# INSTRUCTIONS FOR INSTALLATION AND USE

# **INDUCTION BUILT-IN UNITS**

RTCSmp Install Griddle-Line and Kombi-Line Compactmodul

with RTCSmp-Technology

**SH/GR/IN/CL 3500** 

SH/GR/IN/CL 5000

**SH/KB/IN/CL 3500** 

**SH/KB/IN/CL 5000** 

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#### 1 General remarks

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

#### 1.1 Description of symbols



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 the cover.

No user serviceable parts inside.

Refer servicing to qualified personnel.

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

The following text calls the induction unit type "Install Griddle-Line" only "induction unit".

## 1.2 Purpose of the induction unit

The built-in induction units are especially suitable as frying units in the kitchen for the preparation of meals. They can be used for the frying and keeping warm-process of food.

This induction unit is solely for commercial purposes.

## 2 Description of product

#### 2.1 Scope of delivery

- 1 Induction unit built-in version completely and ready for use
- 1 Cleaning pad
- 1 Griddle spatula
- Splash cover (only for SH/GR/IN/CL)

#### 2.2 Products

We differentiate between two basic types with two different power ratings each. One with 3.5kW and one with 5kW (each type), all built in a robust method of construction. They are compact and powerful with a revolutionary "RTCSmp" technology (Realtime Temperature Control System). The complete case is made of CrNi-steel with a griddle plate or braising pan set-in above. Rounds and a smooth surface enable a rational and optimal cleaning. The temperature can be chosen via a continuously variable power switch, set value and actual value are visualized on a display.

- RTCSmp (Realtime Temperatur Control System) allows a temperature regulated frying process with contactless temperature measurement and regulation in realtime
- The temperature of the whole griddle/ braising pan surface is measured, regulated and checked
- Electronical check of energy supply
- A maximum of safety thanks to multiple functions of protection and checking
- State-of-the-art SMD-technique, regulated via microprocessor
- Temperature regulation between 50° and 230°C
- Heat-up time SH/GR/IN 3500 from 20° to 200°C within 4 ½ minutes
- Heat-up time SH/GR/IN 5000 from 20° to 200°C within 3 ½ minutes
- A special developed induction griddle plate with a HPCR-INOX surface coating
- Grease expiry by functional wide juice collector
- Europatent EP 0858722, Swiss patent 695817, US 7183525 B2

#### **Fulfills the latest directions:**

EN 60335-1/-2-36, EN 62233; EN 55011, EN 61000 CE-conform ANSI/UL 197; CSA C 22.2 No.109 FCC Part 18, ICES-001 NSF/ANSI 4

#### 2.2 Technical Data

Туре	Dimensions	Griddle plate
SH/GR/IN/CL	531 x 390 x 176 mm	493 x 352 mm
SH/KB/IN/CL	531 x 390 x 226 mm	493 x 352 mm

Туре	Voltage	Power	Weight
SH/GR/IN/CL 3500	230/ 208 V	3,5 kW	24 kg
SH/GR/IN/CL 5000	400/ 208 V	5,0 kW	26 kg
SH/KB/IN/CL 3500	230/ 208 V	3,5 kW	24 kg
SH/KB/IN/CL 5000	400/ 208 V	5,0 kW	26 kg

#### **Operating conditions**

Max. tolerance of the nominal supply voltage +6%/-10%

Supply frequency 50/60 Hz

Protection class IP X0

Max. environmental temperature Stock  $> -20^{\circ}\text{C} - +70^{\circ}\text{C}$ 

In function  $> +5^{\circ}\text{C} - +40^{\circ}\text{C}$ 

Max. relative air moisture Stock > 10% - 90%

In function > 30% - 90%

#### 3 Installation

#### 3.1 Requirements of installation

The air inlet and outlet must not to be hindered by any obstructions, the max air flow is 150 m<sup>3</sup>/h and therefore a minimal opening of 10`700 mm<sup>2</sup> has to be maintained. The supporting area must be admitted for minimum 80 kg. The temperature control must be easily accessible and the display must be visible.

The area below and around the fan of the induction unit has to be absolutely free regarding danger of obstruction and air intake. An optimal air circulation must not be reduced by the installation. If necessary, a flexible air duct including shackle (available as accessory) has to be installed to ensure perfect air flow. 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 floors.

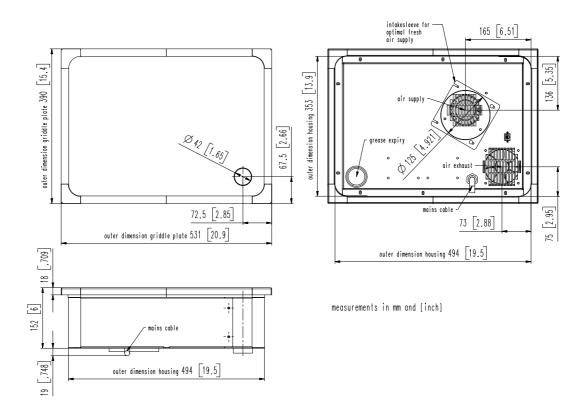
In addition make sure that the air of air-inlet and air-outlet do not mix. We recommend to ensure a supply of fresh air by adding an air duct incl. shackle or by air openings. The air exit must not to be hindered by any obstructions. It is recommended to use the optional installation kit for the installation of the unit.

