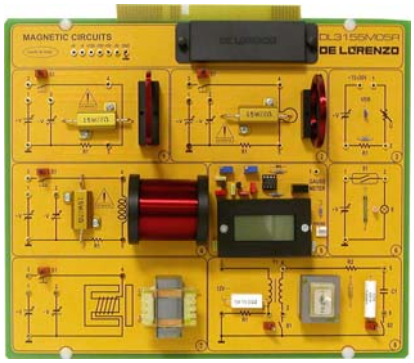
TIME ELECTRONIC BOARDS

MAGNETIC CIRCUITS



DL 3155M05R

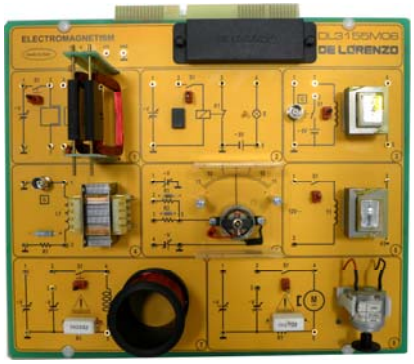
Theoretical topics:

- Characteristics of the magnetic field
- Diamagnetic, paramagnetic and ferromagnetic materials
- Soft and rigid ferromagnets
- Hysteresis cycle
- Magnetic quantities and relevant measurement units
- Hall's effect and Hall's potential difference
- Hopkinson's law
- Energy of the magnetic field
- Study of VDR
- Fault simulation

Circuit blocks:

- Magnetic field created by a rectilinear conductor
- Magnetic field created by a circular conductor
- Magnetic field created by a solenoid conductor
- Measurement of the magnetic induction
- Magnetic switch
- Electromagnet
- Hysteresis cycle
- Resistor not linear (VDR)

ELECTROMAGNETISM



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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