

Test Report

Date/Time: 2020-12-17, 05:44:13 PM

Assessment**Auto**

Passed

Manual**Location**

Company: uedcl

Station: Lira

Phase: Yellow

Country: ug

Feeder: Apac-Masindi

IEC-ID:

CT Nameplate

Manufacturer: ABB

Type: CVC-200

Serial Number: IVAP61515986

Tap: 1

Core Number: M

Optional 1:

Ratio: 150:1

Frequency: 50Hz

Nominal Burden: 10.0 VA

Core Type: Metering CT

Class: 0.2 - FS n/a ext. 120% (IEC 60044-1)

Operating Burden: 10.0 VA

Equipment

Test Device: CT-Analyzer

Serial Number: JH467E

Software Version: 5.10 (537) 2020-11-17 16:38

Hardware Version: 01/01/09/05/00/11

Test Settings:

Primary Current I-pn: 150.0A
Secondary Current I-sn: 1.0A
Frequency: 50.0Hz

Nominal Burden: 10.0VA [?]* cos φ: 0.8
Operating Burden: 10.0VA [?] cos φ: 0.8 [?]

Applied Standard: IEC 60044-1
Class: 0.2 - FS n/a ext. 120%
Rct: 1.954Ω [?] (75.0°C)

Core Type: Metering CT

FS: -2.0

Ext. I-pn: 120%
Ext. VA: no

Multiplying Factor for Ratio Assessment: 1.000
Delta compensation: Ratio 1

[?] Value is automatically detected by CT Analyzer's guesser function.

* Auto-detection may prevent assessment. Explicit setting might be mandatory for automatic assessment.

Assessments:

Parameter	Auto	Manual
Accuracy	Passed	
ε	Passed	
Δφ	Passed	
FS	n/a	
FSi	n/a	

Resistance

Secondary Winding:

R-meas:	1.639Ω	T-meas:	25.0°C
R-ref:	1.954Ω	T-ref:	75.0°C

Ratio:

Results with nominal burden:

Used Burden: 10.0 VA cos φ : 0.8
Used I-p: 150.00A
Ratio: 150.0 : 0.9993
Deviation: -0.068%
 ε -C: 0.069%
RCF: 1.00068
N: 149.98
Phase: 0.33min
Polarity: OK

Burden		Current ratio error in % at % of rated current							Designation
VA / cos φ	1.0 %	5.0 %	10 %	20 %	50 %	100 %	120 %	200 %	
10.00 / 0.8	-0.144	-0.141	-0.137	-0.129	-0.094	-0.068	-0.062	-0.048	100% Nom.Burden
5.00 / 0.8	-0.067	-0.066	-0.067	-0.066	-0.059	-0.044	-0.041	-0.031	50% Nom.Burden
2.50 / 1.0	0.009	0.008	0.005	-0.002	-0.014	-0.017	-0.016	-0.014	25% Nom.Burden
1.25 / 1.0	0.010	0.009	0.008	0.005	-0.003	-0.008	-0.008	-0.007	12.5% Nom.Burden
1.00 / 1.0	0.001	0.009	0.009	0.006	-0.001	-0.006	-0.006	-0.006	1 VA
Burden		Phase displacement in minutes at % of rated current							Designation
VA / cos φ	1.0 %	5.0 %	10 %	20 %	50 %	100 %	120 %	200 %	
10.00 / 0.8	8.18	6.96	5.18	3.08	1.09	0.33	0.20	0.03	100% Nom.Burden
5.00 / 0.8	4.86	4.51	4.01	2.91	1.41	0.65	0.51	0.23	50% Nom.Burden
2.50 / 1.0	3.61	3.47	3.30	2.90	1.98	1.28	1.13	0.78	25% Nom.Burden
1.25 / 1.0	2.53	2.46	2.38	2.20	1.63	1.14	1.01	0.71	12.5% Nom.Burden
1.00 / 1.0	2.31	2.25	2.18	2.04	1.55	1.10	0.98	0.69	1 VA
NOTE: Measurements with '!' have reduced accuracy. Accuracy only guaranteed on non-gapped cores.									

Excitation:

Knee Points:

Standard	V	I
IEC 60044-1	46.25V	2.630mA

Results:

Kr: 71% **Lm:** 72.0H
Ls: 650.2 μ H

Results with nominal burden:

Burden: 10.0 VA cos φ : 0.8
FS: 5.40
FSi: 5.05
Ts: 7.233s
 ϵ -i: n/a (@ FS = -2.0)

Results with operating burden:

Burden: 10.0 VA cos φ : 0.8
FS: 5.40
FSi: 5.05
Ts: 7.233s
 ϵ -i: n/a (@ FS = -2.0)

Excitation Table:

Actual Values		
V	I	L
59.90V	2.585A	29.6mH
59.27V	1.383A	52.6mH
58.88V	785.6mA	88.5mH
58.61V	461.4mA	143.9mH
58.39V	279.6mA	234.2mH
58.20V	168.4mA	381.3mH
58.03V	106.4mA	623.5mH
57.86V	66.44mA	1.0H
57.69V	42.12mA	1.6H
57.49V	28.03mA	2.7H
57.21V	18.91mA	4.4H
56.83V	13.20mA	7.1H
54.68V	6.702mA	16.6H
52.31V	4.623mA	25.5H
49.84V	3.515mA	34.4H
47.18V	2.802mA	44.0H
44.49V	2.324mA	53.4H
41.59V	2.006mA	61.9H
38.56V	1.778mA	69.0H
35.72V	1.621mA	73.4H
33.33V	1.516mA	75.0H
30.76V	1.356mA	81.5H
16.32V	934.9μA	59.4H
8.661V	672.2μA	43.1H
4.594V	481.8μA	31.6H
2.437V	343.0μA	23.3H
1.000V	193.2μA	16.2H
0.685V	148.5μA	14.5H
0.363V	85.7μA	13.0H
0.193V	47.2μA	12.1H
0.102V	25.7μA	11.0H

