

Transformer Routine Test Report

Name: Single Phase Pole mounted Transformer

Type: D-15-21.6/0.24-0.12

No: W2022107-132

BEIJING DAELIM GREEN EP TECH CO.,LTD

Date: 2023-3-30

1. Product Specification

Rated Power:	15KVA
Rated Voltage:	21.6 /0.24-0.12kV
Rated current:	0.69/62.5-125.0A
Rated Frequency:	60 Hz
Number of Phases:	1 phase
Tap Range:	21.6($\pm 2 \times 2.5\%$)/0.24-0.12kV
Cooling Method:	ONAN
Insulation Class:	A
Insulation Level:	LI 125 AC50 /LI AC 10

2. Test Standard:

ANSI C57.12.20

3. Test Item and Result:

3.1 Voltage Ratio Measurement and Connection Group test

H.V.Winding		L.V.Winding	H1-H2/ X1-X2		Connection Symbol
Tap position	Voltage (V)	Voltage (V)	Rated Ratio	Voltage Deviation%	
1	22680		94.5000	-0.39	
2	22140		92.2500	-0.40	
3	21600	240	90.0000	-0.38	
4	21060		87.7500	-0.42	
5	20520		85.5000	-0.43	

3.2 Winding Resistance Test Environment Temperature 16°C

Winding	Tap position	Measured Value (Ω)		Remarks
		H1~H2		
H.V	1	122.98		
	2	120.03		
	3	117.05		
	4	114.11		
	5	111.09		
L.V		X1-X2		Remarks
		0.006460		

3.3 Insulation Resistance Measurement

Measurement Site	Insulation Resistance ($M\Omega$)
HV—LV TO GROUND	76200
LV—HV TO GROUND	63000
HV&LV TO GROUND	106000

3.4 AC power withstand voltage Test

Pressurized parts	Test voltage (kV)	Duration (s)	Result
HV—LV TO GROUND	50	60	PASS
LV—HV TO GROUND	10	60	

3.5 No load loss and no load current

Average voltage (V)	RMS voltage (V)	No-load current	Load loss (W)
		(%)	Measured value
240	240	0.91	38.7

3.6 Induction Pressure Test

Tap position	Apply voltage (V)	Induction voltage (V)	Induction multiple	Frequency (Hz)	Duration (s)	Result
	X1-X2	H1-H2				PASS
3	480	43200	2	150	48	PASS

3.7 Impedance(%) and load loss test Environment Temperature 17.2 °C

Winding	Tap position	Apply current(A)	Test voltage (V)	Short circuit impedance (%)	Load loss (W)
				Measured value	Measured value
H1,H2 - X1,X2	3	0.24	140.0	t = 85°C I=Ir 1.96	t = 85°C I=Ir 135.67

3.8 Seal Test

Test method	Put pressure (kPa)	Residual pressure (kPa)	Duration (h)	Result
Air pressure	30	27	12	No leakage

4. Test Result:

The transformer is proved to meet the stipulations of ANSI C57.12.20

Test dongwenshen

Check wanglei

Approve meng_yongjiang

Date 2023-3-30