

Solar pumping station

DESCRIPTION

- Solar pumping station unit is delivered complete with technical manual.
- Design, production and industrial equipment.
- 4 module poly cristalline 80 Wc 12V.
- Circulation pump with brass rotary blade.
- Battery 12 Volts.
- The instrumentation allows measurement of every electric parameter of the installation (power, tension, power).



SUGGESTED LESSONS

- Study of solar panel
- Study of a pump in charge or in suction.
- Study of the output
- Study of the influence of the panel orientation
- Calculation of efficiency
- Calculation of the output
- Setting of experiences

DIAGRAM

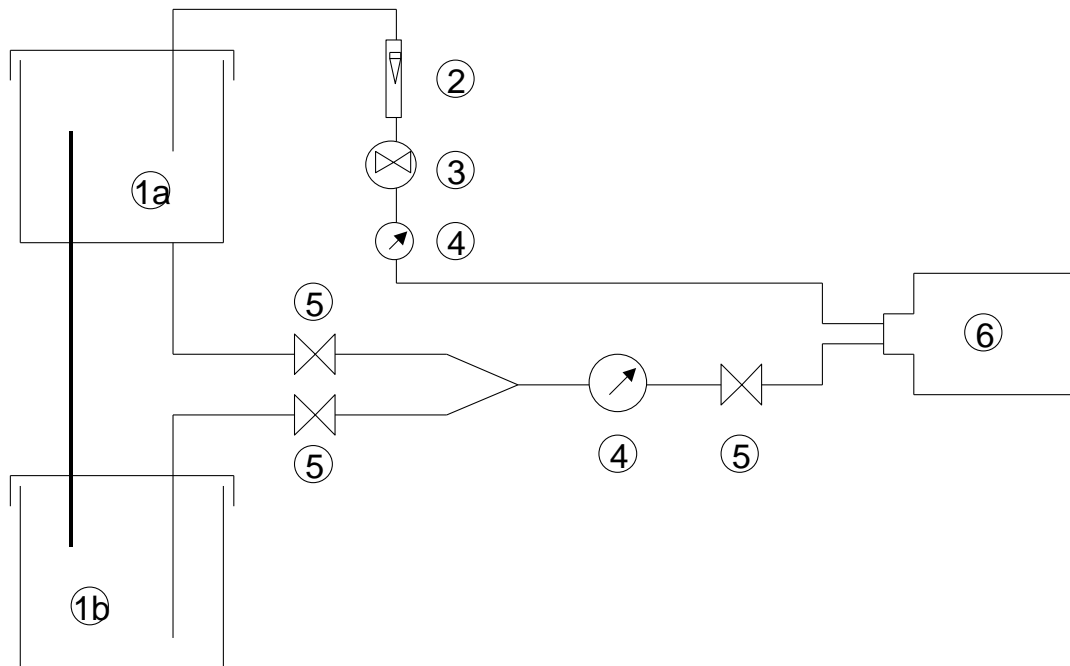
This installation is composed of 2 profiled aluminium bench on castors.

Bench 1 : Photovoltaics solar panel

Bench 2 : Electric board, regulation, inverter...

