KT210 CT/PT Analyzer

KINGSINE

KT210 – Test Items

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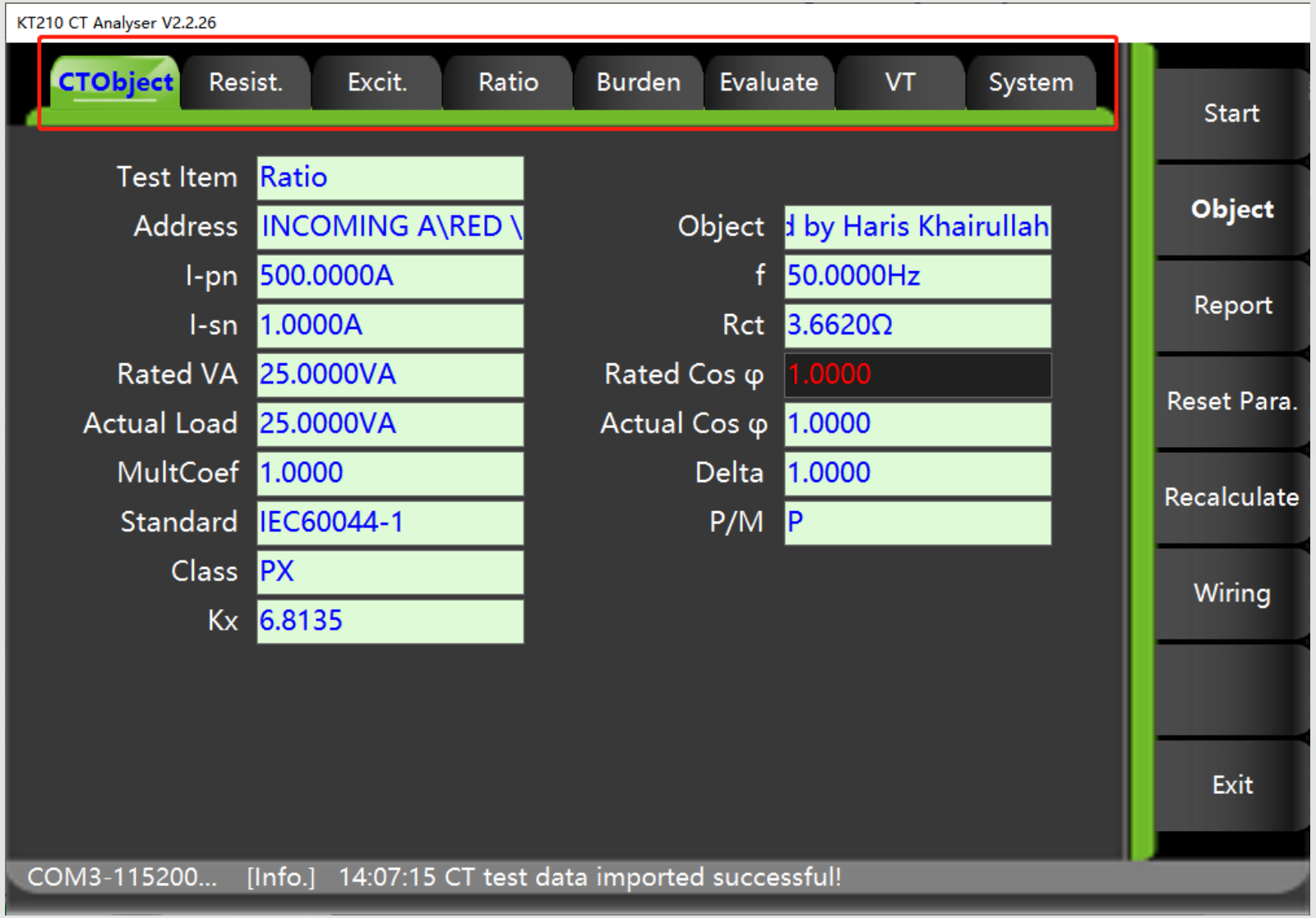
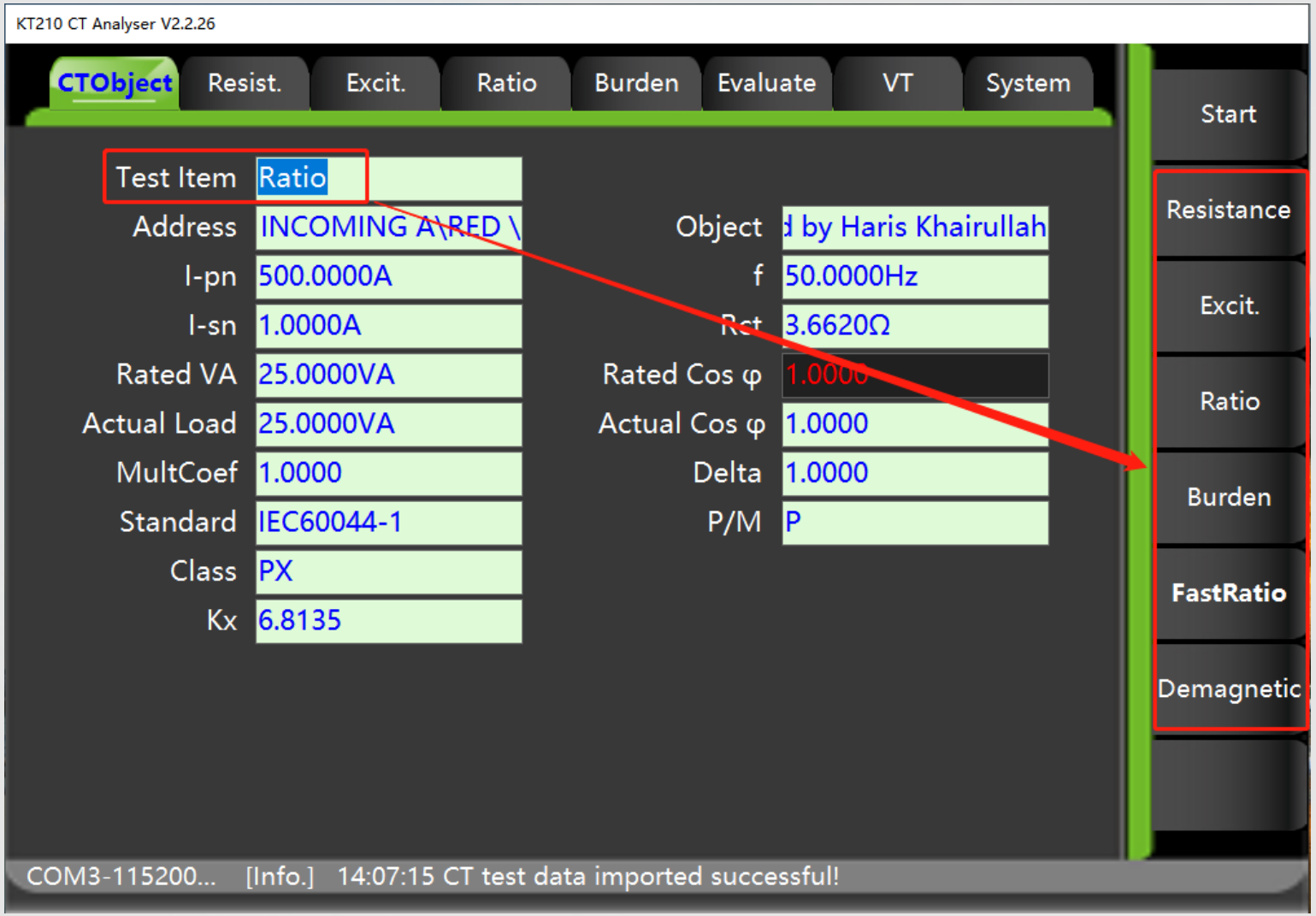
- Ratio (up to 30000 : 1)
- Current ratio error and phase error for all measurement points defined in selected standard
- Winding resistance
- Excitation/saturation voltage current
- Secondary burden
- Saturated inductance (Ls)
- Unsaturated inductance (Lm)
- Remanence flux factor (Kr)
- Secondary time constant (Ts)
- Accuracy limiting factor (ALF / ALFi)
- Instrument security factor (FS / FSi)
- Dimensioning factor according to class PX, TPS (Kx)
- Accuracy limiting voltage/current according to class PX (Ek / Ie)
- Turns ratio according to class PX (N)
- Turns ratio and composite error (εt ,εc)
- Rated symmetrical short-circuit current factor (Kssc)
- Transient dimensioning factor (Ktd)
- Peak instantaneous error (ε^)
- Maximum emf voltage (Emax - calculated value)
- Accuracy limiting voltage/current (Val/Ial)
- Knee-point voltage/current (Vkn / Ikn)
- The impedance / admittance of CT secondary Load, Like the burdens of various meters, relays, selector switches

KT210 – Software introduce



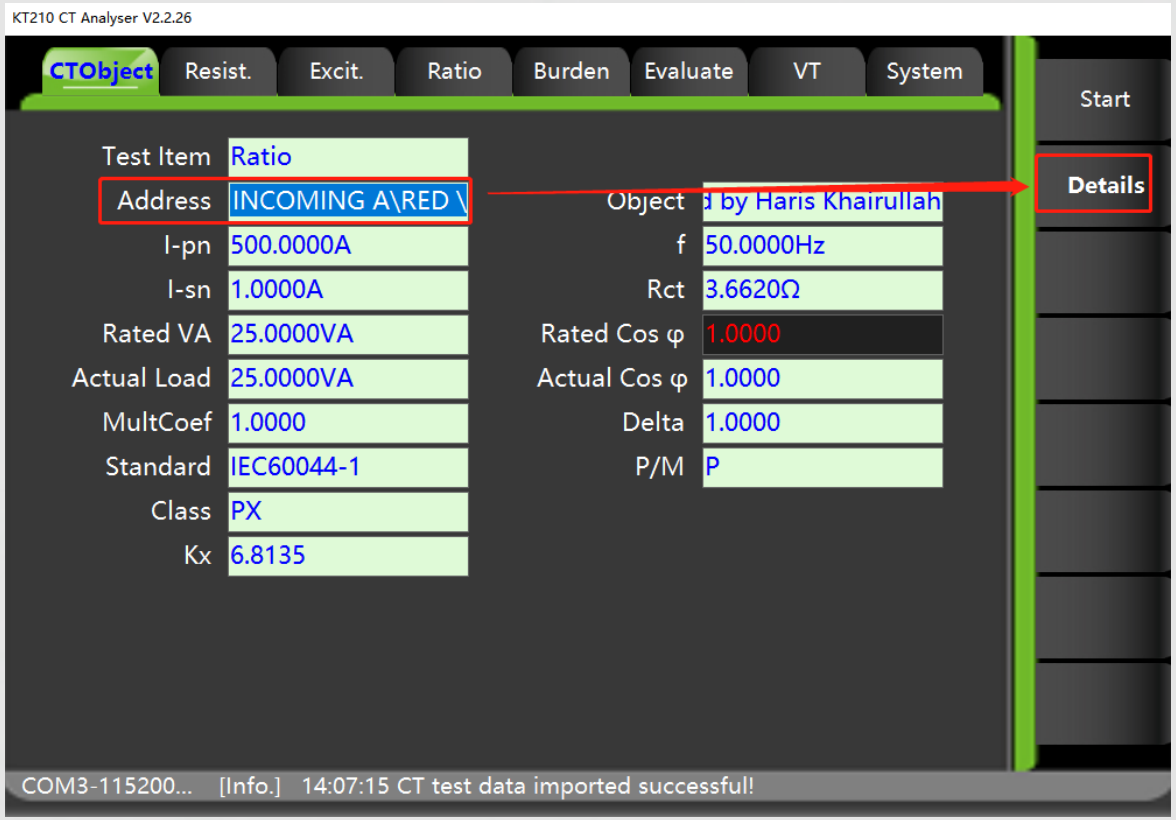
CTObject	Test Parameter setting
Resist.	Resistance test result display
Excit.	Excitation test result display
Ratio	Ratio test result display
Burden	Ratio test result display
Evaluate	Test Result Evaluate
VT	Voltage transformer test interface
System	System configuration interface

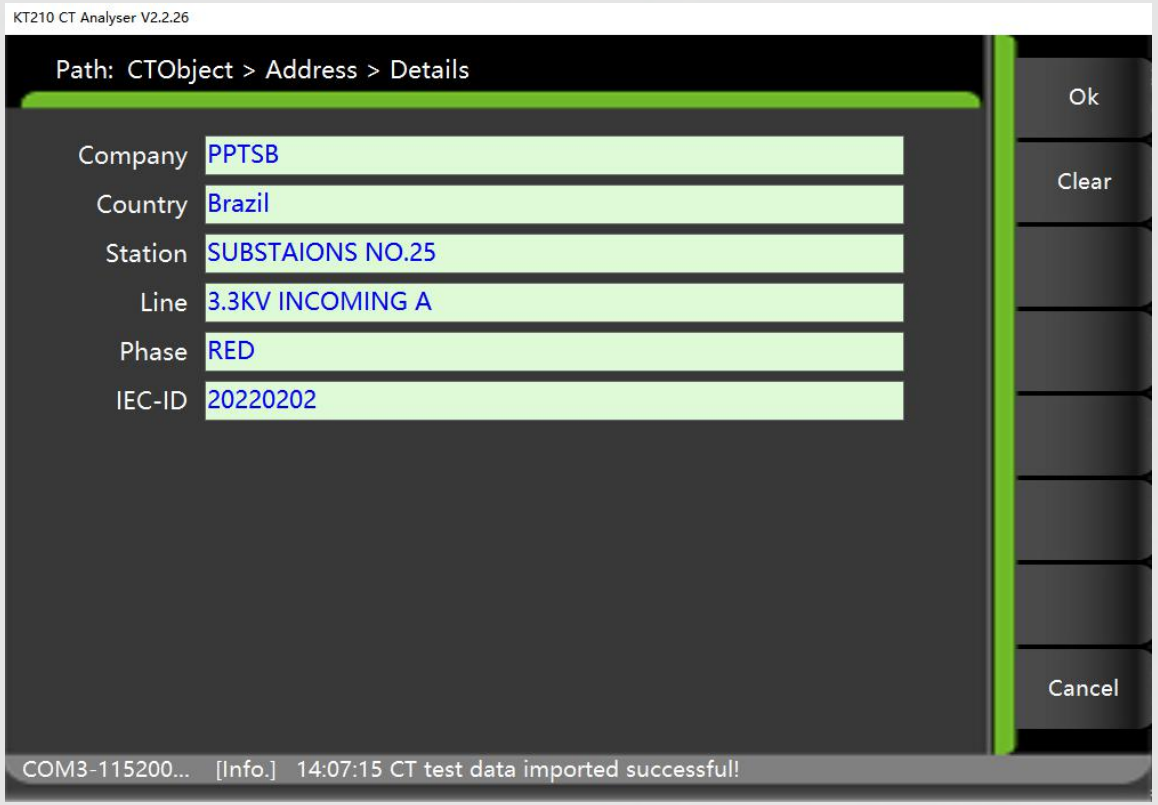


Test Item: We can option test items of current transformer.

