INSTRUCTIONS FOR INSTALLATION AND USE

INDUCTION BUILT-IN HEAT RETENTION UNIT

RTCSmp Install Hold-Line

---

with RTCSmp-Technology

HO/IN/CL 1500
HO/IN/CL 1600-GN

CONTENT

1 General remarks

The following instructions for use contain information which is fundamentally important and must be taken into account during assembly, operation and maintenance. It must therefore be read carefully before installation and operation by the responsible specialist staff and the operator(s). It must always be available for consultation at the place of operation.

General information about products, installation, initial operation, operating test, heat-retention process, safety instructions, out of operation, trouble shooting, cleaning, support, waste disposal concept are described on the following pages.

1.1 Description of danger signs

	This symbol identifies the safety information which may cause danger (personal injury) for people at non-observance of proper operation.
	This dangerous voltage warning symbol indicates a risk of electric shock and hazards from dangerous voltage.
CAUTION	Indicates a hazard or unsafe practice which could result in minor personal injury or property damage.
	Electromagnetic field

Warning
Risk of fire or electric shock
Do not open

To reduce the risk of fire or electric shock, do not remove or open cover.

Information signs mounted directly on the unit must be observed at all times and kept in a fully legible condition.

1.2 Purpose

The induction unit RTCSmp Install Hold-Line are specially suitable as built-in unit in closed counters and for keep the meal warm. The warm holding process with the RTCSmp unit must be carried out with recommended types and sizes of pans and bacs. Do not use any **NO NAME pans and bacs**.

Please use just perfect ferromagnetic material!

2 Description of product

2.1 Scope of supply

The unit is delivered completely and in working order.

2.2 Product

The induction unit is self-contained in it’s own housing and is made from stainless steel. Built-in a robust method of construction, compact and powerful with the revolutionary RTCSmp technology. A variable temperature regulation permitted an efficient keep food warm.

- Simple built-in solution thanks to it’s design
- Compact module
- Plug-in terminal for control-unit
- Simple operation with temperature rotary knob
- Compact power electronic enables flat construction and safe operation
- Maximum safety thanks to multiple functions of protection and checking
- Electronical checking of the energy supply
- Two heating zones
- Two temperature displays under glass surface
- Compact measurement – light weight
- Fulfills the latest directions:
  EN 60335-1/-2-36; EN 62233;
  EN 60335-2-49; EN 55011;
  EN 61000
  CE-conform
  ANSI/UL 197; CSA C 22.2 No.109
  FCC Part 18 ; ICES-001
  NSF/ANSI 4

2.3 RTCSmp Install Hold-Line Compactmodul unit at a glance

Before carrying out function checks, the operator must know how to operate the unit.

Temperature rotary knob

Two control units are attached (plug-in terminal) on the equipment bottom. The temperature setting from 50°C to 100°C is carried out via rotary knob mounted on an built-in control plate or box.

2.4 Technical Data

Operation and control

Type	Dimensions	Ceran plate
HO/IN/CL 1500	800 x 400 x 114 mm	800 x 400 mm
HO/IN/CL 1600, 2x GN-1/1	710 x 570 x 124 mm	710 x 570 mm

Technical data	Voltage	Power	Weight
HO/IN/CL 1500	230/ 120V	1500 W	17 kg
HO/IN/CL 1600, 2x GN-1/1	230/ 120V	1600 W	

Operating conditions

Max. tolerance of the nominal supply voltage	+6/-10 %
Supply frequency	50/60 Hz
Protection class	IP X0
Minimal diameter of the pan	12 cm (in the centre)
Max. ambient temperature	Storage > -20° - +70°C
	Function > + 5° - +40°C
Max. relative humidity of air	Storage > 10 % - 90 %
	Function > 30 % - 90 %
Set point temperature petition 51°C – 100°C	Point appears constantly at the display
Current temperature	No point appears at the display
Energy transfer active	Point flashes after indicating

3 Installation

3.1 Requirements of installation

This heat-retention unit has to be mounted on an even place like a table or counter which must be able to withstand a loading of 40kg. The built-in unit can e.g. be fixed in a closed drawer with doors. Air inlet and air outlet may not be obstructed, the place must be able to withstand a loading of 40 kg. The control unit attached on the ground sheet must be easily accessible.