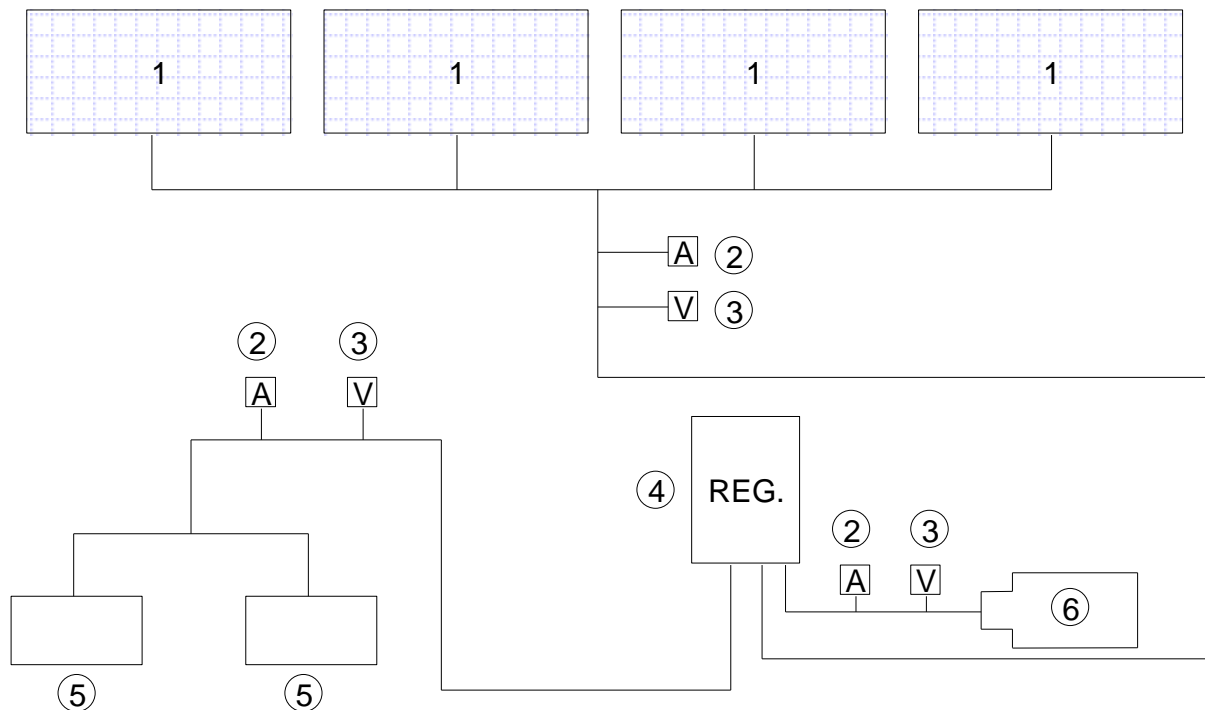
Bench 1:

Hydraulic diagram



Bench 2:

Electric diagram



ERS 600

Technical descriptive

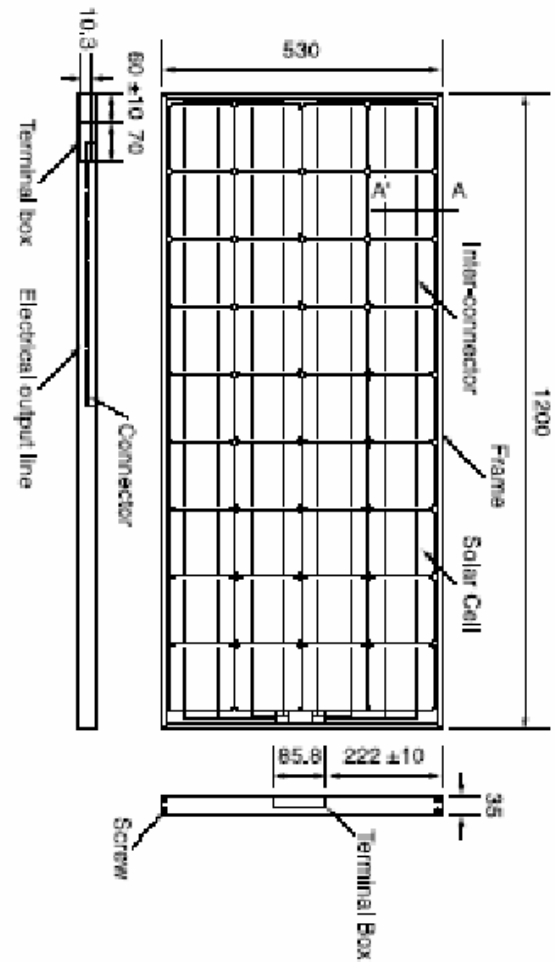
1) Solar panel Sharp 80:

Physical characteristic :

Technology : Multilens
Dimension of the cell : 125 mm
Number of cells : 36
Dimension (mm): 1200x530x35
Weight of the unit : 8,5 Kg

Electrical characteristic (1000 Watts/m² - 25°C) :

Crest power: 80 Wc
Maximum tension: 600 V
Temperature coefficient: -0,0781 mV/°C
Cells output : 14%
Module output: 12,6%



2) Circulation pump:

- Mechanism with brass, carbon, graphite and stainless steel rotary blade.
- Accept sea water and stainless mineral.
- Motor with direct current (without maintenance).
- Aspiration capacity : 5 metres



3) Battery

- Brand : ENERSOL 80
- Nominal tension : 12 Volts
- Charge of current : 0,66 A
- Dimension : 278 x 175 x 190 mm
- Weight (included steel): 20,4 Kg
- Weight steel: 5,6 Kg
- Out position: 1
- Codification : NVCE120080WCOTA



UTILITIES

Electricity : 230 V Mono

DIMENSIONS

Length: 3200 mm

Width: 850 mm

Height: 1800 mm