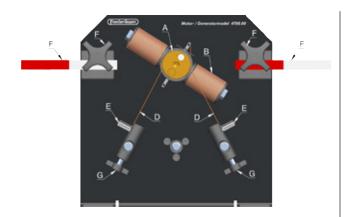
## Motor-Generator Model, 4706.00

02.02.11 AE 470600



#### Motor-Generator Model, 4706.00

Simple model for demonstration of electrical machines

#### Overview

- A. The rotor axis with slip rings A2 and A3 (ends) and commutator A1 (middle)
- B. Double-T-anchor with iron core
- C. Pole magnets (stator)
- D. Contact springs
- E. Bushings for electrical connection
- F. Fastening with knob screws for solenoid
- G. Fastening with knob screws for contact springs

On the back: Pulleys with belt transmission for manual operation.

# **Experiments with the Motor-Generator Model Necessary equipment**

- Power supply with smoothed DC voltage
- Incandescent lamp 1.5 V, 0.09 A (4250.15)
- Lamp holder (4120.15 or 4120.00)
- 2 safety cables (1056.10)

#### Generator

Best effect is achieved with the contact springs AC coupled and the magnets mounted as close to the rotor as possible.

#### **DC** motor

Contact springs DC coupled. To reduce friction the belt can be removed on the back. Set the T-anchor vertically and give it an initial push when the voltage (6-10 V) is connected.

The windings on the T-anchor are connected to the two brass parts which together form the slip ring  $\rm A_2$  and  $\rm A_3$  and  $\rm A_1$  commutator.

### **AC Coupling**

Fit the contact springs against the slip rings  $\mathbf{A}_{\mathbf{2}}$  and  $\mathbf{A}_{\mathbf{3}}$ .

## **DC** Coupling

Both contact springs are in contact with the commutator  $A_1$ .

