



Shaker TVL 15T to thermostatic water bath TVL 15

Instructions of operating



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0. Introduction

0.1 Purpose of the apparatus and its specification

The shaker is intended for use in a thermostatic water bath designed to cultivate and heat samples at a pre-set water temperature in a water bath.

0.2 Technical data

Speed	about 2 - 30mm/s
Range of motion	±7mm
Power supply	230V ±10%; 50Hz
Overvoltage category in installation	II.
Input power	max. 24VA
Fuse 5x20	T 200mA
Weight	6.5 kg
Dimension (w x l x h)	420 x 670 x 160mm

1. Technical description

The device consists of drive, drive control, sample floor and universal mounts. The device is designed exclusively as an accessory for the thermostatic water bath TVL 15. To the bath it is attached by side clamps. The drive is controlled by a potentiometer. The green LED indicates the device is turned on, the red LED overload or a defect.



Fig. 1 The shaker on position in the water bath TVL 15

2. Putting into service

2.1 Unpacking of the apparatus

Take out the device from the shipping container, check the surface of the apparatus and examine all the items delivered according to the delivery note. Approach the manufacturer or turn to your dealer in the event of damage to the apparatus or if an item is missing.

2.2 Assembly of the apparatus

- 1) Put the appliance into the TVL 15, tighten the side clamps, pour the desired amount of water into it.
- 2) Plug in the power cord.
- 3) Turn on the power switch.
- 4) Set the desired shake speed with the potentiometer.

3. Maintenance

Do not leave surfaces of the apparatus stained with corrosive substances. Varnish coating of the apparatus could be damaged. For the cleaning of the apparatus surface a clean soft cloth should be used that may be dampened, however, not wet. Also ordinary detergents may be used for cleaning.

Caution: Disconnect the apparatus from the mains when cleaning it with a dampened cloth!

4. Causes of malfunctions and removal of faults

The red LED flashes. Check the motion trajectory for an obstacle, turn the power switch off and on.

After switching the device does not respond. Check the fuse on the front panel or replace new with the same parameters.

Warning: Disconnect the apparatus from the mains before replacing of the fuse!

5. Safe operation, operation conditions

5.1 Safe operation

Operational safety is secured by an electronic fuse of increased resistance contra moving the platform for samples. (Indicated by blinking red LED).

5.2 Operation conditions

The apparatus is designed for operation under current laboratory conditions in the temperature interval from +10 through +35°C and air humidity up to 80%. Power supply 230 V, 6 A, 50 Hz. The power lead-in cord is connected in the socket circuit provided with protections 10 or 16 A. The power cord must not touch the moving parts.

Caution! It is prohibited to handle the water bath if containing water.
It is prohibited to handle the water bath if heated up to a temperature higher than 40°C.

Caution! Use protective gloves when handling the cover at the bath temperature higher than 40°C. Be careful during manipulation.

6. Accessories, accessories to order

Accessories: Universal mounts.

Accessories to order: Anti-slip pads according to the dimensions of sample containers as supplied by the customer.

7. Conclusion

7.1 Execution of repairs

All guarantee and post-guarantee repairs are to be carried out by the manufacturer or by an organization authorized by the manufacturer. If not otherwise indicated in the delivery note address, approach the manufacturer with your requirements for repairs.

7.2 Guarantee

The manufacturer gives a two - year guarantee with the product running from the day of handingr the product over to the customer.

The apparatus may only be used in the way indicated in this operation manual. The apparatus may not be used in any way different from the manner indicated in this operation manual otherwise safe operation might be jeopardized. The manufacturer may not be held liable for any damage attributable to non-observance of conditions stipulated in this operation direction.

7.3 Waste Disposal

At the end of life discard the instrument according to valid regulations on waste or return to the vendor or producer for disposal or in the context of return when buying new equipment.

Warning: Instrument contains parts (PCB), which fall into the category of hazardous waste.

The instrument is disposed of as electronic waste.