RTCSmp Install Hold-Line must only be fixed in closed counters.

The rear side of the induction unit below the fan (air intake) has to be absolutely free regarding danger of obstruction. **The max air flow is 50 m^3/h and therefore a minimal opening of 4100 mm^2 has to be maintained**. An optimal air intake must not be reduced by the installation. If necessary, a perfect air supply has to be guaranteed by adding a flexible air duct including a shackle (available as accessory). Pay special attention to the air inlet and air outlet openings: there has to be a distance of at least 30 mm between obstructions like walls or floor. In addition to that make sure that the the air of air inlet and air outlet do not mix. The air exit must not to be hindered by any obstructions.

Ensure that the grease filter on the bottom of the unit is accessible.

3.2 Definition of interfaces

Please observe the following rules:

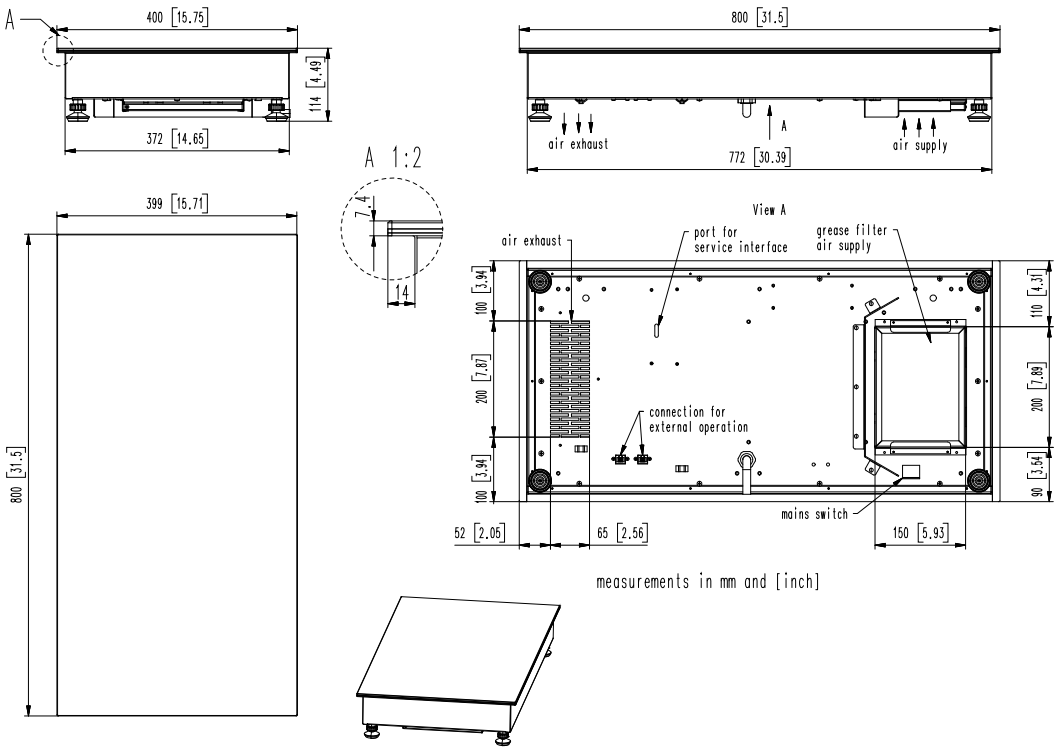
- Check and ensure that the supply voltage matches the voltage given on the specification plate.
- The electrical connections must satisfy local house installation regulations. The valid, national and local electrical regulations must be observed.
- This induction unit is equipped with a mains cable which can be connected with the necessary plug to the socket. The connector must be easily accessible to disconnect the unit from the net.
- When residual current circuit breakers are used, it has to be taken into account, that by switching on an induction generator to a three phase power supply system, leakage current can be caused for a short period due to the asymmetry. This leakage current can activate the residual current circuit breakers. While the choosing residual current circuit breakers, please note that the generator generates direct as well as alternating current in high frequency areas of approx. 20 kHz. Our recommendation is to choose a residual current circuit breaker suitable for these requirements. If the residual current circuit breakers are used as protection for People, the breakers must be in compliance to the specific National and local regulations for personal security.
- This induction unit is equipped with an air cooling system. Make sure that the air supply and air exhaust are not blocked (wall, fabric, etc).

