

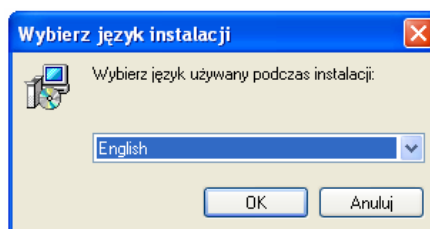
## CALPRO300 - C300 PC Soft Short Manual

### 1. Unpacking and Setting up.

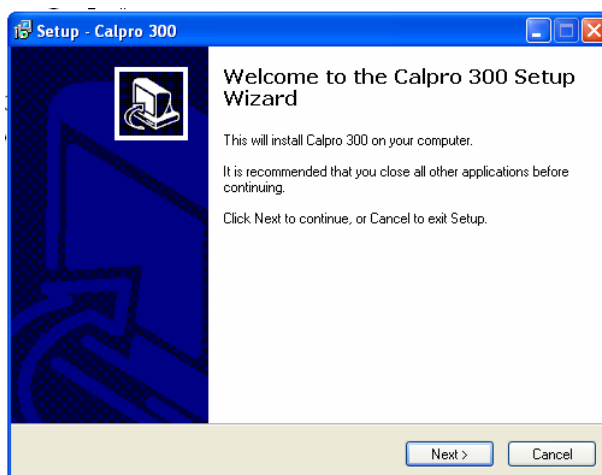
Unpack Calpro300.zip file to the temporary directory.

Start Calpro 300 Demo Setup.exe file.

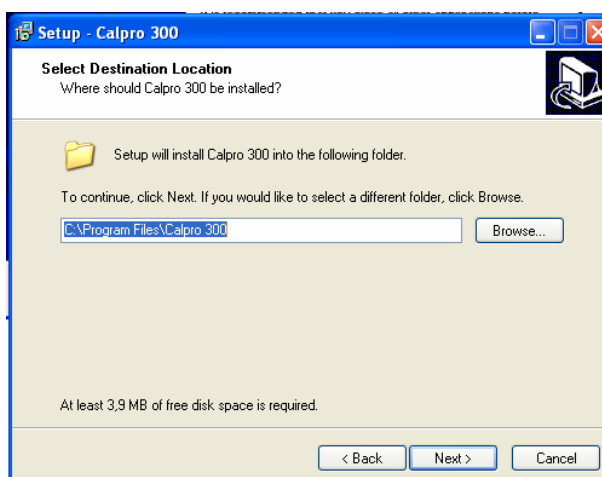
Choose the language of installation:



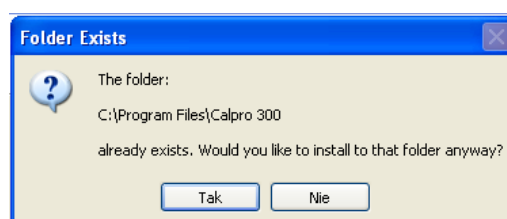
You will see Start Installation window:



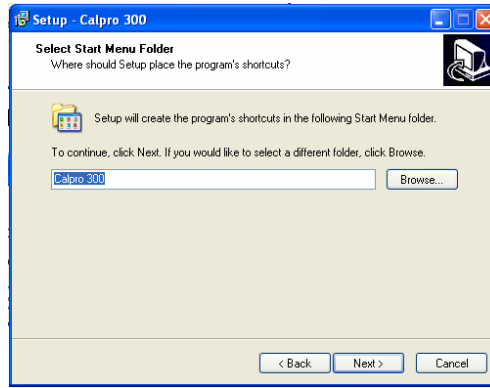
Click “Next” to select the directory, where you want to install software



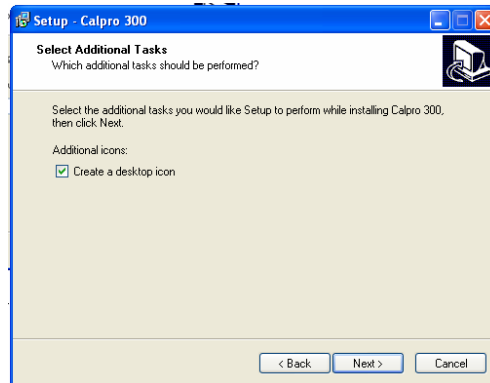
If you had installed Calpro 300 before, you will be asked to overwrite it or not:



