

# Induction Devices Series

## Cooking appliances

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### Service manual for maintenance and repair

#### Model

**INSTINCT Hob 3 / 3.5 / 5 / 10**

**INSTINCT Wok 3 / 3.5 / 5 / 8**

**INSTINCT Griddle 3 / 3.5 / 5 / 10**

**Compactmodul 7 / 10 (Dual)**

**Install-Line 7 / 10 (Dual)**

**Compactmodul Single 3.5 / 5 / 8**

**Install-Line Single 3.5 / 5 / 8**

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## Security Alert

### Presentation of the safety instructions

The safety instructions are categorized according to the following security levels


Security level	Consequences	Probability
 <b>DANGER</b>	Death / severe injury (irreversible)	is imminent
 <b>Warning</b>	Death / severe injury (irreversible)	Maybe
 <b>Caution</b>	Minor injury (reversible)	Maybe
<b>Attention</b>	Damage to property	Maybe

### Safety symbols and warnings on the device

Warning Alert	Description
	This symbol alerts you to a dangerous situation that WILL or COULD result in severe bodily injury or death.  Pay attention to appropriate safety precautions.
	<b>DANGER - HIGH VOLTAGE</b> This symbol indicates the risk of electric shock and danger hazardous voltage.
	<b>Electromagnetic field</b> This symbol warns of non-ionizing electromagnetic radiation.
	<b>Potential equalization</b> This symbol indicates the terminal to be connected to the equipotential bonding.

Danger symbols, which are attached directly to the device, must always be observed at all times.

### Further Risks

Warning Alert	Description
	<b>Caution! Hot!</b> This symbol warns of hot surfaces.



### **Qualification and Staff training**

The assembling, installation, commissioning, operating and maintenance personnel must have the necessary qualifications. The scope of responsibility, the competences and the supervision of the personnel must be determined and adhered to by the operating staff of the induction unit.

### **Safety instructions for installation, maintenance and inspection work**

Operators must ensure that all installation, maintenance and inspection work is performed by authorized and qualified personnel. These personnel have informed themselves according to the requirements by a thorough study of the operating instructions. For installation, maintenance, service, repair and overhaul of the induction unit, the personnel must be specially qualified by being instructed by a special training course, approved by the manufacturer.

In principle, such work may only be carried out on the induction unit if it has no electrical voltage. The device must be switched off and disconnected from the power line. The safety and protection installations must be restored or installed before completion of the work.

### **Replica, modification and use of spare parts**

Any replicas or modification of the induction unit is not allowed. Modifications are not permitted without the express permission of the manufacturer. In the case of modifications of the devices without the manufacturer's consent, all warranty and liability claims are void. To ensure safety, use only original spare parts and accessories approved by the manufacturer. Using non-original components voids any liability for consequential costs.

### **Incorrect operation**

The functionality of the induction unit can only be guaranteed when used correctly. The limit values according to „Technical Data“ must not be exceeded under any circumstances.

## Technical specifications INSTINCT

### Single Unit

Model	INSTINCT Hob 3 (208-240 VAC)	INSTINCT Hob 3.5 (208-240 VAC)	INSTINCT Hob 5 (380-440 VAC)	INSTINCT Hob 5 (208-240 VAC)
Voltage, Phases	208 - 240 VAC, 1 Ph	208 - 240 VAC, 1 Ph	380 - 440 VAC, 3Ph	208 - 240 VAC, 3Ph
Power	3000 W	3500 W	5000 W	5000W
Curent	13 A	16 A	8 A	14 A
Power factor Cos $\varphi$	>0.95	>0.95	>0.95	>0.95
max. leakage current	0.5 mA	0.5 mA	5 mA	5 mA

Model	INSTINCT Wok 3 (208-240 VAC)	INSTINCT Wok 3.5 (208-240 VAC)	INSTINCT Wok 5 (380-440 VAC)	INSTINCT Wok 5 (208-240 VAC)
Voltage, Phases	208 - 240 VAC, 1 Ph	208 - 240 VAC, 1 Ph	380 - 440 VAC, 3Ph	208 - 240 VAC, 3Ph
Power	3000 W	3500 W	5000 W	5000 W
Curent	13A	16A	8 A	14 A
Power factor Cos $\varphi$	>0.95	>0.95	>0.95	>0.95
max. leakage current	0.5 mA	0.5 mA	5 mA	5 mA

Model	INSTINCT Wok 8 (380-440 VAC)
Voltage, Phases	380 - 440 VAC, 3Ph
Power	8000 W
Curent	12 A
Power factor Cos $\varphi$	>0.95
max. leakage current	8 mA

Model	INSTINCT Griddle 3 (208-240 VAC)	INSTINCT Griddle 3.5 (208-240 VAC)	INSTINCT Griddle 5 (380-440 VAC)	INSTINCT Griddle 5 (208-240 VAC)
Voltage, Phases	208 - 240 VAC, 1Ph	208 - 240 VAC, 1Ph	380 - 400 VAC, 3Ph	208 - 240 VAC, 3Ph
Power	3000 W	3500 W	3500 W	3500 W
Curent	16A	16A	8 A	14 A
Power factor Cos $\varphi$	>0.95	>0.95	>0.95	>0.95
max. leakage current	0.5 mA	0.5 mA	5 mA	5 mA

## Dual Geräte

Model	INSTINCT Hob 7 (208-240 VAC)	INSTINCT Hob 10 (380-440 VAC)	INSTINCT Hob 10 (208-240 VAC)
Voltage, Phases	208 – 240 VAC, 3Ph	380 - 440 VAC, 3Ph	208 – 240 VAC, 3Ph
Power	7kW (2 x 3500 W)	10kW (2 x 5000 W)	10kW (2 x 5000 W)
Curent	20 A	16 A	28 A
Power factor Cos φ	>0.95	>0.95	>0.95
max. leakage current	7 mA	10 mA	10 mA

Model	INSTINCT Griddle 7 (208-240 VAC)	INSTINCT Griddle 10 (380-440 VAC)	INSTINCT Griddle 10 (208-240 VAC)
Voltage, Phases	208 – 240 VAC, 3Ph	380 - 440 VAC, 3Ph	208 – 240 VAC, 3Ph
Power	7kW (2 x 3500 W)	10kW (2 x 5000 W)	10kW (2 x 5000 W)
Curent	20A	16A	28A
Power factor Cos φ	>0.95	>0.95	>0.95
max. leakage current	7 mA	10 mA	10 mA

## General Data

Max. Mains voltage tolerance	Nominal voltage +6 / -10 %
Frequency	50 / 60 Hz
Protection category	IP X3
Minimum diameter of the induction pan	12cm [5"]
Ambient temperature storage	-20 bis +70°C
Ambient temperature in function	+5 bis +40°C
Relative humidity storage	10 % bis 90%
Relative humidity in function	30 % bis 90%

## Radio Interference Suppression

A line filter for radio interference suppression is integrated in the device. The line filter protects against electrical interference.

## Technical Specification Compactmodul and Install-Line

Model	Compactmodul 2x3.5 400V	Compactmodul 2x5 400V
Voltage, Phases	380 - 440 VAC, 3Ph	380 - 440 VAC, 3Ph
Power	7kW (2 x 3500 W)	10kW (2 x 5000 W)
Curent	20 A	16 A
Power factor Cos $\varphi$	>0.95	>0.95
max. leakage current	7 mA	10 mA

Model	Compactmodul 2x3.5 208V	Compactmodul 2x5 208V
Voltage, Phases	208 – 240 VAC, 3Ph	208 – 240 VAC, 3Ph
Power	7kW (2 x 3500 W)	10kW (2 x 5000 W)
Curent	20 A	16 A
Power factor Cos $\varphi$	>0.95	>0.95
max. leakage current	7 mA	10 mA

Model	Install-Line 2x3.5 400V	Install-Line 2x5 400V
Voltage, Phases	380 - 440 VAC, 3Ph	380 - 440 VAC, 3Ph
Power	7kW (2 x 3500 W)	10kW (2 x 5000 W)
Curent	20A	16A
Power factor Cos $\varphi$	>0.95	>0.95
max. leakage current	7 mA	10 mA

Model	Install-Line 2x3.5 208V	Install-Line 2x5 208V
Voltage, Phases	208 – 240 VAC, 3Ph	208 – 240 VAC, 3Ph
Power	7kW (2 x 3500 W)	10kW (2 x 5000 W)
Curent	20A	16A
Power factor Cos $\varphi$	>0.95	>0.95
max. leakage current	7 mA	10 mA

### General Data

Max. Mains voltage tolerance	Nominal voltage +6 / -10 %
Frequency	50 / 60 Hz
Protection category	IP X3
Minimum diameter of the induction pan	12cm [5"]
Ambient temperature storage	-20 bis +70°C
Ambient temperature in function	+5 bis +40°C
Relative humidity storage	10 % bis 90%
Relative humidity in function	30 % bis 90%

### Radio Interference Suppression

A line filter for radio interference suppression is integrated in the device. The line filter protects against electrical interference.

## Functions

### Operational safety, personal protection

#### **⚠ DANGER**

Risk of electric shock from live parts and loose cables.

If any part of the device is damaged or defective, **immediately switch off the device and disconnect it from the mains**. Do not touch any parts inside the unit.

Disconnect power from the main circuit breaker for all equipment being serviced.

To avoid disturbing your pacemaker, ask your doctor or the manufacturer of the pacemaker about the effects of electromagnetic fields on your pacemaker.

Never stand on the device, sit or lean against it! It is not intended to support the weight of an adult and may collapse or tip over if used improperly.

### Short cooking time / heating time

#### **⚠ Caution**

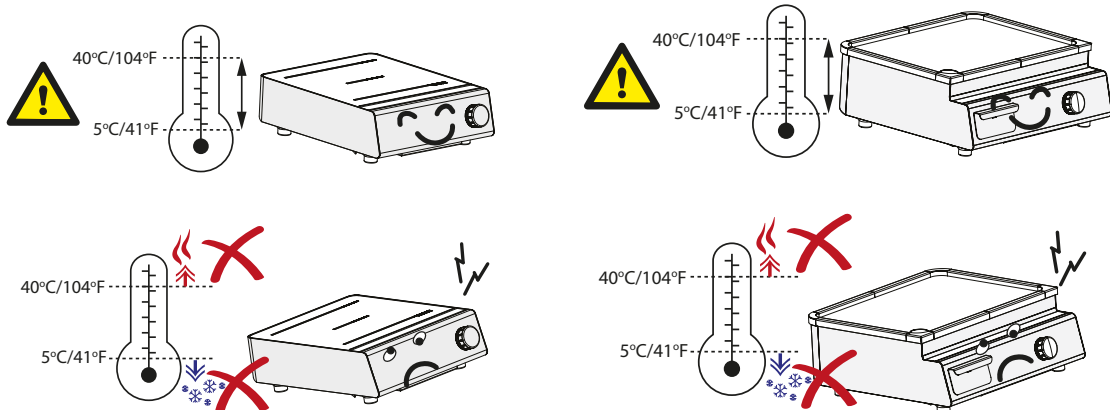
Induction appliances heat up the cookware faster than conventional cooking appliances. To avoid overheating and burning, check the cooking process regularly.

**Never leave the appliance unattended during operation.**

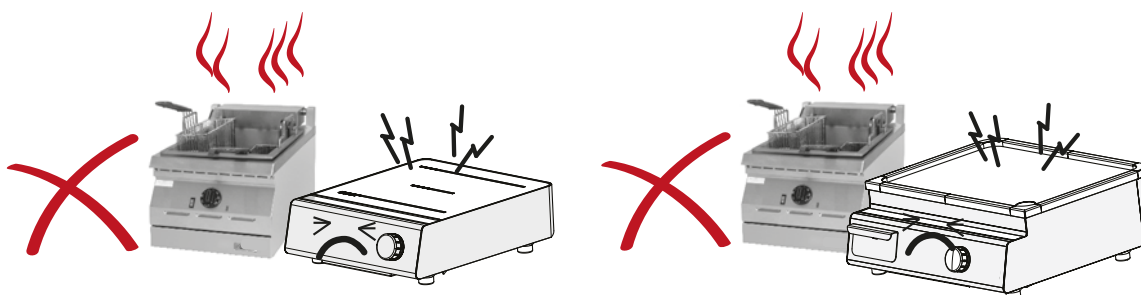
### Important rule

Follow these rules to ensure reliable and consistent performance of your induction equipment.

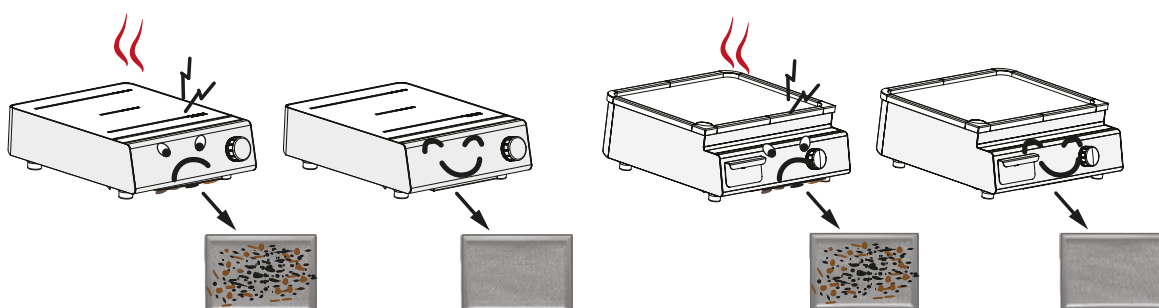
#### **1 Keep the kitchen temperature below 40°C [104°F].**



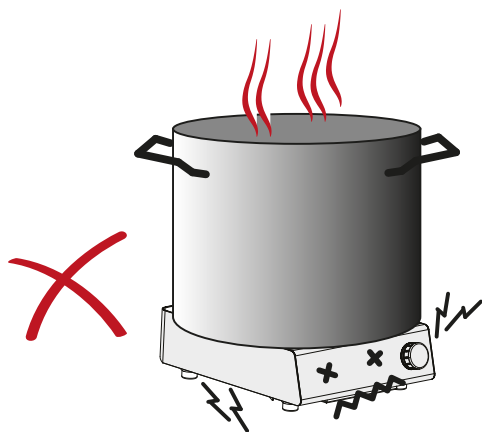
**2** Your induction devices must never be near steam or heat generating devices.



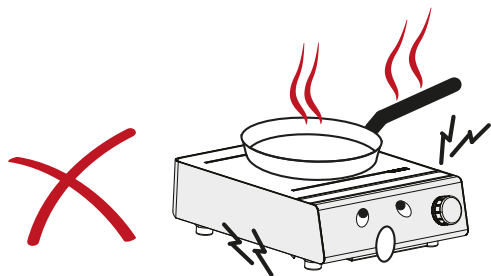
**3** Clean the air intake filter at least once a week or as often as necessary.



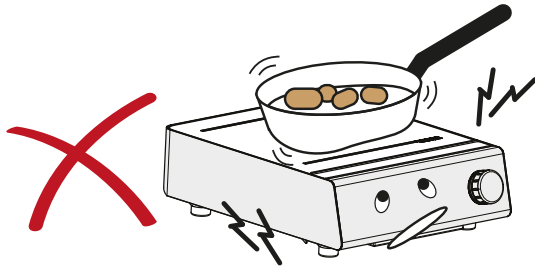
**4** Use only pans of a suitable size for the cooking surface. Do not use too big pans.



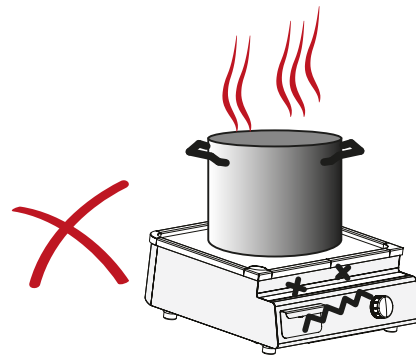
**5** Don't preheat the pan under any circumstances. Do not place the pan on the cooking zone until you are ready to cook.



**6** Do not use dented pans as they could damage the electronics.

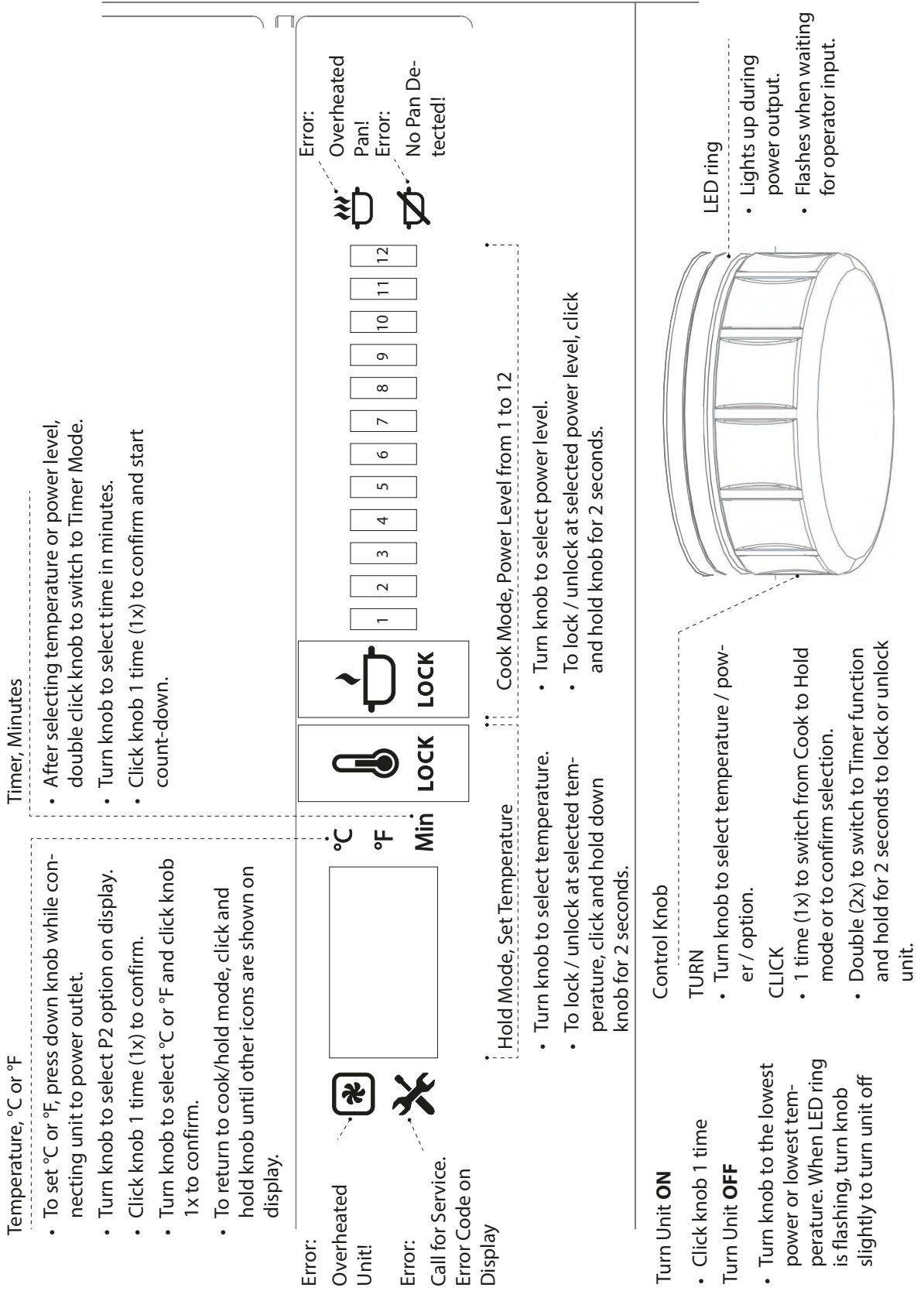


**7** Do not use pans on the grill plate. Using pans can deform the grill plate and the coating can be damaged.



## Display and Control Quick Reference

Note: Hold mode and Temperature function are not available for Wok Models





## Operation Hob and Wok

### Turn unit on

Press the knob and turn it clockwise to select the power level.

### LED Ring

- The LED ring flashes when operator input is required
- The LED ring lights up continuously during cooking or holding.

### Switching Between cooking and holding modes

Holding mode is not available for INSTINCT Wok.

1. Press the knob once during operation. The LED flashes.
2. While watching the display, turn knob clockwise or counter-clockwise to activate Power Level Mode or Hold-Mode.
3. Click knob again to confirm selection.

### Setting Power Level (1 to 12) and Lock/Unlock

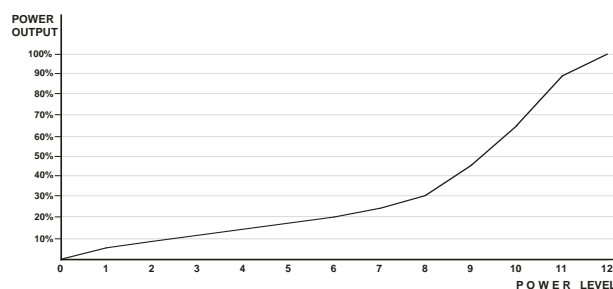
1. In Power Level Mode, turn knob clockwise to choose power level:
  - Power level (1) = lowest power
  - Power level (12) = highest power
2. To lock power at set level, press down knob until the word "LOCK" on the display lights up. This takes 2 seconds.
3. To unlock, press down knob again until the word "LOCK" on the display goes dark. This takes 2 seconds.

### Power Level Settings

The Power Diagrams (below) show that the difference in power output between two higher power levels is much larger than that between two lower power levels.

This power level and output relationship gives you a fine simmer-rate control in the low power range, and an instant response in the high power range.

Power Diagram 1: Power Level 0 to 12



The settings from (1) to (9) span the lower 50% of the total Power Output; the settings from (10) to (12) cover the 50% to 100% output range.

### Selecting hold Temperature and Lock/Unlock

1. In Hold-Mode, turn knob until the desired temperature is shown on the display.
2. Leave the knob for approximate 5 seconds, the display will show the actual detected temperature.
3. To lock temperature at set level, press down knob until the word "LOCK" on the display lights up. This takes 2 seconds.
4. To unlock, press down knob again until the word "LOCK" on the display goes dark. This takes 2 seconds.

### Setting the Timer


The timer function can be set for both Cooking or Holding Modes.