- This induction unit is equipped with an additional grease filter. But make sure that the induction unit does not take in hot ambient air (concerns units built-in side by side, or one behind the other, or installed near a frying pan or an oven) and high steam content in the surroundings (concerns units installed next to pasta cookers, steamers or a water bath).
- The induction unit must not be placed near or on a hot area.
- The air intake temperature must be under 40°C.
- The operating staff has to make sure that installation, support and inspection is done by qualified personnel.

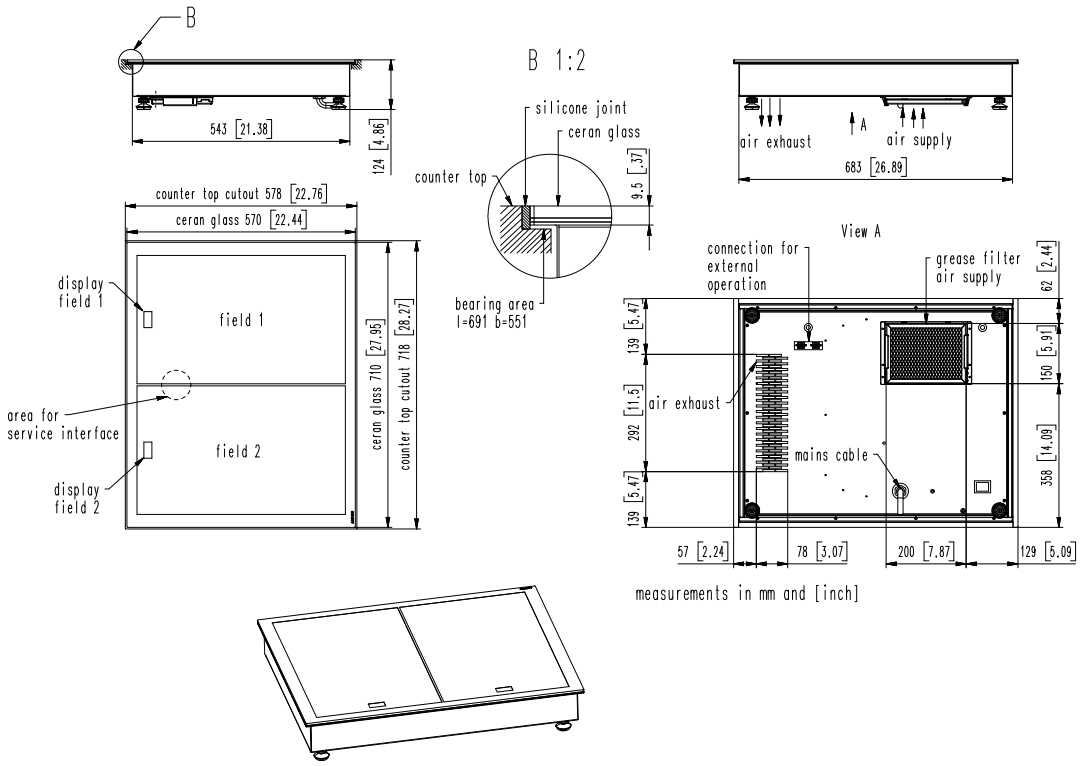
3.3 Technical drawings

Following you can find the drawings of the different units.

