

Student set Electric motor / Generator, TESS advanced Physics

Article no: 15221-88



Function and Applications

Modular system for student experiments to work out physical and technical basic relations common to electric motors, generators and transformers. This variable system, which consists of single parts, allows to set up different function models without tools:

- Various DC motors
- Series and shunt motor
- Synchronous motor
- DC generator and alternator
- Transformer

This set allows the performance of 10 student experiments about the following topics:

- Magnetic field of a coil
- Conversion of electrical energy into kinetic energy
- Commutator
- Direct current motor
- Synchronous motor
- Series and shunt-wound motors
- Electromagnetic induction
- The electrical generator
- Engine-generator
- Transformer

Benefits

- Complete equipment set: simple execution of the experiments
- The equipment is stored in a rugged, stackable and compact box, allowing quick control of completeness (foam insert)
- Experimenting literature for pupils and teachers available: minimal preparation time
- Matched with international Curriculum: all topics are covered
- Simple design of all components, so that the student can easily recognise their function
- The possibility to set up function models gradually, so that functional relations between components can be understood
- No tools required for assembly

Equipment and technical data

- The equipment set consists of all necessary components for the experiments

Scope of delivery

Electric motor/ Generator, EMG	15221-00	1
Connecting cord, 2 mm-plug, 5A, 250 mm, red	07355-01	2
Adaptor 4 mm plug / 2 mm socket	39161-02	2
Connecting cord, 2 mm-plug, 5A, 250 mm, blue	07355-04	2
TESS box, plastics, high, 305 x 425 x 150 mm	15200-01	1
Lid for TESS box, plastic	15205-01	1

Necessary accessories

Student set Electric Motor / Generator, necessary accessories for 1 group, TESS advanced Physics	13412-88
Student set Electric Motor / Generator, consumables for 10 groups, TESS advanced Physics	13413-88

Recommended accessories

Carrying system for student experiment boxes	25200-00
TESS advanced Physik Handbuch Elektromotor / Generator	07880-01