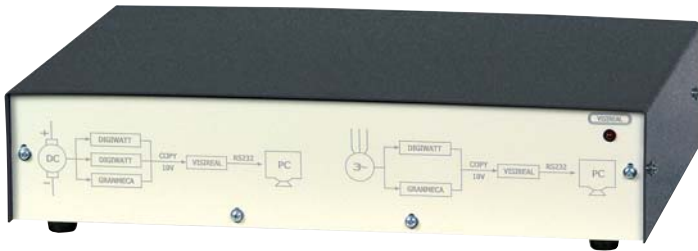


## Acquisition system



ref. VISIREAL

VISIREAL lets you record and display on a screen mechanical and electrical quantities from the rotating machines (asynchronous motors, synchronous machines, single-phase motors and DC machines).

VISIREAL is an interface that connects the motor test bench to a PC via a measuring bay composed of at least GRANMECA and DIGIWATT (see all the arrangements possible on the next page).

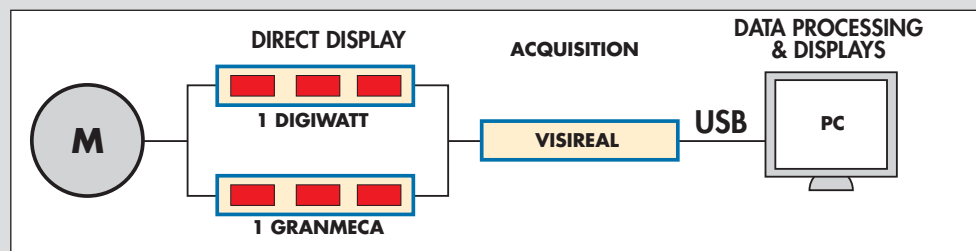
The LOGIREAL software delivered with VISIREAL lets one display these quantities in real time. During acquisition, the values for voltage, current, power consumed, torque, rotation speed and useful power are shown both as curves and as numeric displays.

After acquisition, VISIREAL uses the recorded values to calculate and trace additional mechanical and electrical characteristics, such as slip, efficiency, active power, reactive power, the power factor, and so on.

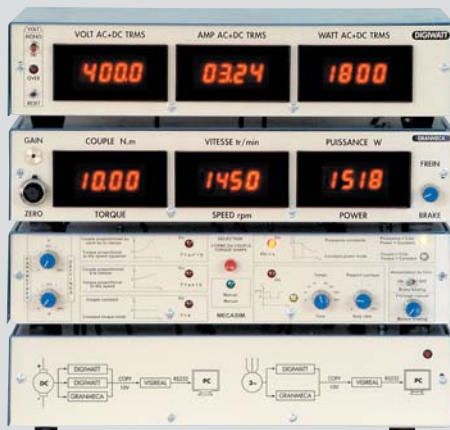
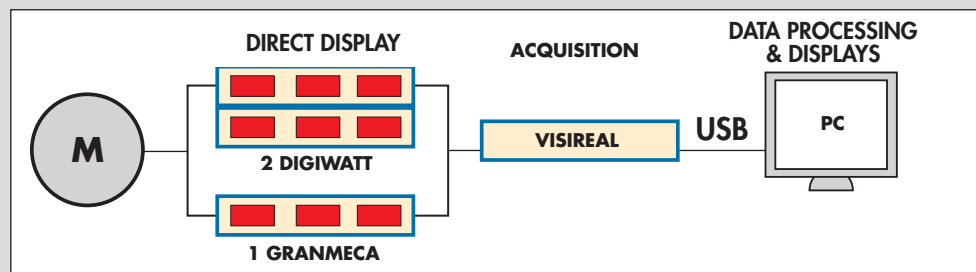
### LOGYREAL

Software supplied with VISIREAL

## REQUIRED UNITS FOR AC MACHINES STUDY



## REQUIRED UNITS FOR DC MACHINES STUDY



### EXAMPLE OF COMPLETE ACQUISITION SOLUTION FOR AC MACHINES STUDY

- 1 DIGIWATT
- 1 GRANMECA
- 1 MECASIM (OPTION)
- 1 VISIREAL (supplied with software)

