



P3 Electricity

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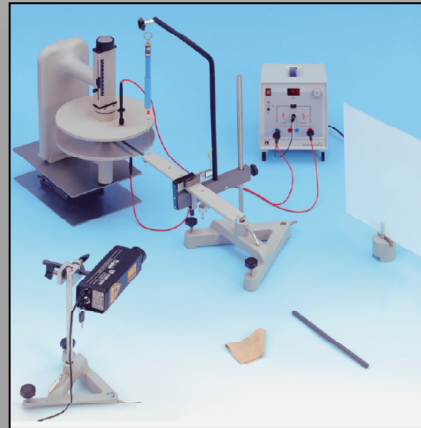
- P 3.9.1 Self-maintained and non-self-maintained discharge
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P3 Electricity

P 3.1 Electrostatics

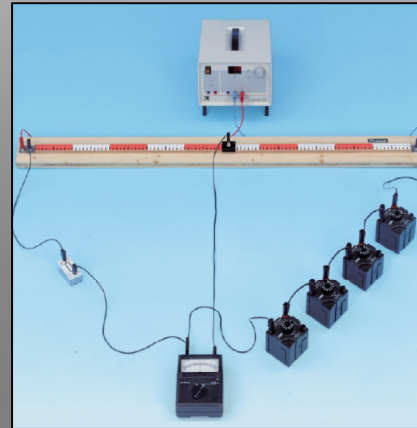


Coulomb's law

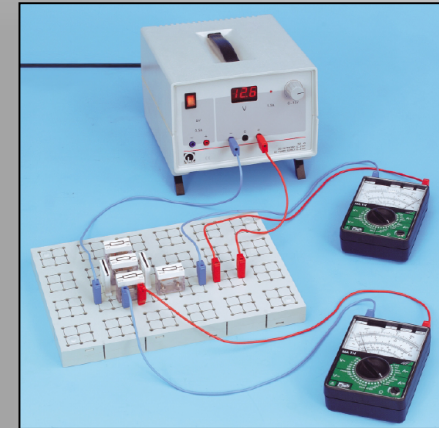


Measuring the force of an electric charge in a homogeneous electric field

P 3.2 Principles of Electricity

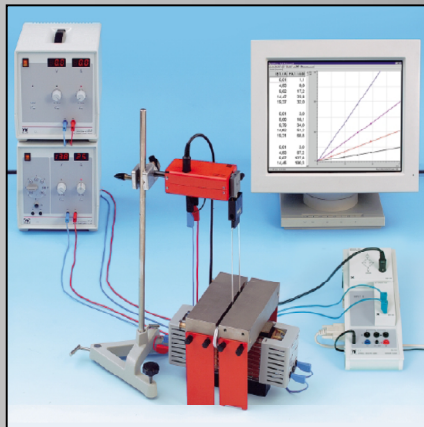


Determining resistances using a Wheatstone bridge

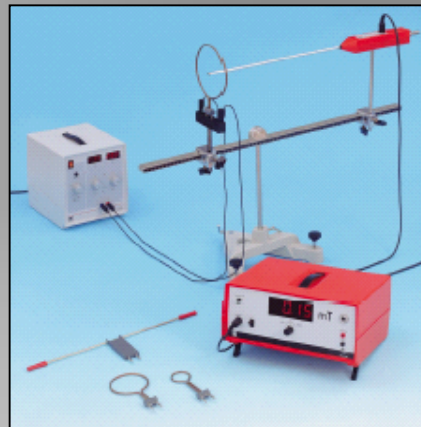


The ammeter as an ohmic resistor in a circuit

P 3.3 Magnetostatics



Measuring the force acting on current-carrying conductors in a homogeneous magnetic field – Recording with CASSY

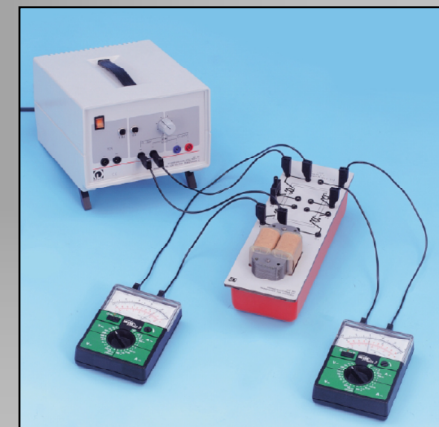


Measuring the magnetic field for a straight conductor and for circular conductor loops

P 3.4 Electromagnetic Induction



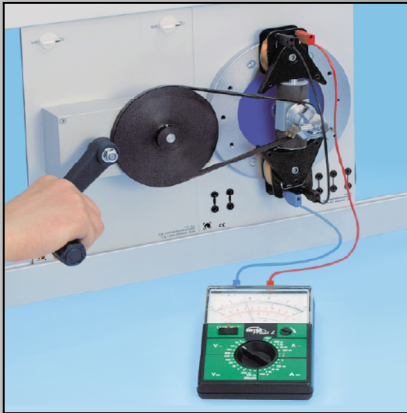
Waltenhofen's pendulum : demonstration of an eddy-current brake



Voltage transformation with a transformer

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P 3.5 Electrical Machines

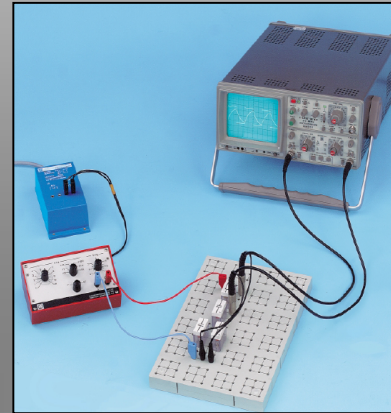


Generating AC voltage with a revolving-field generator (dynamic) and a revolving-armature generator

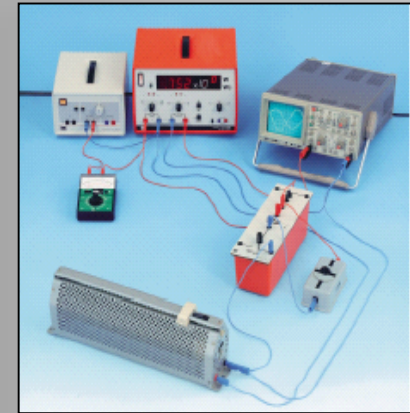


Investigating a DC motor with two pole rotor

P 3.6 DC and AC circuits



Charging and discharging a capacitor when switching DC on and off



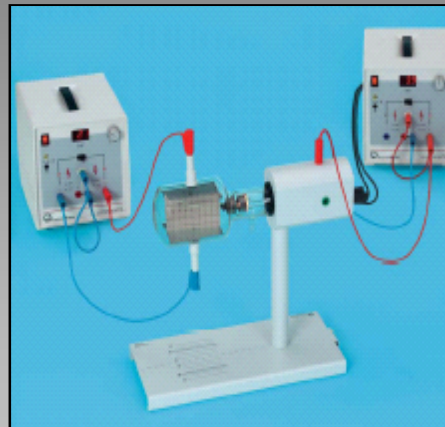
Determining the active and reactive power in AC circuits

P 3.7 Electromagnetic Oscillations & Waves



Microwaves Experiment

P 3.8 Moving charge carriers in a vacuum



Investigating the deflection of electrons in electrical fields

P 3.9 Electrical conduction in gases



Gas discharge at reduced pressure