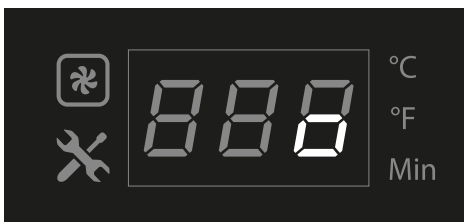
1. After setting power level or temperature, double click the knob to switch to Timer Mode.
2. Turn knob to set the timer from minimum 1 minute to maximum 240 minutes. The LED ring will flash.
3. Click knob 1 time to confirm and start the count-down.
4. Note when using Hold-Mode with Timer, the display will show alternately the actual temperature and the count-down.
5. After the set time is elapsed, the appliance will sound a beeping signal and the unit will automatically shut down if the operator takes no action.

### Turning off

When in Cook or Hold Mode, turn knob to go to the lowest power level or lowest temperature.

When LED ring is flashing, turn knob slightly to turn off the appliance.

When the unit is switched off, a  appears in the display.



## Additional Settings

Additional settings are available to reduce power level, and to set display to °C or °F.

To activate the additional settings:

1. Press down knob while connecting unit to power outlet.
2. Then turn knob to select setting P1 or P2:
  - P1 = Reduce nominal max power from 100% to 25%
  - P2 = Change temperature from °C to °F (function not available on Wok models)
  - P3 = Shows the actual Firmware number.
  - P4 = Enable / Disable buzzer (timer function)
3. Click knob 1 time (1x) to confirm selection.
4. In P1, turn knob to select power.  
In P2, turn knob to select °C or °F.  
In P4, turn knob to select "on" or "oFF"
5. Click knob 1 time (1x) to confirm selection.
6. To leave the special setting function, keep pressing down the knob until the normal cooking or hold mode is shown on display.

## Automatic Pan Detection, No Pan No Heat

When a temperature or a power level is selected, the appliance supplies energy only when a pan is placed in the cook zone.

When you remove the pan from the cook zone, the appliance stops power output immediately. The power output resumes, when the pan is placed back on the cooking zone.

NOTE: Switch off the cook-top by means of the control. Do not rely on the Pan Detection as the ON-OFF control.

NOTE: Pan with a bottom diameter smaller than 12cm or 5" is not detected by the system.

### **When Appliance Is Idle**

When the induction appliance is not in use, always turn it off.

NOTE: Switch the appliance off if you take the cookware away for a while. This will prevent the heating process to start automatically and unintentionally when a pan is placed back on the heating area. If any person needs to use the induction appliance, he/she will have to turn the appliance ON intentionally.

### **Decommissioning**

Procedure if the device is not needed for a long time.

1. Switch off the device on the knob. (See Section 3 Turning Off)
2. Disconnect the device from the mains.

### **⚠ DANGER**

If the plug is not safely accessible, the device must be switched off at the main circuit breaker.

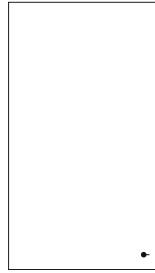
## Display and Control Quick Reference

### Temperature, °C or °F

- To set °C or °F, press down knob while connecting unit to power outlet.
- Turn knob to select P2 option on display.
- Click knob 1 time (1x) to confirm.
- Turn knob to select °C or °F and click knob 1x to confirm.
- To return to normal mode, click and press down knob until other icons is shown on display.



°C  
°F  
Min

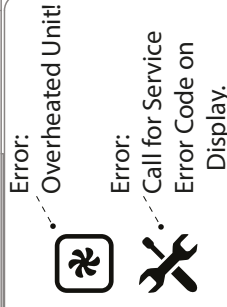


Temperature

- Turn knob to select temperature.

### Timer, Minutes

- After selecting temperature, double click knob to switch to Timer Mode.
- Turn knob to select time in minutes.
- Click knob 1 time (1x) to confirm and start count-down.

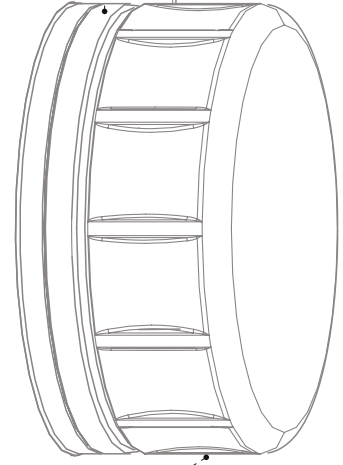


### Turn Unit ON

- Click knob 1 time
- ### Turn Unit OFF
- Turn knob to the lowest power or lowest temperature. When LED ring is flashing, turn knob slightly to turn unit off.

### Control Knob

- TURN
- Turn knob to select temperature / time / option.
- CLICK
- 1 time (1x) to confirm selection.
  - Double (2x) to switch to Timer function



LED Ring

- Lights up during power output.
- Flashes when waiting for operator input.

## Operation INSTINCT Griddle

### Turn unit on

Click knob and turn to select temperature.

### LED Ring

- The LED ring flashes if operator input is needed.
- The LED ring lights up continuously during cooking.

### Selecting Temperature

1. Turn knob until the desired temperature is shown on the display.
2. Leave the knob for approximate 5 seconds, the display will show alternately the actual detected temperature and set temperature.


### Setting the Timer

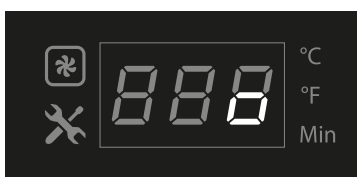
1. After setting temperature, double click the knob to switch to Timer Mode.
2. Turn knob to set the timer from minimum 1 minute to maximum 240 minutes. The LED ring will flash.
3. Click knob 1 time (1x) to confirm and start the count-down.
4. Note the display will show alternately the temperature and the count-down.
5. After the set time is elapsed, the appliance will sound a beeping signal and the unit will automatically shut down if the operator takes no action.

### Turning off

Turn knob to go to the lowest temperature.

When LED ring is flashing, turn knob slightly further to turn off the appliance.

When the unit is switched off, a  appears on the display.



### Additional Settings

Additional settings are available to reduce power level, and to set display to °C or °F.

To activate the additional settings:

1. Press down knob while connecting unit to power outlet.
2. Then turn knob to select setting P1 or P2:
  - P0 = Reserved
  - P1 = Reduce nominal max power from 100% to 25%
  - P2 = Change temperature between °C and °F
  - P3 = Shows the actual Firmware number.
  - P4 = Enable / Disable buzzer (timer function)
  - P5 = Light color of the knob
3. Click knob 1 time (1x) to confirm selection.
4. In P1, turn knob to select power.  
In P2, turn knob to select °C or °F.  
In P4, turn knob to select "on" or "oFF"  
IN P5, turn knob to select a color
5. Click knob 1 time (1x) to confirm selection.
6. To leave the special setting function, keep pressing down the knob for approximately 5 seconds.

### Grease Drawer

- Empty out the grease drawer as often as necessary.
- Before operating the appliance, ensure the grease drawer is placed correctly and securely under the grease chute such that the drawer will not slide out or fall.

 **Caution**

Risk of burn from hot equipment, hot grease and steam. Wear personal protective equipment.

### Considerations

- **Always use a bit of oil on the griddle plate before putting any food on.**
- **Cooking Food from Frozen**  
If you cook food from frozen regularly, do not put the frozen food every time on the same position. Otherwise, the plate could deform locally over time.
- **Using Proper Cooking Utensils**  
Use only the spatula provided to turn over food products on the griddle plate. Using any sharp-edged objects such as knife or fork can damage the griddle surface.
- **Recovering from Temperature Loss**  
Temperature loss occurs when cold food is put on the griddle plate. The RTCSmp technology can immediately sense the temperature drop and correct any temperature loss.

### When Appliance Is Idle

When the induction appliance is not in use, turn it off.

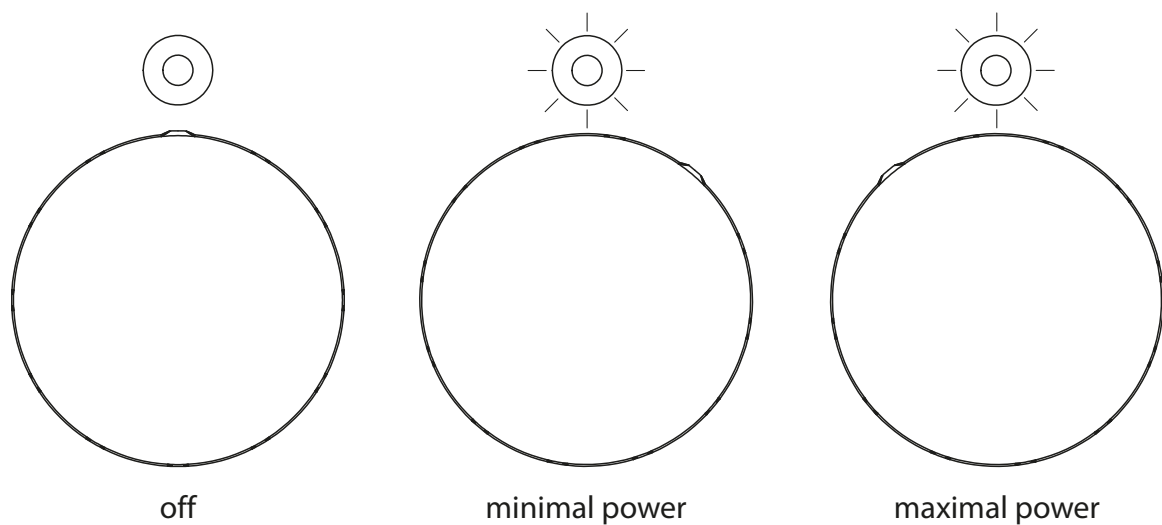
## Short Heat-Up Time

To heat up from 20°C to 200°C [68°F to 392°F], a single cook-zone griddle will take:

- INSTINCT Griddle 3.5 approximately 4 ½ minutes
- INSTINCT Griddle 5, approximately 3 minutes
- INSTINCT Griddle 10, approximately 3 minutes

## Rotary power switch

The induction unit is turned on by turning the power rotary switch (OFF / ON). It is ready for immediate use. The glowing power indicator indicates that energy is transferred to the pan. The power level is set by turning the power selector (the bigger ridge indicates the Position):



## The LED indicates the stat of the device:

- Dark: Device or field is in standby mode.
- Continuous: Device is in cooking mode.
- Blink ones: Device is in pan detection mode.
- Blinks long and multiple times short: Device has an error detected.

## Temperature Monitoring

### Heat sink temperature

The temperature of the heat sink (hereinafter referred to as KK temperature) is monitored by a temperature sensor. The temperature monitoring switches the fan on at 60°C [140°F] KK temperature. If the KK temperature exceeds 80°C [176°F], the energy output is reduced. The error code E12 is output on the display and stored in the error memory. If the KK temperature exceeds 85°C [185°F], the power output is interrupted. The display shows the error code E03.



### **Induction coil**

The temperature of the induction coil is monitored by several temperature sensors simultaneously. When the temperature exceeds 260°C [500°F], the power output is reduced and interrupted at 290°C [554°F]. The display shows error code E47.

In the wok version, the error code E47 already occurs at 200°C [392°F].

### **Device interior temperature**

The temperature in the device interior (hereafter called B temperature) is monitored by a temperature sensor. The temperature control switches on the interior fan at 55°C [131°F] B temperature. When the B temperature exceeds 70°C [158°F], the energy delivered to the induction coil is reduced. The error code E20 is stored in the error memory. If the B temperature exceeds 80°C [176°F], the power output is interrupted, and the error code and the display show the error code E06.

## Safe work during maintenance

### For your safety

Familiarize yourself with the safety instructions on page 4 before starting work.

### Qualification of the personnel for the electrical installation

Only qualified electricians of an authorized after-sales service as defined by EN 50110-1 are allowed to work on the electrical equipment.

### Regulations for electrical installation

To Avoid Risks due to faulty electrical connections, the following regulations must be observed

- The connection to the power supply must be carried out according to the valid local regulations of the professional associations and of the energy supply company.

### Live parts

**⚠ DANGER**

Risk of electric shock from live parts and loose cables.

While opening the cover, touching the live parts may result in an electric shock.

- Work on the electrical system may only be carried out by a qualified electrician by an authorized service center.
- Make sure that the device is de-energized before opening the device.
- Secure the device against being switched on again.
- Before commissioning, make sure that the electrical connections are undamaged and firmly connected.

### Hot surfaces

**⚠ Warning**

Risk of burns due to high temperatures in the cooking area or inside the appliance.

Touching the hotplate or the parts inside the appliance can cause burns.

- Wear personal protective equipment.
- Allow the device to cool to ambient temperature.

### Maintenance

By means of the infrared interface (see chapter 8) it is possible to set and check the function and to carry out a diagnosis.

The following maintenance work must be carried out periodically once a year.

#### Ventilation check

To open the device, see chapter 7.

The correct function of the device can only be guaranteed if the electronics are kept at normal operating temperatures.

- The air supply and air exhaust must not be obstructed
- The air filter must be free of dust or grease deposits
- The air ducts must be free of dirt
- The air must be able to circulate freely through the heat sink
- The fan must be well secured.
- The heat sinks must be mounted correctly.

#### Induction coil check:

- Check the mechanical fastening (are the screws tightened)?
- The coil must be glued firmly to the coil carrier.
- The ferrites must not be loose.
- Broken ferrites must be replaced.
- The measuring sensors must be firmly bonded to the induction coil.

#### General check

To open the device, check chapter 7.

- The protective conductor must be provided with a fan disc on the housing.
- The protective conductor of the power cable must be connected to the housing.
- The screw fasteners must be sufficiently tightened.
- Check the cable insulation for damage and replace the complete cable if necessary.
- Check the cables at the terminals for tension.
- Remove liquids or deposits.
- Remove insects (if there any)
- Check the gasket on the glass

### Testing

#### Induction pans

It is very important in inductive cooking to use induction-compatible pans. The pan bottom is the element in which the heat is generated by the magnetic field. We recommend using only pans specially designed for the induction.

To determine if your pan is suitable, a boiling test should be done. One needs a quantity of water of 1 liter / approx. 20°C [68°F]. The pan should be heated to maximum power level. Meanwhile, the oil-up time is measured. Subsequently, this is compared with the reference time specified by Induc (3.5 kW for about 140 seconds, 5 kW for about 80 seconds, 8 kW for about 60 seconds). The boil-up time provides information about the efficiency that can be achieved with these pans. Poor pans have considerably longer cooking time for the same amount of water.

To determine if the pan material is even induction-compatible, a magnet can be used. The magnet should adhere to the bottom of the pan. However, this test does not say anything about the ladle efficiency and material structure (it can also be a bad induction pan).

#### Hot surfaces

**▲ Warning**

Risk of burns due to high temperatures of the hotplate or inside the appliance.

Touching the hotplate or parts inside the appliance can cause burns.

- Wear personal protective equipment.
- Allow the device to cool to ambient temperature.
- Do not touch the heating zone

#### Pans detection

This test shows whether the induction device is working properly when using small diameter pans and whether small metallic objects are warmed up on the heating zone.

To perform the test, you will need the following material:

- Induction pan with bottom diameter of 12 cm [4.72 inches] or two round iron plates (test plate) untreated, approx. 4 mm [157.5mil] thick:
- Test plate 1: diameter d = 12 cm [4.72 inches]
- Test plate 2: diameter d = 7 cm [2.76 inches]

## Test with pans

Step	Action	Level	Result
1	Put the pan on the middle of the heating zone	1.....12	Heating, operating indicator lights up
2	Move the pan until the edge of the pan is in the middle of the heating zone	1.....12	No heating, operating display switches off

## Test with test plates

Step	Action	Level	Result
1	Put the test plate 1 on the center of the heating zone	1	Heating, operating indicator lights up
2	Put the test plate 2 on the center of the heating zone	1	The fan should switch off automatically

## Fan

### Cooking appliances

In this test, the fans, their monitoring and the degree of contamination are checked. At the beginning of the test, the induction device should be cold.

Step	Action	Level	Result
1	Put the pan with water on the heating zone	12	Heat
2	Measure the time until the fan turns on	12	Fan should turn on after about 8-10 minutes
3	Continue cooking	12	The fan should switch off automatically

## Griddle

The correct function of the device can only be guaranteed if the electronics are kept at normal operating temperatures.

- The air supply and air export must not be obstructed
- The air filter must be free of dust or grease deposits
- The air ducts must be free of dirt
- The air must be able to circulate freely through the heat sink
- Check the mounting screws of the fan
- Check the installation of the heat sink

## Power components - Testing

### Live parts

#### **⚠ DANGER**

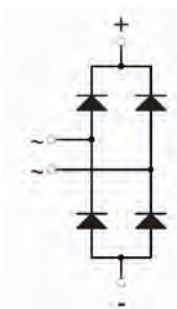
Risk of electric shock from live parts and loose cables.  
When opening the cover, touching the live parts may result in electric shock.

- Work on the electrical system may only be carried out by a qualified electrician by an authorized service center.
- Make sure that the device is de-energized before opening the device.
- Secure the device against being switched on again.
- Before commissioning, make sure that the electrical connections are undamaged and firmly connected.

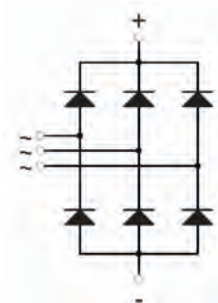
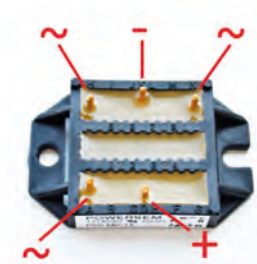
### Rectifier

Two different types of rectifier are used.

NOTE: Type 1 is used for the 3500W devices.



NOTE: Type 2 is used for the 5000W and 8000W devices.



For the rectifier, the forward voltages between the anode and cathode are measured with the multimeter. (please use only multimeter with diode check as additional function).

The forward voltage for the diode is approx. 0.5 V in the direction of the anode - cathode, in the opposite direction there is no passage.

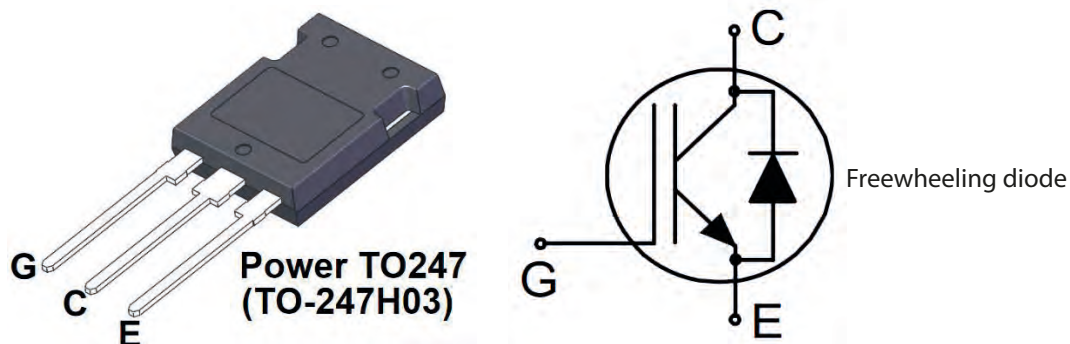
If one of the diodes has a short circuit or interruption, the rectifier is defective and the power unit must be replaced.

## Transistor (IGBT)

The IGBT (Insulated Gate Bipolar Transistor) is connected to the power PCB with three solder contacts.

The IGBT transistor has an integrated freewheeling diode as additional protection. First, we need to measure the forward voltage of this diode. The forward voltage is approx. 0.5V.

If the freewheeling diode has a short circuit or interruption, the IGBT transistor is defective and the power unit must be replaced.



## Fault location / Troubleshooting

### Live parts

#### DANGER

Risk of electric shock from live parts and loose cables.

When opening the cover, touching the live parts may result in an electric shock.

- Work on the electrical system may only be carried out by a qualified electrician by an authorized service center.
- Make sure that the device is de-energized before opening the device.
- Secure the device against being switched on again.
- Before commissioning, make sure that the electrical connections are undamaged and firmly connected.

### As a general rule







While troubleshooting, always check the cabling. The following errors can occur:

- Broken cables
- Bruised cables
- Broken cable insulation
- Lots of crimps













The PCB **must** not be repaired. The power unit must always be replaced as a whole unit.