## Acquisition software supplied with VISIREAL



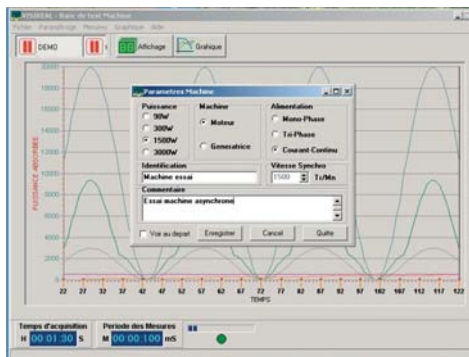
This software is supplied with VISIREAL (acquisition system which works using a measuring unit). Fully adjustable for compatibility with the machines you want to study, this software can also convert the data that it acquires into a spreadsheet (e.g. Excel®). (®Excel is a trademark of Microsoft corp.)

### FEATURES OF LOGIREAL SOFTWARE

Sampling frequency	50ms
Number of curves displayed in real-time	8
Number of numeric keypads displaying the electrical and mechanical values	9
Number of curves that can be displayed simultaneously	8
Plotting of machine operating point	YES
Modification of characteristic scales and X/Y axes	YES
Modification of one or more plotting points in curves	YES
Retains the colour and scale configurations when a saved file is opened	YES

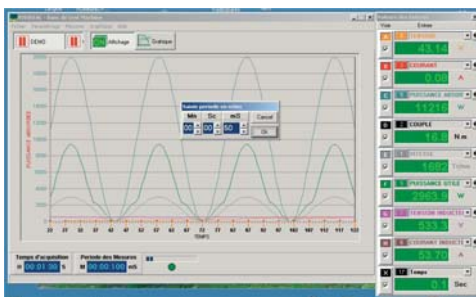
### 1. SETTING PRIOR TO ACQUISITION

Note down the features of the machine to be tested from the terminal board (AC/DC, power and speed, etc.) and complete the window in the computer program



### 2. REAL-TIME ACQUISITION

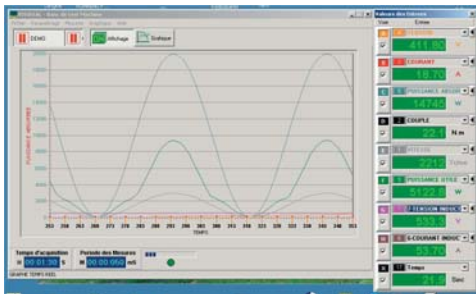
The following stage involves setting the acquisition time (here it is 1 minute and 30s). Once acquisition is underway, the mechanical and electrical features will be displayed in real-time in the form of digital data and curves.



Once acquisition is complete, you can zoom in on any point in the curve charts to display the detailed features at instant t.

### 3. FEATURE DISPLAY SELECTION

Using this window, you can select from all the saved mechanical and electrical features those that you would like to display. You can move along the curve charts using the cursor. At each point in the curve, the numeric display on

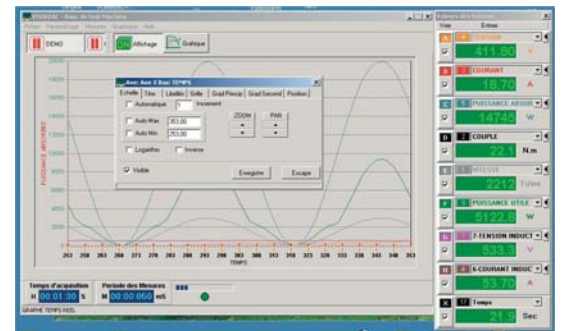


the right of the screen shows the mechanical and electrical features. The displayed curve charts correspond to the total acquisition time (here it is 62 seconds).

You can choose to display the following quantities: U, I, u, i, Pa, slip, efficiency, power factor, torque, n, Pu, reactive power and apparent power. Any quantity can be selected for either the x- or y-axis (e.g.  $I=f(t)$ ;  $t=f(P_u)$ , etc.). To do this, simply click on the corresponding button at the bottom of the screen.

### 4. CURVE ANALYSIS

After the acquisition process is complete, you can modify the scale of each axis if you wish.



### 5. OTHERS SETTINGS

Most graph display settings can be accessed by means of a single mouse click. This means that it is very easy to change the colours, text styles or grid shapes in the graph display window, with a view to printing out information for a measurement report.



Option to save and print the features, and to display the various measurements in an Excel® spreadsheet, for instance.