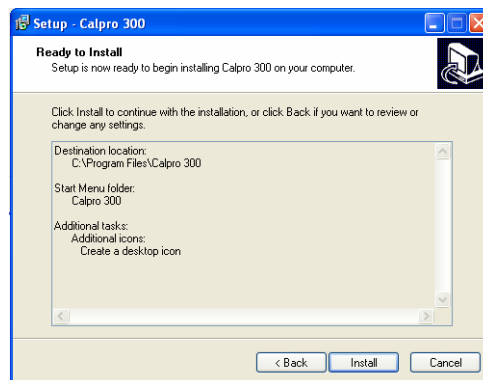
Then you will be asked for create a shortcut to the Calpro 300 Soft:



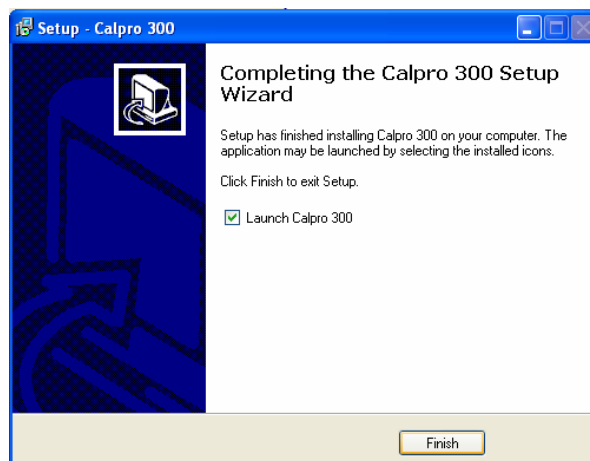
Then you will be asked for create an icon to the Calpro 300 Soft:



The Calpro 300 Soft is ready to install:

