

MI_2303: VarioSmoker – function test/troubleshooting on a faulty unit



VarioSmoker



30 min.



Standard; multi-meter



24/02/2023

Topics

This information describes the function test/troubleshooting on a faulty VarioSmoker.

Affected product/accessories

VarioSmoker

Unit with country-specific accessory item numbers:

- Type B (60.75.367)
- Type E/F (60.75.371)
- Type G (60.75.373)
- Type I (AS/NZS) (60.75.375)
- Type J (60.75.377)
- Type N (60.75.385)

Required tool

- Standard
- Multimeter
- Optional: Oscilloscope

General information

Target group

- This document is intended for skilled technicians, who have been certified by the manufacturer after attending training and safety instructions.
- Installation, inspection, maintenance, and repair work must only be carried out by trained technicians.
- It is recommended that only technicians authorised by the manufacturer perform inspection, maintenance and repair work.
- The unit may not be used, cleaned, or maintained by children. The unit may not be used for play. This is prohibited even under supervision.
- The unit may not be used, cleaned, or maintained by people with limited physical, sensory, or mental capacity or those without the necessary experience or knowledge, unless such people are supervised by a person who is responsible for their safety and who has been informed of the hazards of the unit.
- In order to prevent accidents or damage, the manufacturer recommends that technicians attend training and safety instructions.

Safety instructions

DANGER

High voltages when connecting to the mains power

Danger to life due to high voltage.

- Disconnect from the power supply.
- Make sure the unit is disconnected from the power.

CAUTION

Sharp edges on the housing

Risk of cuts on the housing when working in the unit.

Wear protective gloves.

CAUTION

Risk of crushing when positioning the unit

Fingers, hands and feet could be crushed beneath the unit.

- Wear appropriate protective clothing when positioning the unit.
- Only lift the unit at the intended lifting points.

CAUTION

High risk of personal injury and material damage

The following modification process is very demanding. There is a high risk of personal injury and material damage.

- Wear safety clothing and equipment.

What is faulty and how do I test the function?

Is the smoker box intact?

Check the resistance:

1. Measure resistance of hot air element and cable – from pin 1 to pin 2.



2. Resistance measurement: $3\ \Omega < R < 5\ \Omega$.
 - > The hot air element is OK.
3. Resistance measurement: $< 3\ \text{ohms}$.
 - > Smoker box is faulty (short circuit).
4. Resistance measurement against megohms:
 - This does not cause the power supply unit to fail, but the hot air element does not heat up.
 - > Smoker box with hot air element is faulty (e.g. cable break).

5. Carry out an isolation measurement on the smoker box.

Is the mains voltage OK?

Check the supply voltage.

- ✓ Multimeter is set to AC.
1. Check the voltage on the socket:
A voltage of 100 – 240 VAC is required to use the VarioSmoker.

Is the power supply unit intact?

Check the output voltage:

- ✓ Set the multimeter to DC.
 - ✓ Optional: An oscilloscope is present.
1. Check the output voltage on the power supply unit.



- > An output voltage of approx. 24 V is required (this must be applied constantly for 10 minutes).
2. **Optional:**
An oscilloscope is present.
After 10 minutes, you can make the clocking visible at 60% of the power.
The resolution of a multimeter is usually too slow to display the clocking correctly.

Is the connection to the iCombiPro intact?

1. Plug the USB cable into the iCombi Pro and the VarioSmoker power supply unit (not compatible with iCombi Classic and old combi-steamer versions).
Actuate the switch.
Check the output voltage on the power supply unit and the display on the iCombi Pro.
- > If an info box appears on the iCombi Pro display stating that the VarioSmoker is plugged in and can now be used, the connection is OK.

NOTICE

The smoker box remains cold and 0 V is displayed on the multimeter! The system is waiting for the input command via a recipe from the iCombi Pro!

2. If 24 V is still output at the power supply unit without the smoking process running:
USB cable or USB connector faulty.

