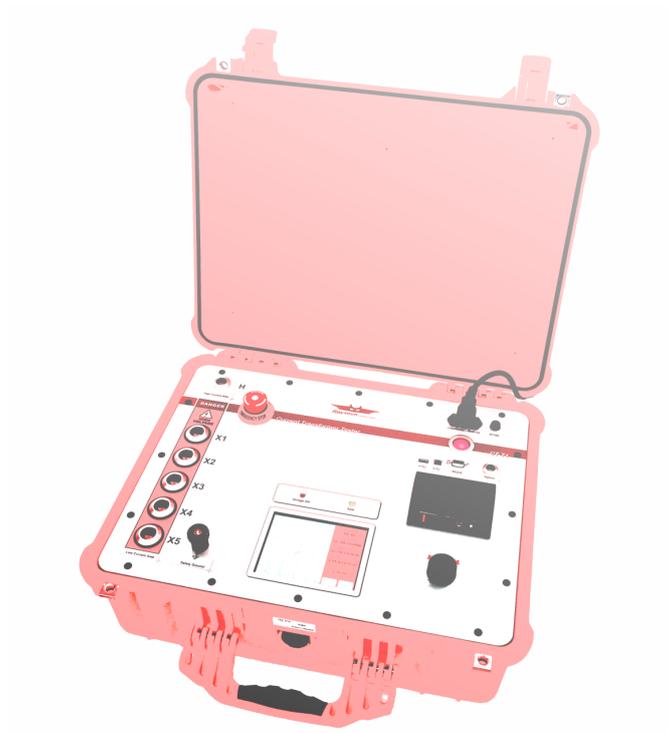




QUICK START GUIDE

ENGLISH



CT-T1

Current Transformer Tester

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Quick Start Guide

1.1 Measuring Setup

Before starting a measurement, connect the CT under test to the CT-T1. An example setup is depicted in Figure 1 and the steps to perform the measurement are given in Table 1.

The measurement results can be stored and printed on the internal 3" printer. If the *Auto Print Results* option is selected, the results will be printed automatically with the date and time fields set already. Table 1 describes the procedure to store the results on the internal memory and—if the *Auto Print Results* option is not selected—to print the results.

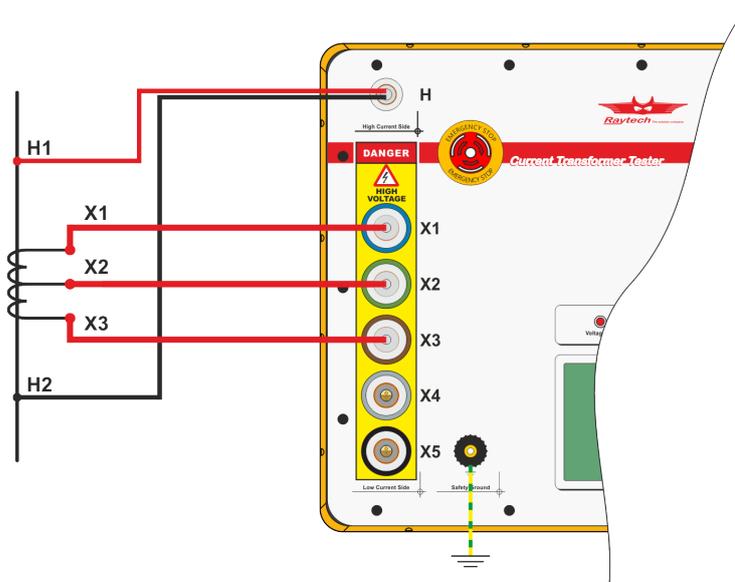


Figure 1: Example measurement with a three taps CT under test connected to the power transformer on the secondary winding. The primary winding of the power transformer is short circuited to prevent excess voltage.



NOTE:

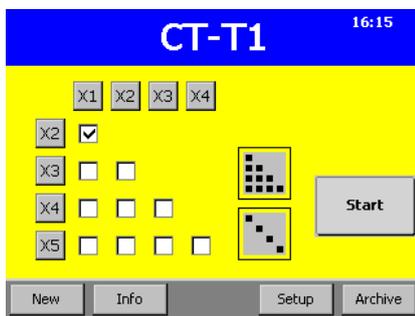
Please always connect the safety ground before starting any measurements.



