Technical Data:

Turns:	600 Wdg.
Load capacity :	~ 2 A
Coil resistance:	4 Ω
Coil inductivity:	10 mH
Fuse :	melting wire fuse in fuseholder T 6,3 A
Operation voltage:	230V~ / 5060 Hz
Operation duration:	t _{max} : < 10 min
Dimensions:	ca. 68 x 68 x 91 mm
Housing:	plastics housing polycarbonate, blue
Weight:	approx. 540 g

Take care that the device does not fall. In the event that this does occur, have the device examined or repaired by authorized service personnel.

In the event that unforeseen difficulties arise during operation, switch off the device and contact the dealer.

Do not subject the device to dripping or sprayed water.

Use only fuses of the type and current rating indicated.

The device contains no components requiring maintenance on the part of the user (except for replacing batteries).

This device may only be operated by qualified personnel or by persons they instruct in its use. \mathbf{F}

Fruhmann GmbH - 7372 Karl, Austria



DE453-1W Coil for mains power with 600 turns



Coil for mains power with 600 turns

Usage:

The coil can be connected directly through the cable to the electric circuit. 230V~ / 50...60Hz. Inside the housing a holder can be found, where a melting wire fuse is attached.

The coil for mains power is highly suited for high-voltage experiments with DE453-1A coil with 5 turns, for spot welding DE453-2A Sheet metal strips and for melting DE453-2B Rings of tin with DE453-2S Melting groove on support, as well as for the Thomson-experiment with DE453-3T Thomson ring



- 1 Dummy bush
- 2 Amount of turns
- 3 Load capacity ~ 2 A
- 4 Coil resistance 4 Ω
- 5 Coil inductivity 10 mH
- 6 Show case
- 7 Opening for iron core up to 30 x 30
- 8 Mains cable
- 9 Holder for melting wire fuse with screw cap, T 6,3 A
- 10- Overheating protection

Operating:

9

10

The coil for mains power 600 turns, and if given the DE453-1A coil with 5 turns for spot welding DE453-2A sheet metal strips or respectively DE453-2S Melting groove on support for melting tin is to be put on DE452-2B U-shaped core before the launch.

Afterwards it has to be put together with DE452-3B I-shaped core with the help of DE452-4B vise grip.

A closed magnetic (iron) circuit is absolutely necessary to reduce the voltage of the coil. If these instructions are not followed, the wire fuse will melt.

The coil for mains power 600 turns can now be supplied through the mains cable (8) with the the electric circuit $230V \sim / 50...60$ Hz.

Note: This item is not designed for permanent operation

Therefore the operation should not take longer than 10 minutes because the danger of overheating is given.!

There is **mortal danger** due to a **electric shock at the secondary terminals** when building a transformator 1:1.

To replace the melting wire fuse, the screw cap (9) is to be openend and the fuse is to be switched.

This device may only be operated by qualified personnel or by persons they instruct in its use.