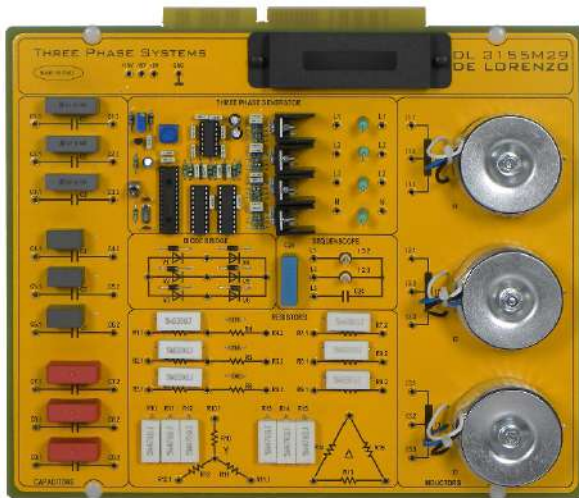




# TIME ELECTRONIC BOARDS



## THREE-PHASE SYSTEMS



**DL 3155M29**

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 a balanced and unbalanced three-phase system with resistive, capacitive and inductive load; they can also verify the behavior of a three-phase rectifier and of a phase sequence indicator.

### THEORETICAL TOPICS

- Star connected three-phase load
- Triangle connected three-phase load
- Balanced three-phase load
- Unbalanced three-phase load
- Inductive load
- Capacitive load
- Re-phasing circuit
- Resonance circuit
- Displacement of the centre of the star
- Half-wave rectifier circuit
- Full-wave rectifier circuit
- Half-bridge three-phase rectifier circuit
- Six-phase rectifier circuit
- Fault simulation

### CIRCUIT BLOCKS

- 4 three-phase resistive circuits
- 3 three-phase capacitive circuits
- 2 three-phase inductive circuits
- 1 diode rectifier circuit
- 1 sequence scope circuit
- 1 three-phase and neutral generator with variable frequency between 10 and 500 Hz

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 3155M29SW)

### 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.