3.3.1 Drawing RTCSmp Install Hold-Line 1500 Compactmodul



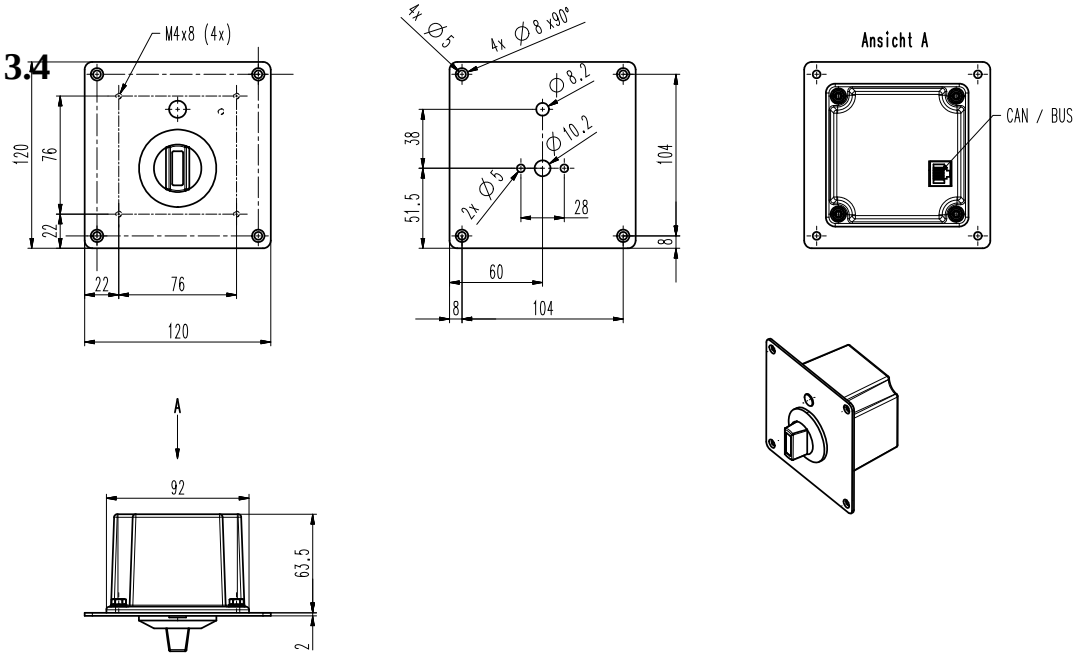
3.3.2 Drawing RTCSmp Install Hold-Line 1600-GN Compactmodul



3.4 Installation operating unit

This unit is supplied completely with an operating unit. For the proposed installation on a installation panel, make the cut-out for the power switch as shown in the drawings below. The control unit has to be mounted vertically on the installation panel. The cable for the temperature control have a length of 100 cm.

3.4



Electrical installation

CAUTION	If the voltage is wrong, the induction unit can be damaged.

The installation of the electricity must be fitted by approved installation contractors in accordance with specific national and local installation in conformity with all safety regulations. The warning signs and rating plates on the units must strictly be followed.

Check and ensure that the supply voltage and the line current matches the specifications given on the rating plate.

Max. tolerance of supply voltage	+6/-10 %
Supply frequency	50/60 Hz

- Turn the temperature rotary knob to off position („ ⏻“).
- Connect the unit to the power socket
  (The unit is delivered completely with mains cable and plug.)

The installation is now finished and an operating test must be done according to chapter 4.

4 Operation test

Remove all objects from the glass surface, verify if this area is neither cracked nor broken. Do not use it when the glass surface is cracked or broken, immediately switch off and disconnect the unit from the outlet.

CAUTION	The glass surface is warmed up from the heat of the pan or bac. To avoid injuries (burning) do not touch this area.

Use a induction pan or bac that is suitable for keeping the food warm and having a bottom diameter of at least 12 cm.

- The glass surface must always be clean. No water residues or fouling.
- Put some water in the pan and place it in the center of the right or left heating area.
- Turn the temperature rotary knob ON (in a position between 51°C and 100°C). The adjusted temperature appears in red below the glass surface (the water will be heated). In the use temperature in the display shines constantly.
- Take the pan or bac away from the heating area. The function LED light will flash.
- Turn the temperature rotary knob in the OFF-position, the heating process will stop, indicator light turns off. By rest warmth bigger as 50°C appears signal HOT on the display under the glass surface.

The blinking LED on the display means that **NO** energy is being transferred to the pan or bac.

If the indicator operation remains off, check the following:

- Is the induction unit connected to the outlet?
- Is the temperature rotary knob in ON position?
- Do you use a suitable pan or bac (bottom diameter at least 12 cm and the pan or bac made of suitable material?
- Is the pan placed in the center of the right or left heating area?

