

**Operating instructions  
Variable isolating transformers**

**LTS 602**

**LTS 604**

**LTS 606**

## Field of application

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Variable isolating transformers are portable devices which are arranged in 19" housings. These variable and low- resistance a.c. voltage sources can be used in all fields, especially in workshops, laboratories, test stands and service shops. Due to the galvanic separation between the primary and the secondary by means of a test voltage of 3,5 kV and the construction according to the protective system II these transformers are especially suitable for use electric workshops, where they are employed for protective isolation of electric or electronic devices which are in need of repair. They are useable only in dry rooms.

The output voltage can be easily adjusted between 1 V and 250 V by means of the adjustable transformer. In continuous operation, the transformer can be subjected to maximum current loading throughout the whole adjusting range.

The most apparent advantage of such a voltage control are the maintenance of the output voltage curve, the nearly loss-free voltage or adaption of current and the relatively low internal resistance.

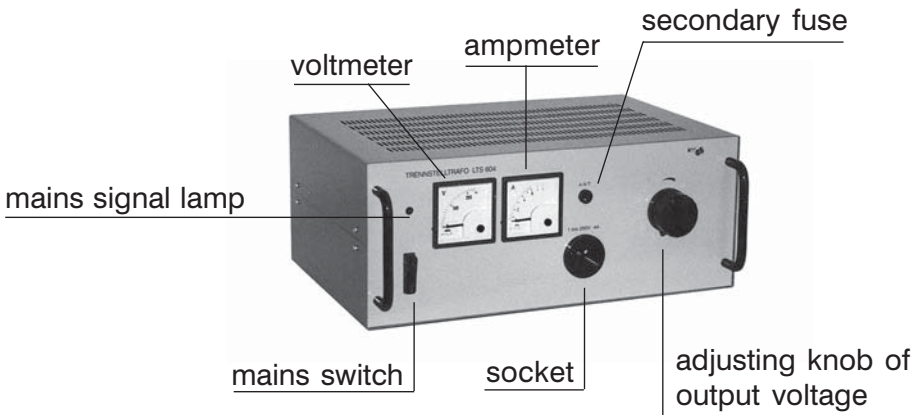
## Operating instructions

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The transformers can be used either individually or in combination with other devices in measuring places or laboratories. Take care to ensure that they are vented through the ventilating ducts available. The ambient temperature should not increase over 40 °C.

## Variable isolating transformer LTS

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After connection to a mains of 230V (or 110V), 50/60 Hz, the transformer can be put into operation with the aid of the main switch. The mains signal lamp light in the ON state. Switching- on causes a current surge in the mains which may be sufficient to release automatic cut outs. Therefore, we recommend to use slow- blow fuses in the mains.

When the knob is turned in clockwise direction, the voltage supplied by the socket is increased. This voltage is simultaneously indicated by the voltmeter.

### **Caution!**

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Only **one** consumer at a time may be connected to the transformer. It is not permitted to connect several consumers by making use of a distributor. In case of a defective consumer, the earth potential would be fed to other connected devices as well. Thus, the output voltage would no longer be free from potential.

### **Repairs**

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All repairs will be carried out by the after sales service of the manufacturer.

### **Maintenance**

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At certain intervals free the sliding path of the adjustable transformer from dust, using a cloth soaked with spirit.

Never use oil.

Access to the sliding path of the adjustable transformer is obtained by removing the four screws and the cover plate of the housing.

### **Caution!**

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Disconnect the device from the mains before removing the screws.

### **Storage conditions**

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Store packed and unpacked devices only in closed rooms and under the climatic conditions specified for their use. The storage rooms must be as free from dust as possible and also free from acid and caustic vapours as well as gases, which have a corrosive action.

### **Transport conditions**

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The device may be transported in packed condition only. For this, use the original package only or a similar package. The consignee is requested to store the device immediately in rooms with respective climatic conditions.

Do not store more than three devices one upon the other.