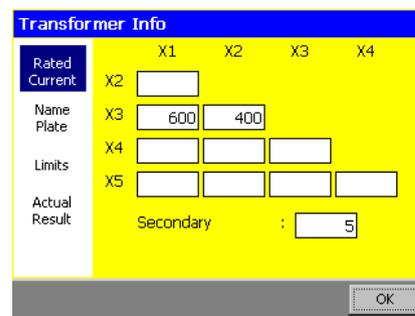
1.2 Measuring Process

Table 1: Instrument operation—Measuring

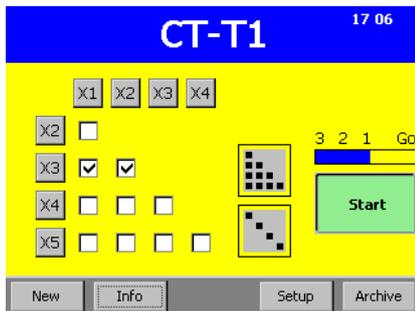
1. Configure the CT-T1 to measure the example setup depicted in Figure 1 above. Power the CT-T1 and you will be presented with the tap configuration.



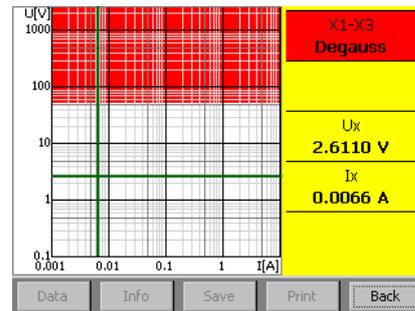
2. After pressing *Info* you see the *Rated Current* screen. Enter the appropriate values and press *OK*.



3. The tap selection is updated according to the values in the *Rated Current* screen. If you do not know the rated currents you can double tap the *Select All* button on the top right to clear the selection and press to *X3* on the left. Finally press and hold the *Start* button.



4. The *Degauss* process starts. In this phase the voltage is increased until the slope is flat enough. Please note the red area on the top of the graph that disappears when the *Surveillance Switch* is pressed.



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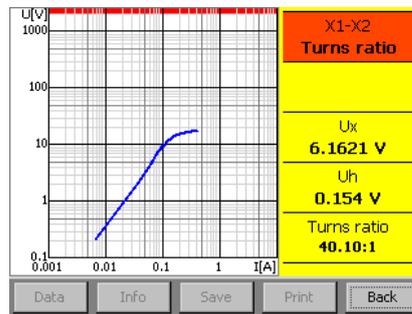


Table 1 – continued from previous page

5. During the *Excitation* process, the voltage is slowly decreased until the slope is steep enough and the graph is extended. Please keep holding down the *Surveillance Switch* as long as the voltage is above 50 V.



6. The *Turns ratio* is measured at different voltages below the detected *Knee point*. Please keep holding down the *Surveillance Switch* during this phase as the voltage might be increased above 50 V depending on the detected *Knee point*.



7. The second winding is measured in the same way. Starting with another *Degauss* process.



8. The *Excitation curve* for the second winding is drawn on the same diagram.

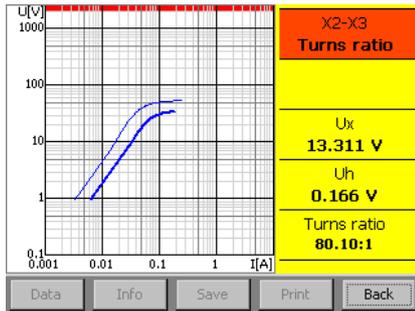


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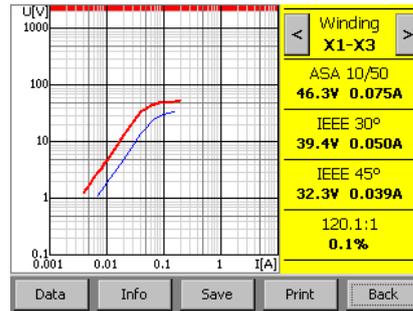


Table 1 – continued from previous page

9. The measurement process is completed with the *Turns ratio* determination for the winding X2-X3.



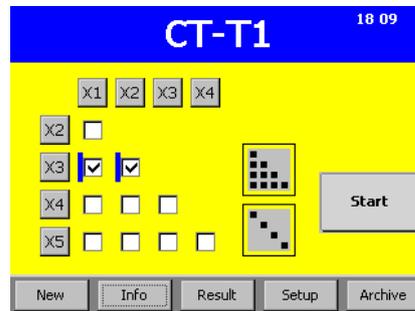
10. The results are shown after all measurements have been concluded. The first winding is highlighted in red and the values are listed on the right.