Resistance	Resistance of CT test
Excit.	Resistance/Excitation of CT test, Can test Knee point, Excitaction curve, Error curve, etc.
Ratio	Resistance/Excitation/Ratio of CT test, Ratio list, Polarity, Number of turns, phase error, ratio error, etc.
Burden	External burden of CT test
FastRatio	Only test Ratio parameters as ratio, polarity.
Demagnetic	Demagnetic after test finish.

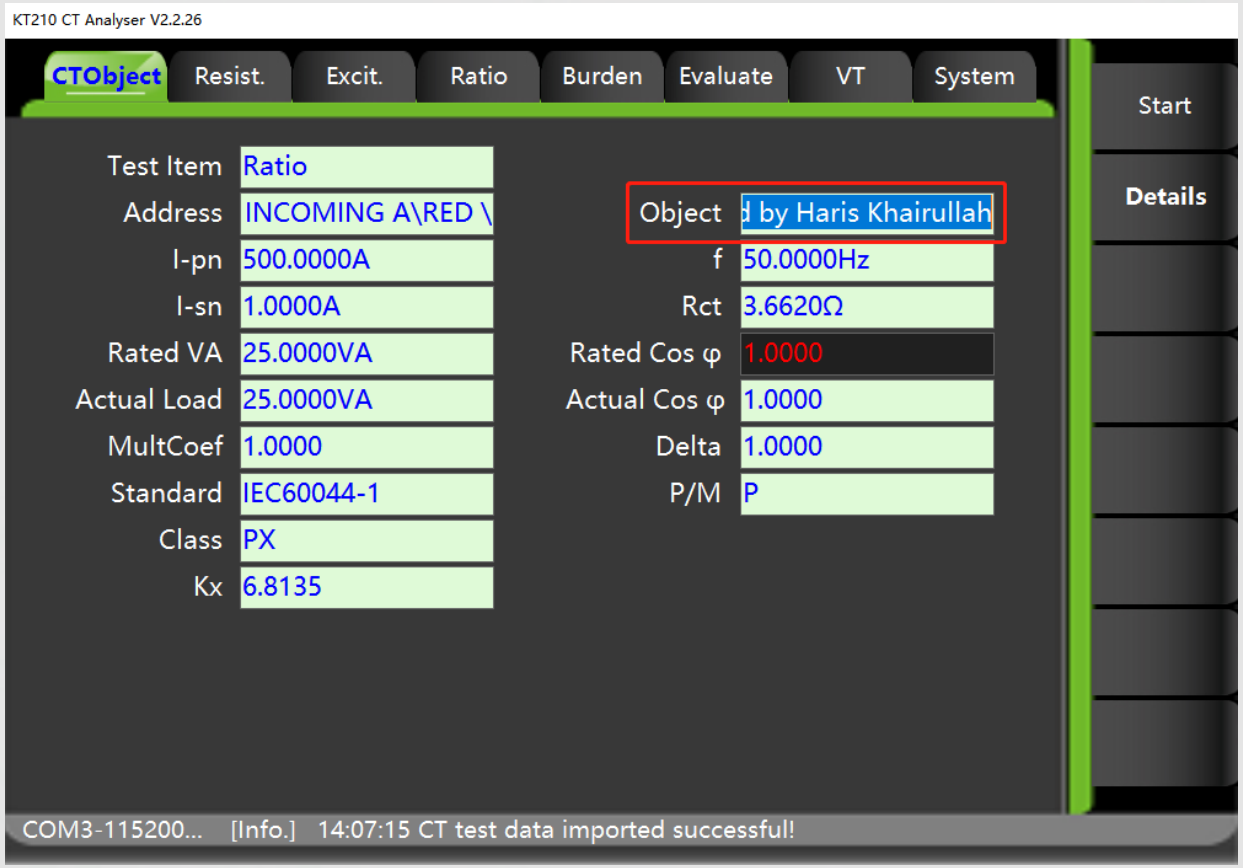
KT210 – Software introduce

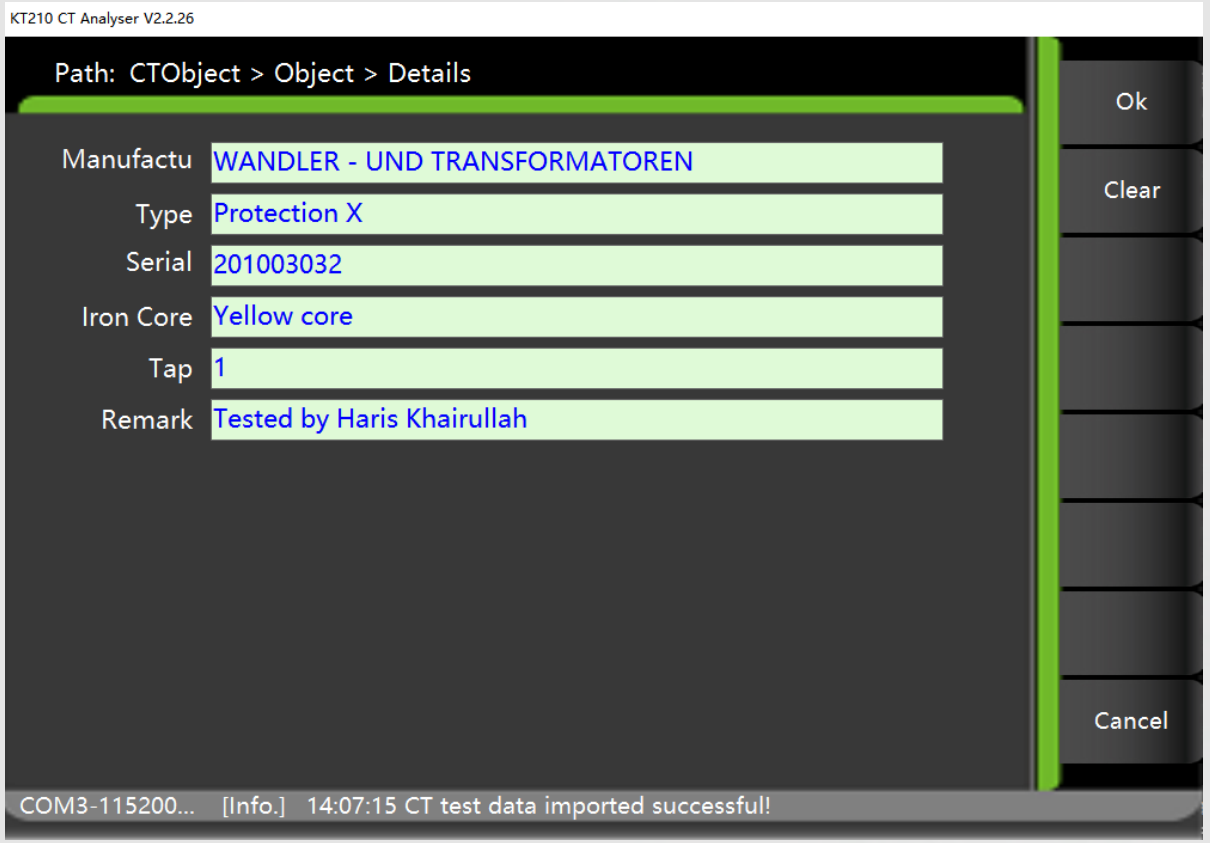




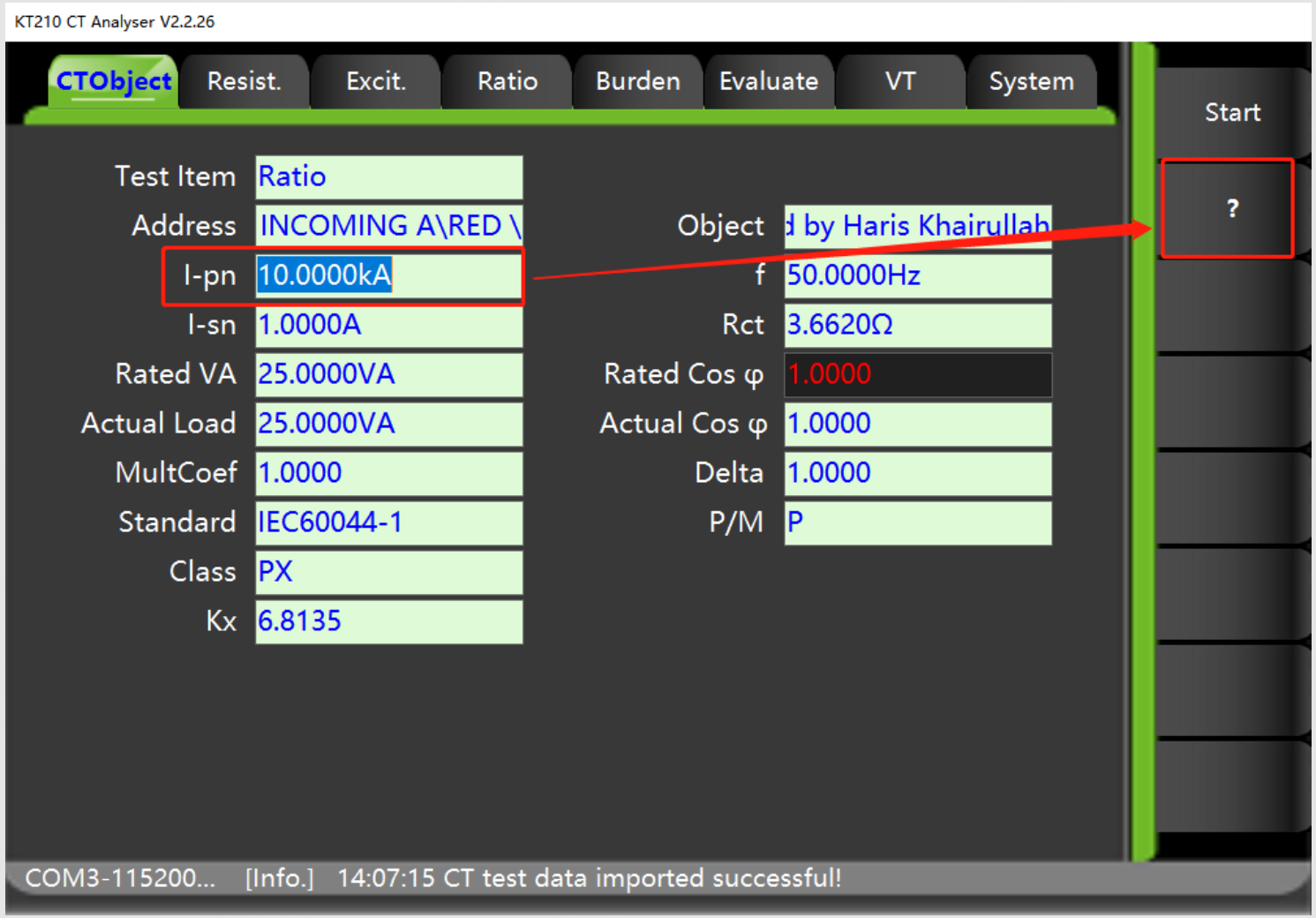
Address - detail: We can use address - details to add information in test report.