To verify if the pan or bac is suitable, use a permanent magnet and find out if it sticks to the bottom of the pan or bac. If not, your pan or bac is not suitable for use with induction. Choose a pan or bac which is recommended for induction and keeping food warm.

If in spite of all positive controls and tests the induction unit doesn’t work, refer to the Fault Finding Section.

5 Operation

5.1 Heat-retention process

This induction unit „RTCSmp Install Hold-Line“ is immediately ready for use. The temperature level is chosen by turning the rotary knob and the adjusted temperature as well as the point is shown constantly. The inductive transmission of power depends on the position of the temperature. The blinking LED on the display means that NO energy is being transferred to the pan or bac.

Due to the following reasons, the operator has to be more attentive than with conventional heat-retention systems.

The heat storage capacity of this technology is very low. After turning the temperature rotary knob to a different level, the pan or bac ground is exposed to the new adjusted temperature level quickly. Empty pan or bac heat-up very quickly. Do not put empty pan or bac on the glass surface.

The pan or bac must be placed on one of the two heating areas properly, otherwise the bottom of the pan or bac is heated unequally.

5.2 Comfort

The induction unit transmits energy only when a pan or bac is placed on the heating area, independently of the position of the temperature rotary knob. If you take the pan or bac away from the heating area, the power transfer stops immediately. If the pan or bac is put back on the heating area, the selected power or temperature will be transferred to the pan or bac again.

After switching the induction unit to the “Off”-position, the heat-retention process is stopped immediately.

6 Safety instructions

6.1 Safety conscious work

The safety information contained in these instructions for use, the existing national regulation for the prevention of accidents as well as any internal working, operating and safety regulation stipulated by the operator must be observed.

6.2 Safety information for the operator/operating personnel

- The heating area is warmed up from the heat of the pan or bac. To avoid injuries (burning) do not touch the heating area.
- To avoid overheating of pans or bacs by means of evaporating the contents, don't heat up pans or bacs unattended.
- Switch the temperature rotary knob off if you take the pan or bac away for a while. This will avoid having the heating process continue automatically when a pan or bac is placed back on the heating area. So, if any person starts to use the unit, he/she will have to start the heating process by turning the temperature rotary knob in the ON-position.
- Do not insert any piece of paper, cardboard, cloth, etc. between the pan or bac and the heating area, as this might initiate a fire.
- As metallic objects are heated up very quickly when placed on the operating heating area, do not place any other objects on the induction unit (closed cans, aluminium foil, cutlery, jewelry, watches etc.). Persons with a pacemaker should ask their doctor whether they are safe near an induction unit or not.
- Aluminium foil and plastic vessels are not to be placed on the hot surface.
- The surface must not be used for storage.
- Do not place credit cards, phone cards, cassette tapes, or other objects that are sensitive to magnetism on the glass surface.
- The induction unit has an internal air-cooling system. Do not obstruct the air inlet- and air outlet-slots with objects (cloth). This would cause overheating and therefore the unit would switch off.
- A soiled grease filter blocks incoming air. Clean the grease filter once a month. The grease filter must used dryly.
- Avoid liquid entering into the induction unit. Do not let water or food overflow the pan or bac. Otherwise turn out the unit from the net immediately.
- Residues and deposits removing immediately on the glass surface.
- Do not clean the unit with a jet of water.

- Protection against steam admission because high steam content in the surroundings (concerns units standing next to pasta cookers, steamers or a water bath).
- If the heating area (glass surface) is cracked or broken, the induction unit must be switched off and disconnected from the electric connection. Don’t touch any parts inside the unit.
- Do not use pans or bacs with an uneven bottom.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or a similarly qualified person in order to avoid a hazard.

6.3 Risk in the event of non-observance of the safety information

Danger for persons, for the environment and for the unit can result of non-observance of the safety information. Certain risks may be associated with non-observance of precautions, including:

- Danger to persons through electrical causes
- Danger to persons through overheated pans or bacs
- Danger to persons through an overheated glass surface platform

6.4 Improper operating methods

The operating reliability of the unit can only be guaranteed with proper use. The limit values may be exceeded on no account.

