

1. Application domain

The transportable cased isolating and regulating transformers are universally employable as low-impedance alternative voltage sources, especially in production departments and during the assembly of measurement positions in laboratories, test facilities and service workshops.

The galvanic separation between primary and secondary side with a test voltage of 3,75 kV and the design as class I protection makes these devices particularly adequate in electrical workshops for the protective separation of devices from the electrical and electronic domains during repairs. It is only designed for use in dry rooms.

The output voltage of the laboratory isolating and regulating transformer can be easily varied between approx. 1 and 250V using a variable transformer. The device may be loaded with the respective nominal current over the entire settings range during continuous operation.

The main advantages of this kind of voltage setting is the constant characteristic curve of the output voltage and the relatively small internal resistance.

2. Design

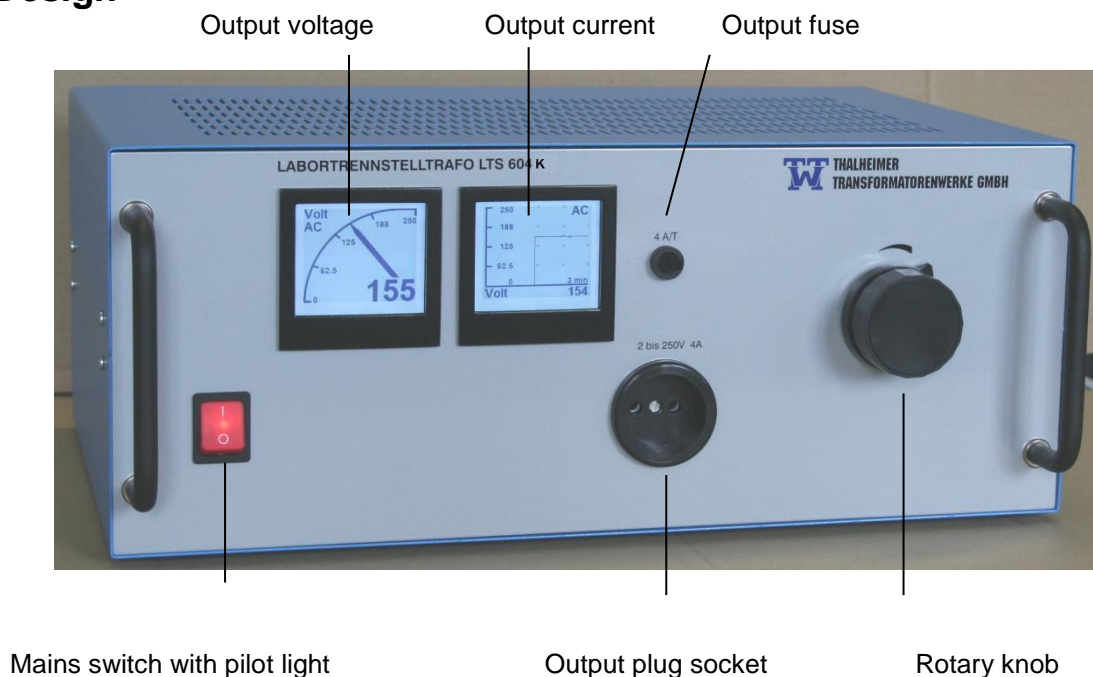


Fig. 1 LTS 604K

Fig. 1 shows the laboratory isolating and regulating transformer in LTS 604 K design. The other designs differ in their technical values (see table). Mechanically, the laboratory isolating and regulating transformers consist of a steel sheet construction

which contains all components. This design is protected by respectively one upper and one lower sheet and provides IP 20 protection.

On the input side, the isolating and regulating transformers have an IEC cold device plug on the rear side. The front plate contains all operating and display instruments including the output plug socket. The displays for current and voltage show the true RMS measured values as indicator dials and digital displays and have a white background illumination.