KT210 – Software introduce



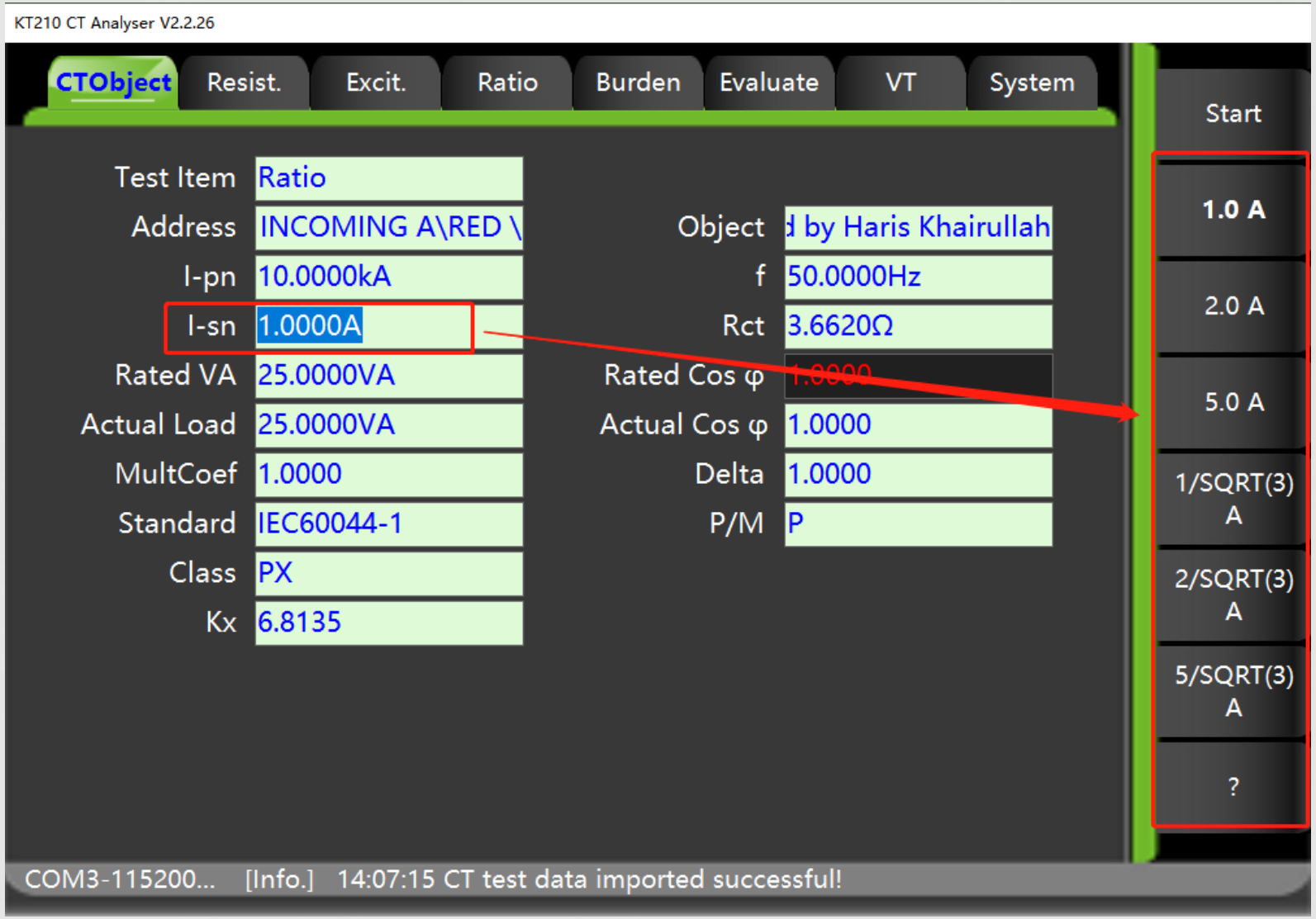


Object - details: We can use Object- details to add information in test report.



I-pn : Primary current of CT, for example, CT ratio is 3000/5, we enter primary value 3000A into parameter box.

If we don't know the nameplate of CT, we can choose “?”, software will guess primary value automatic.



I-sn : Secondary current of CT, for example, CT ratio is 3000/5, we choose secondary value 5A in right list.

If we don't know the nameplate of CT, we can choose “?”, software will guess secondary value automatic.

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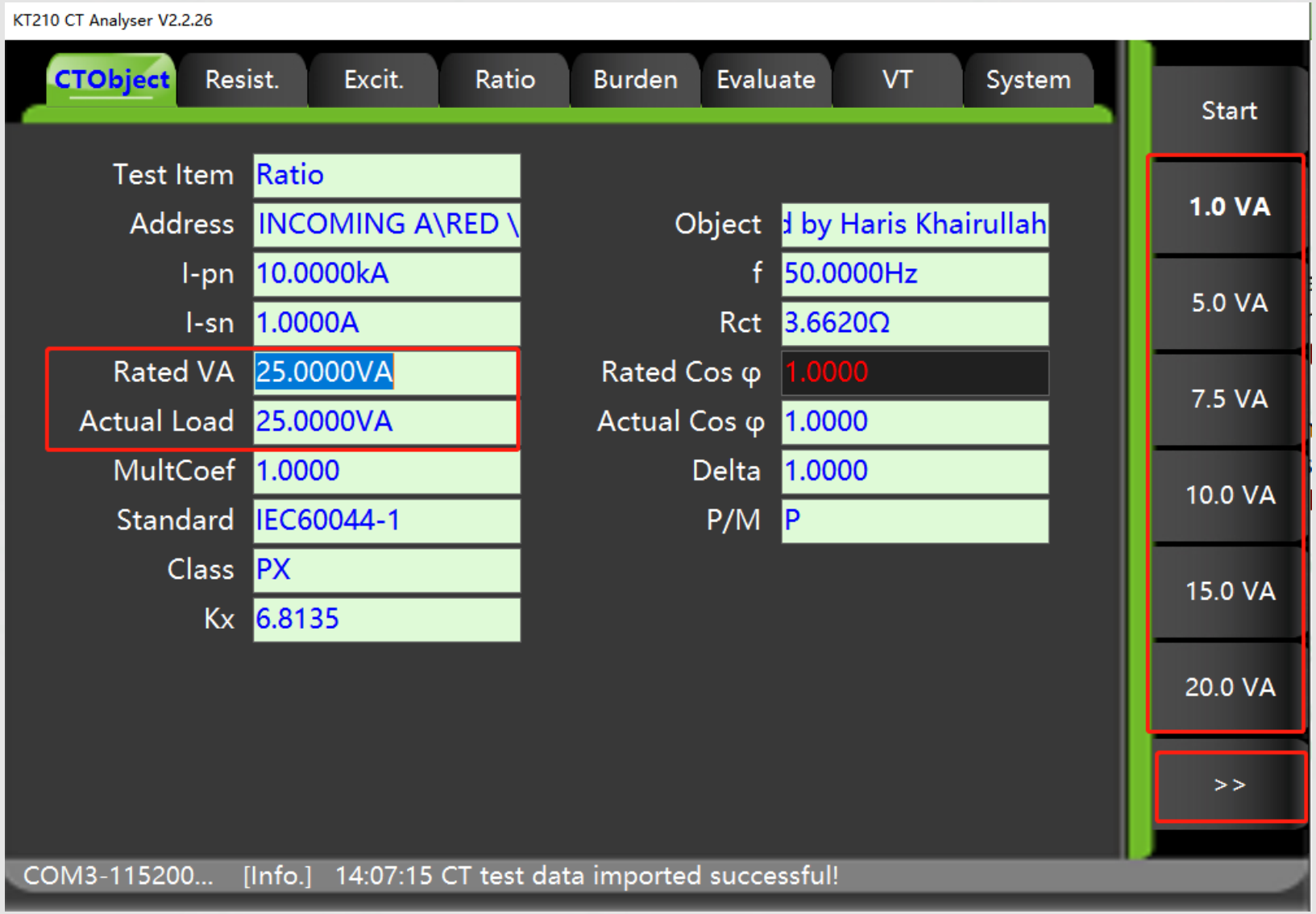

Rated VA/Actual VA : power of CT, we choose VA value in right list.

If we don't know the nameplate of CT, we can choose “?”, software will guess value automatic.

We use “>>” to pagedown

KT210 – Software introduce

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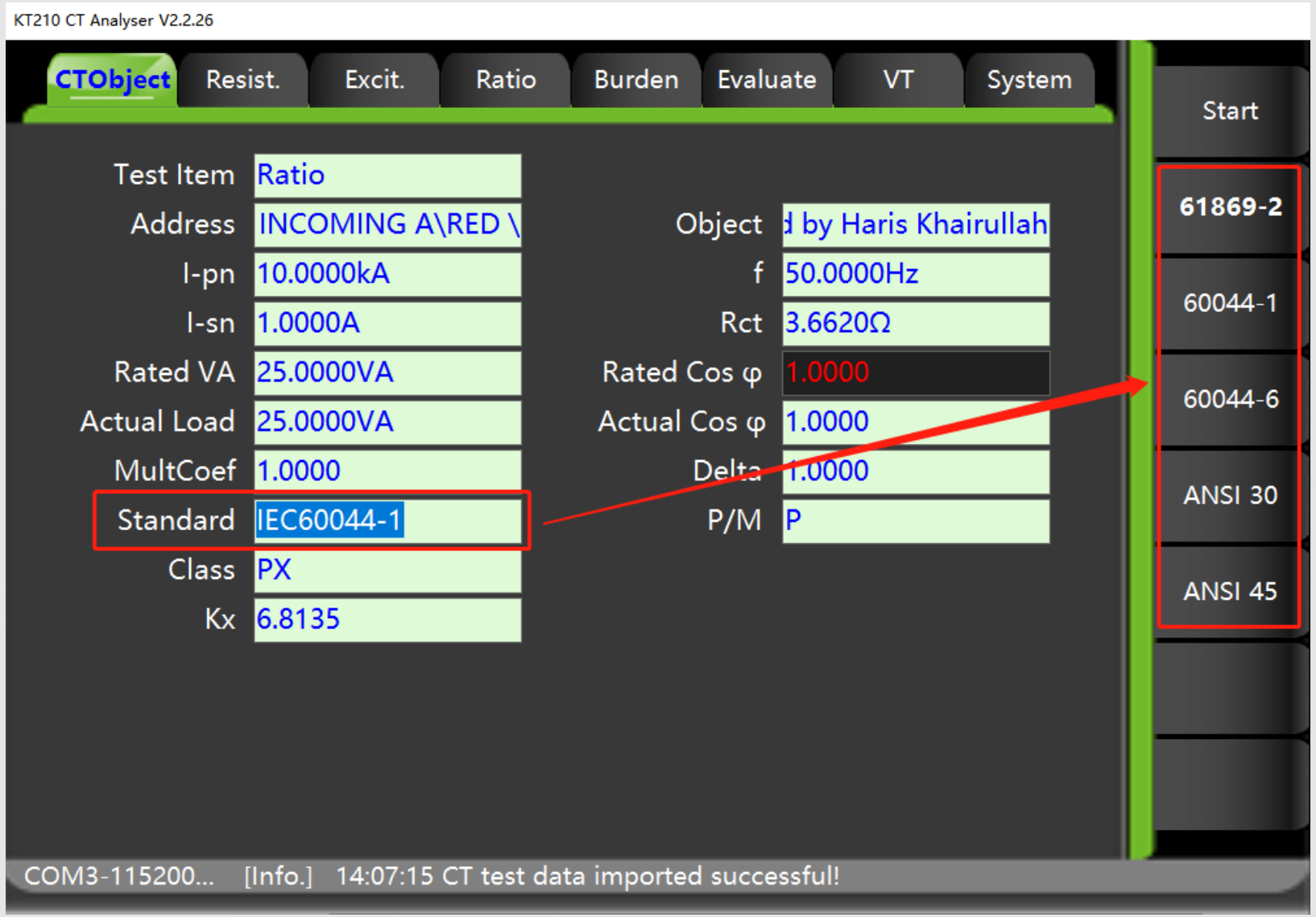
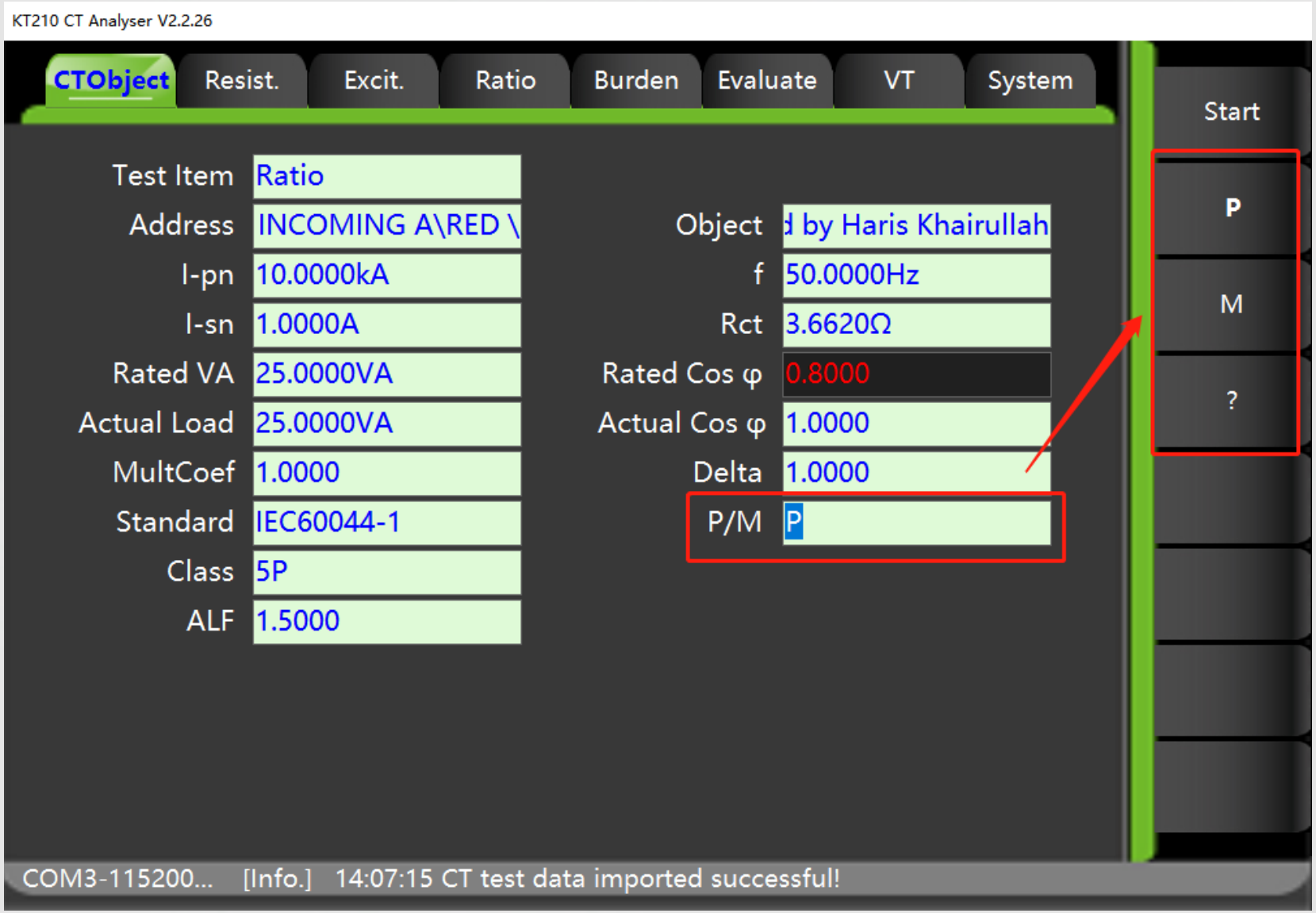


Standard : Standard we use to test CT.

