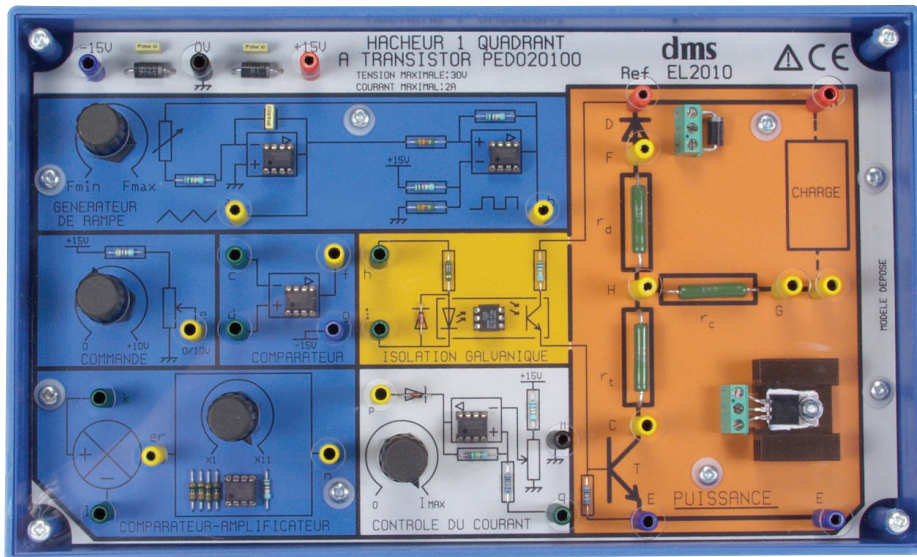


## PED 020100

(Previous Ref.: EL2010)

### Bipolar One Quadrant 2 Amps transistorized Chopper



### MAIN CHARACTERISTICS

The **PED 020 100** module enables the study of :

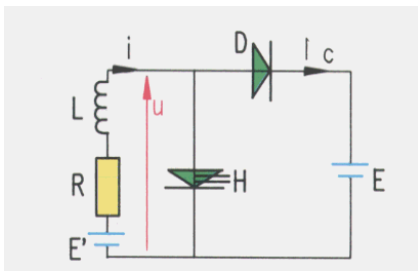
- undervoltage choppers (or serial )
- overvoltage choppers (or parallel).

Control circuit functions are available.

One feedback loop enables the study with control current.

The galvanic insulation is achieved through optocoupler device.

**Note :** With the PED-020100 module, it is possible to study some applications of loop systems : current control by one quadrant transistorized chopper of RL load or loaded motor.



### AREAS OF APPLICATION

#### Basic training:

Introduction in low power, to the principles of motor-generator groups control :

- . Technical colleges
- . Secondary & higher education Universities.

#### Professional training:

Illustration in high power and safety modes of industrial rotating machines control .

### TECHNICAL SPECIFICATIONS

#### Nominal characteristics :

- Supply voltage : 30 V
- Max. intensity : 2 Amp.
- Chopping frequency : 200 Hz to 2 kHz
- Cyclic ratio linear control by DC voltage between -10V and +10V
- Adjustable current control between 0 and 2Amp.

#### Mechanical Characteristics :

- Net weight : 0.9 Kg
- Gross weight: 1.6 Kg
- Dimensions : 30 . 20 . 10 cm

#### Technical handbook :

The **PED 020 100** module is provided with one implementation and maintenance manual, giving all information about the use of this module.

### PRACTICAL WORKS MANUAL

The **PED 020 100** module is provided with the following training manual:

- T. P. Ref. PED 020100 TP (47 pages)

#### Practical works :

- 1- Study on RL load  
Study on ERL load and motor I continuous and discontinuous operation
- 2- Influence of the smooth inductance
- 3- Influence of the chopping frequency
- 4- Study of the control circuit
- 5- Study of current control
- 6- Study of serial chopper operating as a current generator
- 7- Study of overvoltage chopper

### TECHNICAL ENVIRONMENT

#### -Accessories :

- . Power Supply : 30 V / 2 Amps  
EMD030340
- . Self inductance  
EMD037340
- . Rheostat  
PMM064010
- . Motor bench  
EPD 037580

#### -External generator :

- . LFG/Frequency meter  
Ref 3125

#### -Test equipment :

- . Storage oscilloscope  
Ref 4087