### Error-Code

The function of the induction unit is continuously checked by the control and monitoring system. If a malfunction is detected, an error code is output on the operating display and stored in the error memory

Error no. in terminal program	Blink Code	Error symbol	Description	Troubleshooting
E01 <a href="#">Page 35</a>	1		Unsuitable induction cooking pan. Hardware overcurrent or power coil not connected <sup>1)</sup>	Check the pan Check the wiring
E02 <a href="#">Page 35</a>	2		Unsuitable induction cooking pan. Software overcurrent <sup>1)</sup>	Check the pan
E03 <a href="#">Page 35</a>	3		Heat sink overheating T > 70°C <sup>1)</sup>	Installation (ventilation) check ⇒ Deep fryer or oven in the immediate vicinity?
E04 <a href="#">Page 36</a>	4 <sup>5)</sup>		Empty cooking, total failure of the sensor unit or sensor unit not connected <sup>1)</sup>	Check sensors
E05 <a href="#">Page 36</a>	5 <sup>6)</sup>		Potentiometer defect	Check the potentiometer Check the wiring
E06 <a href="#">Page 36</a>	6		Interior temperature of the generator is too high > 80°C <sup>1)</sup>	Installation and function (ventilation) check ⇒ Deep fryer or oven in the immediate vicinity?
E07 <a href="#">Page 36</a>	-		Mains current is too low during power output	Control on a missing phase
E08 <a href="#">Page 37</a>	-		Mains voltage too low / high (deviation greater than +/- 10%)	



Error no. in terminal program	Blink Code	Error symbol	Description	Troubleshooting
E10 <a href="#">Page 37</a>	10		CAN bus communication interrupted or disturbed <sup>1)</sup>	Check wiring, faulty display or defective CPU
E12 <a href="#">Page 37</a>	-		Heat sink (KK) Temperature is too high T > 70°C <sup>2)</sup>	Installation (ventilation) check ⇒ Deep fryer or oven in the immediate vicinity?
E20 <a href="#">Page 37</a>	-		Reduction of interior temperature T > 70°C <sup>2)</sup>	Installation (ventilation) check ⇒ Deep fryer or oven in the immediate vicinity?
E21 <a href="#">Page 38</a>	8 <sup>7)</sup>		Heat sink sensor defective <sup>1)</sup>	Replace power unit
E23 <a href="#">Page 38</a>	-		Voltage drop 24V supply <sup>1)</sup>	Power unit
E24 <a href="#">Page 38</a>	8 <sup>7)</sup>		CPU sensor defective <sup>1)</sup>	Check sensor
E29 <a href="#">Page 38</a>	7		Empty cooking or sensor defective. Second security level <sup>1)</sup>	Check sensor
E30 <a href="#">Page 39</a>	6 <sup>8)</sup>		CPU temperature central unit > 100°C <sup>1)</sup>	Check installation, Improve cooling
E41 <a href="#">Page 39</a>	4 <sup>5)</sup>		Hob sensor 1 overheated or defective <sup>1)</sup>	Check cooking process, Check sensor 1 Standard value: 1080 Ω @ 25°C [77°F]
E42 <a href="#">Page 39</a>	4 <sup>5)</sup>		Hob sensor 2 overheated or defective <sup>1)</sup>	Check cooking process, Check sensor 2 Standard value: 1080 Ω @ 25°C [77°F]
E43 <a href="#">Page 39</a>	4 <sup>5)</sup>		Hob sensor 3 overheated or defective <sup>1)</sup>	Check cooking process, Check sensor 3 Standard value: 1080 Ω @ 25°C [77°F]
E44 <a href="#">Page 39</a>	4 <sup>5)</sup>		Hob sensor 4 overheated or defective <sup>1)</sup>	Check cooking process, Check sensor 4 Standard value: 1080 Ω @ 25°C [77°F]
E45 <a href="#">Page 40</a>	4 <sup>5)</sup>		Hob sensor 5 overheated or defective <sup>1)</sup>	Check cooking process, Check sensor 5 Standard value: 1080 Ω @ 25°C [77°F]
E46 <a href="#">Page 40</a>	4 <sup>5)</sup>		Hob sensor 6 overheated or defective <sup>1)</sup>	Check cooking process, Check sensor 6 Standard value: 1080 Ω @ 25°C [77°F]
E47 <a href="#">Page 40</a>	4 <sup>5)</sup>		Hob overheats or sensors reversed <sup>1)</sup>	Check sensor connection

- 1) The power output is interrupted immediately
- 2) The device continues to operate at reduced power
- 3) Applies to INSTINCT Hob and Wok only
- 4) Applies only to INSTINCT Hob 10 and INSTINCT Griddle 10
- 5) E04, E41 - E46 have the same Error Blink Code
- 6) E06 and E30 have the same Error Blink Code
- 7) E21 and E24 have the same Error Blink Code

## Error No. 01

Hardware overcurrent or power coil not connected

Cause	What has to be checked	Action
Unsuitable induction pan	Check pan material	Replace pan
No coil current, hardware overcurrent	Check the coil	Replace the coil
	Check wiring	Fix wiring
Electric circuit coil	IGBT Test	Replace power unit
	CPU Test	Replace CPU
	Check capacitors	Replace power unit

## Error No. 02

Software overcurrent <sup>1)</sup>

Cause	What has to be checked	Action
Coil current too high	Check the coil. • Coil type • Wiring	Replace the coil
Aluminum pan <sup>2)</sup>	Check pan material	Change / compare pan
IGBT defective	IGBT measure	Replace power unit

<sup>1)</sup> Only INSTINCT Hob 3 / 3.5 / 5, INSTINCT Wok 3 / 3.5 / 5 / 8, INSTINCT Griddle 3 / 3.5 / 5

<sup>2)</sup> Griddle excluded

## Error No. 03

Heat sink overheating  $T > 70^{\circ}\text{C}$  [158°F]

Cause	What has to be checked	Action
Temperature sensor for heat sink defective (the error occurs immediately)	Plug for the heat sink sensor	Replace power unit
Inadequate Ventilation (the error occurs after some time)	Air intake filter dirty	Clean / replace air intake filter
	Device placement • Insufficient air outlet	Distances were not kept
Fan is defective / dirty (the error occurs after some time)	Check fan • Fan is spinning • Fan is dirty	Replace fan
Defective fuse	Check fuses	Replace fuse
Power supply I120 is defective <sup>1)</sup>	Measure voltage 24VDC +/- 10%	Replace power supply
Power unit or CPU is defective	Switch on fan via infrared interface and measure voltage for the fan (24VDC +/- 10%)	Replace power unit / CPU

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

### Error No. 04

Sensor reports too high temperature on the cooking surface <sup>1)</sup>

Cause	What has to be checked	Action
Sensor connection	Is the sensor onnected correctly?	Connect sensor correctly
	Check sensor unit channel 1 and channel 2	Replace sensor unit channel 1 and channel 2
Temperature sensor defective (Error occur immediatly)	Check the resistance of the PT1000 sensors (about 1.08kΩ @ 25°C [77°F])	Replace the sensor unit
Temperature sensor reports a too high temperature after some time	Frying pan without content (empty cooking)	Remove the pan from the heat and let the cooking surface cool down
	Pan is not suitable for the high power	Replace the pan and let the cooking surface cool down
	By means of infrared interface check the sensor temperatures and their rise	Replace the sensor unit

<sup>1)</sup> Only INSTINCT Hob 3 / 3.5 / 5, INSTINCT Wok 3 /3.5 / 5 / 8, INSTINCT Griddle 3 / 3.5 / 5

### Error No. 05

Defect Potentiometer or wiring

Cause	What has to be checked	Action
Defect Potentiometer	Check wiring and Connections	Replace defect component
	Check Potentiometer with IR	Replace potentiometer

### Error No. 06

Interior temperature > 75°C [149°F]

Cause	What has to be checked	Action
Device interior temperature is too high (Error occurs immediatly)	Read out interior temperature via infrared interface ➔ <a href="#">Page 35</a>	Replace CPU Replace control unit
Error occurs only after some time	Check ambient temperature	Eliminate external heat source
	Heating the cooking area	Install active ventilation for stove top sheet

### Error No. 07

The mains current is too low during the power output.

Cause	What has to be checked	Action
Generator	Check wiring	Replace the cable, connect the cable correctly
	Check IGBT and rectifier	Replace power unit
	Check CPU	Replace CPU
	Check power supply	Replace power supply
Control Unit	Check wiring	

1) Only INSTINCT Hob 10 and Griddle 10

## Error No. 08

Mains voltage too low / high <sup>1)</sup>

Cause	What has to be checked	Action
Power fluctuations or inappropriate device	Check the mains voltage	Please contact your distributor

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

## Error No. 10

Cause	What has to be checked	Action
Defective Wiring	Check wiring	Replace the cable
Display print defect	Check display print	Replace display print
Defective CPU	Check CPU	Replace CPU

## Error No. 12

Heat sink overheating  $T > 65^{\circ}\text{C}$  [ $149^{\circ}\text{F}$ ] <sup>1)</sup>

Cause	What has to be checked	Action
Temperature sensor for heat sink defective (the error occurs immediately)	Plug for heat sink sensor	Replace power unit
Inadequate ventilation (the error occurs after some time)	Dirty air intake filter	Clean / replace air intake filter
	Device placement • Insufficient air outlet	Distances were not kept
Fan is defective / dirty (the error occurs after some time)	Check fan • Fan is spinning • Insufficient air outlet	Replace fan
Defective fuse	Check fuses	Replace fuse
Power supply I120 is defective	Measure voltage 24VDC +/- 10%	Replace power supply
Defective Power unit or CPU	Switch on fan via infrared interface and measure voltage for the fan (24VDC +/- 10%)	Replace power unit / CPU

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

## Error No. 20

Interior temperature  $> 65^{\circ}\text{C}$  [ $149^{\circ}\text{F}$ ] <sup>1)</sup>

Cause	What has to be checked	Action
Device interior temperature is too high (Error occurs immediately)	Read out interior temperature via infrared interface <a href="#">↪ Page 81</a>	Replace CPU Replace control unit
Error occurs after some time	Check ambient temperature	Eliminate external heat source
	Heating the cooking plate	Install active ventilation for stove top sheet

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

### Error No. 21

Heat sink Sensor is defective or unplugged

Cause	What has to be checked	Action
Temperature sensor for heat sink defective (the error occurs immediately)	Plug for heat sink sensor	Replace power unit
Inadequate ventilation (the error occurs after some time)	Dirty air intake filter	Clean / replace air intake filter
	Device placement • Insufficient air outlet	Distances were not kept
Fan is defective / dirty (the error occurs after some time)	Check fan • Fan is spinning • Fan is dirty	Replace fan
Defective fuse	Check fuses	Replace fuse
Power supply I120 is defective <sup>1)</sup>	Measure voltage 24VDC +/- 10%	Replace power supply
Defective Power unit or CPU	Switch on fan via infrared interface and measure voltage for the fan (24VDC +/- 10%)	Replace power unit / CPU

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

### Error No. 23

Voltage drop of the 24V power supply

Cause	What has to be checked	Action
Defective power supply	24VDC measuring	Replace power unit <sup>1)</sup>

<sup>1)</sup> Only INSTINCT Hob 3.5/5, INSTINCT Wok 3.5/5/8 and Griddle 3.5/5

### Error No. 24

Board sensor defective <sup>1)</sup>

Cause	What has to be checked	Action
CPU defective sensor	Read out temperature via infrared interface	Replace CPU

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

### Error No. 29

Hardware shutdown <sup>1)</sup>

Cause	What has to be checked	Action
Sensor unit failed	Read out sensors via infrared interface	Replace sensor unit
Defective power unit	Wiring coil connections	Replace power unit

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

## Error No. 30

Control unit I133 over temperature  $T > 100^{\circ}\text{C}$  [ $212^{\circ}\text{F}$ ]<sup>1)</sup>

Cause	What has to be checked	Action
I133 defective (the error occurs immediately when switching on)	Read out temperature via infrared interface	Replace I133 <sup>1)</sup>
Inadequate ventilation (the error occurs after some time)	Dirty air intake filter	Clean / replace air intake filter
	Device placement • Insufficient air outlet	Distances were not kept
Fan is defective / dirty (the error occurs after some time)	Check fan • Fan is spinning • Fan is dirty	Replace fan

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10

## Error No. 41

Sensor 1 is overheated or defective

Cause	What has to be checked	Action
Sensor defect	Read out temperature via infrared interface	Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

## Error No. 42

Sensor 2 is overheated or defective

Cause	What has to be checked	Action
Sensor defect	Read out temperature via infrared interface	Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

## Error No. 43

Sensor 3 is overheated or defective

Cause	What has to be checked	Action
Sensor defect	Read out temperature via infrared interface	Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

## Error No. 44

Sensor 4 is overheated or defective

Cause	What has to be checked	Action
Sensor defect	Read out temperature via infrared interface	Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

## Error No. 45

Sensor 5 is overheated or defective

Cause	What has to be checked	Action
Sensor defect	Read out temperature via infrared interface	Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

## Error No. 46

Sensor 6 is overheated or defective

Cause	What has to be checked	Action
Sensor defect	Read out temperature via infrared interface	Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

## Error No. 47

Cooking surface overheated or sensors reversed <sup>1)</sup>




Cause	What has to be checked	Action
Sensors reversed	Read out temperature via infrared interface	Swap sensors Replace sensor unit
Unsuitable pan / pot	Check pan material	Replace pan / pot

<sup>1)</sup> Only INSTINCT Hob 10 and Griddle 10



### Fault location without Error Code

Despite the monitoring of the components in the induction cooking appliance, it can lead to errors that cannot be displayed. These are listed below.




Symptom	Possible Error	Troubleshooting
Pan or grill will not get hot. Display is off (dark)	No electricity	Plug in the device Replace fuses Replace the cable
	Device is switched off	Press the knob and turn it clockwise until the desired power level is displayed.
	Defective display Read out error via infrared interface	Replace display
	Defective power supply	Replace power supply
	Defective power unit	Replace power section
The pan does not get hot and the symbol for no pan lights up.	Pan is too small	Use an induction pan with min. 12cm diameter.
	Pan is not in the center of the cooking surface. (Pans are not detected by pan detector)	Put the pan in the middle of the cooking surface.
	Unsuitable pan	Use only suitable pans for induction.
	Defective power unit	Replace power unit
Pan is not hot properly. LED ring lights	Ventilation is blocked.	Check if the ventilation is not blocked. Check if the air filter is clean.
	Unsuitable pan	Not every pan sold for induction is suitable for professional induction devices. Compare different pans.
	The ambient temperature is too high. The device cannot be sufficiently cooled.	Make sure that no hot air is sucked in through the fan. The intake air must be below 40°C [104°F]
	Power supply <ul style="list-style-type: none"> <li>• All phases available</li> <li>• Fuses intact</li> <li>• Cable intact</li> </ul>	Replace fuses Replace the cable
The device does not respond to the commands of the rotary knob.	Broken knob	Take the pan off the stove and unplug the appliance. Please inform your distributor.
Fan symbol lights up and the fan switches on 	The ventilation is blocked. The internal fan is dirty. ⇒ Deep fryer, oven (hot environment > 40°C [104°F])	Make sure that the ventilation is not obstructed. Make sure the Air filter is clean
Fan symbol lights up and the fan is not running 	Defective fan or fan control	Turn off the device and unplug it. Inform the support.
Symbol for overheated pan lights up. 	Induction coil is too hot. Overheated cooking surface. Overheated pan.	Turn off the device. If present, remove the pan. Wait until the device has cooled down before switching it on.

<b>Symptom</b>	<b>Possible Error</b>	<b>Troubleshooting</b>
Small metallic objects (e.g., spoons) are heated on the cooking surface.	Flame detector is defective.	Replace power unit.
Pan Jumps on the ceramic surface	The pan contains too much aluminum. As a result, currents flow in the pan bottom which build up a magnetic field. The magnetic fields of the pan and the cooking utensil are opposite. This will jump the pan	Pan is unsuitable for this application. Replace pan.

---

### Replacement of spare parts

To ensure safety, only original spare parts may be used. If original spare parts are not used anyway, then any liability for follow-up costs expires. Before you can carry out repair or maintenance work on the induction unit, it must be completely cooled.

	Before repair or maintenance tasks run on the induction unit, disconnect the unit from the mains. Make sure that there is no residual charge.
	The induction unit may only be opened by a trained service personnel. Dangerous voltage!
	Before moving or opening the unit, make sure that it has cooled down completely.

### Repair with spare parts

The repair of spare parts must be performed only by INDUCS AG trained technicians.

No soldering work may be performed on the electronics. Only the following parts may be replaced: complete power unit, power supply unit, CPU, rotary knob, wiring, mains filter, mains cable, sensor unit, induction coil.

If warranty claims are made, defective power parts, printed circuit boards of any kind or sensor units must be returned to INDUCS AG with a detailed description of the fault and the serial number of the device. Other defective parts (mains cable and the like) can be disposed properly on site.

### Construction

Follow to remove the component of the statement. To insert the new component, proceed in reverse order.

NOTE: The images may differ from the actual component installed.

### Device Types

INSTINCT (table top unit) [page SW1](#)

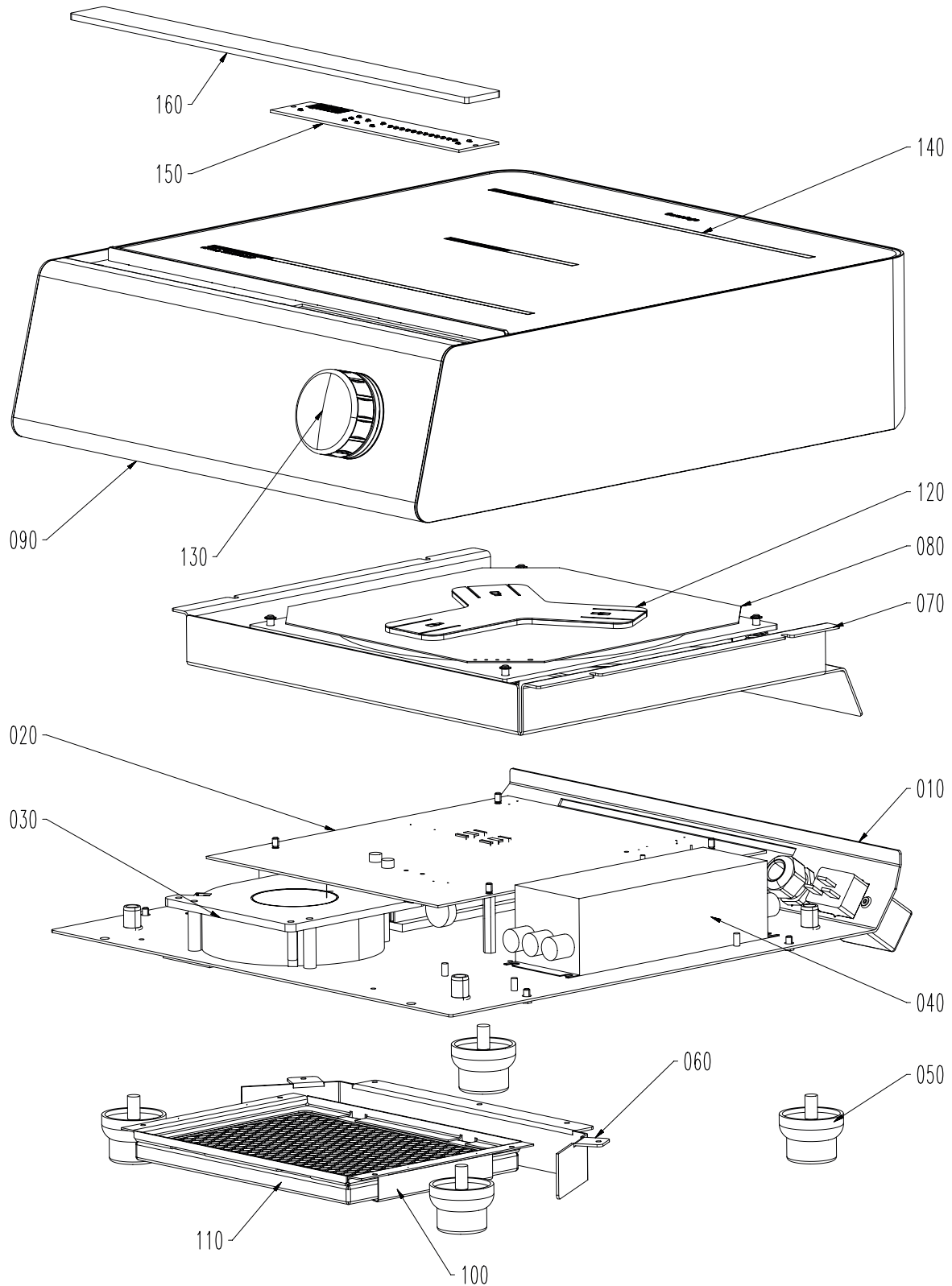
Compactmodul Dual [page 60](#)

Compactmodul Single [page 69](#)