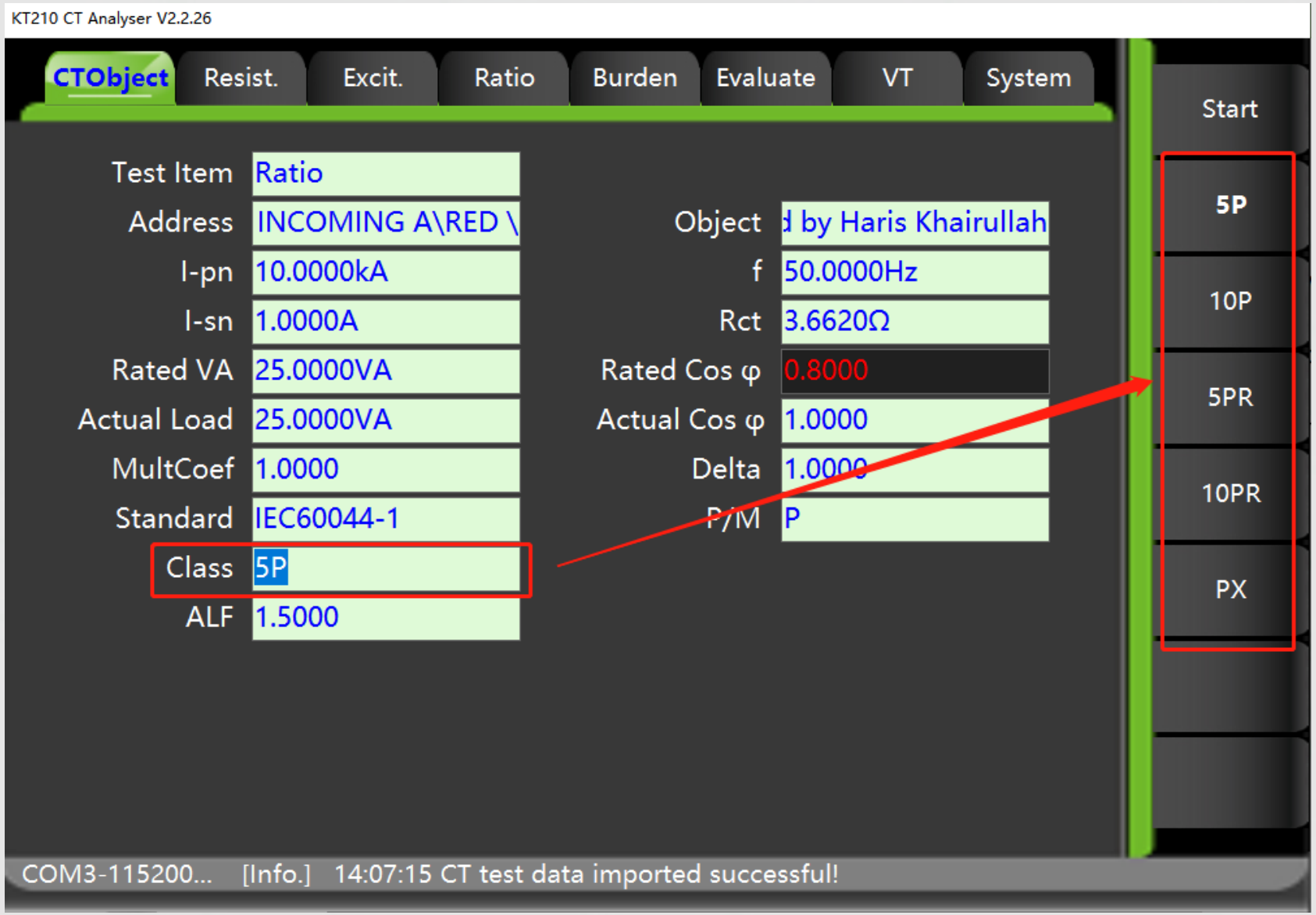
Different standard according to different test parameters of CT.



P/M : CT type choose.

P: Protection type CT.

M: Metering type CT.



P/M : CT type choose.

P: Protection type CT.

M: Metering type CT.

Class: accuracy level of CT. If we choose protection type CT, we have accuracy list of it.

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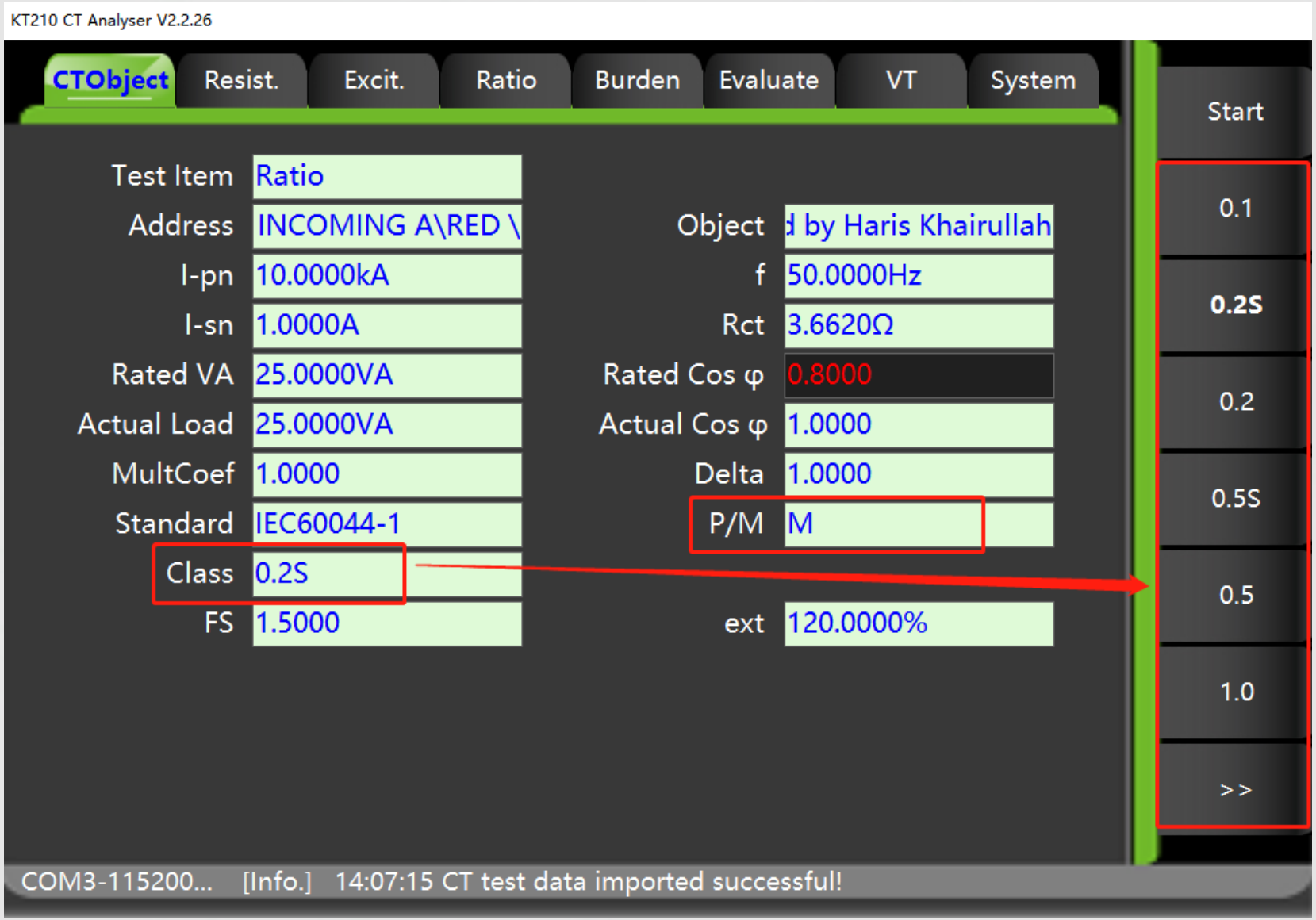

P/M : CT type choose.

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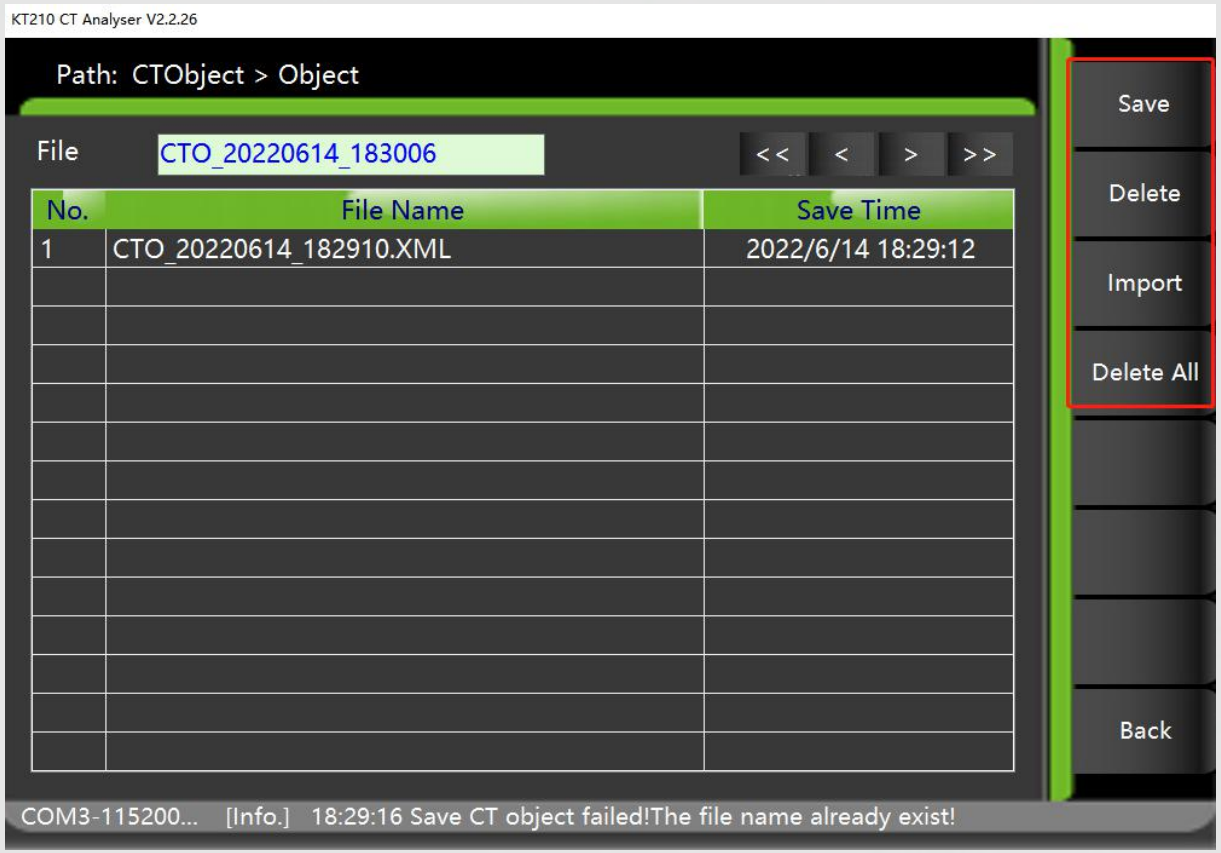
Class: accuracy level of CT. If we choose Metering type CT, we have accuracy list of it.

KT210 – Software introduce



Object: We can Press Object button to save test parameters, next time we can use this parameters by import.

Save: Save test parameters
Delete: Delete test paramters
Import : import test parameters in list
Delete all: Delete all test parameters

