 %	6 - 7	32175	
5. -5.0 %	7 - 8	31350	
6. -7.5 %	8 - 9	30525	
7. -10 %	9 - 10	29700	
8. -12.5 %	10 - 11	28875	
9. -15 %	11 - 12	28050	

MADE IN INDIA

180

PVJ POWER SOLUTIONS PVT.LTD.

DABHOTA , INDUSTRIAL AREA , NALAGARH (H.P.) - 174101

DRAWN BY

CHECKED BY

APPROVED BY

SCALE:- NOT TO SCALE

TITLE:-

NAME, RATING & TERMINAL ARRANGEMENT DIAGRAM PLATE
FOR 10000 KVA 33/11KV , POWER TRANSFORMER.

REV.

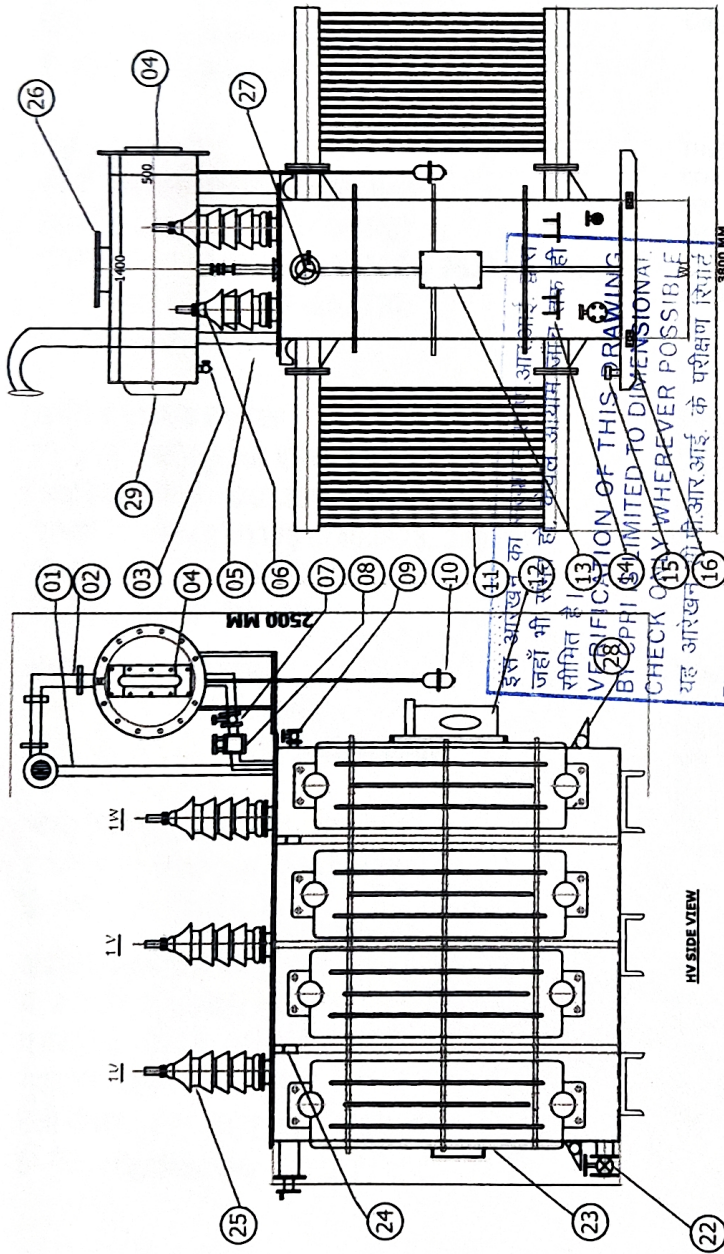
DRAWING No.

00

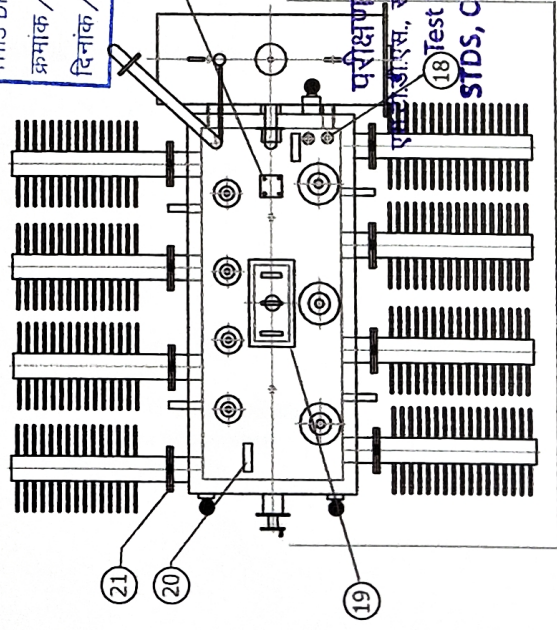
PVJ/10000/RP/04

FIRST ANGLE PROJECTION

ALL DIMENSIONS ARE IN mm.



