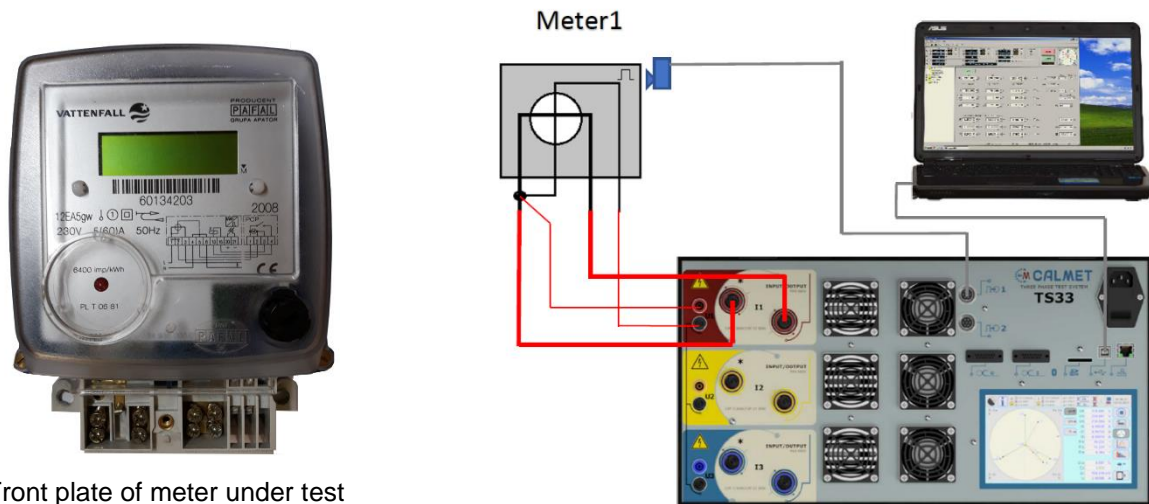


How to test 1 unit of single phase energy meter using TS33 Test System?

The measurement system consists of:

- **TS33** Three-phase Test System with Reference Standard and Integrated Current and Voltage Source;
- Laptop with installed **TS PC-Soft** Software;
- Device under test – 1 unit of single-phase meter.

The test is performed in the measurement system presented below, where the energy meter under test (DUT) is connected to phase L1 of the TS33 Test System:



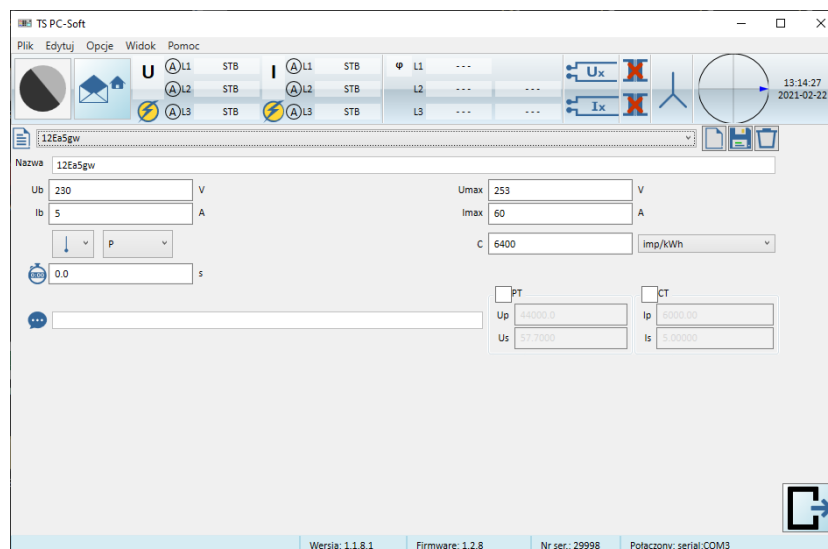
Front plate of meter under test

The TS33 Test System works as three-phase voltage, current source and reference meter.

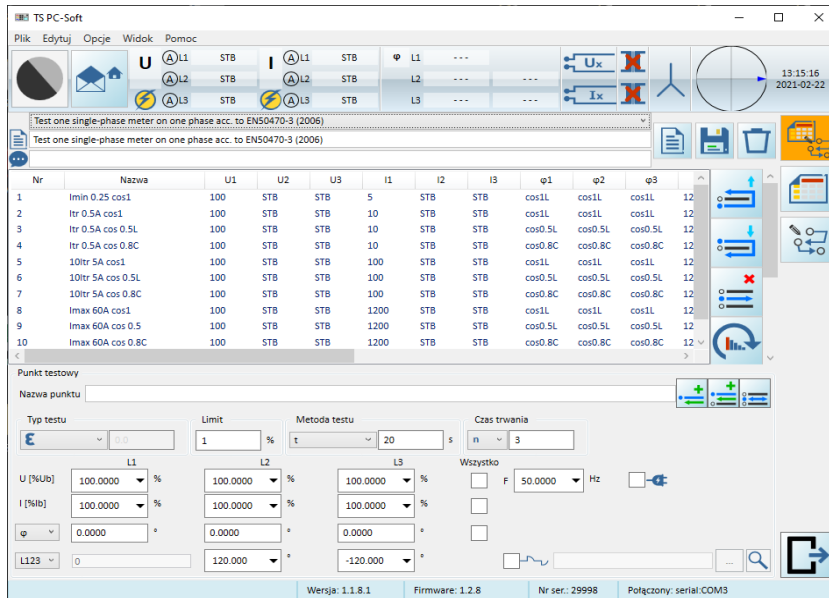
To initiate the test, the user should perform the following steps in *TS PC-Soft*:

1. In *Type* function – set all parameters of the tested energy meter, such as: base voltage U_b , base current I_b , Maximum voltage U_{max} , maximum current I_{max} , impulse constant C).