KT210 – Software introduce

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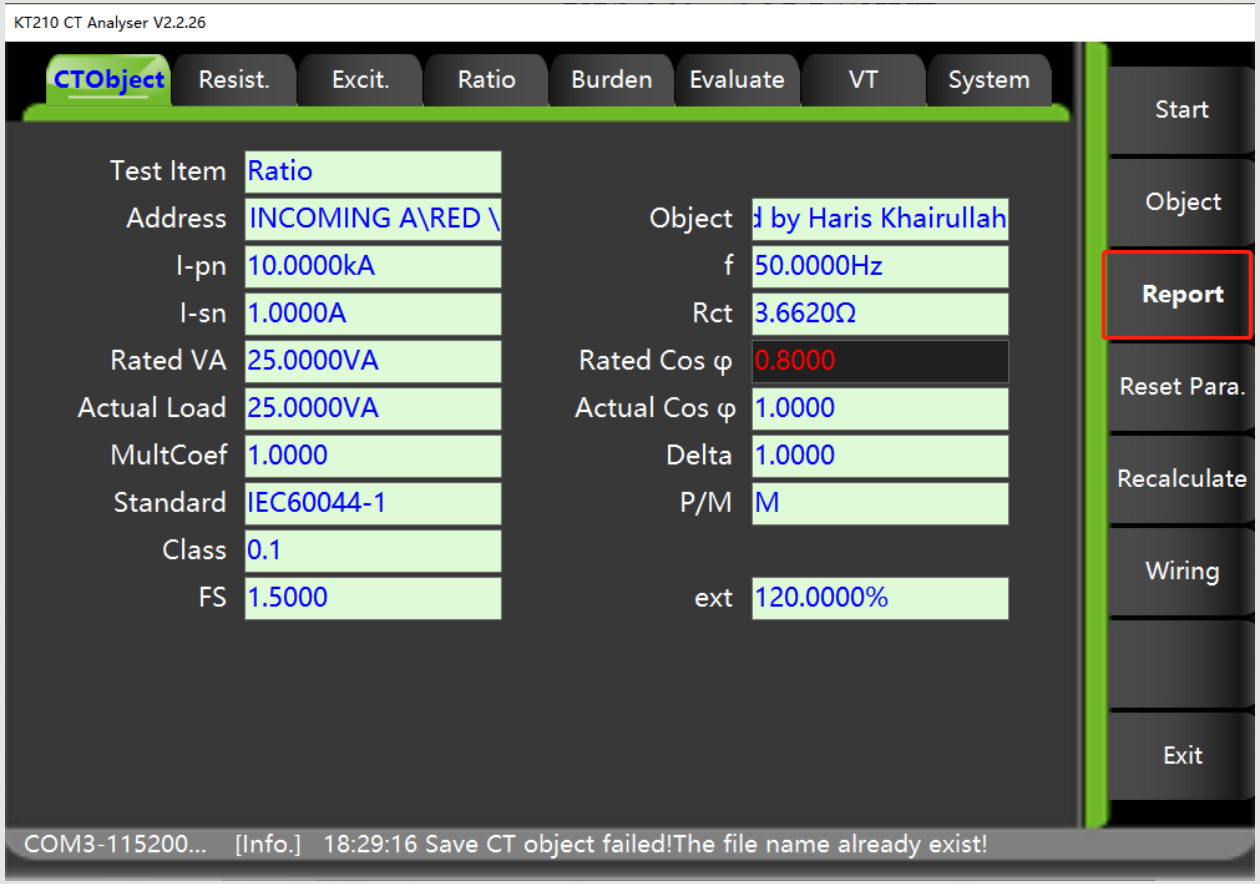
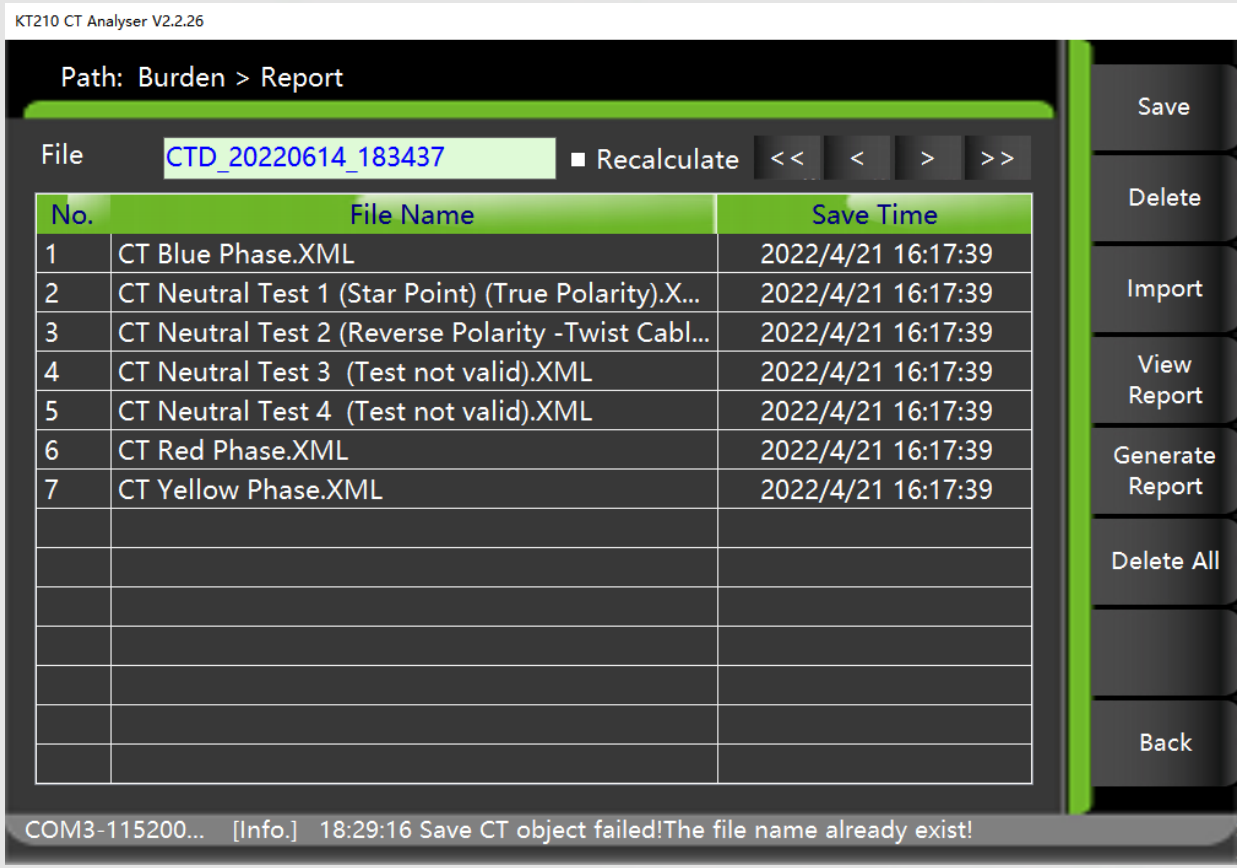
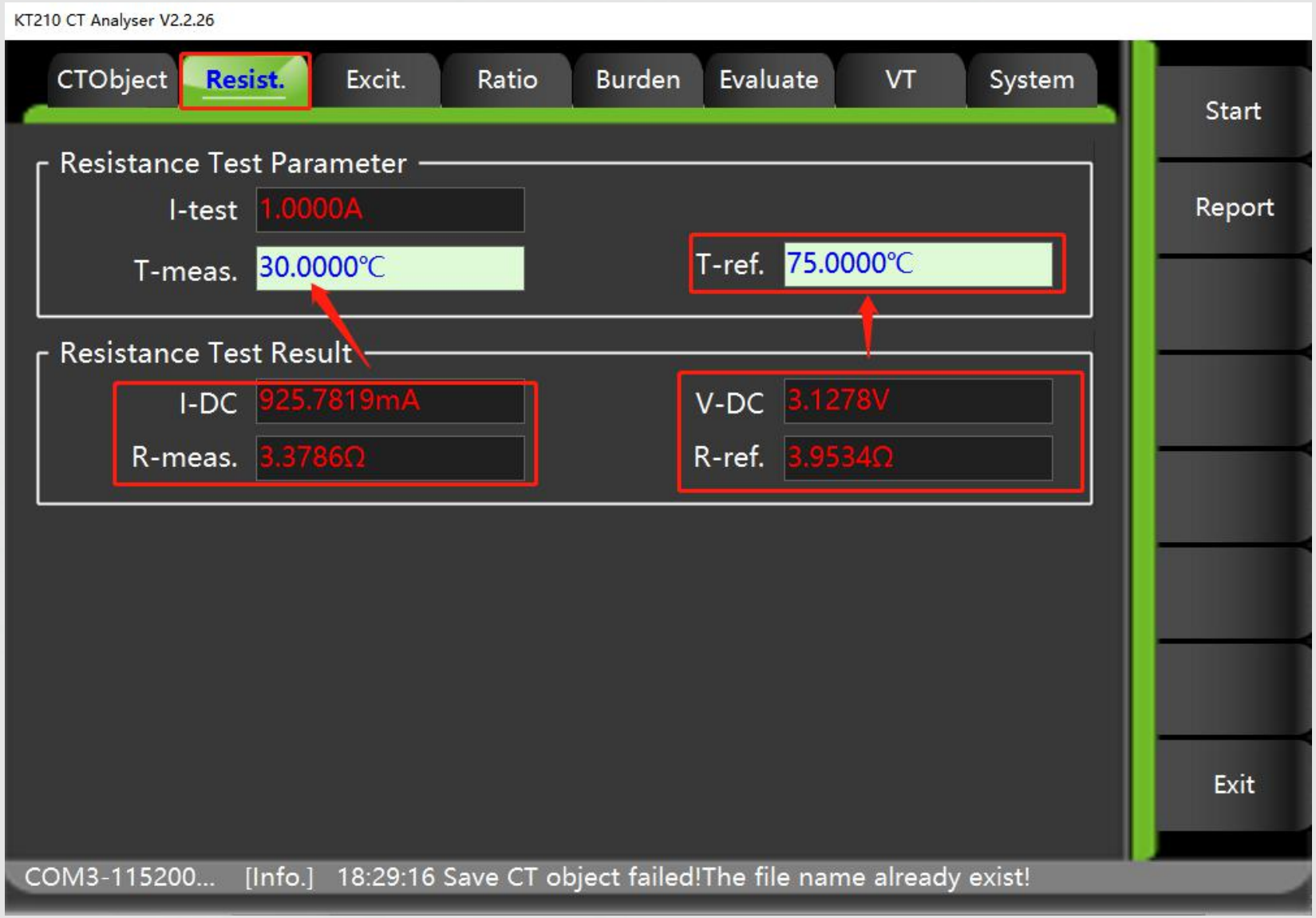




Report: We can press test report to save test result.

Save: Save test result
Delete: Delete test result
Import : import test result in list
Delete all: Delete all test parameters



Resistance test result interface

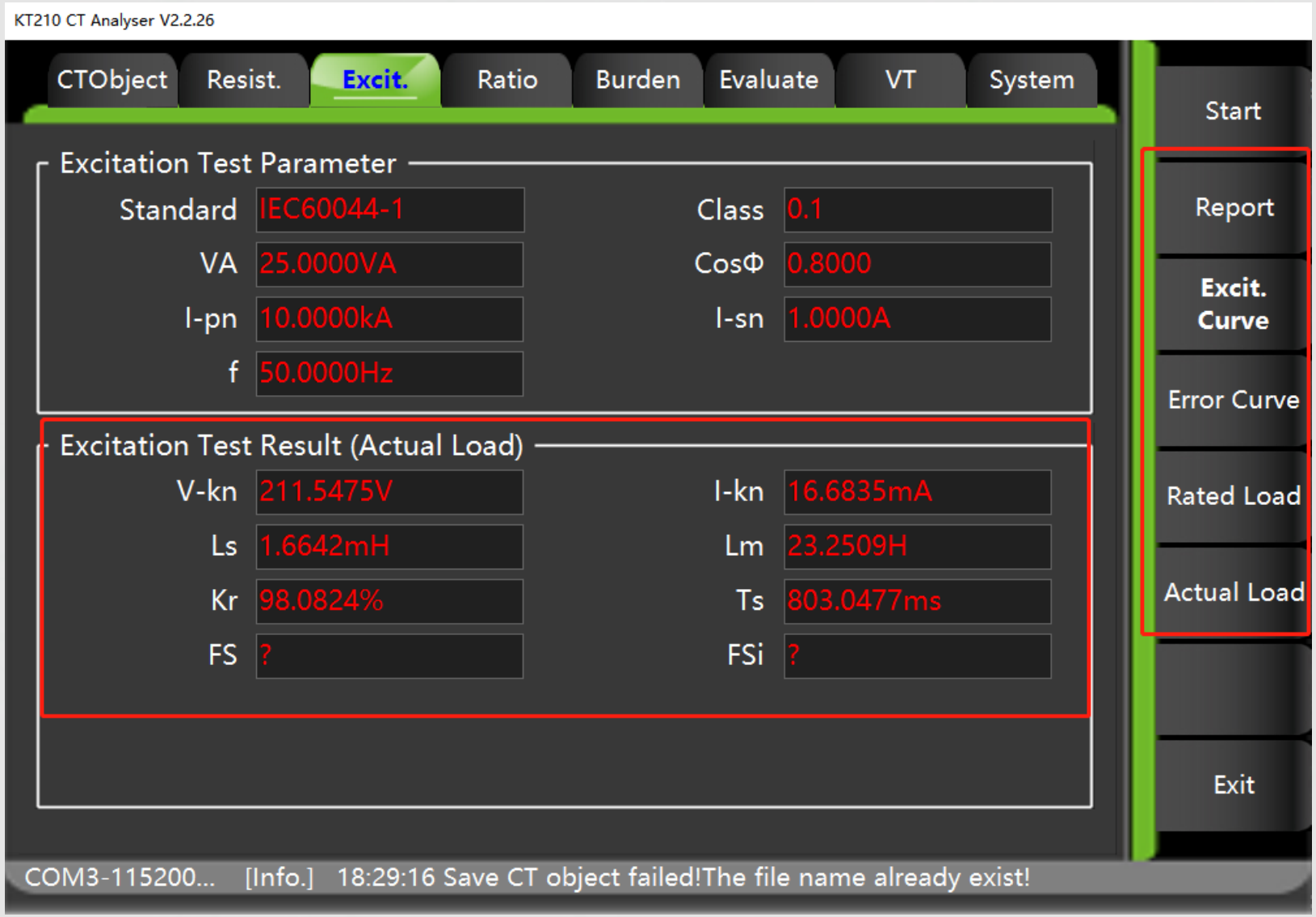
I-DC : test current

V-DC: test voltage

R-means.: Resistance result we test in T-means. temperature.

R-ref. : Resistance calculate referance to T-ref temperature

KT210 – Software introduce



Excitation test result interface

V-kn : knee point of voltage

I-kn: knee point of current

We can press Excit. Curve to check excitation curve.