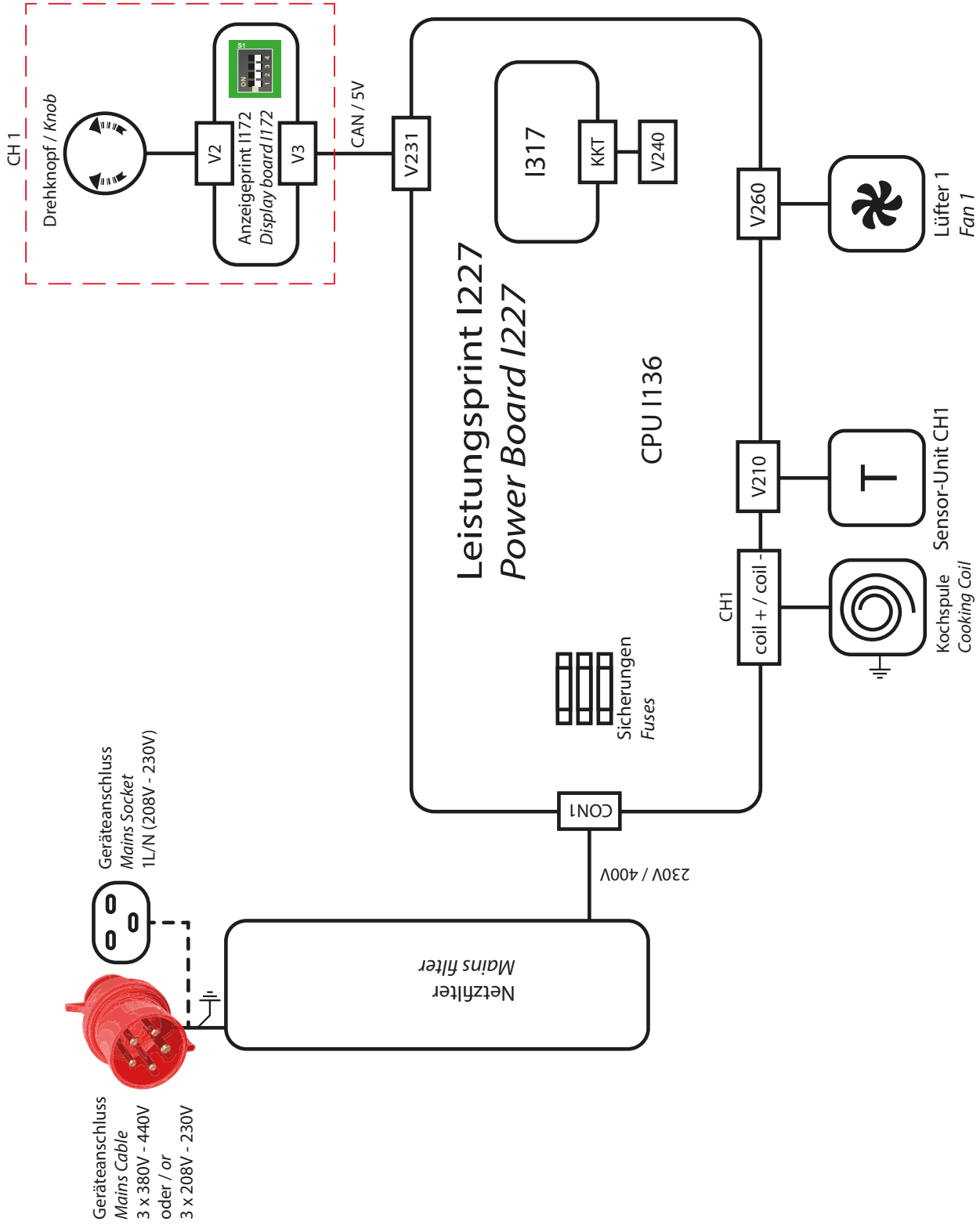
## INSTINCT

### INSTINCT Hob 3.5 / 5

#### Exploded View

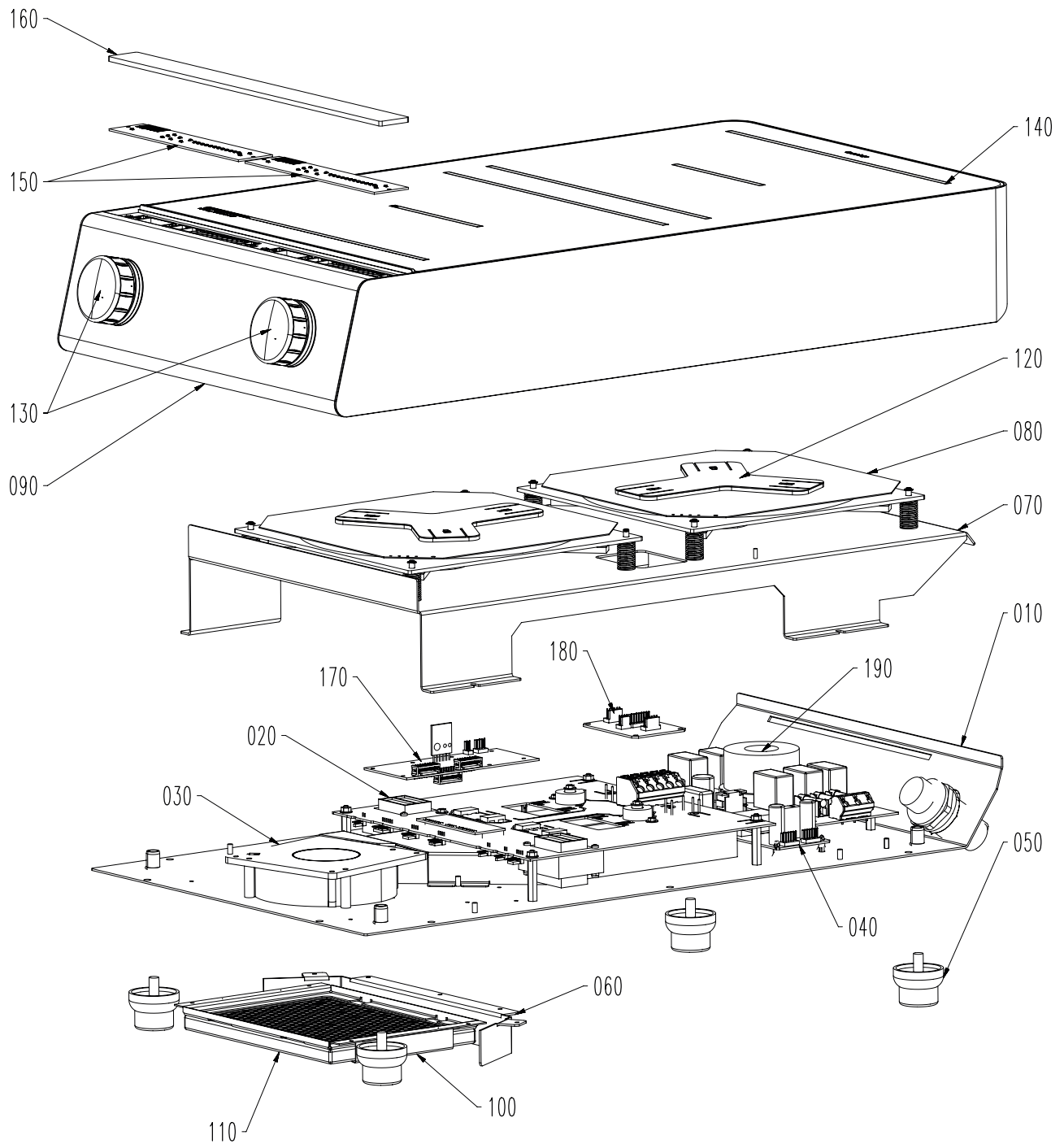


**Wiring Diagram**

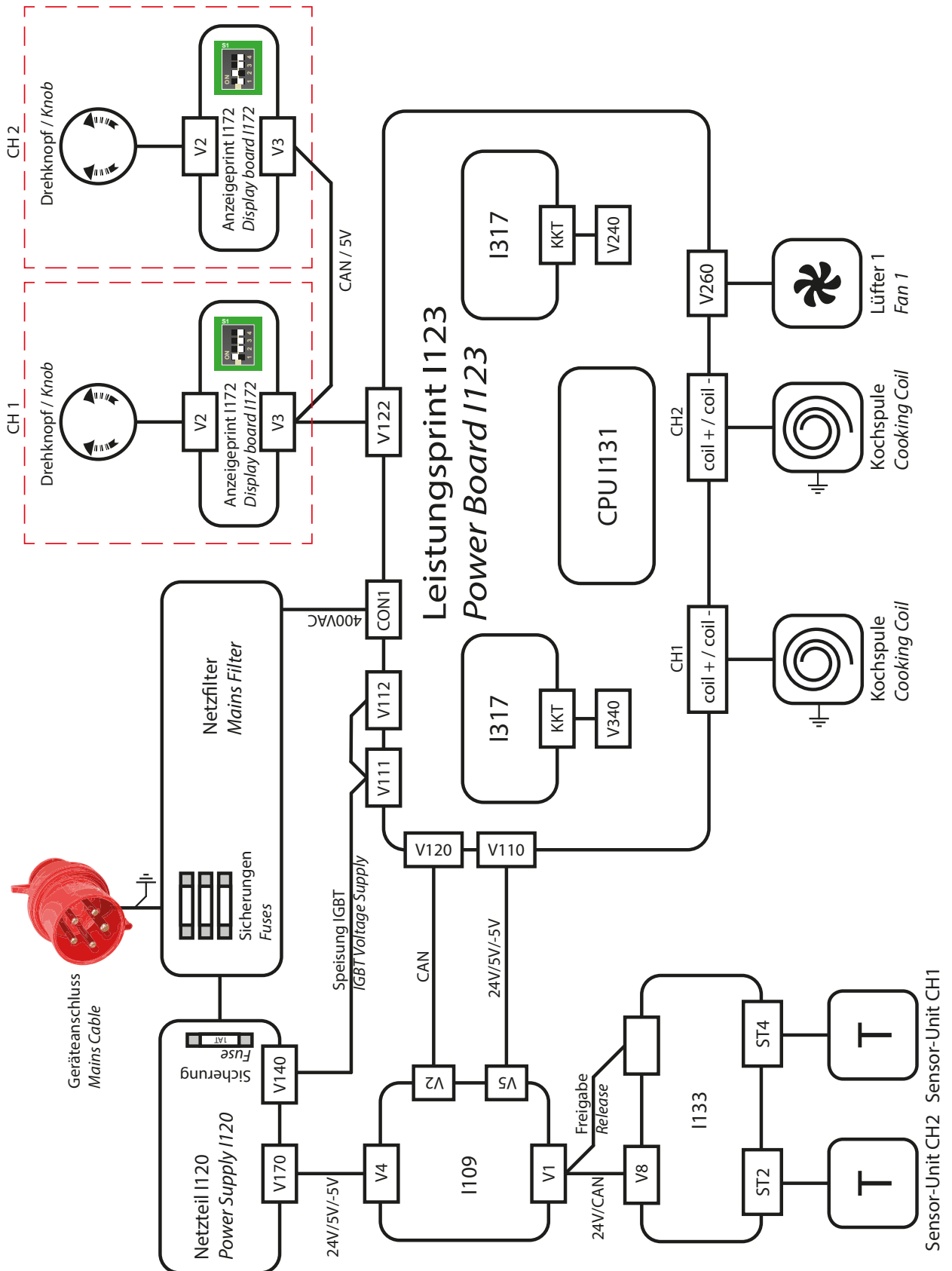


## INSTINCT Hob 10

### Exploded View

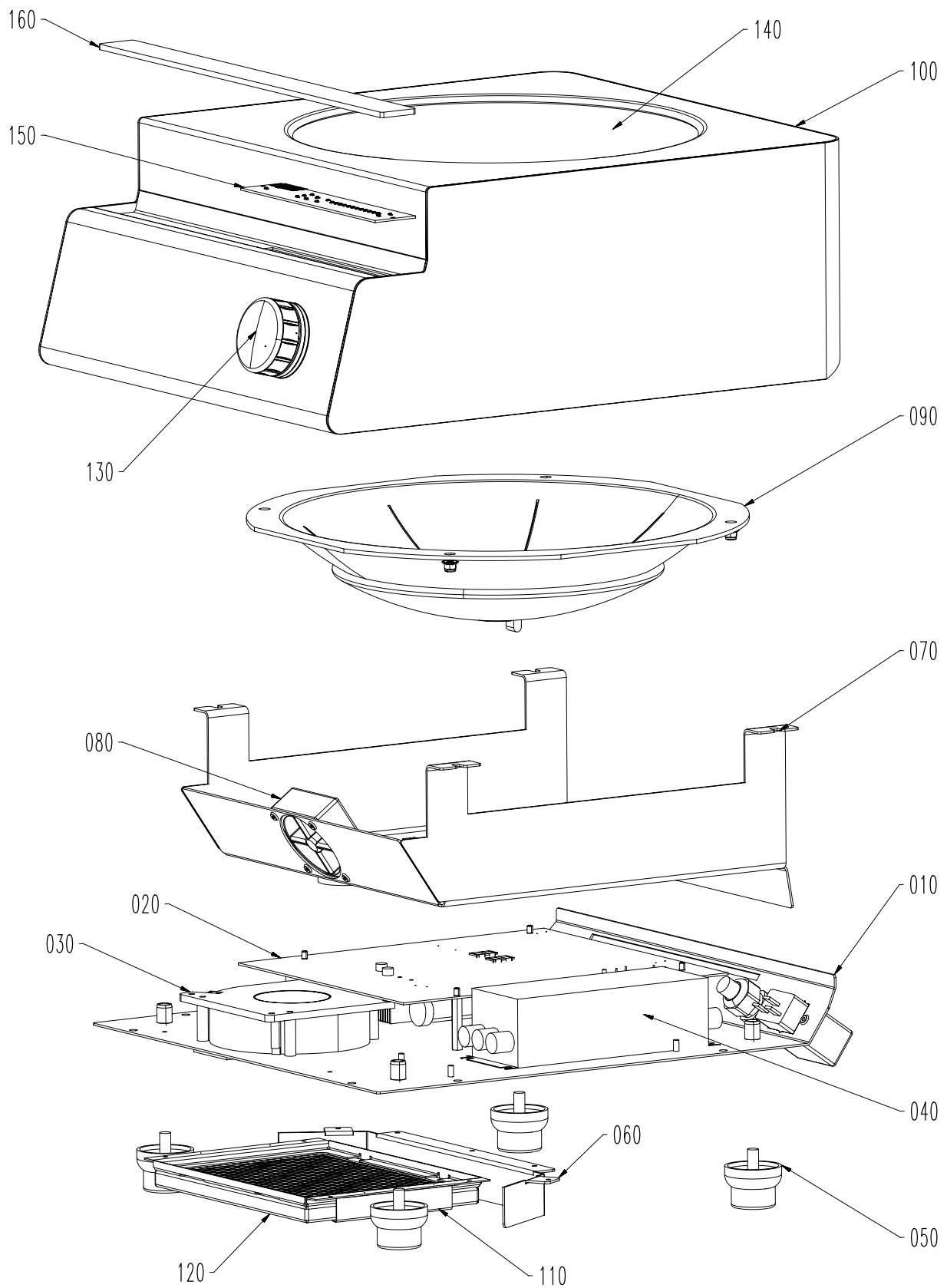


Wiring Diagram



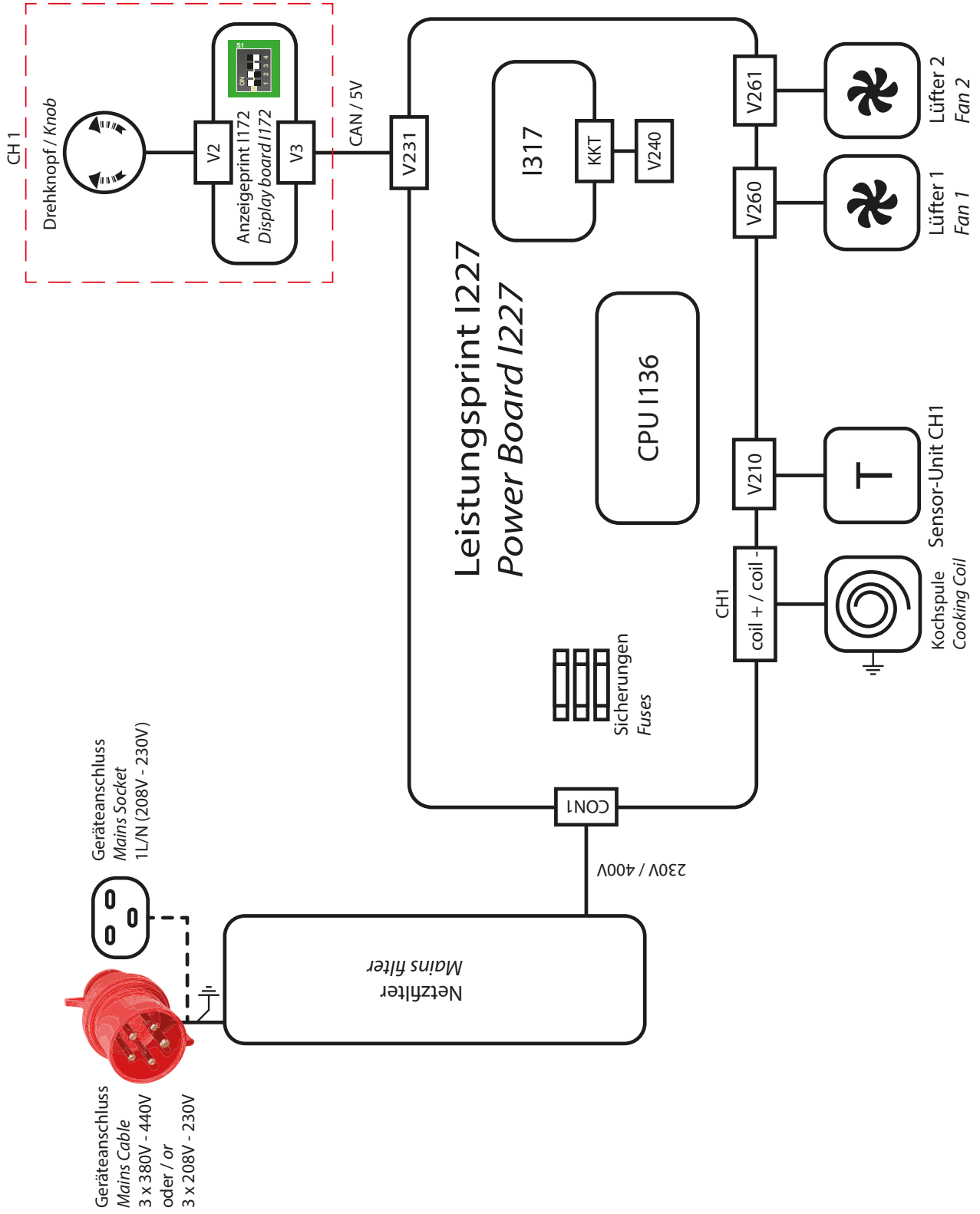
## INSTINCT Wok 3.5 / 5 / 8

### Exploded View



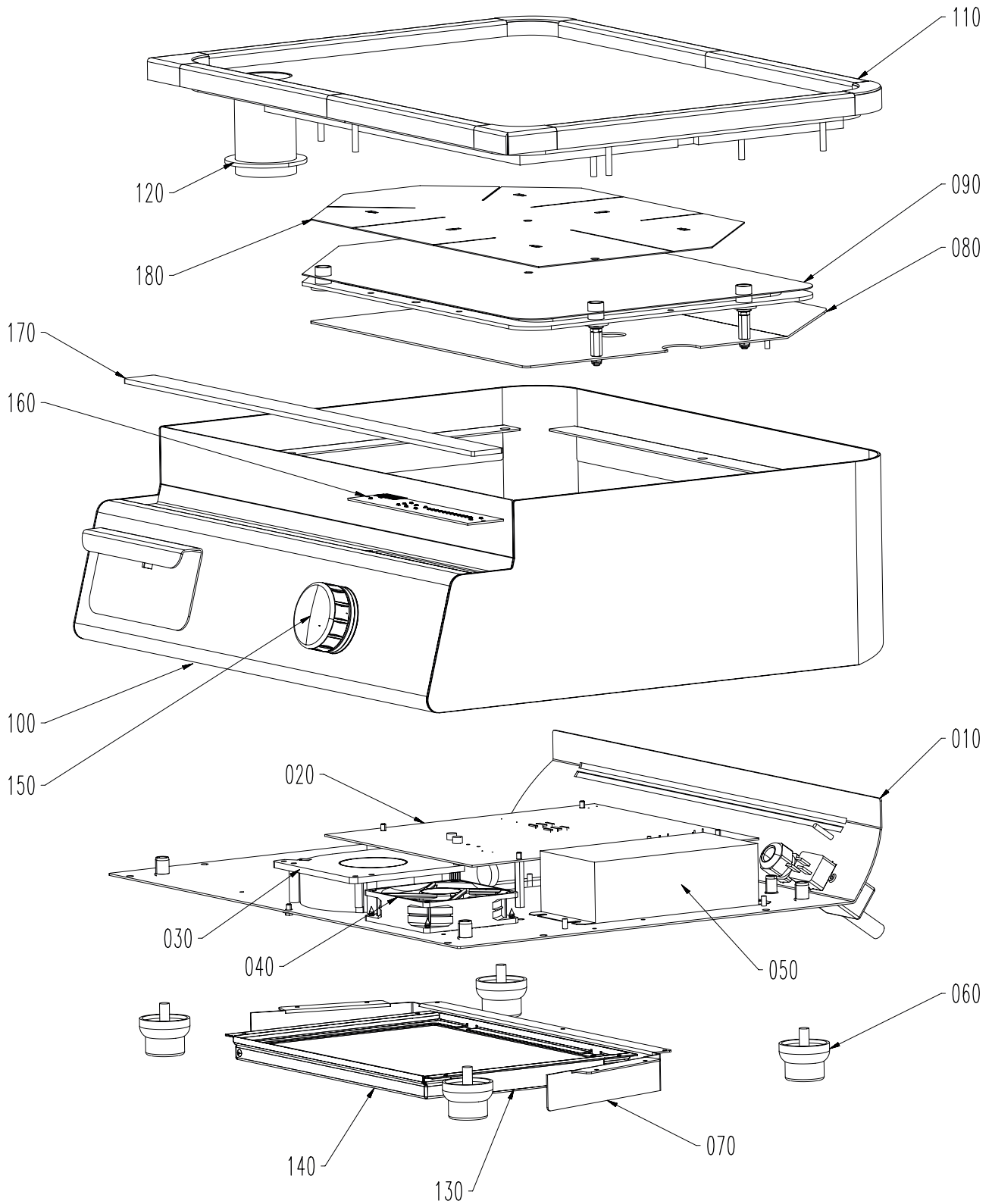


Wiring Diagram

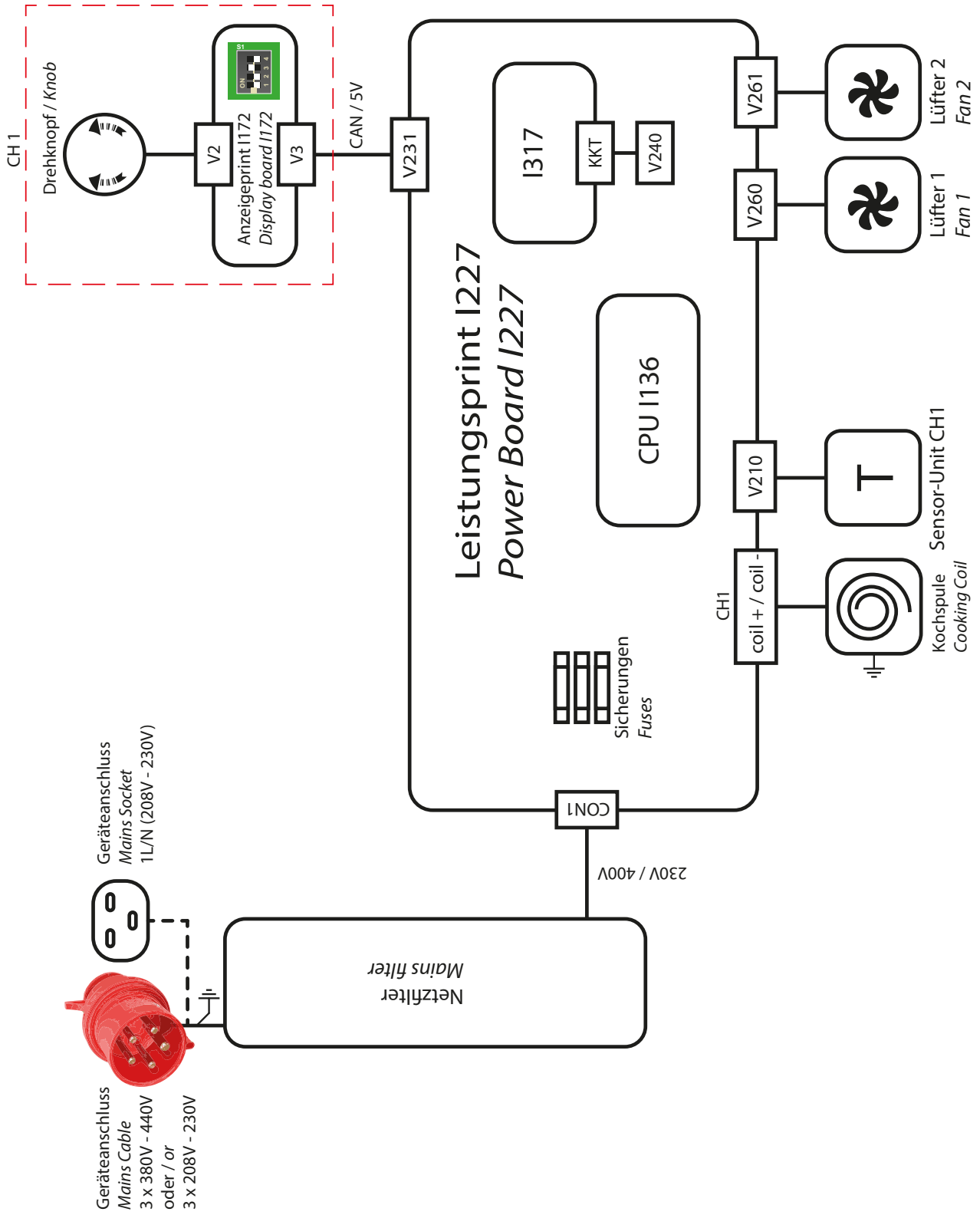


## INSTINCT Griddle 3.5 / 5

### Exploded View

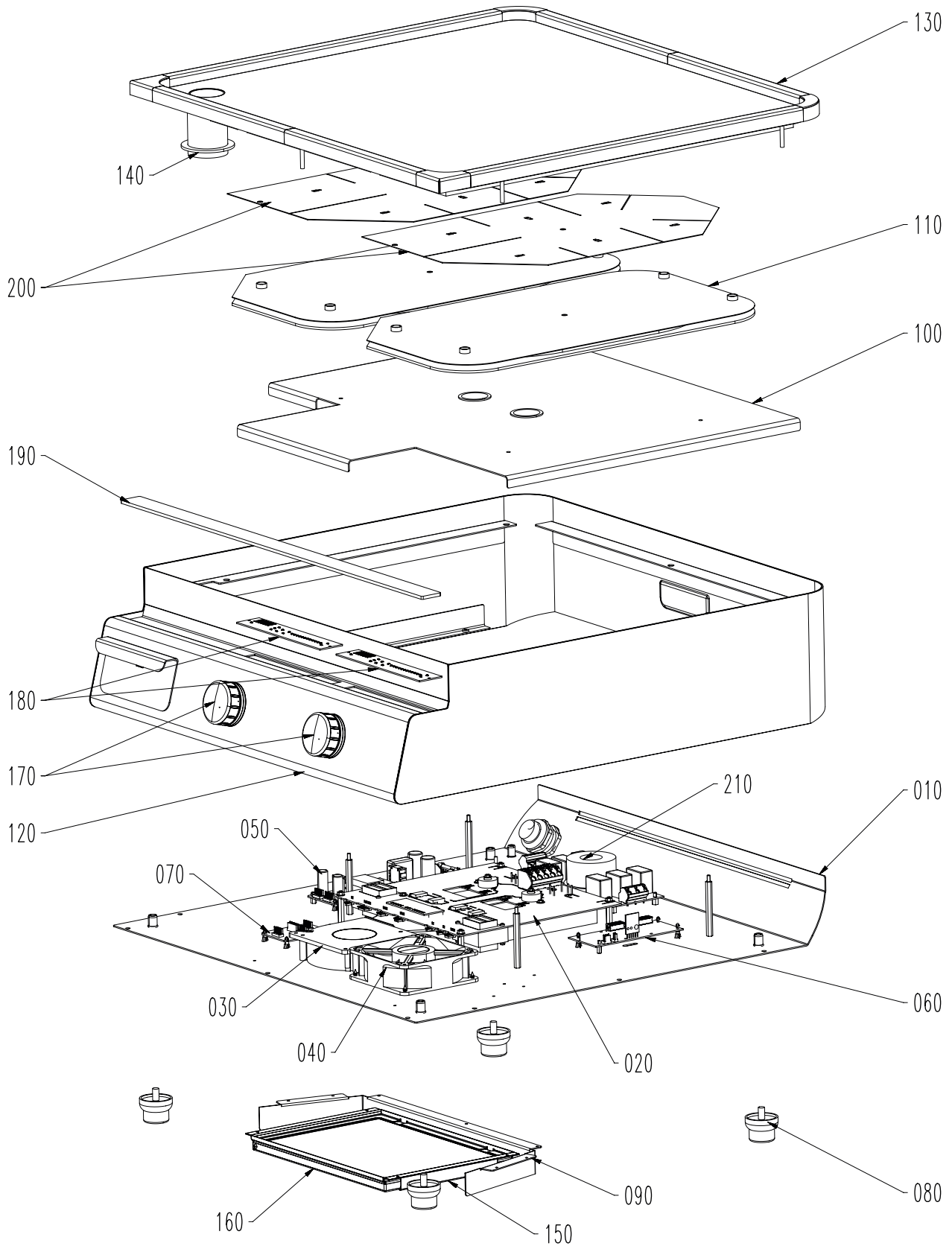


**Wiring Diagram**

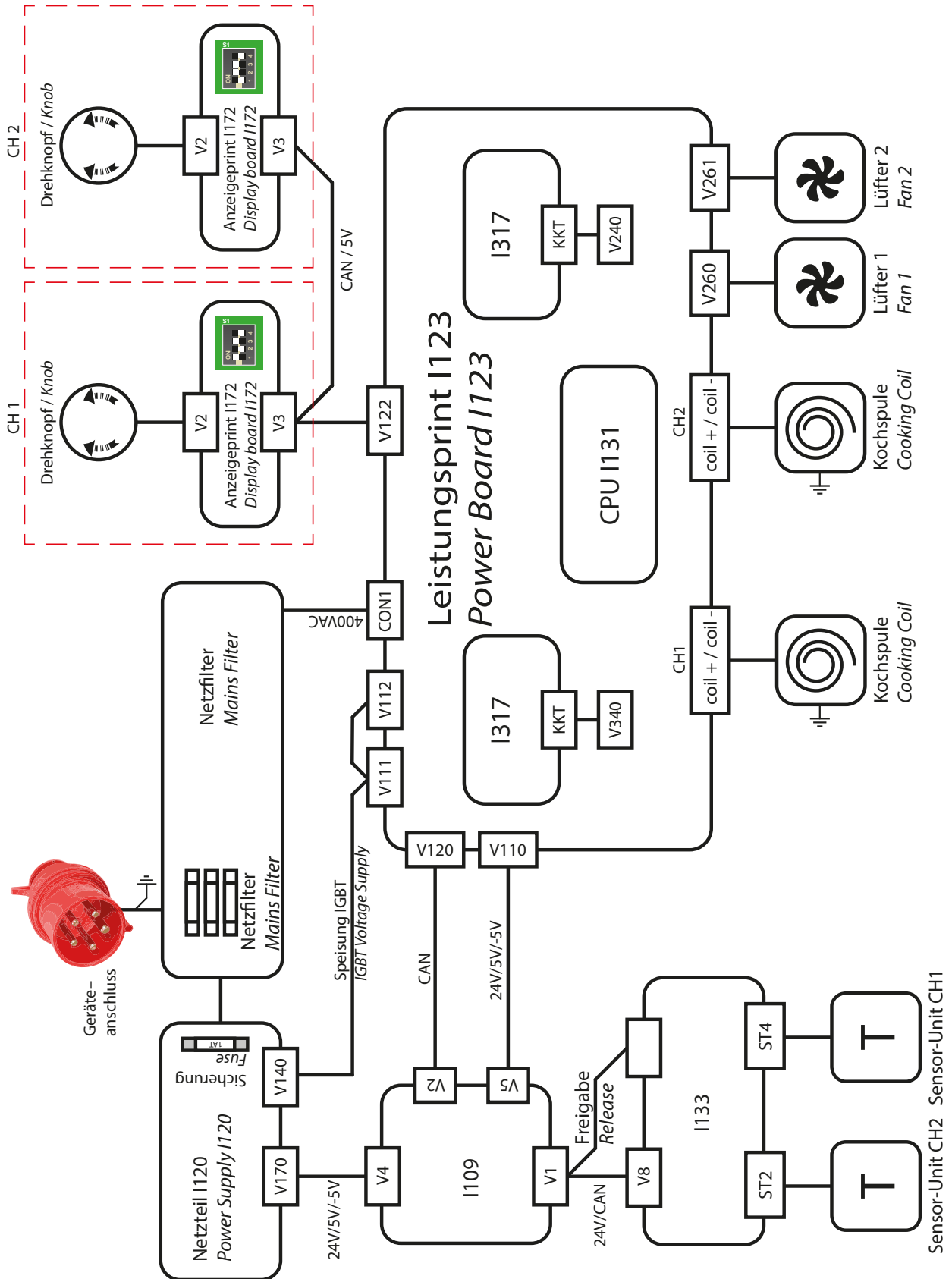


## INSTINCT Griddle 10


### Exploded View



**Wiring Diagram**

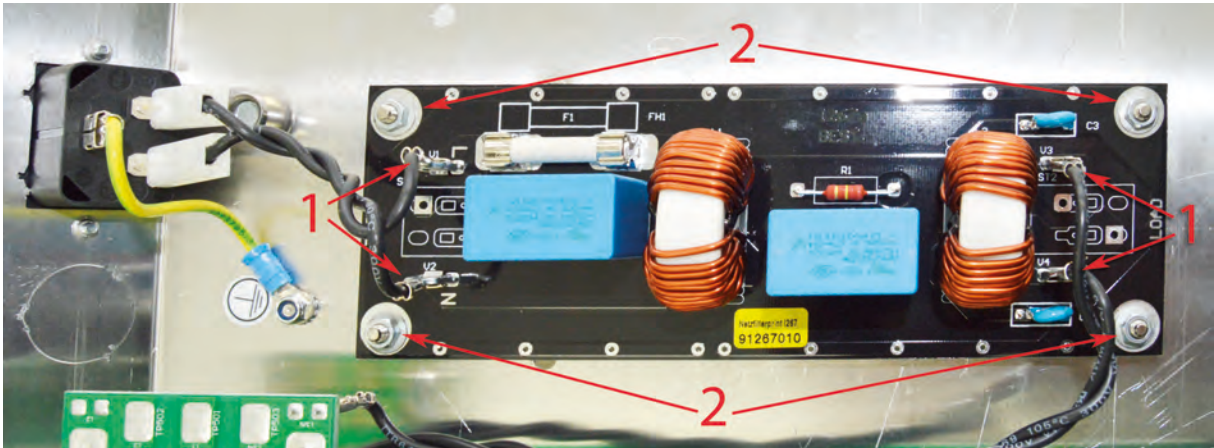


## Open Unit

Step	Description
1	Place the device on the work surface, face down. Make sure that the device can not be scratched. If necessary, cover the work surface.
2	Unscrew 6 hexagon head screws (M4x8)
	
3	Gently turn the device back on the feet
4	Lift the lid carefully. Pay attention to cables.
5	Disconnect the sensor and CAN cables.
6	Loosen the two screws of the coil cable. The griddle also has to be grounded.
7	Carefully remove the upper part and place it upside down on the work surface.

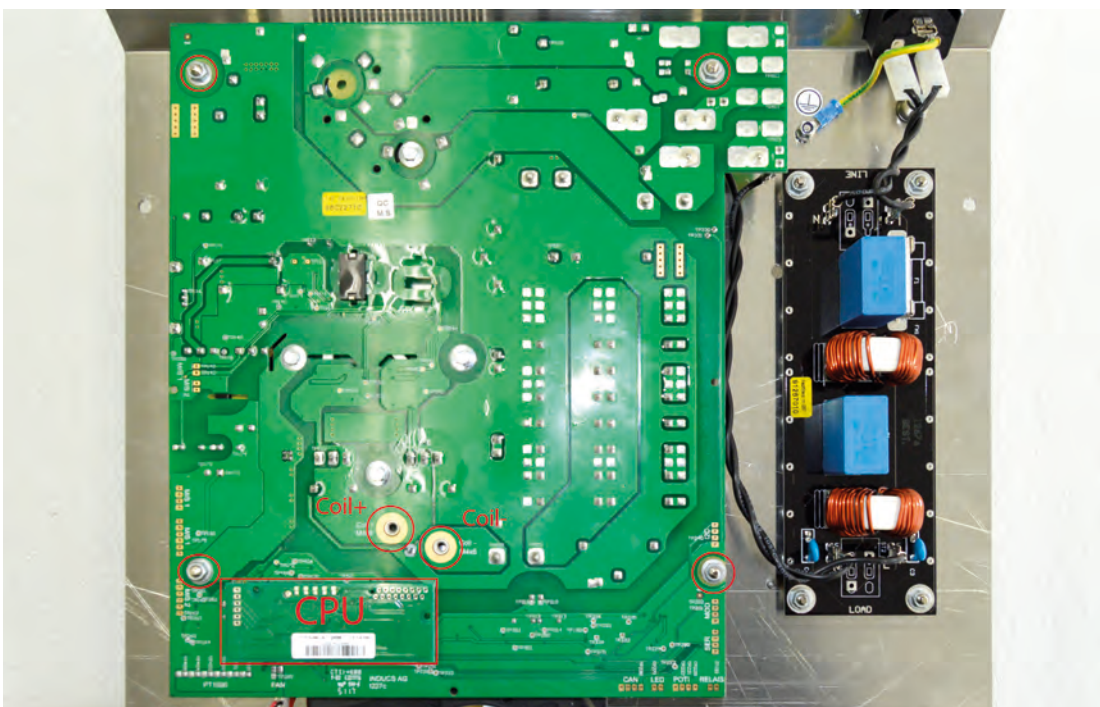
### Replacing mains filter

Step	Description
1	Remove the cable from the mains filter.
2	Loosen 4 screws (Attention a screw is used as a ground connection and provided with a fan disc)



### Replacing power units

Step	Description
1	Disconnect the fan on the side of the power unit
2	Remove mains cables from power unit
3	Loosen the 4 screws
4	Remove the power unit



## Replacing fan

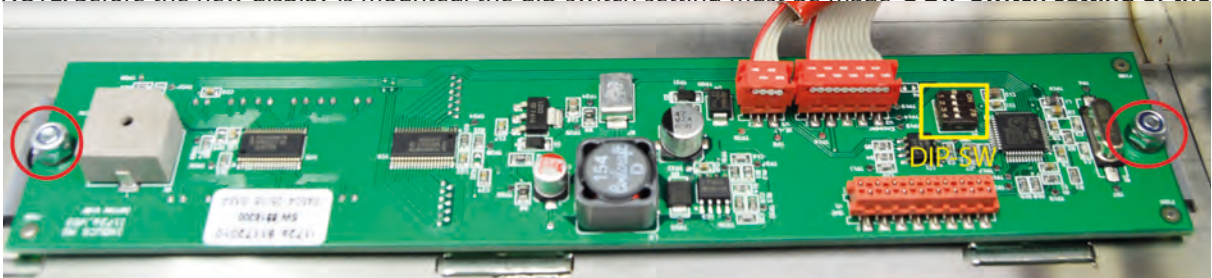
Step	Description
1	Disconnect the fan
2	Remove the air filter
3	Release the 3 screws and remove the fan



## Replacing display

Step	Description
1	2 unplug the cable
2	Release 2 screws
3	Remove display Print