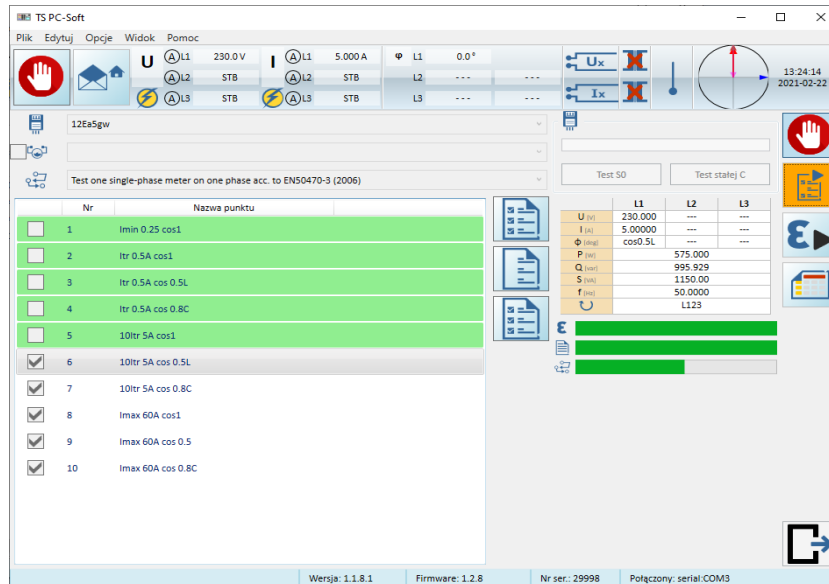
Attention: Because the DUT is single-phase energy meter, please set the *Meter connection* field to *Phase, 2 Wires* (phase L2 and L3 will be in stand-by state during test).




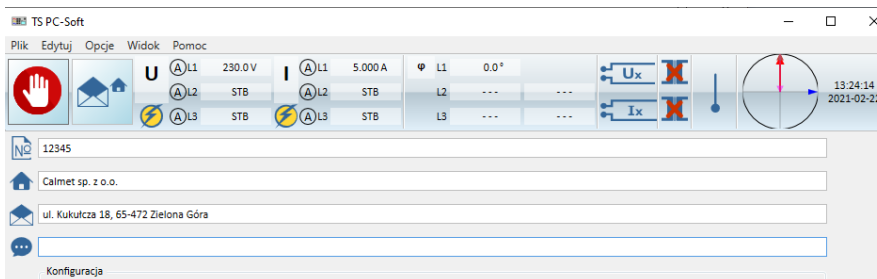
2. The *Procedure* function allows the user to prepare a set of load points acc. to requirements of standard (in this case acc. to EN 50470-3) or acc. to the individual requirements of the user.





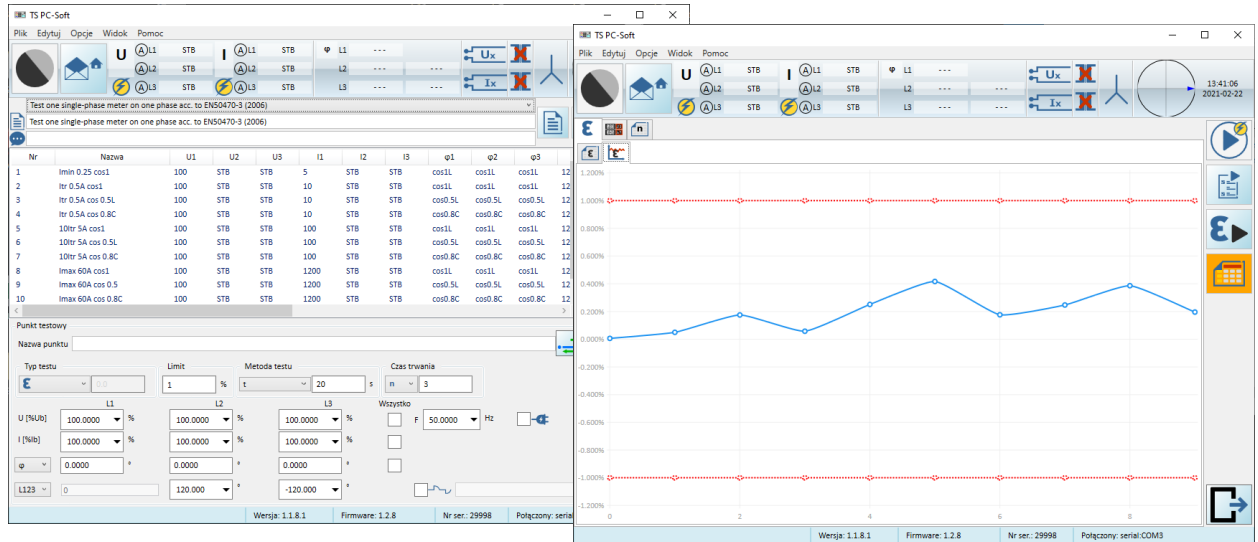
3. The *AutoTest* function takes the load points set acc. to the procedure and generates them automatically. For each load point, the accuracy of the energy meter under test is calculated.



4. After pressing the  icon, a field appears in which we enter administrative data.



5. The obtained results are available in the form of a table (pressing  button) and a graph (pressing  button).



6. The administrative data and results can be exported to MS Excel in order to prepare a measurement report.