11. The second winding can be highlighted using the *left* and *right* buttons on the top.



12. After pressing *Back* the available results are marked in the *Main* screen.



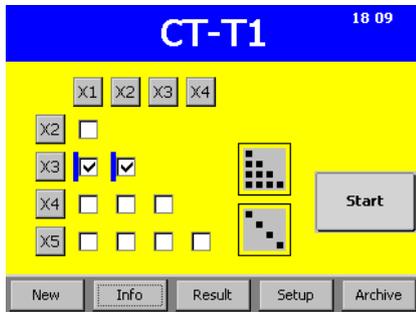


1.3 Data Storing, Printing & Loading

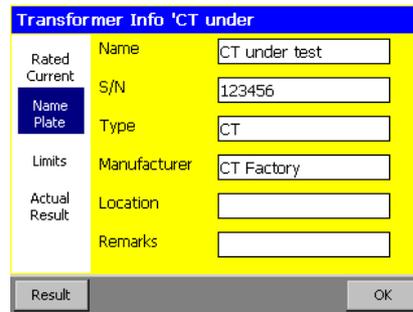
The profile data of the CT under test is accessed by pressing *Info*. The measurement results of the currently active profile are displayed by pressing *Result*. The *Data* button displays the raw data points.

Table 2: Instrument operation—Storing, printing & loading

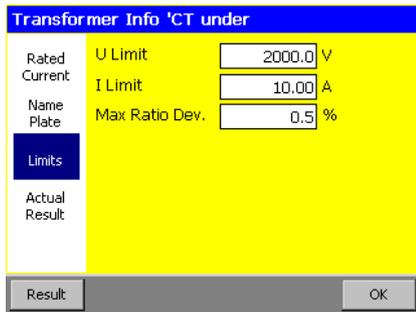
1. Available results are marked on the *Main* screen.



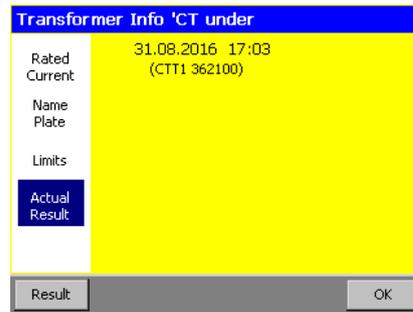
2. By pressing *Info* and *Name Plate* the characteristics of the CT under test can be entered.



3. If the CT under test is sensitive and certain voltage or current values must not be exceeded these limits can be set in the *Limits* tab.



4. The date, time, device name, and the serial number of the CT-T1 are listed in the *Actual Result* screen.

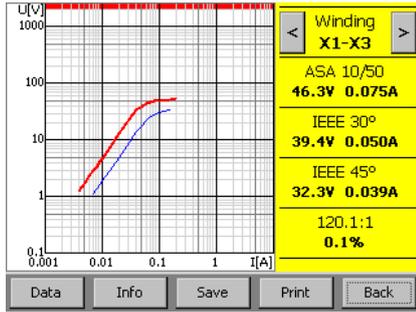


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Table 2 – continued from previous page

5. From the *Result* screen measurements can be *Saved* into the *Archive* and *Printed* as well as the raw *Data* being displayed.



6. To display the raw data points press *Data* from the *Result* screen.

Ix [A]	Ux [V]
0.0040	1.3014
0.0050	1.7797
0.0060	2.2984
0.0070	2.8532
0.0080	3.4409
0.0090	4.0590
0.0100	4.7055
0.0150	8.5288
0.0200	12.836
0.0300	23.744
0.0400	33.113

Winding	ASA 10/50
X1-X3	45.9V 0.073A
IEEE 30°	39.9V 0.051A
IEEE 45°	32.1V 0.039A
120.1:1	0.1%



Contacts

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Your local representative

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