

Test Report

Date/Time: 2020-12-17, 05:32:51 PM

Assessment

Auto

Passed

Manual

Location

Company: uedcl

Station: Lira

Phase: Blue

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: 1.989Ω [?] (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:	1.668Ω	T-meas:	25.0°C
R-ref:	1.989Ω	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 : 0.9992
Deviation: -0.080%
 ε -C: 0.081%
RCF: 1.00080
N: 149.99
Phase: 0.35min
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	-0.164	-0.162	-0.156	-0.148	-0.111	-0.080	-0.073	-0.056	100% Nom.Burden
5.00 / 0.8	-0.079	-0.078	-0.078	-0.077	-0.069	-0.054	-0.050	-0.038	50% Nom.Burden
2.50 / 1.0	0.007	0.005	0.003	-0.005	-0.018	-0.022	-0.022	-0.019	25% Nom.Burden
1.25 / 1.0	0.007	0.007	0.006	0.003	-0.006	-0.012	-0.012	-0.012	12.5% Nom.Burden
1.00 / 1.0	-0.002	0.007	0.006	0.004	-0.004	-0.010	-0.010	-0.010	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	9.18	7.85	5.97	3.68	1.30	0.35	0.19	-0.01	100% Nom.Burden
5.00 / 0.8	5.50	5.08	4.53	3.36	1.69	0.77	0.59	0.25	50% Nom.Burden
2.50 / 1.0	4.10	3.93	3.74	3.29	2.29	1.50	1.31	0.89	25% Nom.Burden
1.25 / 1.0	2.87	2.79	2.70	2.50	1.88	1.33	1.18	0.83	12.5% Nom.Burden
1.00 / 1.0	2.63	2.56	2.48	2.31	1.78	1.28	1.15	0.80	1 VA
NOTE: Measurements with '!' have reduced accuracy. Accuracy only guaranteed on non-gapped cores.									

Excitation:

Knee Points:

Standard	V	I
IEC 60044-1	46.60V	3.112mA

Results:

Kr: 71% **Lm:** 61.1H
Ls: 573.1 μ H

Results with nominal burden:

Burden: 10.0 VA cos φ : 0.8
FS: 5.43
FSi: 5.08
Ts: 6.117s
 ϵ -i: n/a (@ FS = -2.0)

Results with operating burden:

Burden: 10.0 VA cos φ : 0.8
FS: 5.43
FSi: 5.08
Ts: 6.117s
 ϵ -i: n/a (@ FS = -2.0)

Excitation Table:

Actual Values		
V	I	L
60.19V	2.458A	30.5mH
59.67V	1.336A	53.7mH
59.34V	782.9mA	85.5mH
59.12V	477.5mA	136.3mH
58.94V	294.7mA	217.3mH
58.79V	182.5mA	348.6mH
58.65V	115.1mA	555.4mH
58.52V	73.36mA	883.2mH
58.38V	48.31mA	1.4H
58.23V	32.55mA	2.3H
58.04V	22.78mA	3.6H
57.73V	16.27mA	5.7H
55.58V	8.228mA	14.0H
53.24V	5.802mA	20.6H
50.80V	4.442mA	27.1H
48.28V	3.537mA	33.7H
45.72V	2.904mA	40.9H
43.03V	2.437mA	49.6H
40.31V	2.104mA	57.5H
37.50V	1.861mA	65.4H
34.76V	1.700mA	69.6H
30.82V	1.486mA	77.0H
16.36V	1.043mA	54.4H
8.687V	763.7μA	38.3H
4.611V	553.2μA	27.8H
2.447V	393.7μA	20.4H
1.000V	218.7μA	14.3H
0.689V	167.7μA	12.9H
0.365V	97.0μA	11.6H
0.194V	53.4μA	10.9H
0.103V	29.0μA	10.0H