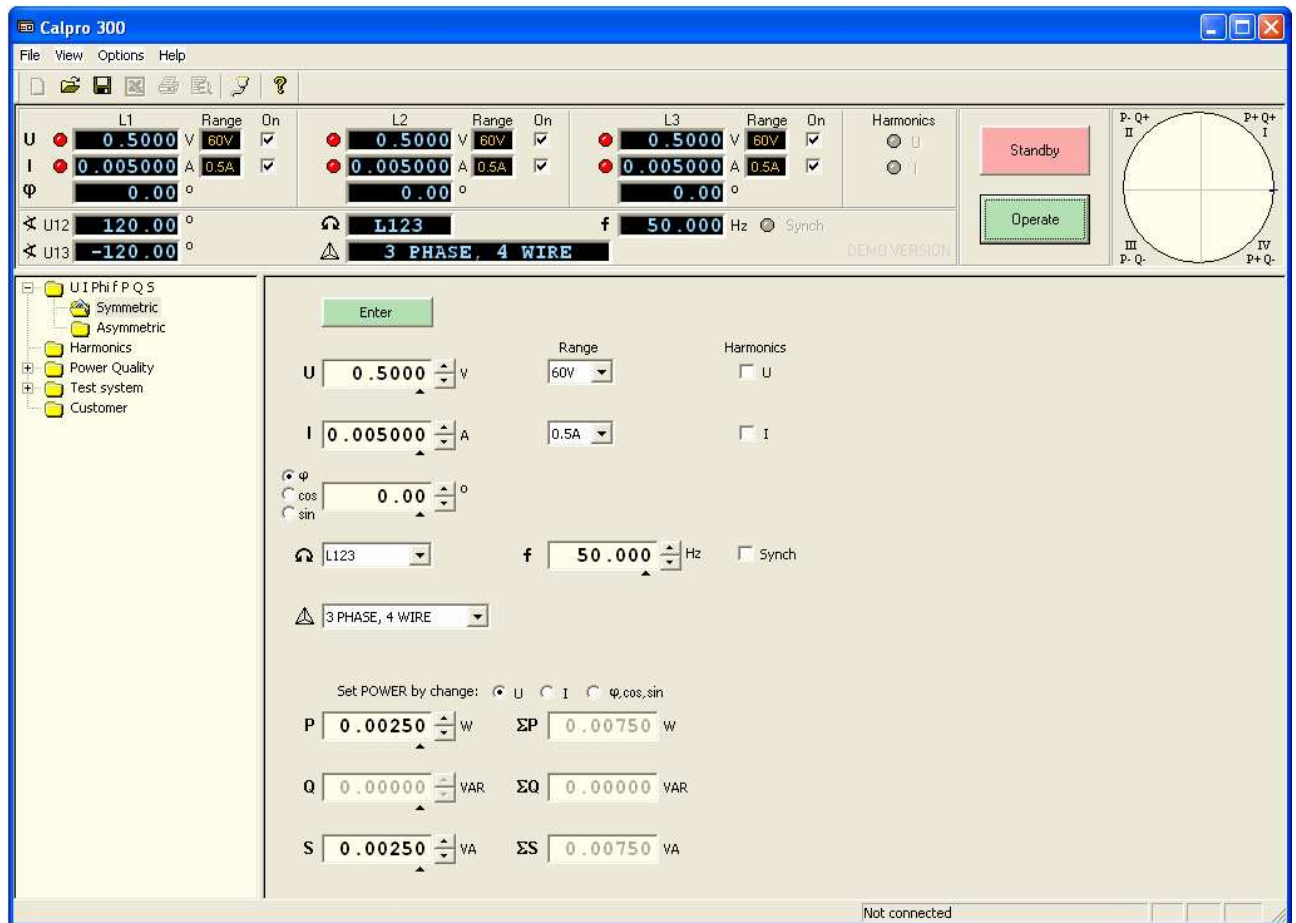


Successfully finished software installation:

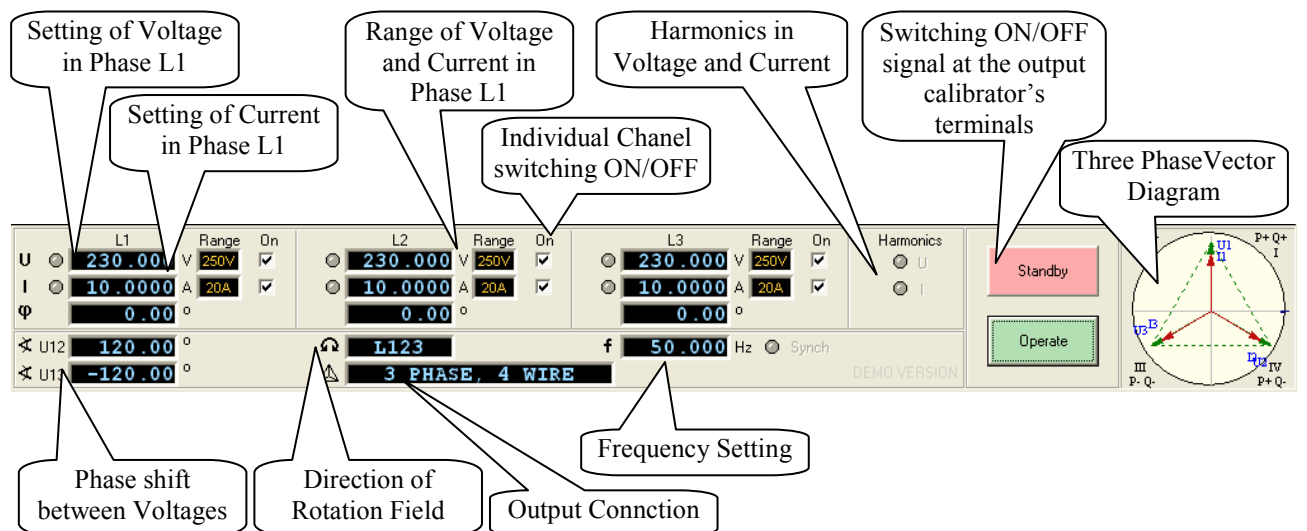


## 2. Starting the Calpro 300 Demo Software

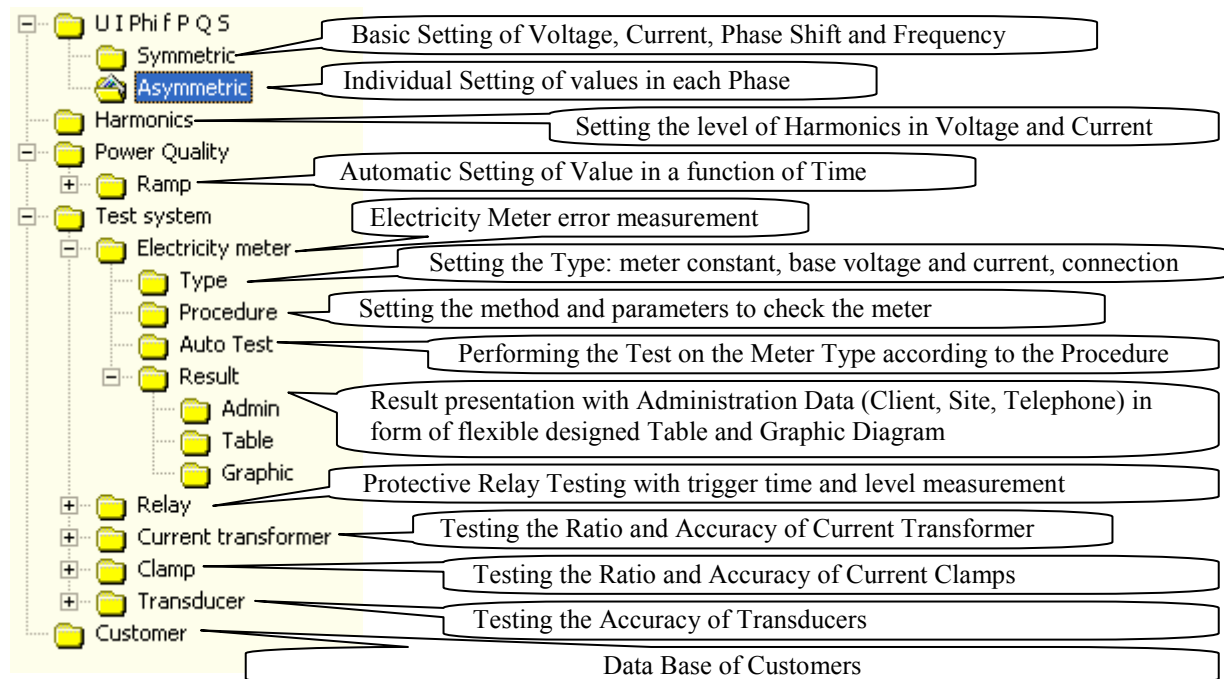
After starting up the Soft you should see the window like below:



The general description of the upper part you can find on the picture below.



The left side menu tree is presented on the picture below.



On the right side you can enter the values of Voltage, Current etc. by entering them to the proper field and then accept by pressing the button “ENTER” on the window.

### 3. Performing the Tests

The typical way of performing test consists of a few steps:

- I. Preparing the important data of the device under test as a “Type” of the device. The data can be saved and opened in the device “Type” Data Base.
- II. Preparing the procedure according to which the device should be tested. The procedure can be saved and opened in the Data Base of Procedures.
- III. Performing the test “Auto Test” to get Results of Measurements.
- IV. Analyzing the Results of Tests by means of Table, Graphic Diagram, Export to Excel etc.

As an example you can try the Electricity Meter Test.

Choose (or prepare) the Type of the Meter (“Electricity meter name” menu)

The screenshot shows the 'Electricity meter name' configuration window. The left sidebar shows the tree structure with 'Electricity meter' > 'Type' selected. The main window contains the following fields:

- Electricity meter name:** A dropdown menu showing 'EM03 3x127V-3x230V 10(100)A'.
- Nominal parameters:**
  - Ub - Base voltage:** 230 V
  - Ib - Base current:** 10 A
  - Imax - Max current:** 100 A
  - F - Frequency:** 50 Hz
- Class of accuracy:** Radio buttons for P, Q, S. A dropdown shows '1.0 %'.
- Meter constant:** 1000. Radio buttons for 'pulse / kWh' and 'Wh / pulse'.
- Meter connection:** A dropdown menu showing '3 PHASE, 4 WIRE'.
- Transformer:**
  - ☒ Direct
  - ☐ CT: I' [ ] A / I'' [ ] A
  - ☐ VT: U' [ ] V / U'' [ ] V
- Comment:** A text area for additional notes.

At the bottom right, it says 'Not connected'.

Choose (or prepare) the Procedure from “Procedure name” menu.

Procedure name: EM03 legalizacja

Test point: Point name: 100A sym cos=1,0

U [%Ub]: 100.0 % 100.0 % 100.0 % ☒ All

I [%Ib]: 1000 % 1000 % 1000 % ☒ All

φ: 1.0 L 1.0 L 1.0 L ☒ All

cos: 120.0 0 U13 -120.0 0 ☐ Harmonics

Test type: ☒ Error test ☐ Counting ☐ Counter test

Test method: ☐ Impulses ☒ Time 5 s

Test duration: ☒ Cycles 3 ☐ Time [hh:mm:ss] 00:00:00 ☐ Energy [kWh]

No	Point Name	U1 [%Ub]	U2 [%Ub]	U3 [%Ub]	I1 [%Ib]	I2 [%Ib]	I3 [%Ib]	φ1	φ2	φ3	Δt2 [s]
1	100A sym cos=1,0	100.0	100.0	100.0	1000	1000	1000	Cos 1.0 L	Cos 1.0 L	Cos 1.0 L	120.0
2	10A sym cos=1,0	100.0	100.0	100.0	100	100	100	Cos 1.0 L	Cos 1.0 L	Cos 1.0 L	120.0
3	10A sym cos=0,5L	100.0	100.0	100.0	100	100	100	Cos 0.5 L	Cos 0.5 L	Cos 0.5 L	120.0
4	1A sym cos=1,0	100.0	100.0	100.0	10	10	10	Cos 1.0 L	Cos 1.0 L	Cos 1.0 L	120.0
5	10A L1 cos=1.0	100.0	100.0	100.0	100	STB	STB	Cos 1.0 L	Cos 1.0 L	Cos 1.0 L	120.0

Not connected

Perform Auto Test. In Demo version the real communication is blocked.

