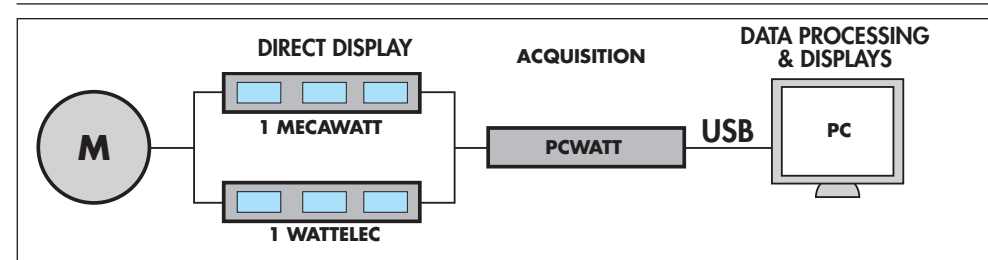# ACQUISITION SYSTEM: INTERFACE + SOFTWARE
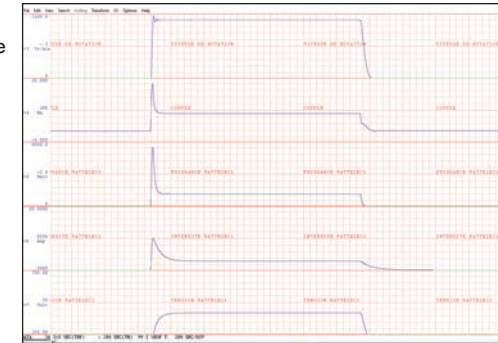

ref. PCWATT-2

PCWATT-2 allows the acquisition of electrical and mechanical quantities of rotating machines (asynchronous motors, synchronous machines, single-phase motors, DC machines).
It is an interface connecting the engine bench to a PC in addition to a measurement bay composed of at least one MECAWATT and/or one WATTELEC.
The software (included) allows visualization on a PC (via the USB connection), in real time or in delayed consultation, of the values of Voltage, Current, Absorbed power, Torque, Rotation speed and Useful power. The information is displayed in the form of curves.
It is also possible to export the data to spreadsheet software to calculate and plot additional electrical and mechanical characteristics such as slip, efficiency, active power, reactive power, cos phi, etc.
The acquisition and visualization software is only in English version.

DIRECT DISPLAY　　ACQUISITION　　DATA PROCESSING & DISPLAYS

1 MECAWATT

1 WATTELEC

USB　PC

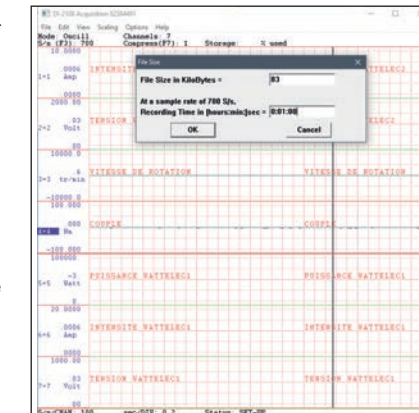SOFTWARE SUPPLIED WITH **PCWATT**

1. REAL-TIME VIEWING

As soon as the software is launched, it is possible to view physical values in real time.
If necessary, modify the sampling frequency (default 100Hz, 20KHz max), scales, unit and annotations. Select the physical quantities to monitor. It is possible to display from 1 to 7 acquisition channels at the same time.
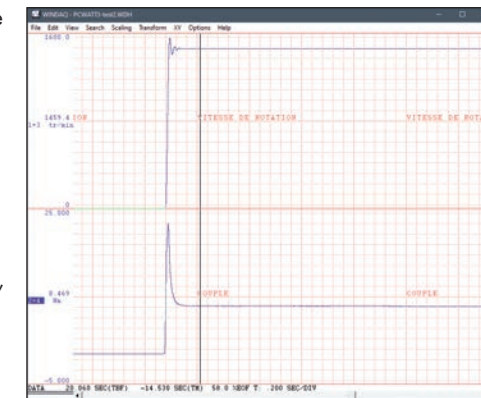

2. DATA ACQUISITION

The next step is to set the acquisition time (here 1min).
Once the acquisition has been launched, the mechanical and electrical characteristics are displayed in real time in the form of curves and digital data.
At the end of the acquisition, it is possible to zoom in on any point of the curves in order to visualize in detail the characteristics at an instant T.
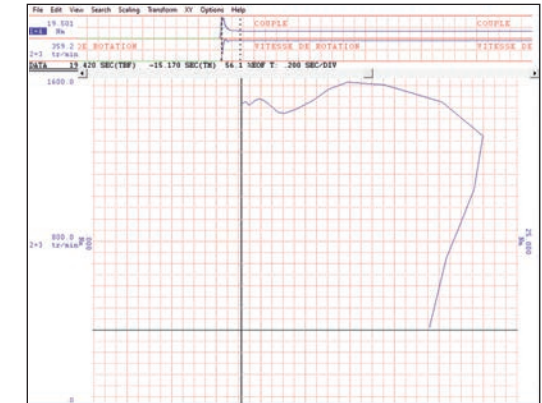

3. CONSULTATION OF DATA

After acquisition, open the file to view.
It is possible to select from all the characteristics memorized mechanical and electrical ones you want to view.
A cursor allows you to move along the curves.
At each point of the curve, the corresponding mechanical and electrical values are indicated on the left of the screen.
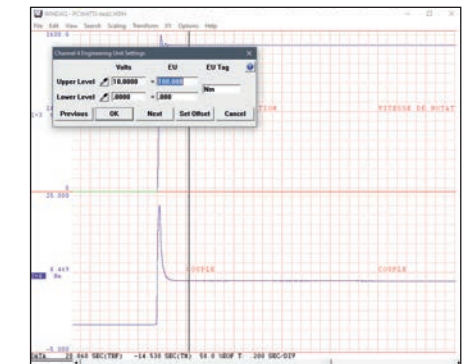The quantities that can be displayed are: U, I, torque, n, Pu.

4. DATA INTERPRETATION

It is possible to create a graph with two variables. Choose the period of time to study and interpret the influence of one physical quantity on another.

5. OTHER SETTINGS

Most settings of the presentation of the graph are accessible with a single mouse click.
It is therefore very easy to change colors, texts, scales and units for printing for a measurement report.

6. DATA EXPORT

Export your data in .CSV format. Calculate and plot, in the spreadsheet software of your choice, additional electrical and mechanical quantities such as slip, efficiency, active power, reactive power, cos phi, etc.