6.5 Unauthorized reconstruction and use of spare parts

Reconstruction of the heat-retention unit or changes to the unit are not allowed. Contact the manufacturer if you intend to make any changes on the equipment. To guarantee the safety, just use genuine spare parts and accessories authorized by the manufacturer. The use of other components voids all warranties.

6.6 Pan detection

Pans or bacs having a diameter smaller than 12cm are not detected. During pan detection, the adjusted temperature set point is shown constantly. No power is transferred and the indicator lamp flashes if no pan or an unsuitable pan is detected.

6.7 Control of the heating area

The heating area is controlled with a temperature sensor. Overheated pans or bacs (hot oil, empty pans) can be detected. Energy transfer will be stopped. The induction unit must be re-started after it has cooled down.

7 Out of operation

If the equipment is not in use, make sure that the temperature rotary knob is in the „OFF“ position. If you do not use the induction unit for a longer period (several days) unplug the unit.

Make sure that no liquid can enter into the cooker and do not clean the cooker with a jet of water.

8 Fault finding/Rectification

CAUTION	Do not open the unit! Dangerous electric voltage inside!

Stop any actions if the heating area (glass surface) is cracked or broken, the induction unit must be switched off and disconnected from the electric supply. Don’t touch any parts inside the equipment.

8.1 Fault finding with error code

Number of flashing signals (Code)	Possible cause	Action to take
E03 - . . . - . . .	Overheated heat sink	Let unit cool down Check air filter and air flow
	Air-cooling system obstructed	Verify that air inlet and air outlet are not obstructed with objects Clean air filter
E04 - . . . . -	Overheated heating zone	Let unit cool down Check air filter and air flow
E05 -. . . . .-. . . . .-	Error on power switch	Contact service agent
E06 - . . . . . -	Overheated electronic	Let unit cool down Check air filter and air flow
	Ambient temperature too high (the cooling system is not able to keep the unit in normal operating conditions)	Verify that no hot air is sucked in by the fan Reduce the ambient temperature, the air inlet temperature must be lower than 40ºC/110ºF
E10 - . . . . . -	Communication BUS	Contact service agent
E12 - . . . . . -	Warning temperature heat sink	Reduce the adjusted temperature Reduce the ambient temperature, the air inlet temperature must be lower than 40ºC/110ºF Verify that air inlet and air outlet are not obstructed with objects Check fan function
E30 - . . . . . -	Interior temperature too high (central unit)	Reduce the adjusted temperature Reduce the ambient temperature, the air inlet temperature must be lower than 40ºC/110ºF Verify that air inlet and air outlet are not obstructed with objects Check fan function
E41 - . . . . . -	Overheated Temperature-Sensor1	Let unit cool down Reduce the adjusted temperature Contact service agent

E42 - . . . . . -	Overheated Temperature-Sensor2	Let unit cool down Reduce the adjusted temperature Contact service agent
E43 - . . . . . -	Overheated Temperature-Sensor3	Let unit cool down Reduce the adjusted temperature Contact service agent
E44 - . . . . . -	Overheated Temperature-Sensor4	Let unit cool down Reduce the adjusted temperature Contact service agent
E45 - . . . . . -	Overheated Temperature-Sensor5	Let unit cool down Reduce the adjusted temperature Contact service agent

8.2 Fault finding without error code

Fault	Possible Cause	Action to take
No heating **Indicator operation is OFF (dark)**	No mains supply	Check the electrical supply (cable plugged onto the wall socket)
		Check preliminary fuses
	Temperature rotary knob is in OFF-position	Turn temperature rotary knob ON
	Unit is defective	Unplug the unit from the electrical supply and contact your service partner
No heating **(If an error code is flashing see section „Fault finding" with error code)**	Pan or bac is too small (bottom diameter less than 12 cm)	Use a suitable pan or bac
	Pan or bac is not placed in the heating area (the unit cannot detect the pan or bac)	Move the pan or bac to the heating area
	Unsuitable pan or bac	Choose a pan or bac recommended for induction use [1)]
	Unit defective	Unplug the unit from the electrical supply and contact your service partner
Poor heating **Indicator operation is ON (shining)**	Used pan or bac is not appropriate	Use a pan or bac recommended for induction use and compare the result with „your" pan or bac
	Air-cooling system obstructed	Verify that air inlet and air outlet are not obstructed with objects
	Ambient temperature is too high (the cooling system is not able to keep the cooker in normal operating conditions[2)]	Verify that no hot air is sucked in by the fan
		Reduce the ambient temperature. The air inlet temperature must be lower than 40ºC/110ºF
	One phase is missing (only units with three phase supply)	Check preliminary fuses
	Unit defective	Unplug the unit from the electrical supply and contact your service partner