Procedure name: EM03 legalizacja

Electricity meter name: EM03 3x127V-3x230V 10(100)A

Serial number: SN 2345/2007

Test points:

No	Point name
1	100A sym cos=1,0
2	10A sym cos=1,0
3	10A sym cos=0,5L
4	1A sym cos=1,0
5	10A L1 cos=1,0
6	10A L2 cos=1,0
7	10A L3 cos=1,0
8	10A L1 cos=0,5L

Ctrl/Shift - multiple points selection

Point parameters:

	L1	L2	L3
U [V]	230.000	230.000	230.000
I [A]	100.000	100.000	100.000
φ [°]	0.00	0.00	0.00
P [W]	69000.0		
Q [var]	0.00000		
S [VA]	69000.0		
F [Hz]	50.000		
φ	L123		

Control panel: ☒ Automatic ☐ Single step

Start Stop

Pause (I=0) Pause (U,I=0)

Cycle Point Procedure

Results:

Epsilon	Error
ε	
εs	
ε	

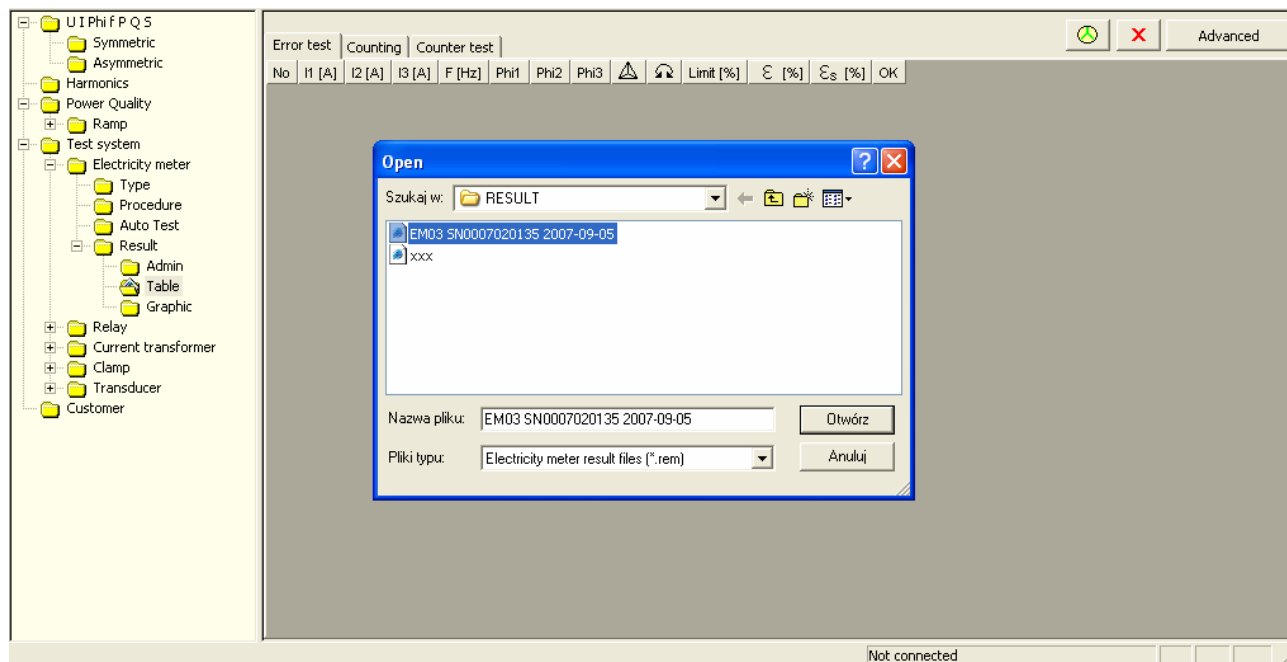
Counter test:

E1	E2	E
00123	02576	

Counting:

Not connected

Observe the results by opening the existing example file with results. To do it you should mark the directory Table in the Result tree and then standard Windows →File →Open.



The result should appear like below.

Or in graphic form.