HV SIDE VIEW



TOP VIEW

क्रमांक / No. से संबंधित है।

दिनांक / Date 18/06/2026

1. * ITEM MARKED ARE NOT PROVIDE DURING TEST.

2. * ALL DIMENSIONS ARE IN mm. OTHERWISE 0235

3. ALL DIMENSIONS ARE SUBJECT TO TOLERANCE OF ± 10%

4. ITEM OF FITTINGS & ACCESSORIES ARE SUBJECT TO CHANGE/MODIFICATION AS PER REQUIREMENT.

THIS DRAWING PERTAINING TO CPRI REPORT

क्रमांक / No. से संबंधित है।

दिनांक / Date 18/06/2026

1. * ITEM MARKED ARE NOT PROVIDE DURING TEST.

2. * ALL DIMENSIONS ARE IN mm. OTHERWISE 0235

3. ALL DIMENSIONS ARE SUBJECT TO TOLERANCE OF ± 10%

4. ITEM OF FITTINGS & ACCESSORIES ARE SUBJECT TO CHANGE/MODIFICATION AS PER REQUIREMENT.

COOLING DETAILS		ONAN	
TYPE OF COOLING		NOS	176
TOTAL NUMBER OF COOLING FINS		MM	1800 x 520 mm.
H x W OF SINGLE FIN			
TANK DIMENSIONS (MM)			
TANK & FITTING	10383	L1 =	2520
OIL	4639	W1 =	970
	3645	H1 =	2200
OVERALL DIMENSION			
TOTAL WEIGHT X-MER	18667		
SIDE PLATE THK.	6 mm	L =	2650
TOP PLATE THK.	12 mm	W =	3800
BOTTOM PLATE THK.	10 mm	H =	2500
MINIMUM ELECTRICAL CLEARANCE IN AIR			
HV	LV	CONSERVATOR SIZE IN mm.	TOLERANCE - ± 10%
350 mm	280 mm	DIA =	500 mm
PHASE TO PHASE		LENGTH =	1400 mm
PHASE TO EARTH	205 mm		

परीक्षण इंजीनियर

सि.पी.ए.सी., सी.पी.ए.सी.

STDS, CPRI, Bhopal

18 Test Engineer

18/06/2026

0235

S.No.	DESCRIPTION	QTY.No.
29.	MAGNETIC OIL LEVEL INDICATOR (MAKE - ATVUS, SERIAL NO. - UVR03979)	01
28.	PULLING LUGS.	02
27.	OFF CIRCUIT TAP CHANGING SWITCH.	01
26.	OIL FILLING HOLE WITH COVER.	01
25.	HV OUTDOOR BUSHING.	03
24.	LIFTING LUGS FOR COMPLETE TRANSFORMER.	04
23.	STIFFENERS (75 x 15)	03
22.	BOTTOM FILTER VALVE WITH COVER. (50 MM)	01
21.	RADIATORS SHUT OFF VALVES AT TOP & BOTTOM. (Ø 50)	16
20.	TOP COVER LIFTING LUGS.	02
19.	INSPECTION COVER WITH AIR RELEASE DEVICE (1100 X 300 MM)	01
18.	THERMOMETER POCKET.	02
17.	W.T.I. POCKET.	01
16.	BASE CHANNEL (200 X 75 MM.)	03
* 15.	EARTHING TERMINALS M-16	02
14.	JACKING LUGS.	04
13.	NAME PLATE & DIAGRAM PLATE.	01
* 12.	MARSHLING BOX WITH W.T.I. & O.T.I.	01
* 11.	DETACHABLE TYPE RADIATORS WITH AIR RELEASE AND DRAIN PLUGS. (1800 x 520 x 22 FINS)	08
* 10.	SILICA GEL DEHYDRATING BREATHER.	01
09.	TOP FILTER VALVE WITH COVER (50 mm).	01
08.	BUCHHOLZ RELAY WITH ALARM AND TRIP CONTACTS. (SERIAL NO. - G29982) MAKE - ATVUS	01
07.	SHUT OFF VALVE BETWEEN CONSERVATOR & TANK 50 mm	01
06.	LV OUTDOOR BUSHING.	04
05.	BREATHING PIPE.	01
04.	OIL LEVEL GAUGE PLAIN.	01
03.	OIL CONSERVATOR WITH DRAIN VALVE.	01
02.	AIR EQUALISING PIPE.	01
01.	EXPLOSION VENT WITH DIAPHRAGH LOCKED ON COVER.	01

PVJ POWER SOLUTIONS PVT.LTD.

DABHOTA, INDUSTRIAL AREA, NALAGARH (H.P.) - 174101

TITLE

OUTLINE GENERAL ASSEMBLY DRAWING

FOR 10 MVA 33/11 KV. POWER TRANSFORMER

SCALE

N.T.S.

DRAWING NO.

PVJ/10000/0GA/01

REV.

01