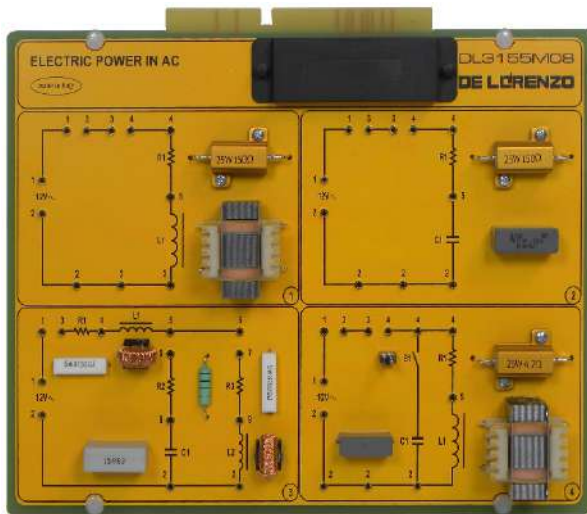




## ELECTRIC POWER IN ALTERNATING CURRENT



**DL 3155M08**

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 concept of active, reactive and apparent power through the use of ohmic- inductive and ohmic-capacitive circuits, the Boucherot's theorem and the concept of phasing of an ohmic-inductive load.

### THEORETICAL TOPICS

- Active power
- Reactive power
- Apparent power
- Boucherot's theorem
- Power and energy measurements
- Phasing of a single-phase system
- Calculation of the phasing capacity
- Fault simulation

### CIRCUIT BLOCKS

- Active, reactive and apparent power (ohmic, inductive, ohmic-inductive load)
- Active, reactive and apparent power (ohmic, capacitive, ohmic-capacitive load)
- Boucherot's theorem
- Phasing of an ohmic-inductive load

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 3155M08SW)

### 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 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.

