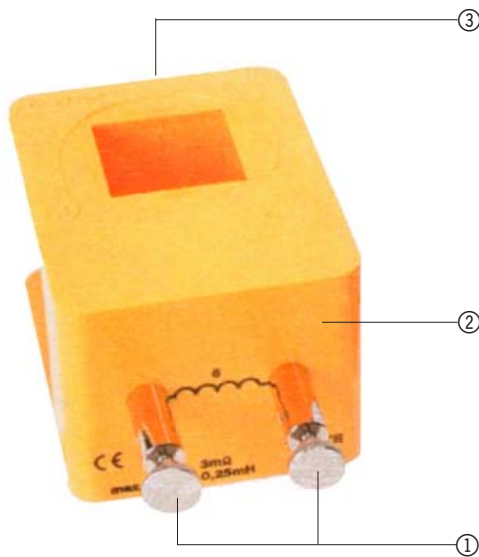


8497406 Coil with 6-turn winding

Instruction sheet

05/05 JH



- ① Screw terminals (for attaching pin)
- ② Plastic case
- ③ Air vents

The coil with 6-turn winding acts as a high current coil for needle-point melting experiments.

- Do not allow the equipment to come into contact with liquids.

1. Safety instructions

- The safety of operators and of the high-voltage coil itself can only be guaranteed when it is used according to the instructions.
- Carry out the experiment on a heat-resistant surface. The melted part of the pin naturally falls downwards due to gravity.
- Only use needles with heads that fit into the screw terminals.
- After the experiment allow the remains of the pins to cool down for at least 5 minutes.
- Do not cover air vents.
- Any modifications to the transformer set-up must be made with the primary voltage switched off.
- Do not open the coil case.

2. Description, technical data

Coil made of impact-resistant plastic with two screw terminals for attaching pins. The characteristic properties of the coil (no. of winding turns, maximum long-term current, effective resistance and inductance) are specified on the case.

Winding turns:	6
DC resistance:	3 mΩ
Max. current for long-term use:	60 A
Inductance:	0.25 mH
Diameter of screw terminal opening:	4 mm
Dimensions in mm:	120 x 90 x 70 (LxWxH)
Opening for iron core:	42 x 42 mm
Weight:	0.6 kg approx.

2.1 Accessories

8497180 Transformer coil with yoke and clamps.

8614190 Transformer base.

8614192 Clamping mechanism for iron core.

8497420 Mains coil with 600-turn winding

8497331 Nails for Nail Fusion Experiment

3. Needle-point melting experiment

Caution: The melted part of the pin naturally falls downwards due to gravity.

- Assemble the transformer as in Fig.1 and place it on a heat-resistant surface.
- Place pins into the openings provided and secure them with the knurled screws.
- Mount the mains coil and switch it on.
- The pin starts to glow because of the high current and gravity causes it to bend downwards.
- After the experiment, allow the remains of the pins to cool down for at least 5 minutes.

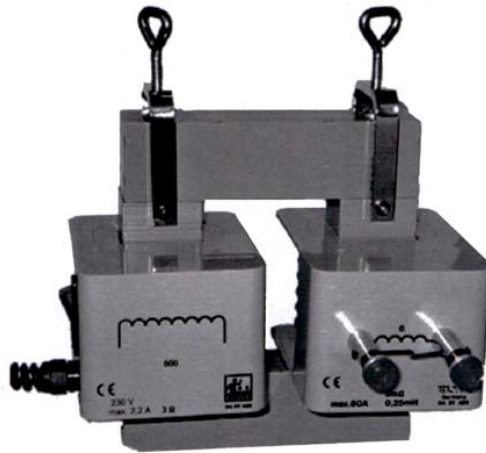


Fig.1