NOTE: Before the new display is mounted, the dip-switch setting must be made → **DIP Switch setting of the**

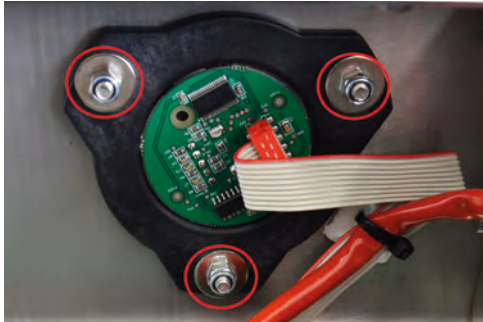


display print I172 – SW1



### Replace operation

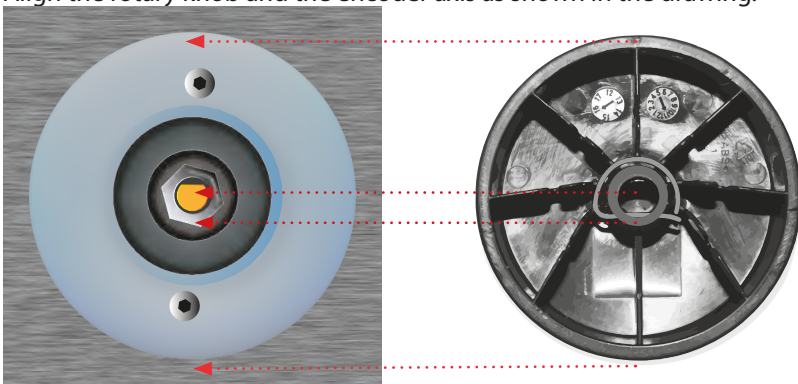
Step	Description
1	Remove cable
2	Release the 3 screws
3	Remove unit



### Removing and attaching the wheel

NOTE: Inducs recommends replacing the complete control unit if the rotary knob is defective.

NOTE: If the wheel has to removed, the instructions are to be followed strictly!

Step	Description
1	Remove the rotary knob Align the rotary knob and the encoder axis as shown in the drawing.
2	 <p>The flattened side of the metal bracket comes on the round side of the encoder axis.</p>
3	Attach the rotary knob

## Replacing coil

### INSTINCT Hob

Step	Description
1	Loosen the screws with which the coil carrier is fastened in the housing.
2	Lift coil carrier out of housing
3	Release cable of shielding
4	Remove the coil

### INSTINCT Wok

Step	Description
1	Loosen the screws with which the coil carrier is fastened in the housing.
2	Lift coil carrier out of housing
3	Release cable of shielding
4	Remove the coil

### INSTINCT Griddle

Step	Description
1	Loosen the screws with which the coil carrier is fastened in the housing.
2	Lift coil carrier out of housing
3	Release cable of shielding
4	Remove the coil

## Replacing coil

---

### Replacing sensor unit

#### INSTINCT Hob

Step	Description
1	Remove the coil as described in the paragraph above
2	Remove cable tie
3	Detach sensor unit from induction coil
4	Carefully remove silicone residue from the Induction coil
5	Secure the new sensor with silicone (Novasil S46 Art. No. 70000014 or Pactan 7076 Art. No. 70000015) or with high-temperature adhesive tape

#### INSTINCT Wok

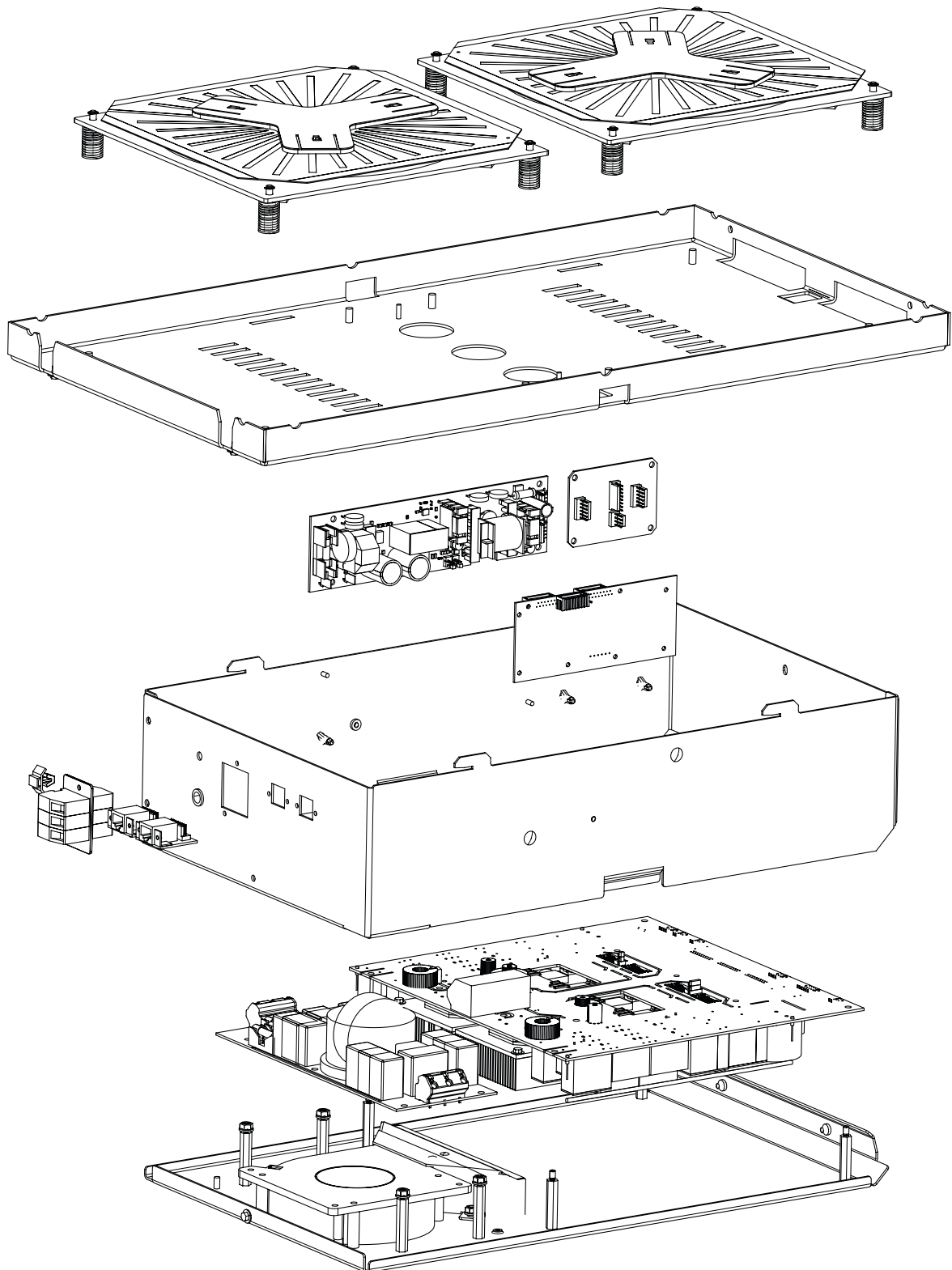
The sensors on the wok coil are very difficult to replace. Therefore, replace the complete coil.