KT210 – Software introduce

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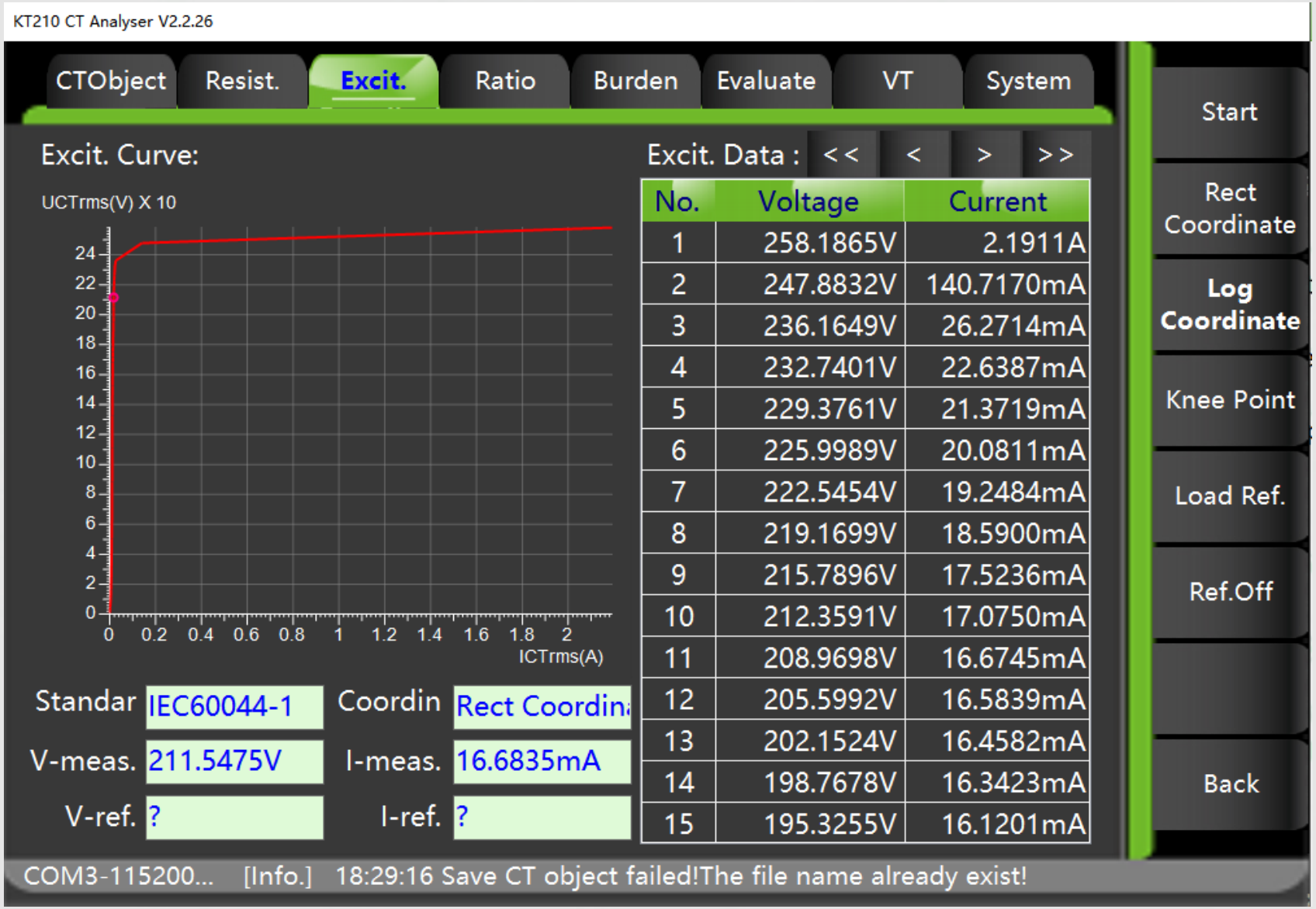

Excitation test result interface

Excitation curve of CT.

We can press load ref to next function

KT210 – Software introduce

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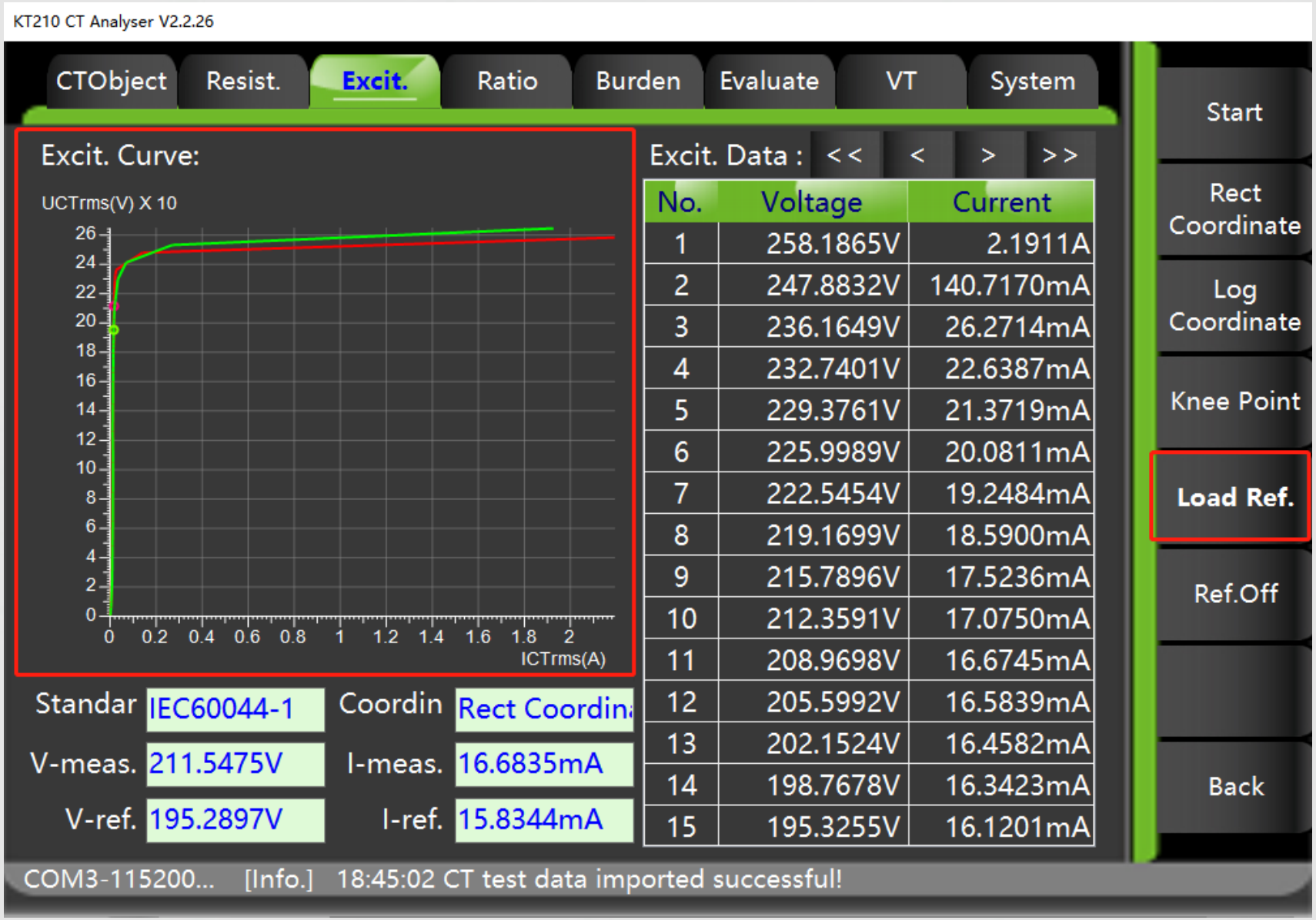
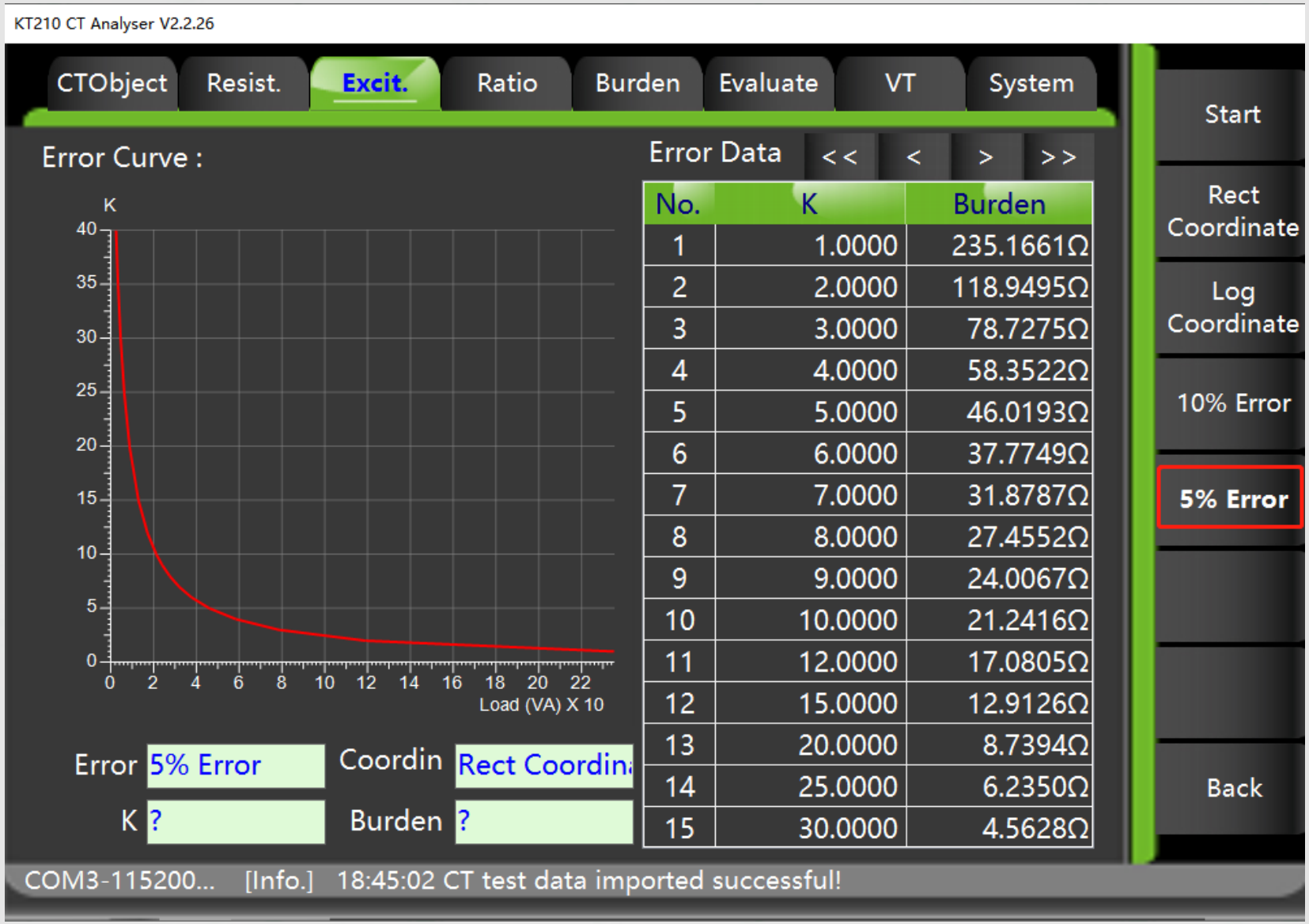


Excitation test result interface

Excitation curve of CT.

We can press load ref to Compare two test result curve, we can use this for referance two test result curve.

Red curve is current test curve, green curve is referance curve



Excitation test result interface

Error curve of CT.

We can press 5% error and 10% error to switch error curve

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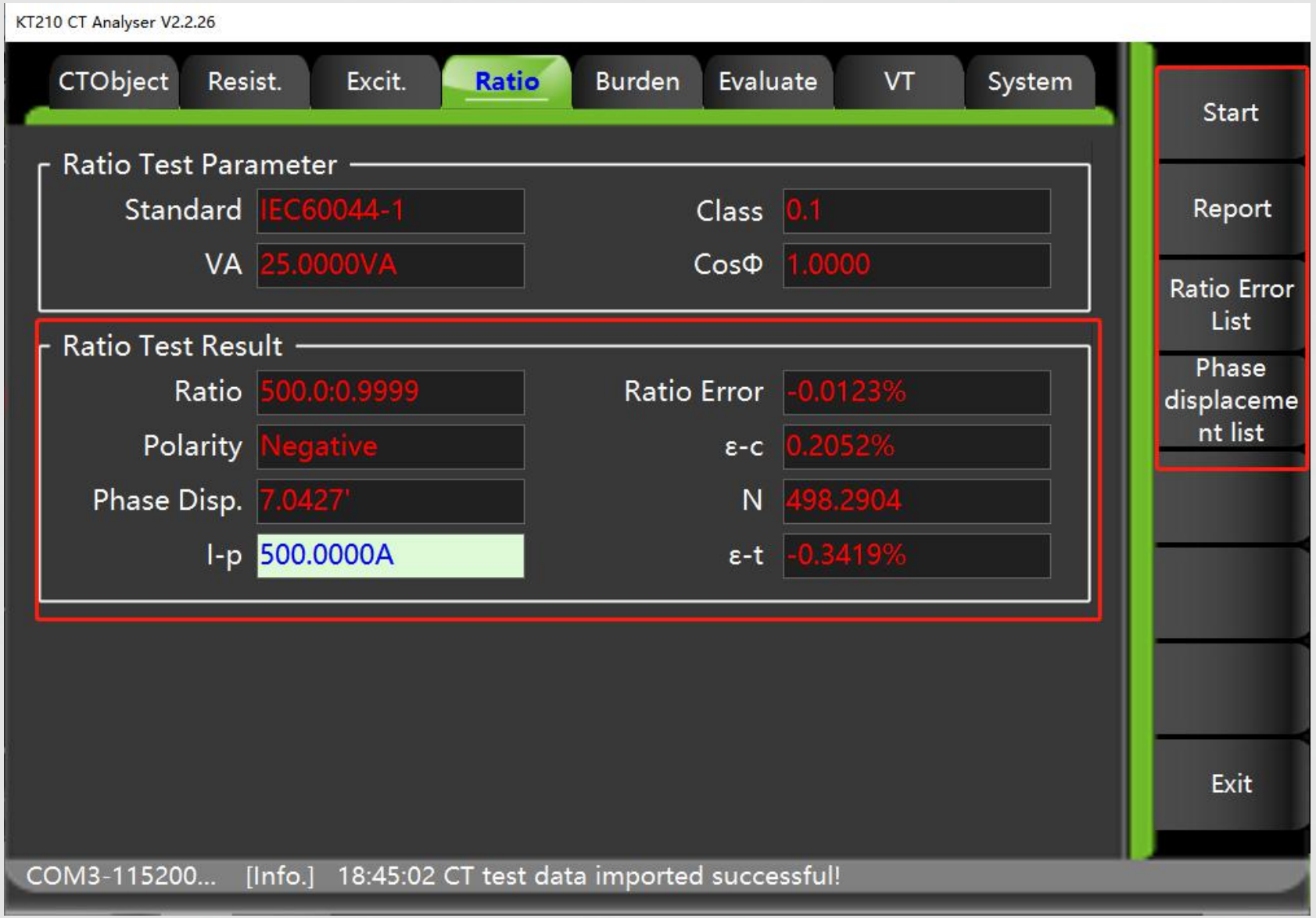