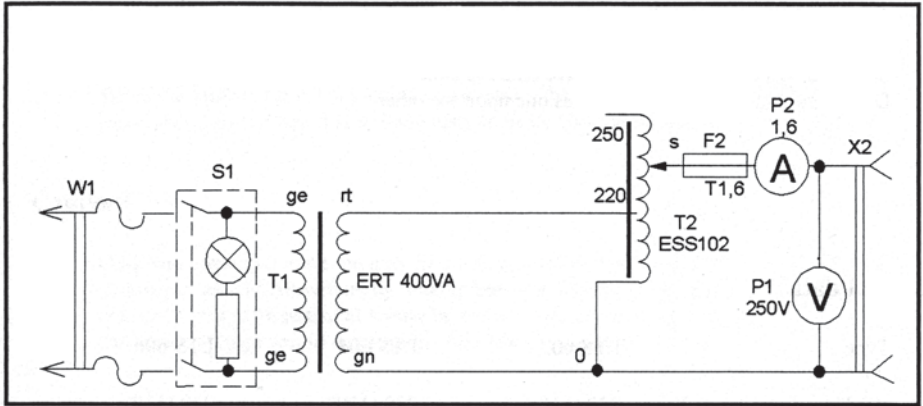
## Technical data

Type		LTS 602	LTS 604	LTS 606
rated input	V	230 (110)	230 (110)	230 (110)
input current	amps	2.3 (4.6)	5.5 (11)	8 (16)
max. power	VA	400	1000	1600
rated frequency	Hz	50/60	50/60	50/60
no- load power loss	W	<25	<40	<60
output voltage	V	1...250	1...250	1...250
tolerance of output voltage				
no load	V	+25	+25	+25
rated load	V	-15	-15	-15
turn to turn voltage	V	<0,4	<0,5	<0,8
output current	amps	1,6	4	6
mode of operation		continuous operation		
degree of protection		II	II	II
protective system		IP 20	IP 20	IP 20
protective measure		protective insulation		
test voltage				
pri.-sec.	kV	3,5	3,5	3,5
pri., sec.-housing	kV	3,5	3,5	3,5
temp. resistance class		B	B	B
max. ambient temp.	°C	+40	+40	+40
temp. range	°C	-10 ... +40	-10 ... +40	-10 ... +40
relative humidity	%	80 at + 35 °C	80 at + 35 °C	80 at + 35 °C
shock sequence test		800 shocks with 15 g		
weight	kg	12	18	24
dimensions				
width	mm	452	452	452
height	mm	146	190	190
dept	mm	252	312	312

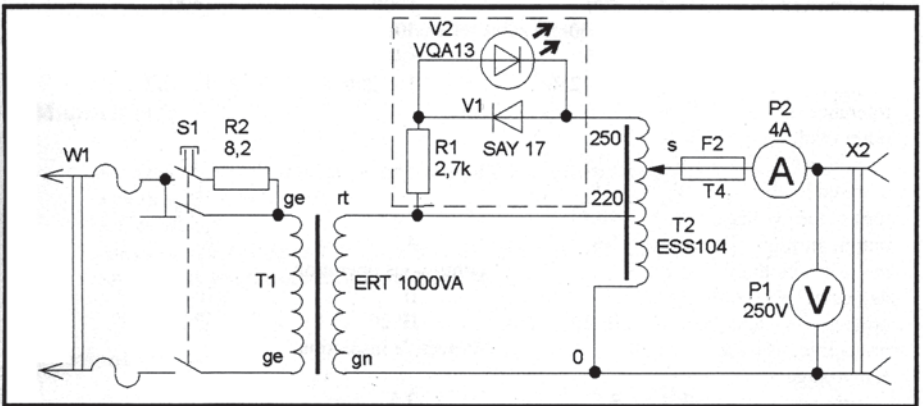
The conditions for temperature, humidity and shock for operation are the same for storage and transport.

# Circuit diagrams

## Variable isolating transformer LTS 602



## Variable isolating transformer LTS 604



## Variable isolating transformer LTS 606