#### INSTINCT Griddle

Step	Description
1	Remove the coil as described in XYZ
2	Remove insulation
3	Remove sensor plate

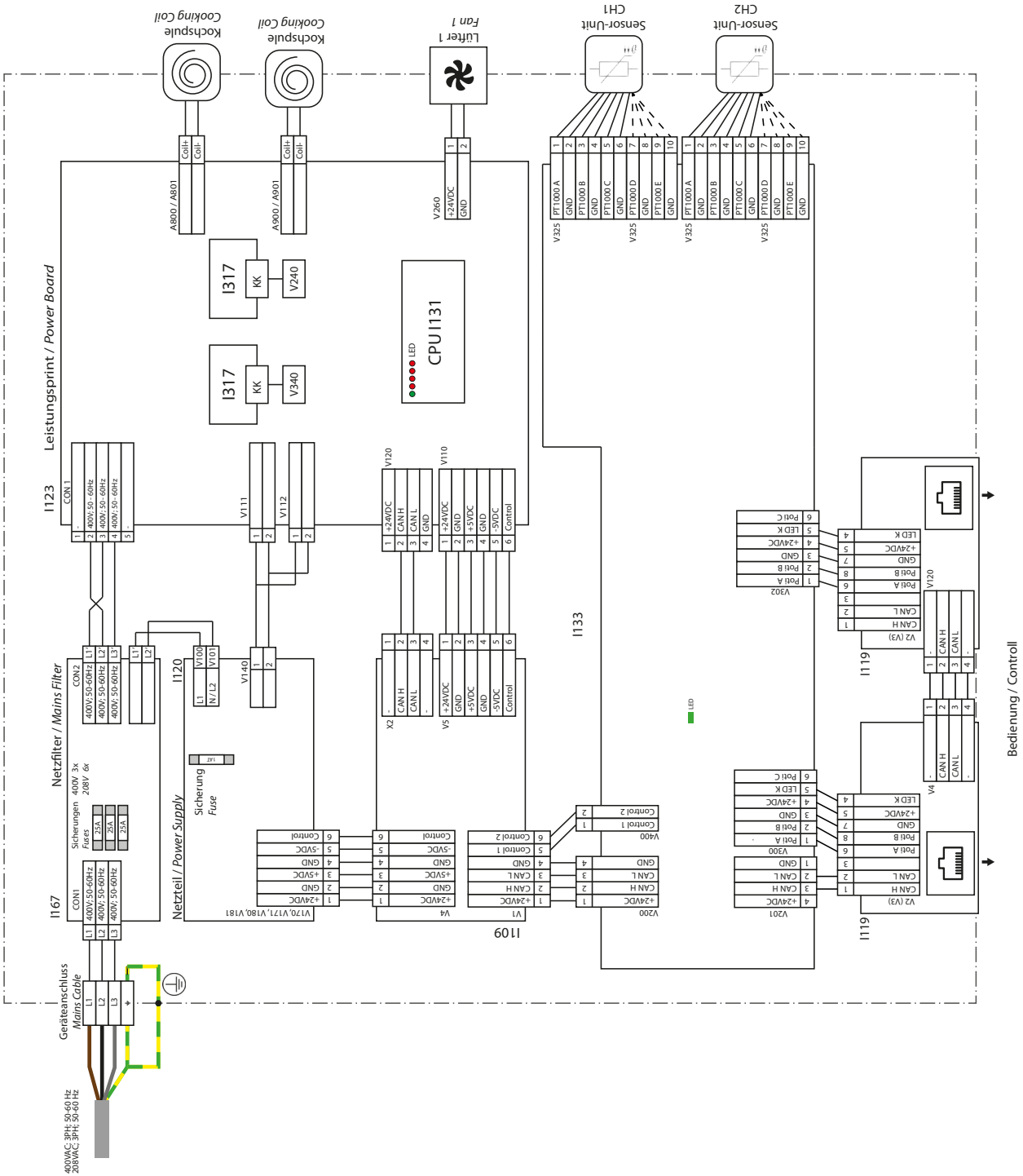
## Compactmodul Dual

### *Exploded View*



The alignment or design of the components may differ.

# Wiring Diagram



## Open Unit

Step	Description
------	-------------

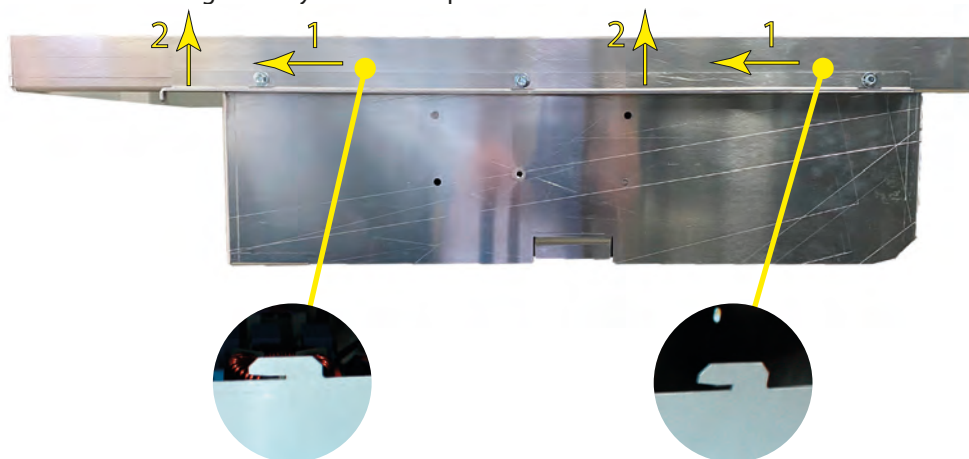
Remove the hexagon screw, which holds the coil and the generator housing together.

1



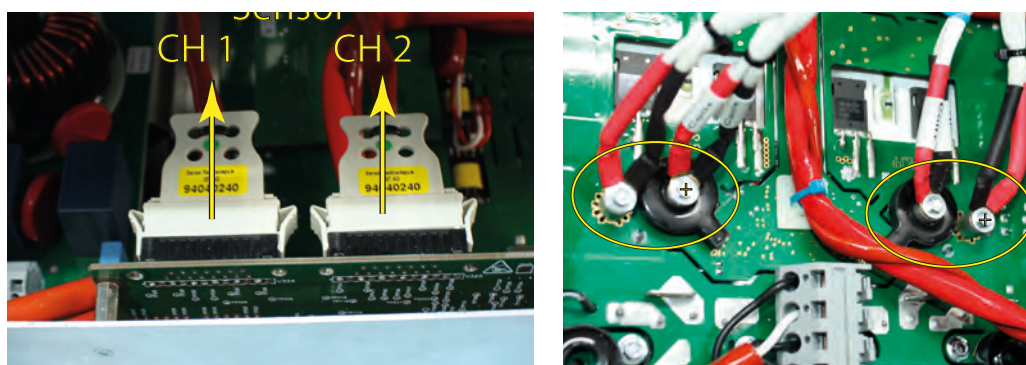
Move the coil housing sideways and lift it up

2



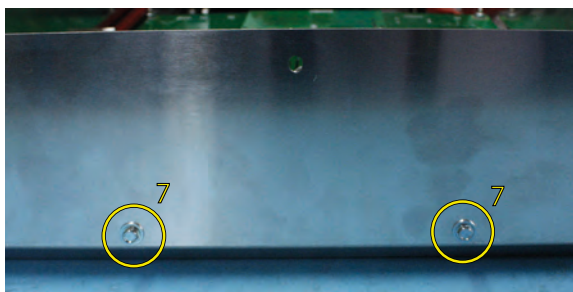
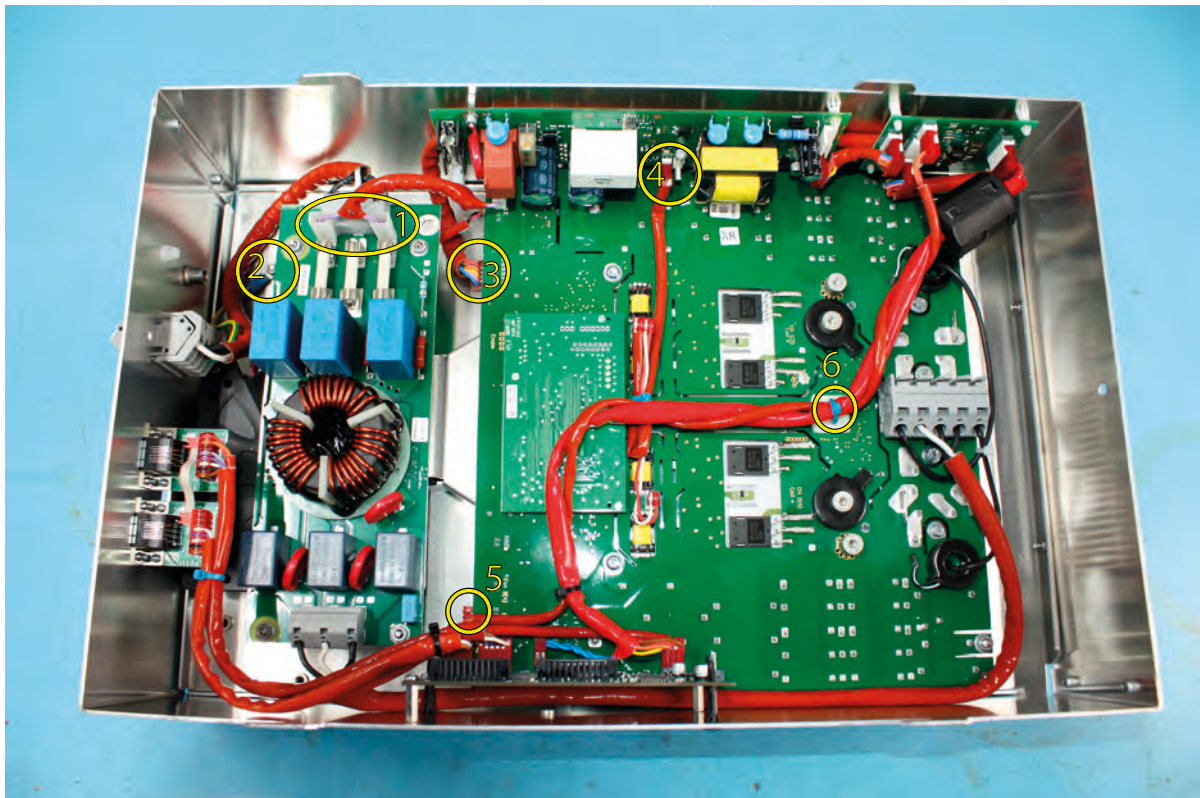
Disconnect the Sensors and coil cables.  
Sensors and coils must be connected as in the original.

3



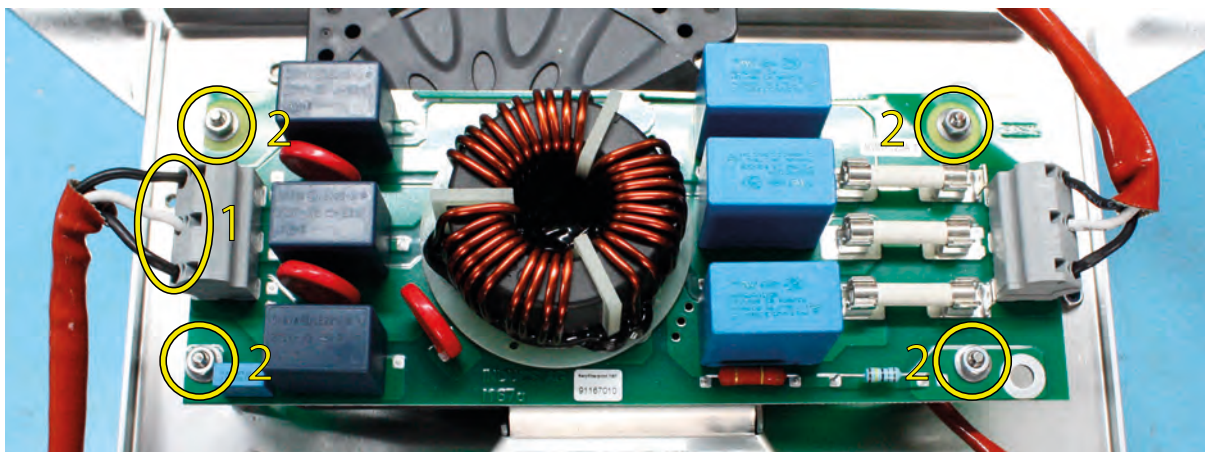
## Remove Base Plate

Step	Description
1	Disconnect the wires to the filter board and the power supply.
2	Disconnect earth cable to the housing.
3	Disconnect the supply cable on the power board.
4	Disconnect the IGBT supply cable
5	Disconnect the communication bus
6	Remove the zip tie
7	Remove 3 hexagon screws, which holds the base plate and the housing frame together. Now lift of the frame.



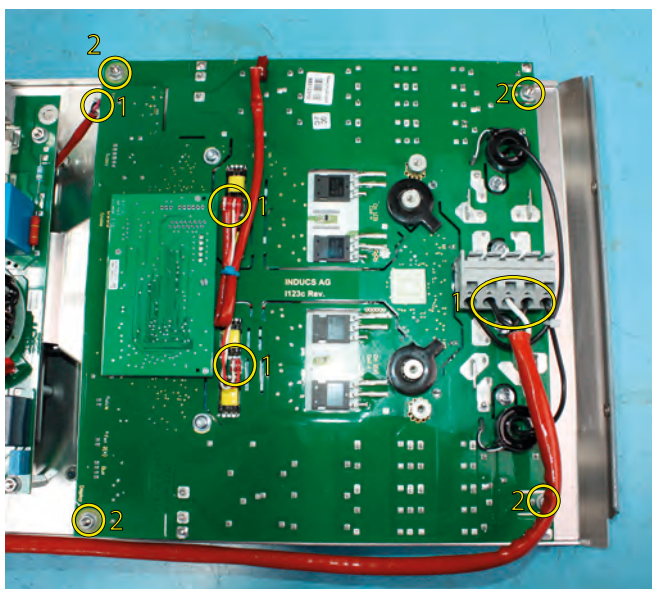
## Replace Filter Board

Step	Description
1	Remove wires
2	Remove 4x M4 nuts
3	Remove filter Board



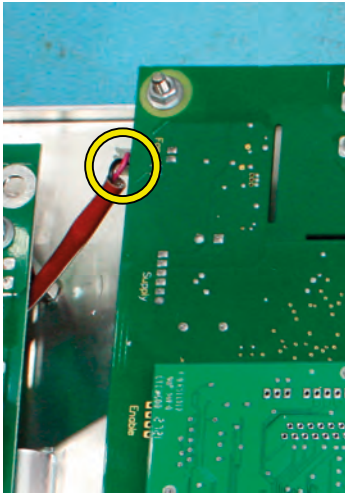
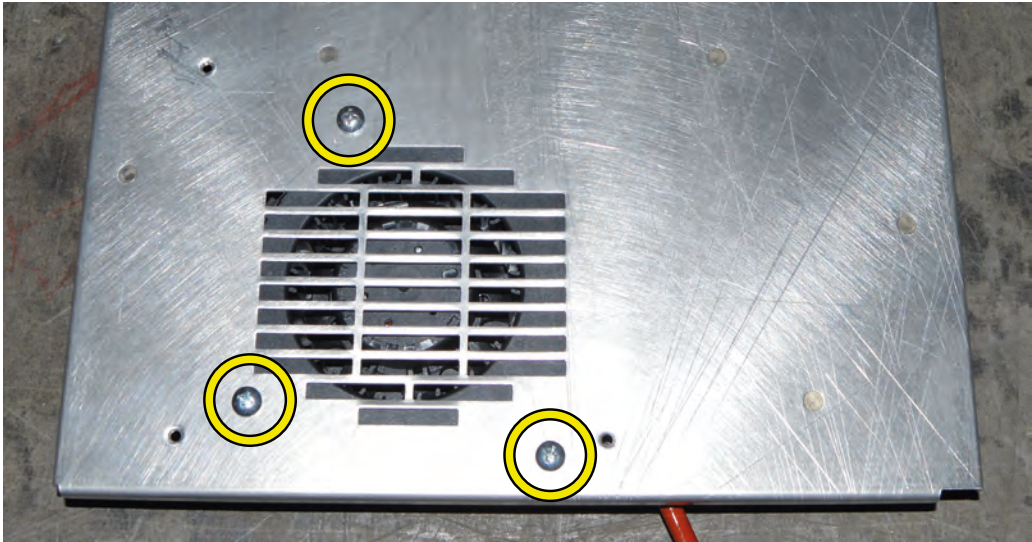
## Replace Power Board

Step	Description
1	Remove wires
2	Remove 4x M4 nuts
3	Remove power board



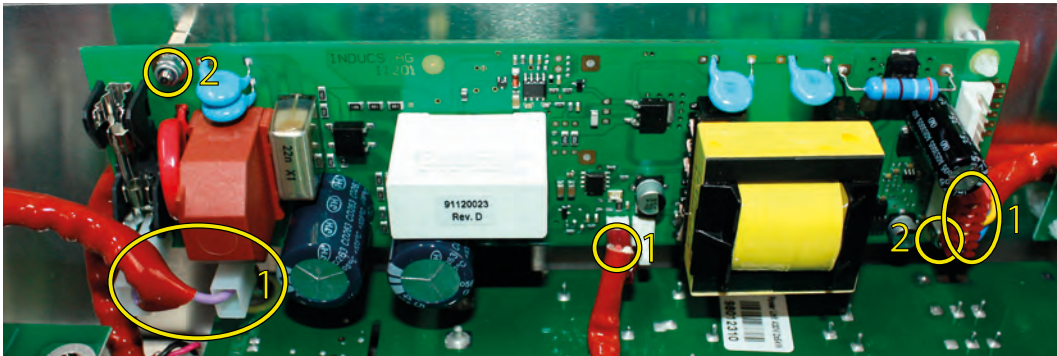


## Replace Fan

Step	Description
1	Disconnect fan. 
2	Remove filter board (see „Replace Filter Board“ on page 64)
3	Remove 3 screws which holds the fan. 