Ratio test result interface

Ratio : Test result of ratio

Ratio error: accuracy of ratio result

Polarity: Polarity of CT test resul

N: Number of turns

We can press Ratio error list to enter next function interface

Ratio test result interface

Ratio error list

We calculate error list in different rated current point

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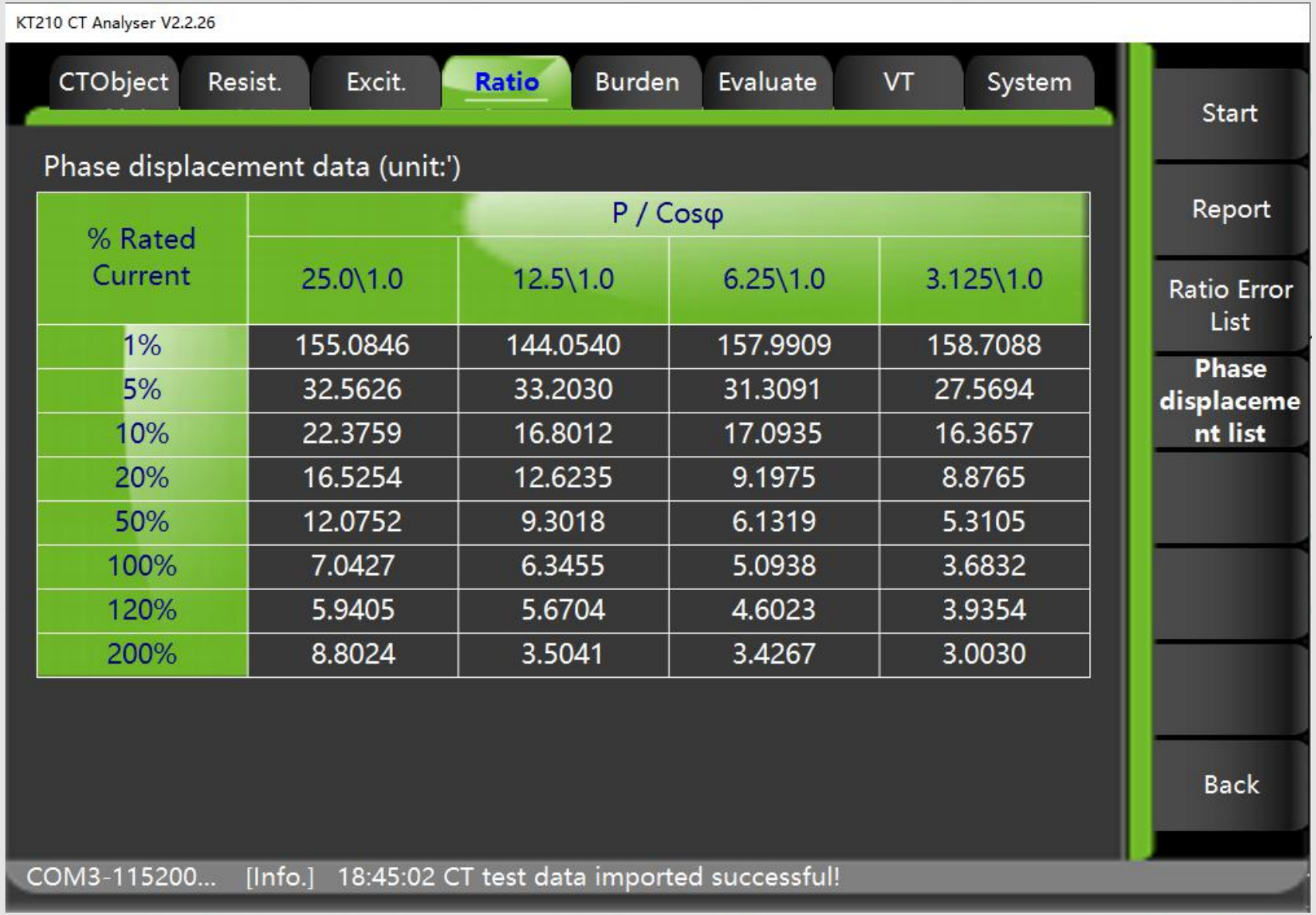


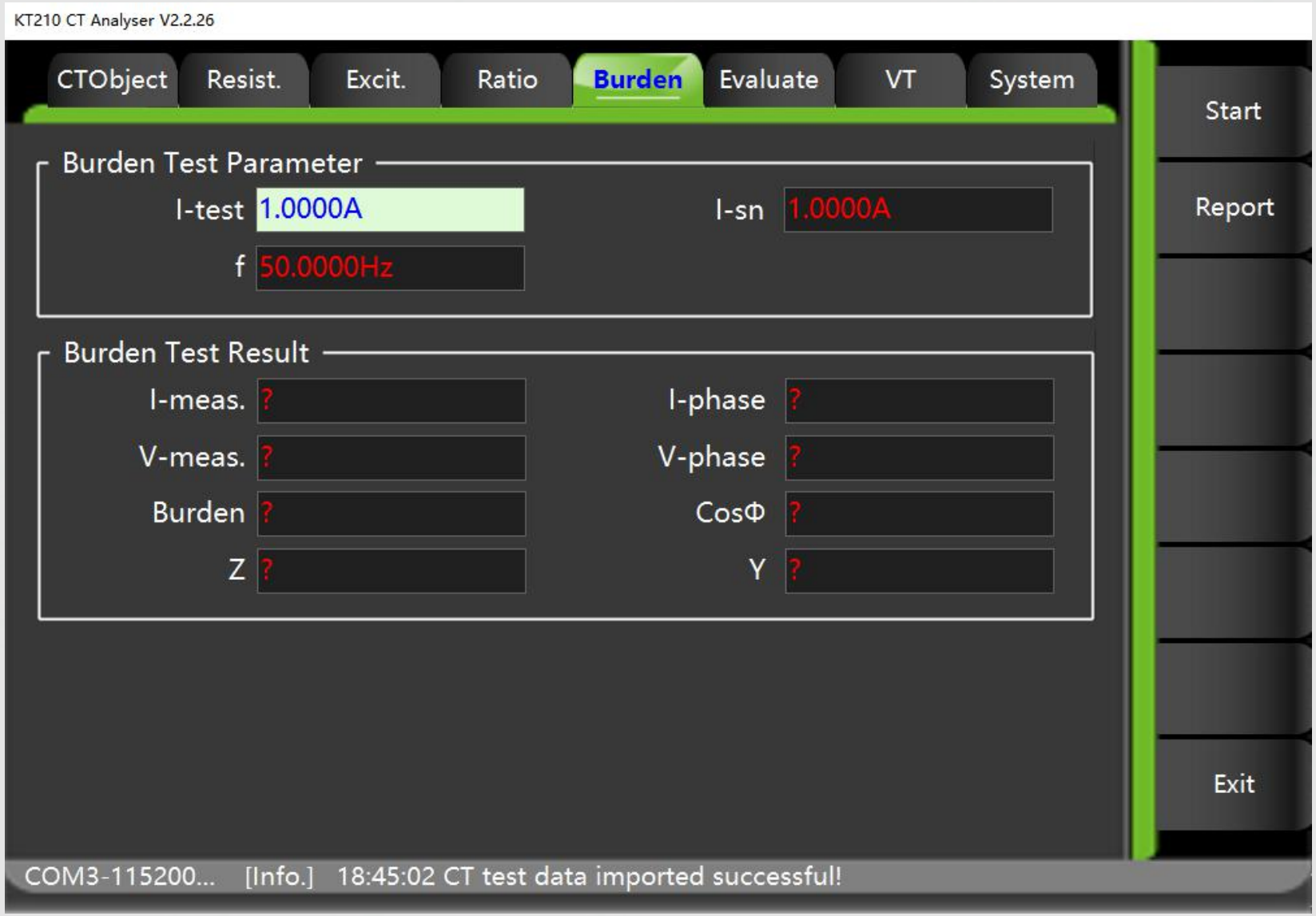
Phase displacement data (unit:')

% Rated Current	P / Cosφ			
	25.0\1.0	12.5\1.0	6.25\1.0	3.125\1.0
1%	155.0846	144.0540	157.9909	158.7088
5%	32.5626	33.2030	31.3091	27.5694
10%	22.3759	16.8012	17.0935	16.3657
20%	16.5254	12.6235	9.1975	8.8765
50%	12.0752	9.3018	6.1319	5.3105
100%	7.0427	6.3455	5.0938	3.6832
120%	5.9405	5.6704	4.6023	3.9354
200%	8.8024	3.5041	3.4267	3.0030

Ratio test result interface

Phase error list

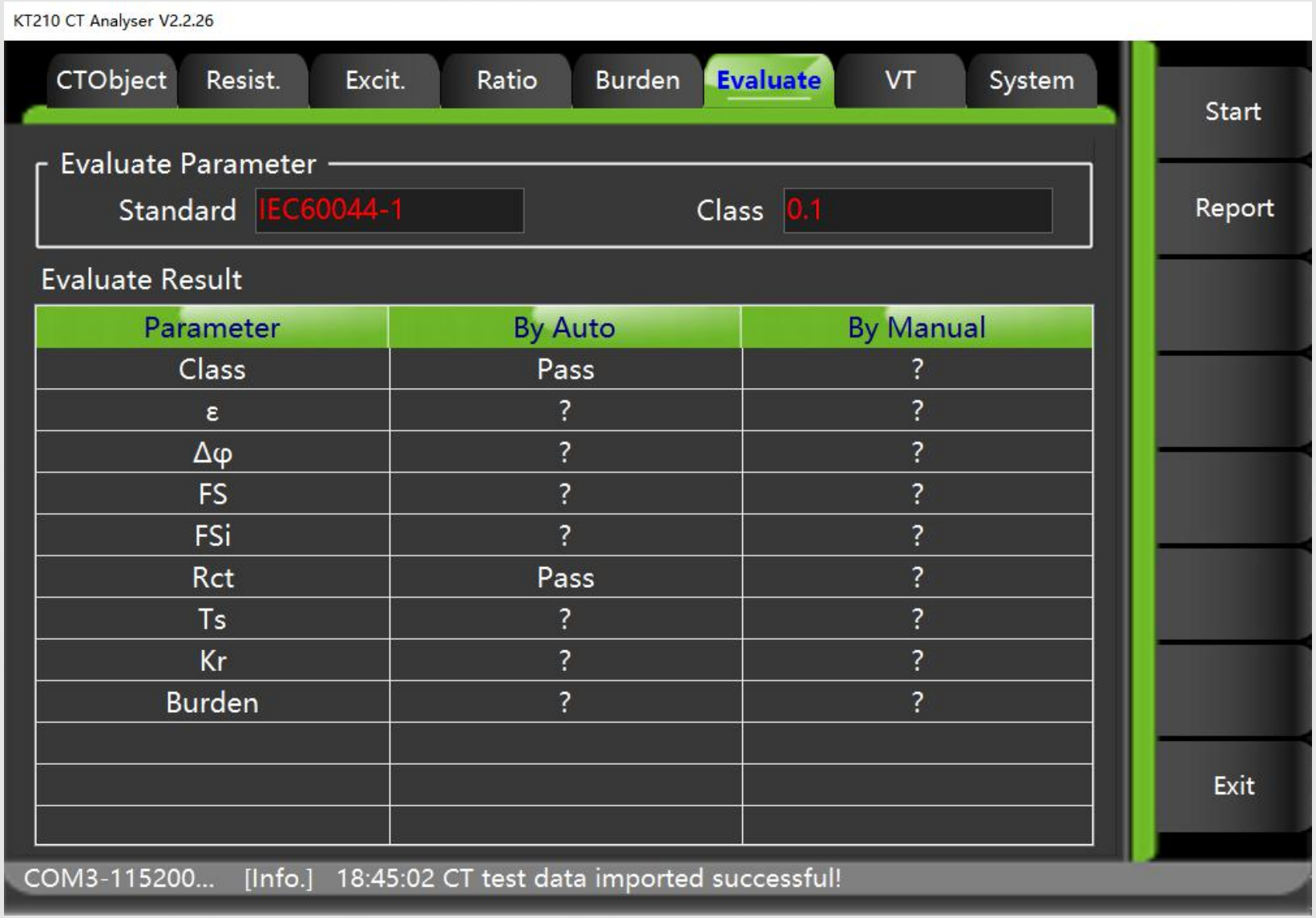
We calculate phase list in different rated current point



