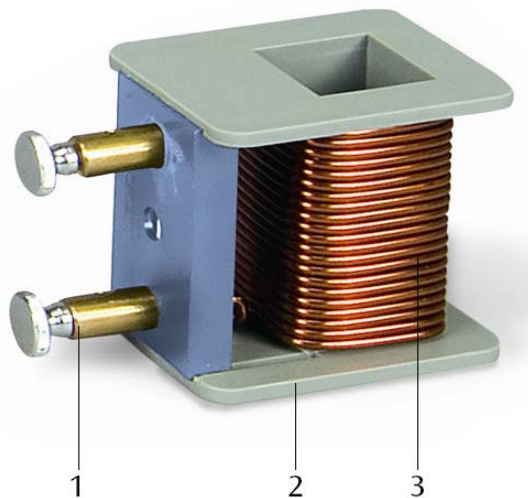


## High Current Coil S U8498065

### Instruction Sheet

06/08 ALF



- 1 Load connectors
- 2 Plastic housing
- 3 Coil-windings

### 1. Safety instructions

The safety of the operator and of the high current coil itself can only be guaranteed if it is used in accordance with the instructions and regulations.

- Experiments must be carried out on a heat-resistant base material. Remember that glowing or melting parts of the test specimen can flow downwards under gravity.
- Only use test specimens that can be passed through the holes in the load connectors.
- After the experiment, allow the test specimen to cool for at least 5 minutes.
- When assembling a transformer, the components may only be handled when the primary voltage is switched off.
- Always use safety leads for the experiments.
- Do not allow liquids to come into contact with the coil.

### 2. Description

The S-model high current coil is used in conjunction with an S-model transformer core (U8498112) for generating high currents.

Test specimens such as paper-clips or short lengths of wire can be clamped between the two load connectors for experiments in which the specimen is intended to melt.

### 3. Technical data

Number of turns:	22
Maximum current:	10 A
Channel for inserting iron core:	20 × 20 mm <sup>2</sup>

### 4. Operation

In order to carry out the experiments, the following additional equipment is required:

1 AC/DC power supply, 0-20V, 0-5A (230V, 50/60 Hz)  
U8521131-230

or

1 AC/DC power supply, 0-20V, 0-5A (115V, 50/60 Hz)  
U8521131-115

1 S-model transformer core U8498112

1 S-model transformer coil U8498070

- Assemble the transformer as shown in Fig. 1 and place it on a heat-resistant surface.
- Clamp the test specimen (short length of wire or a paper-clip) between the load connectors.
- Connect the AC current output terminals of the AC/DC power supply to the tapping points of the primary coil corresponding to 200 turns.
- Switch on the power supply and select a voltage between 10 V and 20 V.

After a short time the high current causes the test specimen to glow, and eventually it will melt through.

- Allow the remains of test specimens to cool for at least 5 minutes before removing them.

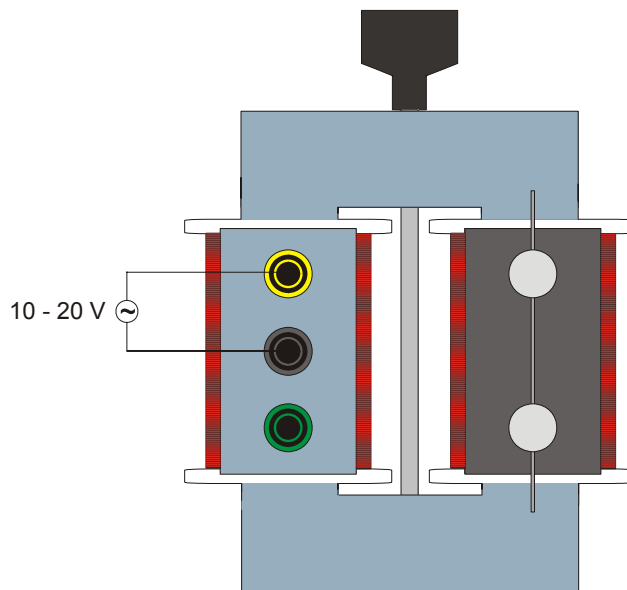


Fig. 1 Experiment set-up