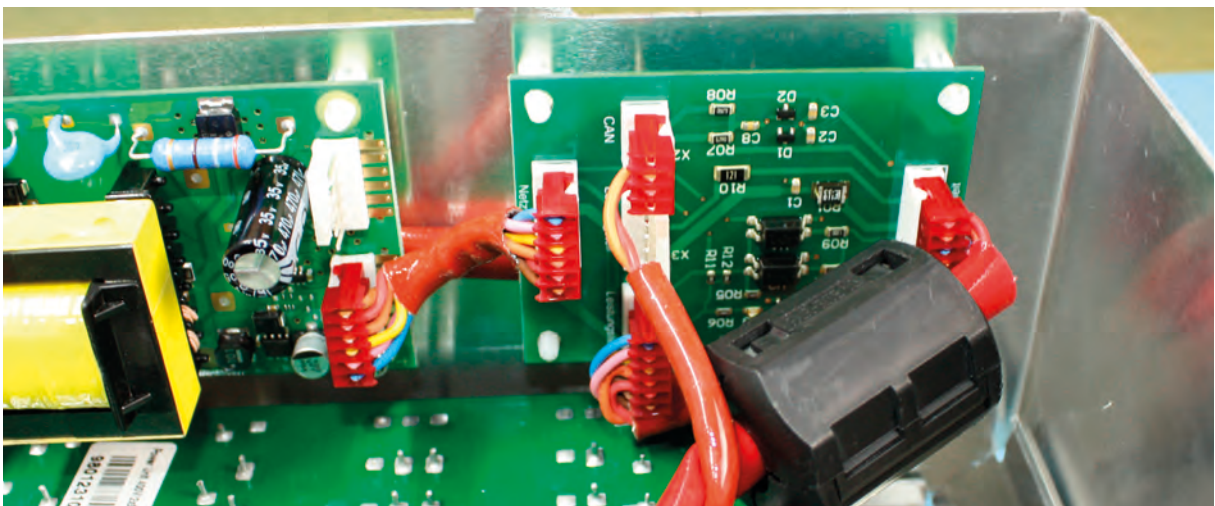
## Replace Power Supply

Step	Description
1	Remove wires
2	Remove 2 nuts and washer
3	Remove power supply



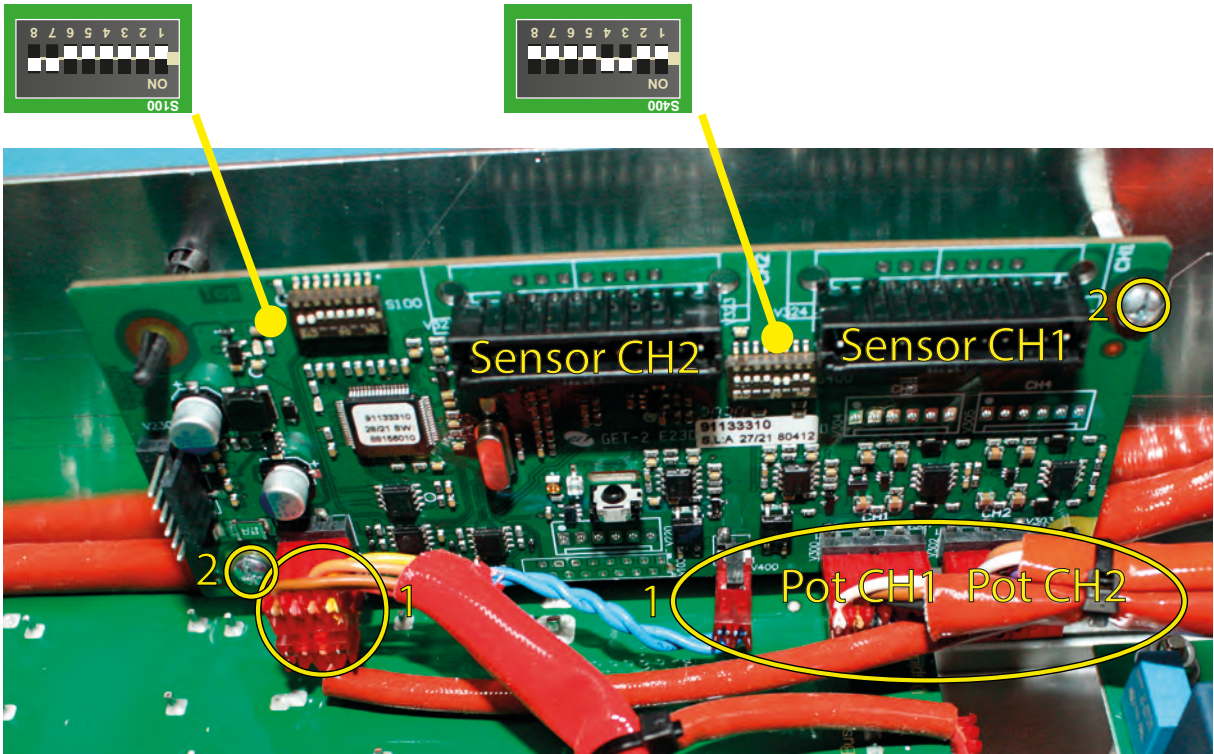
## Replace I109

Step	Description
1	Remove wires
3	Replace I109



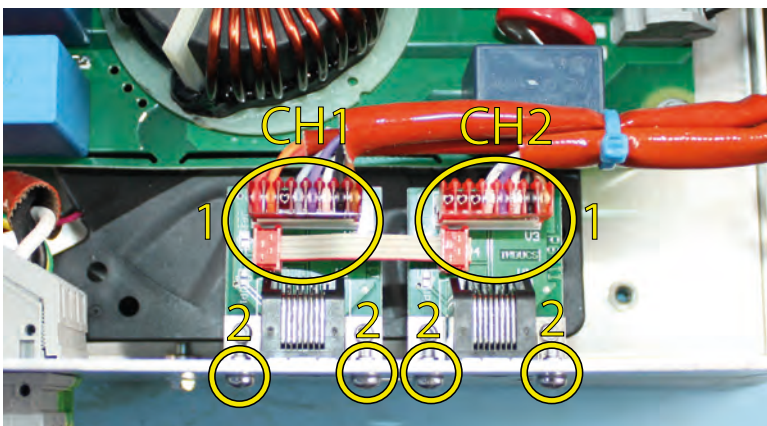
### Replace Control Unit

Step	Description
1	Remove cable
2	Remove two M4 nuts
3	Replace control unit



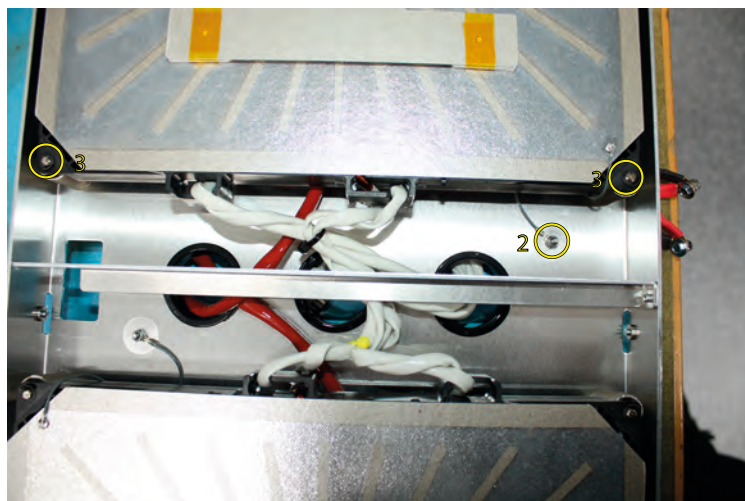
### Replace I119 Board

Step	Description
1	Remove wires
2	Remove screws



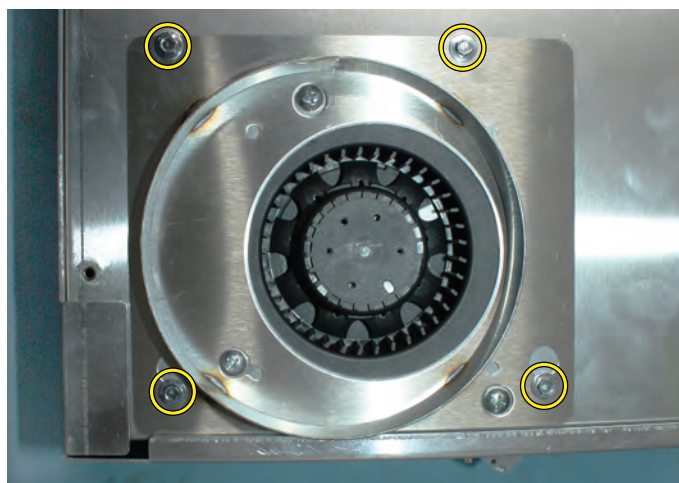
## Replace Cooking Coil

Step	Description
1	Pull the cable through the openings in the coil carrier
2	Remove the shielding cable
3	Press the coil down and remove the 4 locking washers on the bolts.
4	Replace the cooking coil



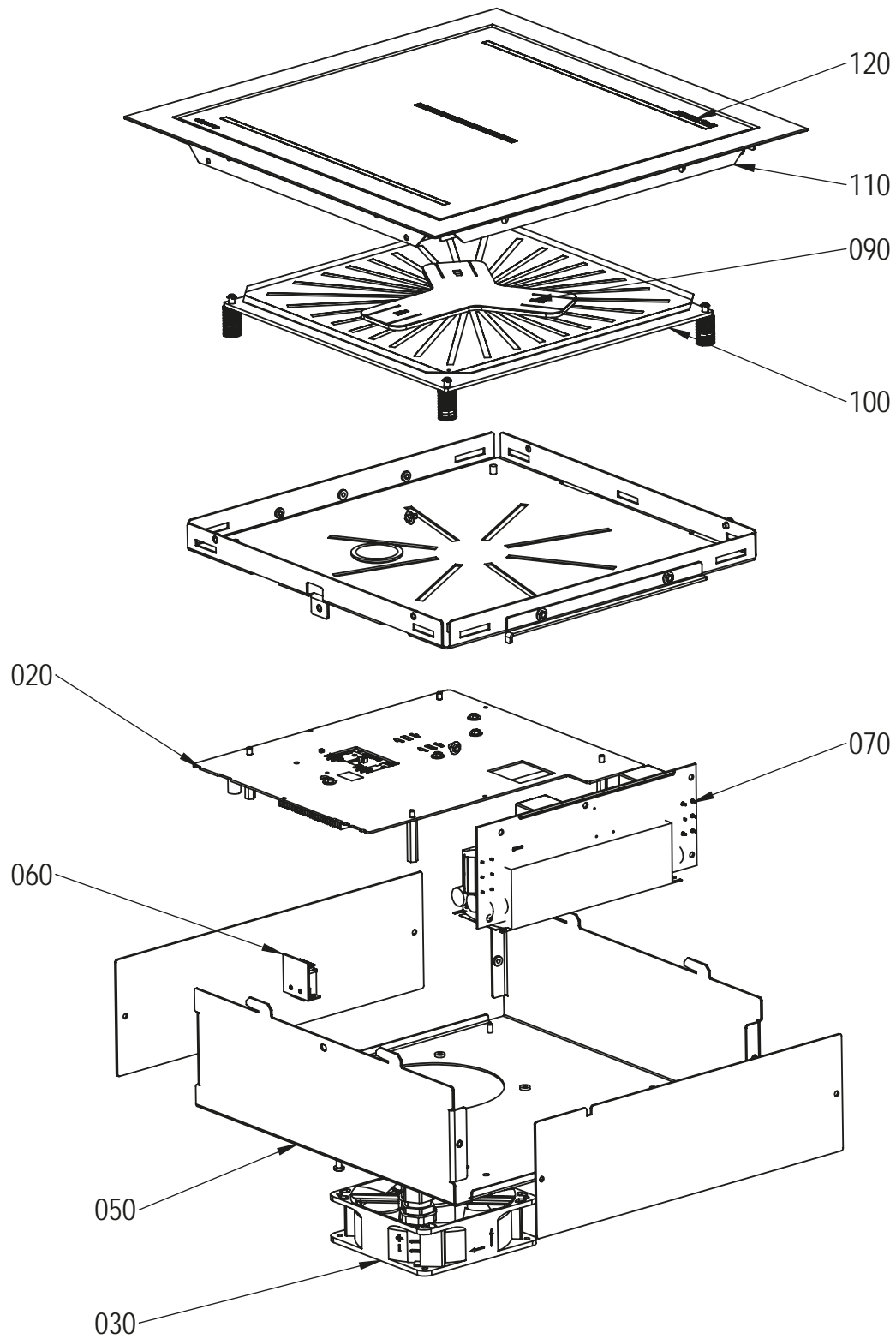
## Mount Ventilation Kit

Step	Description
1	Place the suction sleeve on the fan opening
2	Attach it with four M4 screws



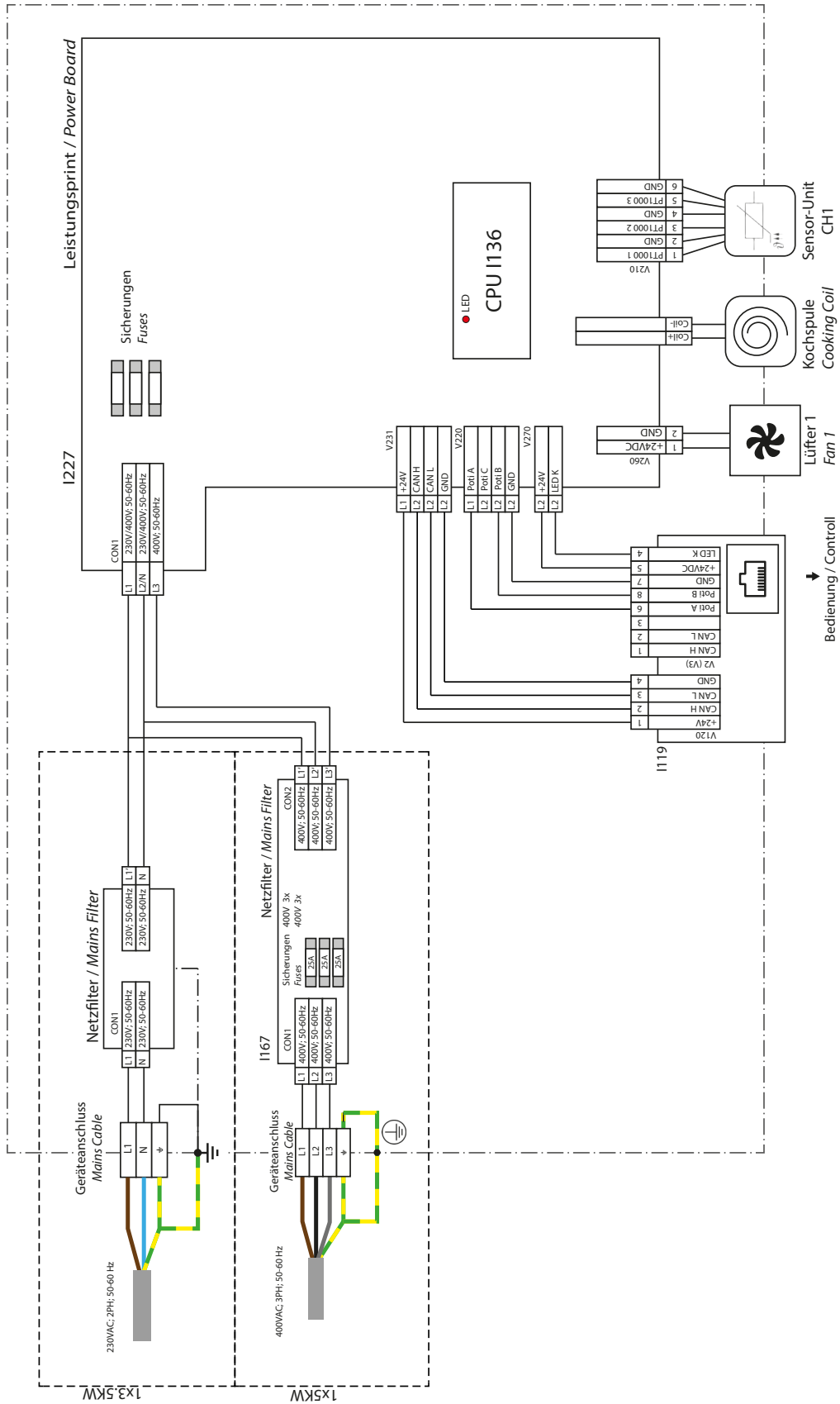
## Compactmodul Single / Install-Line Single

### Exploded View


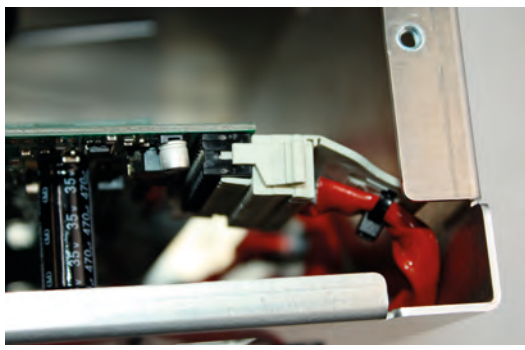

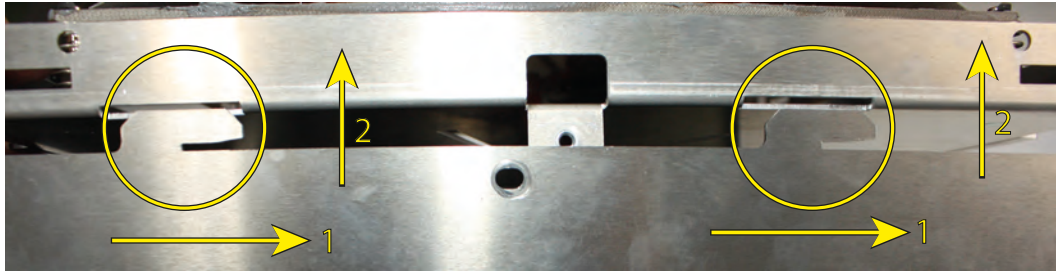


The alignment or design of the components may differ.

## Wiring Diagram

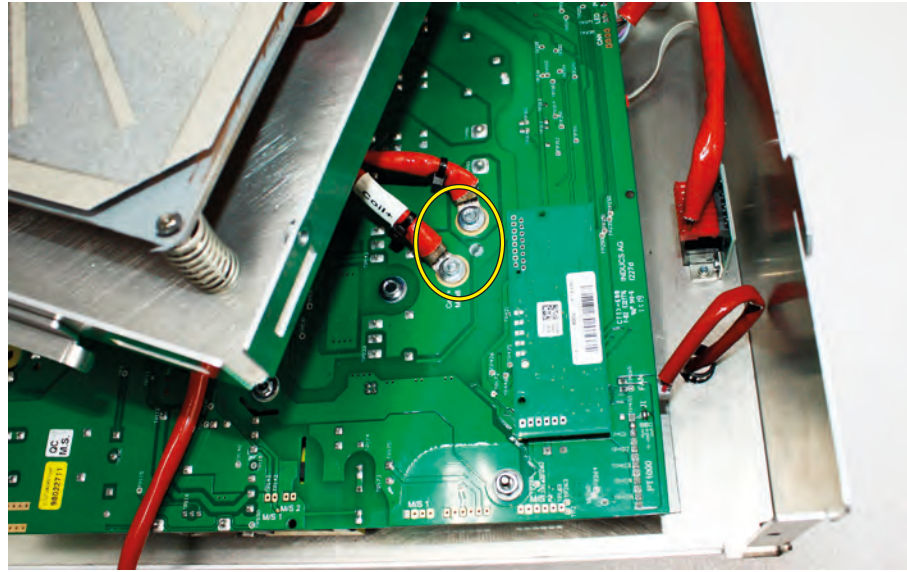


## Open Unit

Step	Description
1	<p>Remove the screws from the side panel.</p> 
2	<p>Disconnect the sensors.</p> 
3	<p>Remove the hexagon screw (M4x8) which connects the coil carrier to the generator housing.</p> 
4	<p>Push the coil carrier to the side and lift it off.</p> 

Disconnect the coil cable. When connecting, pay attention to the polarity and the position of the connections.

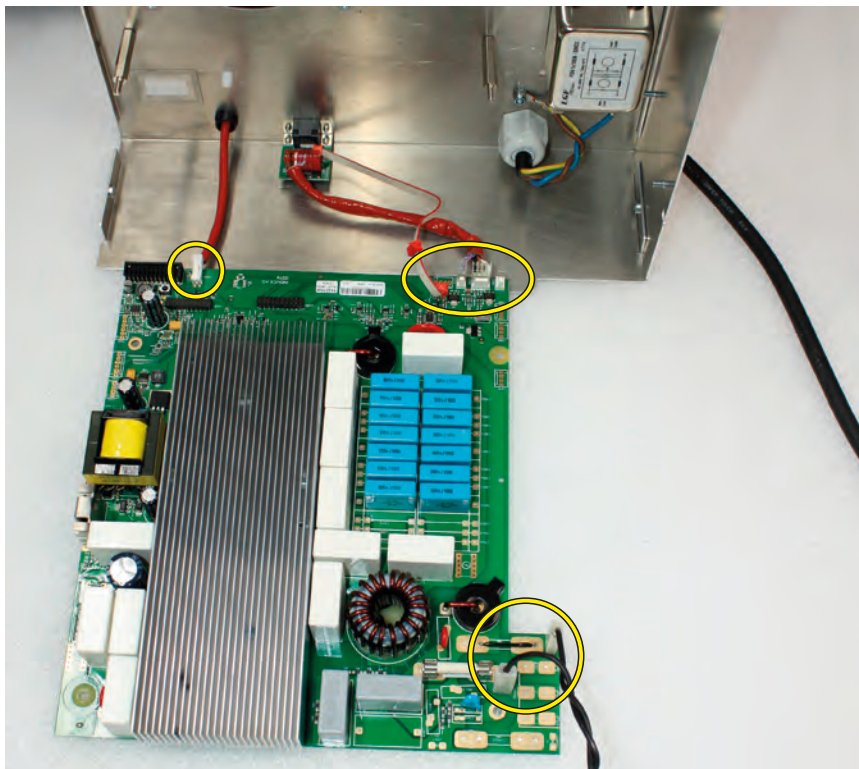
5



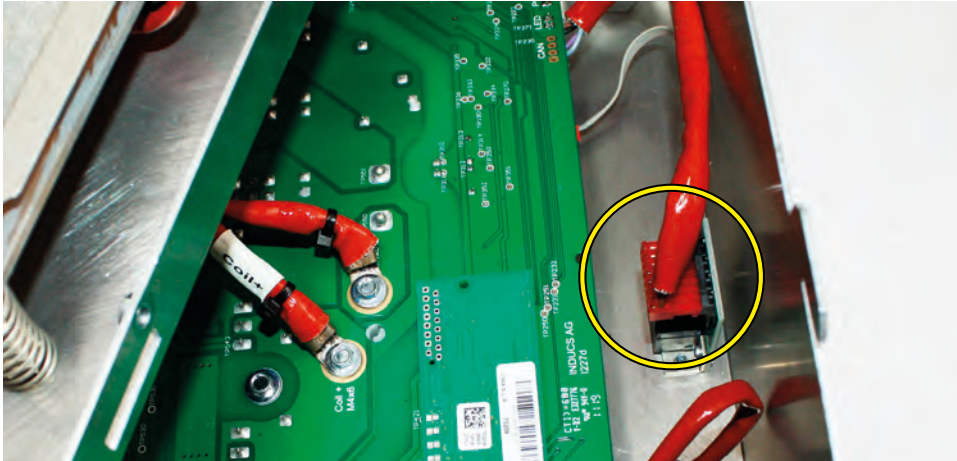
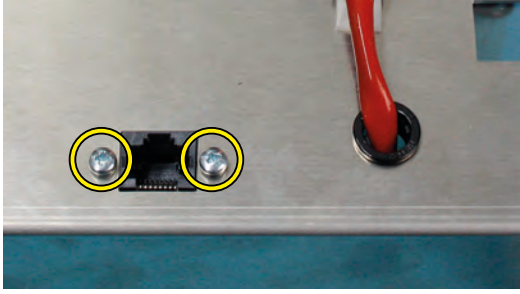


## Replace Power Board

Step	Description
1	Remove the cable from the line filter.
2	Remove the four M4 nuts.
3	Lift off the power board and disconnect the cables.



## Replace I109

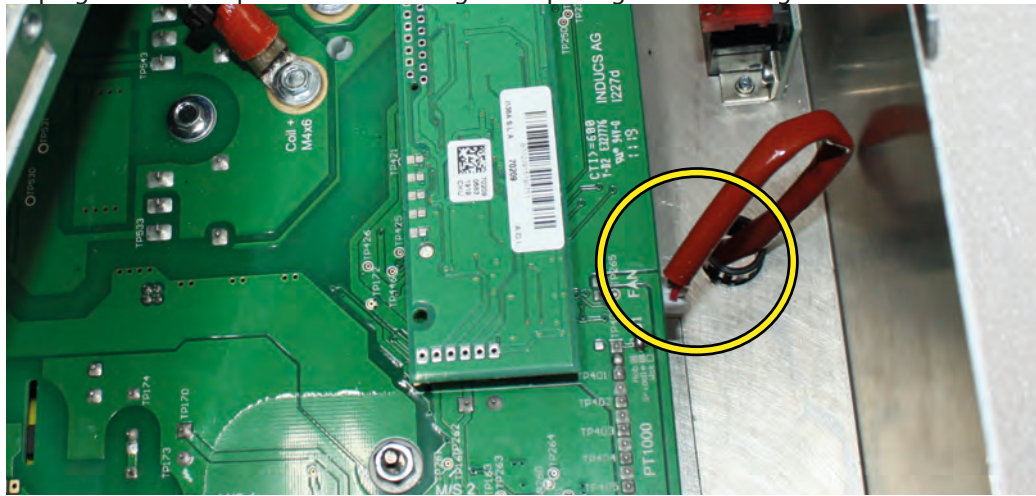
Step	Description
1	<p>Disconnect the cables.</p> 
2	<p>Remove the screws.</p> 
3	<p>Remove the I109 board.</p>

## Replace Fan

Step	Description
------	-------------

Unplug the FAN and pull the cable through the opening in the housing.

