

# POWER TRANSFORMER

## (AUTO-TRANSFORMER / TWO-WINDING TRANSFORMER)

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### TEST DATA

**Test Data No.** \_\_\_\_\_

Station \_\_\_\_\_

Equipment ID \_\_\_\_\_

Date of Test \_\_\_\_\_

Make \_\_\_\_\_

Serial No \_\_\_\_\_

Tap Changer Type \_\_\_\_\_

MVA \_\_\_\_\_

kV HV \_\_\_\_\_ Y [ ]  $\Delta$  [ ]

LV \_\_\_\_\_ Y [ ]  $\Delta$  [ ]

Winding Connection \_\_\_\_\_

% Impedance \_\_\_\_\_

Year Manufactured \_\_\_\_\_

#### I. EXCITATION CURRENT TEST

HV TAP	EXITING CURRENT (mA) at 10 KV			RATING (S, P, C)
	H1 - H0	H2 - H0	H3 - H0	

Standards Used: \_\_\_\_\_

Remarks: \_\_\_\_\_

#### II. OVERALL INSULATION POWER FACTOR TEST

INSULATION MEASURED	TEST kV	CURRENT mA	WATT-LOSS	% POWER FACTOR		CORRECTION FACTOR	CAPACITANCE pF	RATING (S, P, C)
				Measured	Corrected			
CH + CHT								
CH								
CHT (UST)								
CT + CHT								
CT								
CHT (UST)								

Standards Used: \_\_\_\_\_

Remarks: \_\_\_\_\_

#### III. TRANSFORMER TURNS RATIO TEST

TAP CHANGER POSITION: As Found High \_\_\_\_\_ Low \_\_\_\_\_

##### A. HIGH VOLTAGE - LOW VOLTAGE

HV		LV		Comp Ratio	H1H0 X1X0	%E	H2H0 X2X0	%E	H3H0 X3X0	%E	Rating (S, P, C)
Tap	Volts	Tap	Volts								

Standards Used: \_\_\_\_\_

Remarks: \_\_\_\_\_

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## B. HIGH VOLTAGE - TERTIARY VOLTAGE

HV		TV		COMP RATIO	H1H0 y_y_	%E	H2H0 y_y_	%E	H3H0 y_y_	%E	Rating (S, P, C)
Tap	Volts	Tap	Volts								

Standards Used: .....

Remarks: .....  
 .....

## IV. INSULATION RESISTANCE TEST

PARTS MEASURE D	TEST kV	TEMP	MEGOHMS			MΩ/KV	POLARIZATION INDEX	RATING (S, P, C)
			30 SEC	1 MIN	10 MIN			
HV-Case								
HV-TV								
TV-Case								

Standards Used: .....

Remarks: .....  
 .....

## V. WINDING RESISTANCE TEST

WINDING	TAP	WINDING MEASURED	RESISTANCE (mΩ) corrected at 75°C		RATING (S, P, C)
HV	Highest	H1-H0		mΩ	
		H2-H0		mΩ	
		H3-H0		mΩ	
HV	N	H1-H0		mΩ	
		H2-H0		mΩ	
		H3-H0		mΩ	
HV	Lowest	H1-H0		mΩ	
		H2-H0		mΩ	
		H3-H0		mΩ	
LV	-	X1-X0		mΩ	
		X2-X0		mΩ	
		X3-X0		mΩ	
TV	-	y_y_		mΩ	
		y_y_		mΩ	
		y_y_		mΩ	

Standards Used: .....

Remarks: .....  
 .....

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## VI. Oil Dielectric Breakdown Voltage, ASTM D1816

SOURCE OF SAMPLE	TEST NUMBER					AVERAGE (X)	TEMP °C	RATING (S, P, C)
	1	2	3	4	5			
Main Tank								
LTC								

Standards Used: .....

Remarks: .....  
.....

Overall Remarks: .....  
.....  
.....

Tested by :

Concurred by :

\_\_\_\_\_  
Contractor - Test Engineer

\_\_\_\_\_  
Owner's Representative

### TEST INSTRUMENTS:

(Eqpt.ID/Make/Model/SN/  
Date of last calibration)

.....  
.....  
.....

### Legend:

S - Satisfactory  
P - Poor  
C - Critical