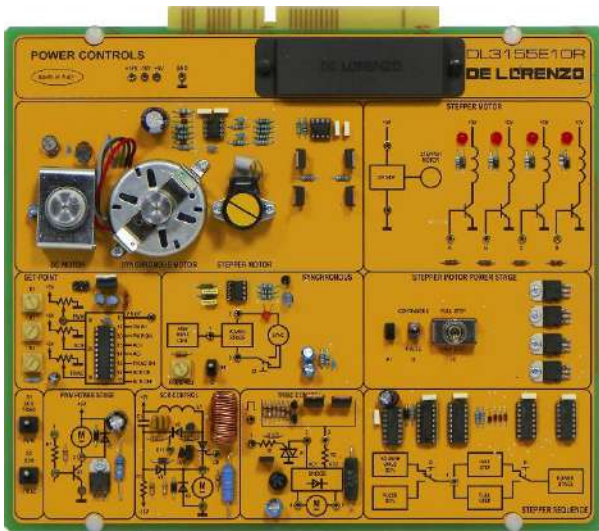




## POWER ELECTRONICS AND CONTROLS



**DL 3155E10R**

The design and construction of electronic circuits to solve practical problems is an essential technique in the fields of electronic engineering and computer engineering.

With this board the students can study the operation of the circuits for motor control in Direct Current, Alternating Current and stepper motors.

### THEORETICAL TOPICS

- Direct current motors
- Generators
- Circuits for the control of direct current motors
- Alternate current motors
- Circuits for the control of alternate current motors
- Stepping motors
- Circuits for the control of stepping motors

### CIRCUIT BLOCKS

- Motors
- Stepper motor
- PWM power stage
- Synchronous
- Stepper motor power stage
- Set point and PWM generator
- Stepper sequence
- SCR TRIAC control

Complete with theoretical and practical manual.

Dimensions of the board: 297x260mm

#### CAI SOFTWARE:

Each board of the TIME system can be supplied complete with a Student Navigator software that allows students to perform their learning activities through a Personal Computer, without the need for any other documentation.

**Ordering code:** please add SW after the code of the board (i.e. DL 3155E10RSW)

#### Required:

##### POWER SUPPLY NOT INCLUDED

Base frame with power supply (completed with connecting cables):

- **DL 3155AL3** - Base frame with power supply and interface to pc and virtual instrumentation
- **DL 3155AL2** - Base frame with power supply and interface to pc

Basic power supply (connecting cables not included):

- **DL 2555ALG** - DC power supply  $\pm 5 \pm 15$  Vdc, 1A
- **TL 3155AL2** - Connecting cables

Choosing this power supply, for the execution of the experiments, it is normally required the use of an oscilloscope and two multimeters.