1



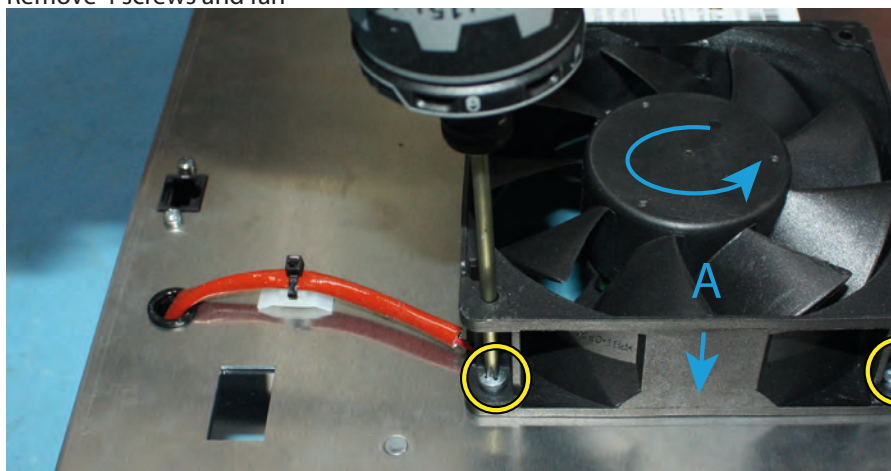
Remove zip ties and protective grille.

2



Remove 4 screws and fan

3



A) The direction of rotation and the direction of ventilation must be observed.

**Assembly of the suction sleeve****Step****Description**

Remove protective grille

1



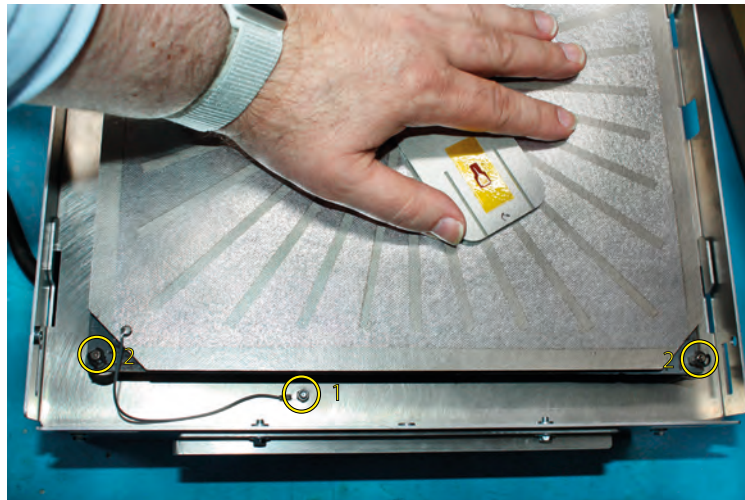
Place the suction sleeve on the fan and fasten with 4 M4 screws and lock nuts.

2




## Replace Cooking Coil

Step	Description
1	Remove the shield cable.
2	Press the coil down and remove the 4 locking washers on the bolts.
3	Replace cooking coil.



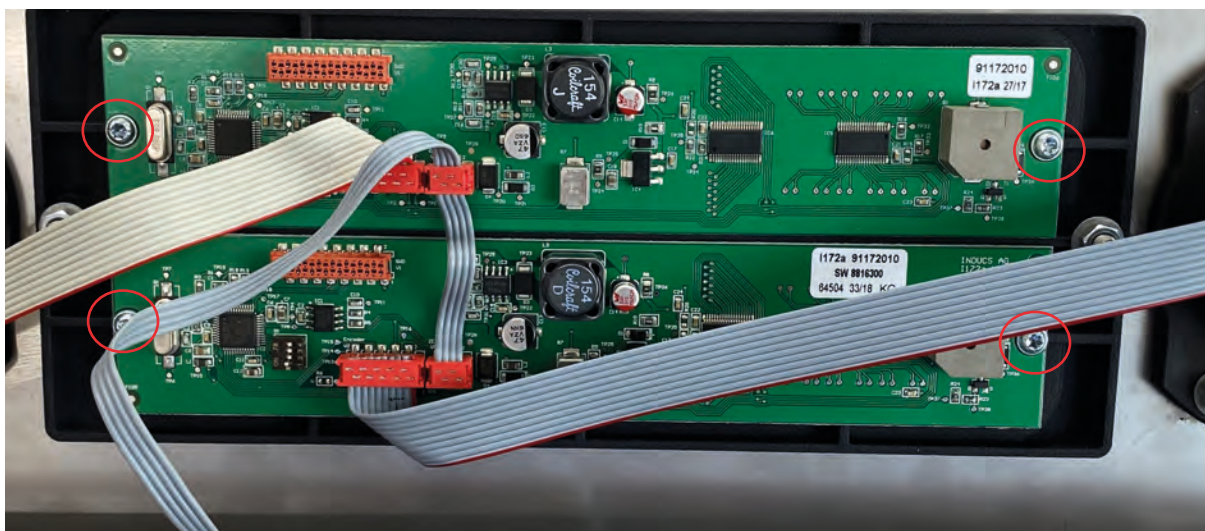
## Tab-Operation Unit

### Open Tab-Operation Unit

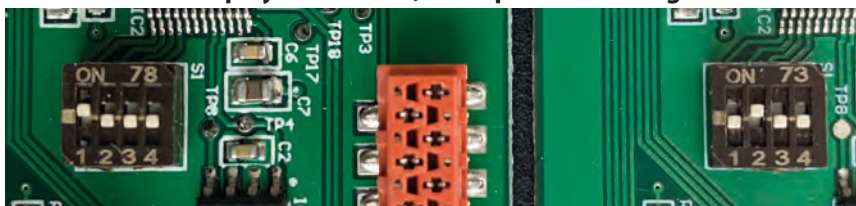
Step	Description
1	Remove 4x M4 nuts
	
2	Remove cover

### Replace Display

Step	Description
1	Remove cables
2	Remove screws and electronic



Before the new display is mounted, the dip switch setting must be made.

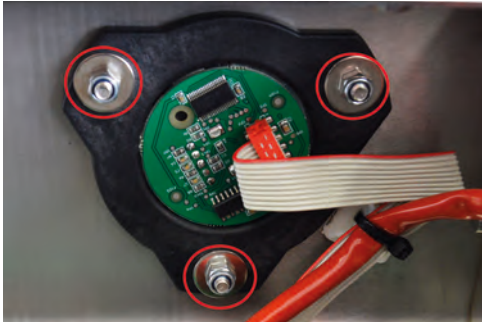


CH1

CH2

## Replace Knob

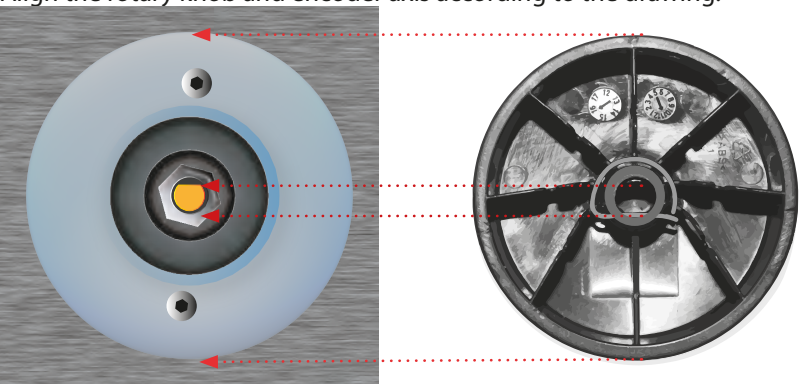
Step	Description
1	Remove cable
2	Remove nuts
3	Replace complete knob



## Remove and put on the rotary wheel

NOTE: Inducs recommends replacing the entire Knob if the rotary wheel is defective.

NOTE: If the rotary knob is removed, the instructions must be strictly observed!

Step	Description
1	Pull off the rotary knob Align the rotary knob and encoder axis according to the drawing.
2	 <p>The flattened side of the metal bracket comes on the round side of the encoder axis.</p>
3	Attach the rotary knob

## IR interface

NOTE: Configuring Inducs equipment should only be performed by trained technicians. Incorrect use can damage the induction device.

### Establishing IR connection

The configuration of the infrared connection can be found in the chapter „Configuration of the IR interface“.

### Communication INSTINCT Hob 3 / 3.5 / 5, INSTINCT Wok 3 / 3.5 / 5 / 8, INSTINCT Griddle 3 / 3.5 / 5

- Disconnect the induction unit from the mains
- Wait a few seconds
- Connect the induction unit to the mains

When the power is On, the following is the output:

```
Inducs AG~
```

Activate communication by entering 12345.

The screen is look like this:

```
WELCOME SERVICE
FIRMWARE: 88135000, I136 EKR CPU, 11.08.2017, V2.0
DEVICE TYP: SH/BA
NUMBER OF PHASES: 1
RATED MAINS VOLTAGE: 208V-240V
RATED POWER: 3500W
CONFIGURED POWER: 3500W

SELECT PAGE WITH 0..6, OR CHANGE PAGE WITH J, j
```

Our example (according to the above expression) shows:

- The company number: 88135000
- Device type: SH / BA
- Number of phases: 1
- Rated mains voltage: 208V - 240V
- Rated power: 3500W
- Configured power: 3500W

The following functions are possible with IR:

- Further display functions with key **J (Page Up)**, **j (Page Down)**
- Fan test with button **O** (an ON) oder **o** (fan OFF)



## Additional display features

### Info Page 1:

Generator temperatures (switch with key J / j):

```
Page: 1  
BG: 39°C, KK: 27°C
```

BG: board temperature  
KK: heat sink temperature

### Info Page 2:

Temperatures on the cooking surface (switch with key J/j):

```
Page: 2  
T1: 24°C, T2: 26°C, T3: 28°C, T4: 0°C, T5: 0°C, T6: 0°C
```

Our example (according to the above expression) shows:

PT sensor 1 = 24°C, PT sensor 2 = 26°C etc.

The sensor connections T4 to T6 are not connected and therefore show 0°C

#### **The number of the connected sensors varies depending on the device type:**

- INSTINCT Hob 3.5 / 5 and Compactmodul Single with round coil have 3 sensors.
- INSTINCT Wok 3.5 / 5 / 8 and Compactmodule Wok have 2 sensors.
- INSTINCT Griddle 3.5 / 5, INSTINCT Hob 7 / 10, Compactmodule Duel with round coil and Compactmodule Single with full area coil have 6 sensors.
- INSTINCT Griddle 7 / 10, Compactmodule Dual with full area coil have 12 sensors.

### Info Page 3:

(Switch with key J/j):

```
Page: 3  
N: 44, S: 0, P: 0, NF: 0, POT: 0  
PAN D: 63, PAN R: -1000, F: 60.0, REG: 0
```

N: mains current [mA]  
S: coil current [mA]  
P: phase distance [0.1°]  
NF: mains frequency [Hz]  
POT: potentiometer value  
PAN D: Pan detection without power output  
PAN R: Pan detection with power output  
F: switching frequency  
REG: Rule condition

**Info Page 4:**

Empty cooking detector (switch over with key J / j):

Has no significance for the technician:

```
Page: 4
S1: 30 S2: 30 S3: 28 S4: 0 S5: 0 S6: 0
D1: 0 D2: 0 D3: 0 D4: 0 D5: 0 D6: 0
ACVTIVE:0
```

**Info Page 5:**

Stored error codes (switch with key J / j):

```
PAGE: 5
01:E05 02:E04 03:E41 04:--- 05:--- 06:--- 07:--- 08:--- 09:--- 10:---
```

Our example (according to the above expression) displays the last 10 error messages. Starting with the E05 that occurred last. Before that, the errors E04 and E41 occurred.

With the key } can the error list be deleted. The entry must be confirmed with }.

**Info Page 6:**

(Switch with key J / j):

Has no significance for the technician:

```
PAGE: 6
LIMITS:
LINE CURR:16036, COIL CURR: 2600, PHASE GAP:200
PAN DETECTOR:28, PAN REMOVE: 50
```

### Communication INSTINCT Hob 10, INSTINCT Griddle 10

- Disconnect the induction unit from the mains
- Wait 5 seconds
- Connect the induction unit to the mains

When the power is on, the following is the output:

```
Inducs AG
Firmware: 88156000 I133 CENTRAL UNIT 28.02.2017
Jumper:0
Betriebszeit CH1:68min CH2: 153min
Generator: 8814031
berr1!
berr1!
berr1!
berr1!
~
```

The following is output

- The firmware number of the central unit: 8816000 with date of the software
- Jumper: 0
- Number of phases: 1
- Operating time per channel
- Software number of the CPU

Activate communication by entering 12345.

After logging in, the IR status and the IR mode are output (here SERVICE). In the last line the current status and the errors of the hob 1 are output.

```
IR=On
WELCOME SERVICE
CH:1 - - - - -
```

cooking field1

Status messages

error messages power board

error messages Central unit

The following functions are possible with IR:

- Further display functions with key **J** (Page Up), **j** (Page Down)
- Change channel with key **K** (Channel Up), **k** (Channel Down)
- Fan test with button **O** (fan ON) oder **o** (fan OFF)

**Other display features include:****Info Page 1:**

Temperatures inside the device (Change page with J / j and change channel with K / k):

```
Page:1  
CH:1 BZ:32°C BG::33°C KK:28°C
```

CH: Cooking field  
BZ: Temperature of the control unit  
BG: Board temperature  
KK: heat sink temperature

**Info Page 2:**

Cooking surface temperatures (Change page with J / j and change channel with K / k):

```
Page2  
CH:1 T1:24°C, T2:26°C, T3:28°C, T4:0°C, T5:0°C, T6:0°C
```

Our example (according to the above expression) shows:

Hob(CH) =1, PT sensor 1 = 24°C, PT sensor 2 = 26°C etc.

Sensor's connections T4 to T6 are not connected and therefore show 0°C

**The number of connected sensors varies depending on the device type:**

- INSTINCT Hob 10 has 3 sensors
- INSTINCT Griddle 10 has 6 sensors

**Info Page 3:**

Control (Change page with J / j and change channel with K / k):

```
Page:3  
CH:1 N:0 S:0 EPQ:0 REG: 0  
STELL:0 POT:4095  
ENRG:0
```

CH: Cooking field  
N: Mains power  
S: Coil current  
EPQ: Power quotient  
REG: Control state  
STELL: Potentiometer Level in%  
POT: Potentiometer value  
ENRG: Energy optimization

### Info Page 4:

Empty cooking detector (Change page with J / j and change channel with K / k):

```
Page: 4
CH: 1
S1: 30 S2: 30 S3: 28 S4: 0 S5: 0 S6: 0
D1: 0 D2: 0 D3: 0 D4: 0 D5: 0 D6: 0
ACVTIVE: 0
```

### Info Page 5:

Stored error codes (Change page with J / j and change channel with K / k):

```
PAGE: 5
CH: 1 01: E10 02: E04 03: E41 04: --- 05: --- 06: --- 07: --- 08: --- 09: ---
10: ---
```

Our example (according to the above expression) displays the last 10 error messages of hob1. Starting with error E10 that occurred last. Before that, errors E04 and E41 occurred.

With the key } can the error list be deleted. The entry must be confirmed with }.

### Info Page 6:

(Change page with J / j and change channel with K / k):

```
PAGE: 6
ACTIVE CH: 1 T1: 0 T2: 0 T3: 0 T4: 0
CTRL: 0 MZCTRL: 0 EPQ_TRIG: 0
```

CH: Cooking field  
T1 - T4: Pan detectors  
CTRL: IGBT control state  
MZCTRL: choke control state  
EPQ\_Trig: tripped power quotient

### Fan function test

The fan can be switched on and off in a function test. The induction unit must be cold at the beginning (hob temperature and ambient temperature between 20°C and 30°C). The fan must not be switched on.

- To do this, press the **O** key
- Heatsink fan is on (full speed)
- Press the **o** button
- Heatsink fan is off

### Communication problems

NOTE: The exposure of light (sunlight, fluorescent tubes, halogen lights or the like) may interfere with the infrared communication with the induction unit and so they should be avoided during the adjustment work.



# Terminal Software

## To configure the Inducs cooking appliances

---

### Instructions for configuring the terminal software

#### Compatible product families:

**Base-Line**  
**Wok-Line**  
**Install-Line**  
**Hold-Line**  
**Griddle-Line**  
**INSTINCT Series**  
**Modul-Line**  
**Compact-Line**



## Configuration of the IR interface

- The following steps may only be performed by trained service personnel. Incorrect use can damage the induction device.

Only the parts and components listed in the repair accessory list are permitted as aids.

In order to be able to communicate with the induction device from the outside, a computer with a terminal program is required. The terminal program displays characters and texts on the screen, which are output from the induction unit via the infrared interface. In addition, parameters can be changed in the induction unit with the terminal program.

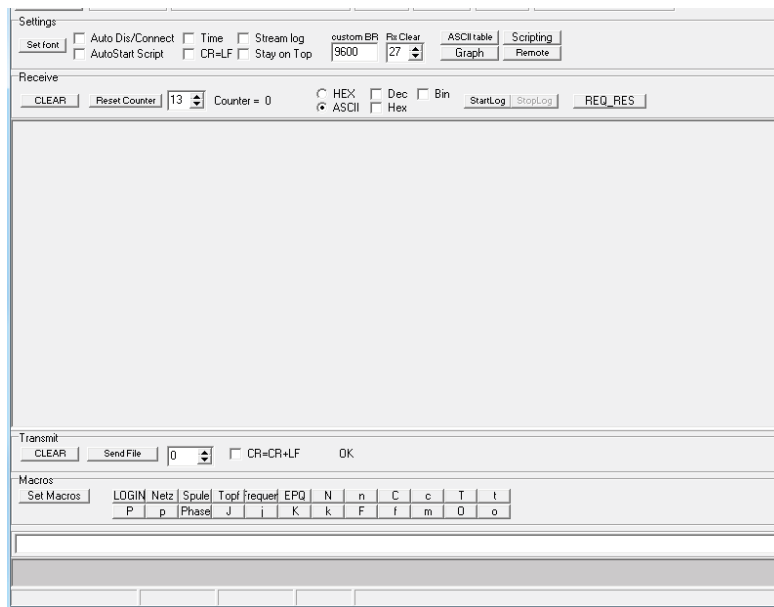
### Aids

- IR box with RS232 connection cable (1: 1)
- Computer with COM or USB interface
- For computer with USB interface: USB / RS232 Converter
- Terminal program

Inducs recommends the use of the program „Terminalbpp“ in version 1.9b.

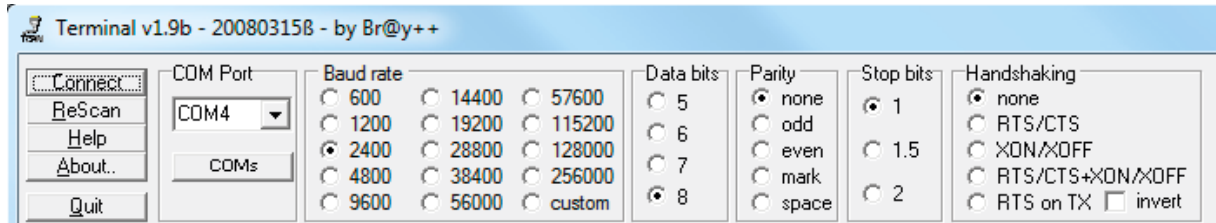
The program can be downloaded directly from the developer site:

<https://sites.google.com/site/terminalbpp>

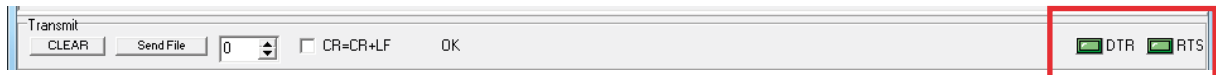


### Set up terminal program

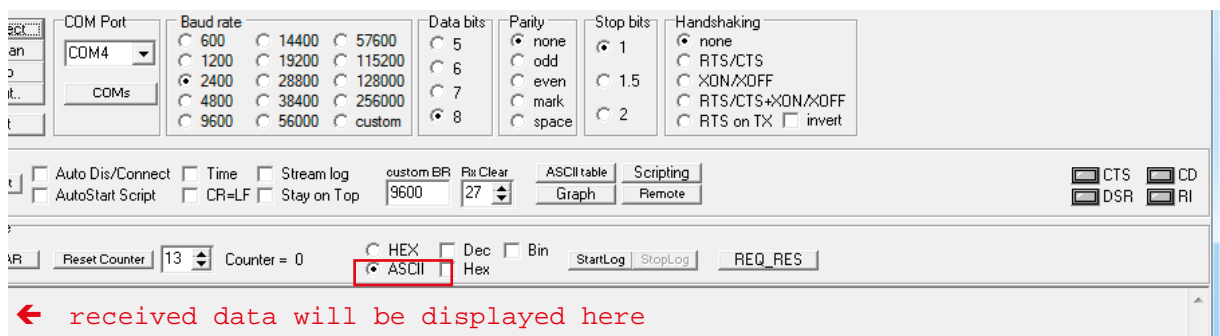
1. Connect the IR box to your PC
2. Start terminal program



3. Configuration of the interface:
  - COM Port: In most cases, only one COM port is seductive, select it. If possible, always use the same slot on your computer, then you do not have to reset the settings each time you start the program.
  - Baud rate: 2400
  - Data bits: 8
  - Parity: none
  - Stop bits: 1
  - Handshaking: none



4. The two buttons must be changed before they can receive or send data. Make sure they are green. Unfortunately, this setting is not saved and therefore it has to be done each time the program is started.










NOTE: Ensure that ASCII is selected in the section „Receive“

- Using the „Connect“ button, connect to the IR-Box. If you now hold the IR box to the IR transmitter / receiver of the Inducs induction cooking device, the received data will be displayed. If you are not logged in, the cooking appliance will periodically send the following character „~“.



- Send the commands to the cooking appliance.
- In „Set macros“ the most used character strings can be stored. For example the Login 12345.

## DIP Switch setting of the display print I172

Device name	DIP switch setting	Illustration
<b>INSTINCT Hob 3.5 / 5</b>	1: OFF 2: OFF 3: OFF 4: OFF	
<b>INSTINCT Hob 10</b> Field 1	1: ON 2: OFF 3: OFF 4: OFF	
<b>INSTINCT Hob 10</b> Field 2	1: OFF 2: ON 3: OFF 4: OFF	
<b>INSTINCT Wok 3.5 / 5 / 8</b>	1: ON 2: ON 3: OFF 4: OFF	
<b>INSTINCT Griddle 3.5 / 5</b>	1: OFF 2: OFF 3: ON 4: OFF	
<b>INSTINCT Griddle 10</b> Field 1	1: ON 2: OFF 3: ON 4: OFF	
<b>INSTINCT Griddle 10</b> Field 2	1: OFF 2: ON 3: ON 4: OFF	

**When changing the display print, make sure that the DIP switch setting is set correctly.**