Fault	Possible Cause	Action to take
No reaction to temperature rotary knob positions	Temperature rotary knob defective	Unplug the unit from the electrical supply and contact your service partner
Heating cycle switches off and on Within minutes, fan is active	Air inlet or outlet obstructed	Remove objects from air inlet and air outlet slots, clean the slots
	Fan dirty	Clean fan
Heating cycle switches off and on Within minutes, fan is never active	Fan defective	Ask your supplier for repair service
	Fan control defective	
After a long permanent operating time, the heating switches off and on within minutes	Coil overheated, heating area too hot	Switch unit off, remove pan or bac and wait until the heating area has cooled off
	Empty pan or bac	
	Pan or bac with overheated oil	
Small metallic objects (e.g. spoon) are heated up on the cooking area	Pan detection circuit is defective	Ask your supplier for repair service

[1)] To verify, if the pan or bac is suitable, use a permanent magnet and find out if it sticks on the bottom of the pan or bac. If not, your pan or bac is not suitable for induction use. Choose a pan or bac which is recommended for induction use. Choose pan or bac material suitable for induction units.

[2)] The cooling-system (fan) starts to operate when the ambient temperature in the control area exceeds 55ºC/130ºF. At heat temperatures higher than 70ºC/160ºF the controller automatically reduces the power to keep the unit in normal operating conditions. The unit runs in a non continuous mode. This mode can be heard.

9 Cleaning

List with common types of soiling and recommendations how to treat them:

Type of soiling	**Treatment**
Slight soiling, no burned residues	Wipe with a moist cloth (scotch), without cleaning agent
Fatty spots (sauces, soups, ...)	• Polychrom • Sigolin chrom, Inox cream • Vif Super cleaner • Supernettoyant, Sida, Wiener Klak • Pudol System
Lime deposits, caused by water which has boiled over	• Polychrom • Sigonlin chrome, Inopx cream • Vif Supercleaner • Supernettoyant
Strong glimmering metallic colour changes	• Polychrom • Sigolin chrom
Mechanic cleaning	• Razor blade • Non-scratching sponge
Sugar, sugar containing food, plastic, aluminum foil	Immediately scrape off the sugar, plastic or aluminum foil residues thoroughly from the hot cooking area, e.g. with a razor blade. After removal of the residues, clean it with a cleaning agent. If the heating area soiled with residues of sugar, plastic or aluminum foil cools down without prior cleaning, the ceramic surface might become deformed by pinhead-sized pits.

Do not use corrosive or abrasive cleaning agents, such as stain- and rust-removers and rough sponges.

Before cleaning, remove residues with a damp cloth (Scotch) from the glass surface because they could corrode.

A professional maintenance of this induction unit requires regular cleaning, careful handling and service.

Make sure that no liquid can enter into the induction unit.

10 Support

A good maintenance of the Induction unit requires a regular cleaning, care and servicing. The operator has to ensure, that all components relevant for safety are in perfect working order at all times. The Induction unit has to be examined at least once a year by an authorized technician.

CAUTION	Do not open the cooker! Dangerous electric voltage inside!

The units may only be opened by authorized personnel.

11 Waste disposal concept

When the life cycle of this unit ends, make sure that you safely dispose it.

Avoid abuse:

The Induction unit may not be used by any person not having the appropriate qualifications. Avoid that the unit, provided for disposal, can be brought into operation again. The heat-retention unit is built up with common electrical, electromechanical and electronic parts. No batteries are used.

The operator is responsible for a proper and safe waste disposal concept.