Burden test result interface

We can check the test result of burden in this function

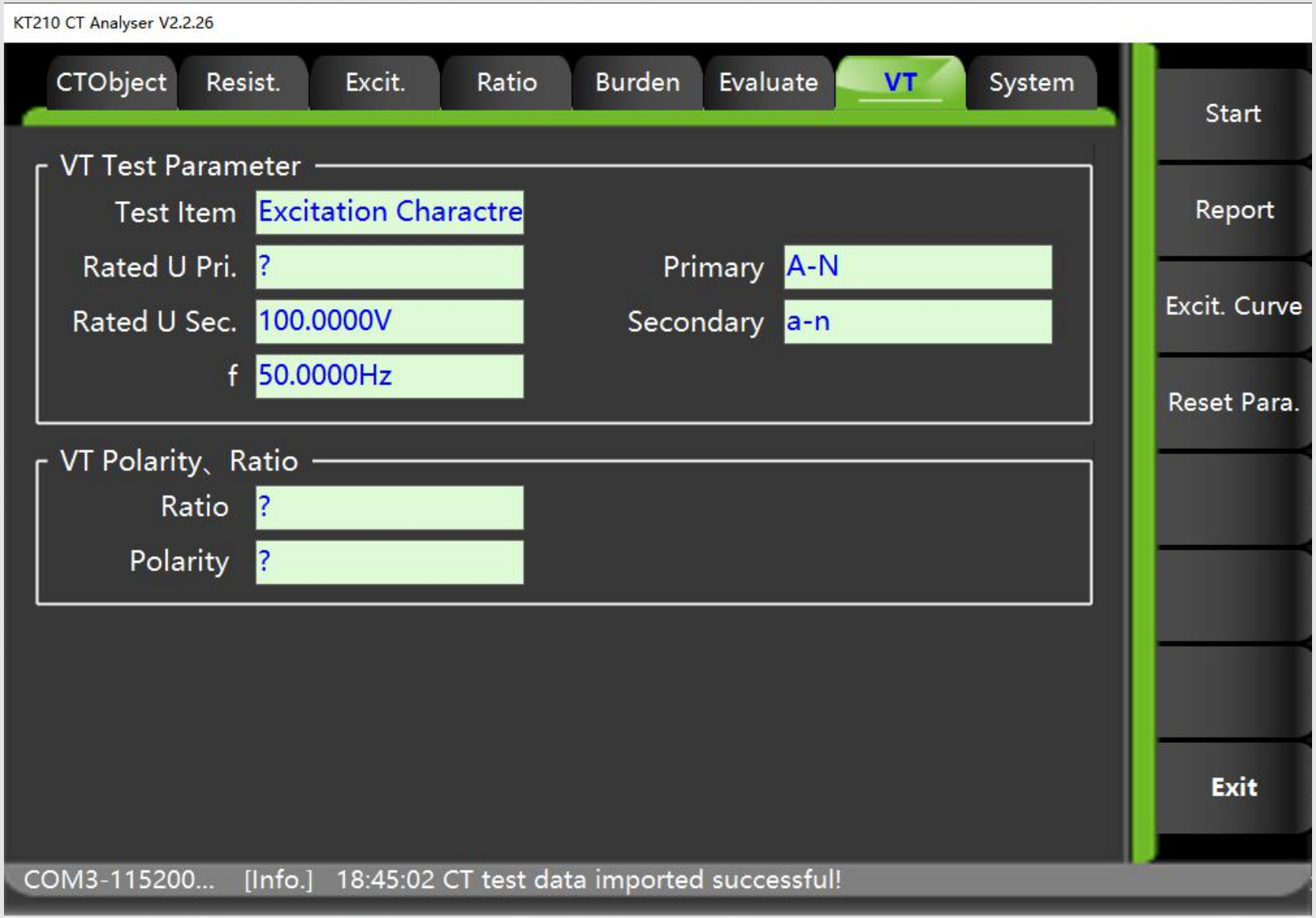
KT210 – Software introduce



Evaluate test result interface

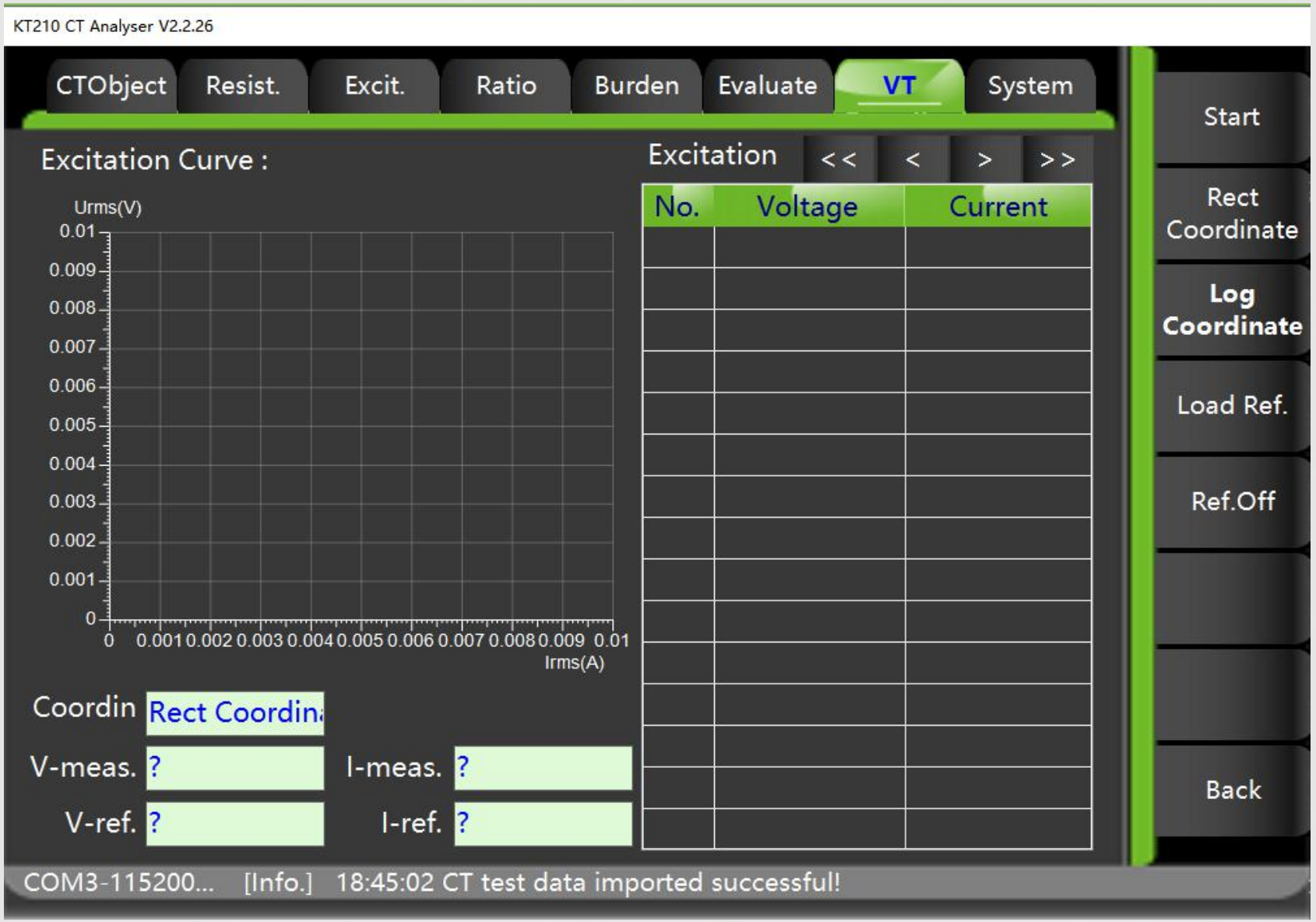
Software will evaluate result auto. or user can define the result manual

KT210 – Software introduce



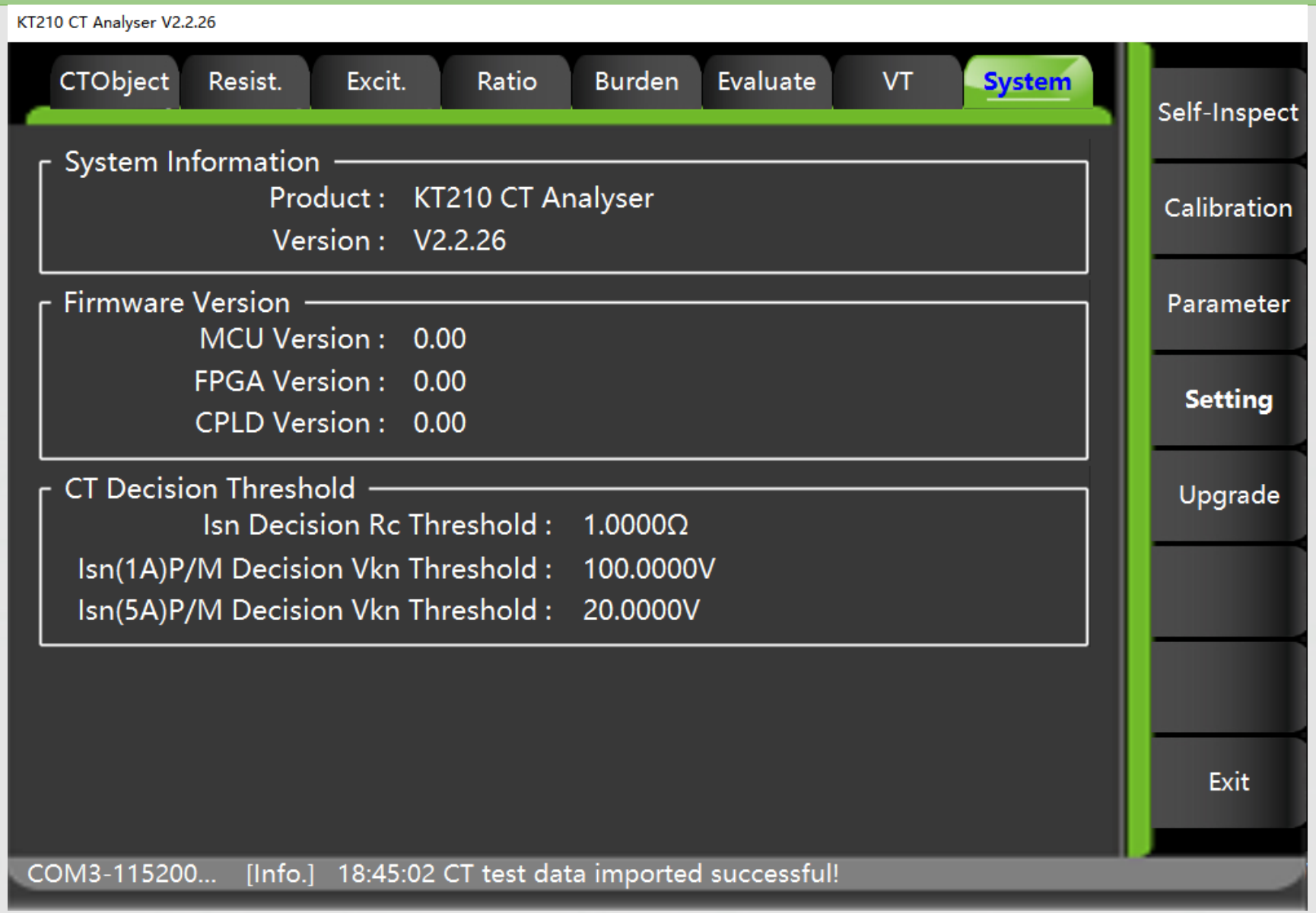
Voltage transformer test result interface

We can use this function to test voltage transformer excitation and ratio and polarity.



Voltage transformer excitation test result interface

We can check the test result of VT in this function

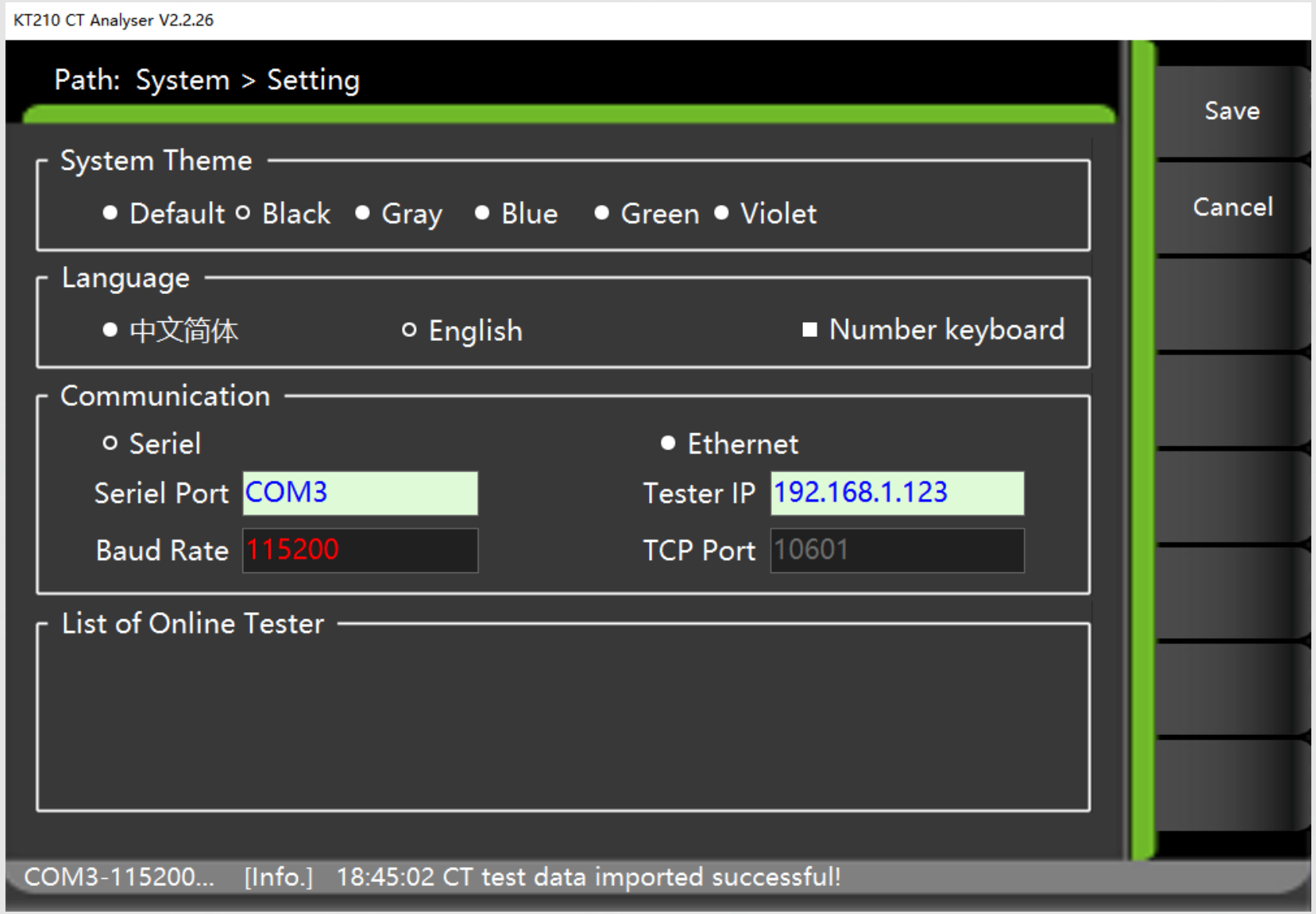


System setting interface

We can modify system setting in this function.

And we can check the software and firmware version in this function

KT210 – Software introduce



System setting interface

We can define the font and software display color, software language,communication port, IP address.