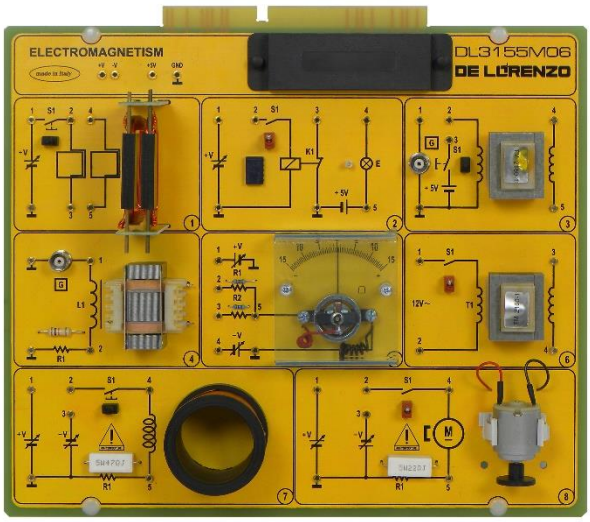
TIME ELECTRONIC BOARDS

ELECTROMAGNETISM



DL 3155M06

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 principle of electromagnetic induction and its laws, the use of a moving coil and the operating principle of the dc electrical machines.

THEORETICAL TOPICS

- Lorentz's force
- Force in a wire run by current in a magnetic field
- The induction phenomenon and the Faraday-Neumann's and Lenz's laws
- The self-induction phenomenon
- The relay
- The moving coil ammeter
- The static transformer
- Alternators and dynamos
- Direct current electric motors
- Fault simulation

CIRCUIT BLOCKS

- Electrodynamic action
- Magnetic field of a coil: the relay
- Electromagnetic induction
- Self-induction
- Moving coil instrument
- Transformer
- Electric motor principle
- Direct current motor

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 3155M06SW)

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 2555ALF** - DC power supply ±5 ±15 0±15 Vdc, 1A
- **DL 2555ALS** - AC power supply 24 Vac, 2A
- **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.