#### 3.2 Definition of interfaces

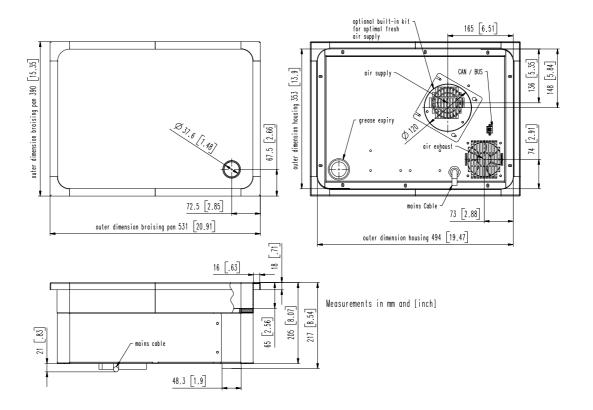
Please observe the following rules:

- 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 electrical net
- When faulty-current circuit breakers are used, they must be rated for a breaking current of more than 30mA
- When installing this generator, make sure that the air supply and air exit are conducted separately. The air from air inlet and outlet **must not** mix. The air outlet must be conducted out of the counter as otherwise there will be a heat blockade which leads to power reduction or to switch-off of the unit
- This induction unit is equipped with an internal air cooling system. Make sure that the air supply and air exhaust are not blocked (wall, fabric etc)
- Ensure that a minimal opening of 10`700 mm<sup>2</sup> is maintained for the air supply
- This induction unit is equipped with an additional grease filter. Make sure that the induction unit does not take in hot or greasy ambient air (concerns units located side by side, or one behind each other, or located near a frying pan or an oven)
- The induction unit must not be placed near or on a hot surface
- 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
- Flush mounted Griddles have to be sealed with silicone to keep grease from entering into the stove
- A juice collector must be placed under the extension tube. The expert who takes care of the mounting of the Install Griddle-Line unit can easily extend the extension tube. Make sure that the juice collector is completely closed against the fan. This will avoid that greasy air is conducted into the unit

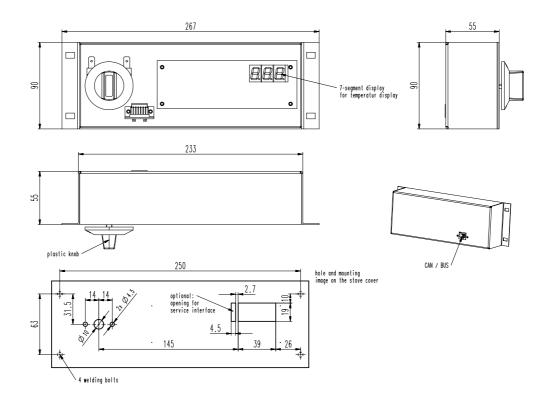
## 3.3 Single zone RTCSmp Griddle-Line SH/GR/IN 3500 and 5000



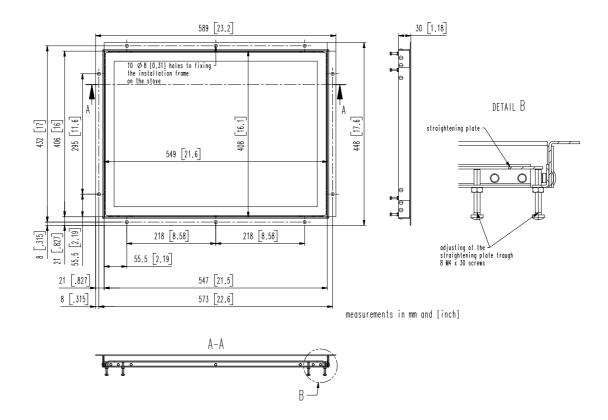
## 3.4 Single Zone RTCSmp Kombi-Line SH/KB/IN/CL 3500 and 5000



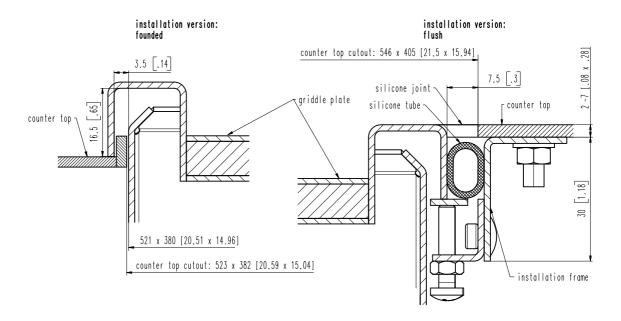
## 3.5 Operation unit Install Griddle-Line / Kombi-Line



## 3.6 Mounting frame SH/GR/IN/CL



#### 3.7 Mounting instructions



#### Work steps (flush version for SH/GR/IN/CL only)

- 1. The optional mounting frame is mounted on the attached stove bottom welding studs
- 2. The Griddle plate can now be inserted from the top into the cut out
- 3. With the adjustable screws on the mounting frame, the Griddle plate can be height adjusted
- 4. After the height adjustment the Griddle plate can be sealed with a Ø11mm heat resistant silicone tube
- 5. Now the Griddle plate can be sealed with a Pactan gap of approximate 9 mm between stove surface and the sidewall from the plate

The silicone must be cured for about 48h. During this time the griddle plate should not be heated.

#### **Work steps (founded version)**

- 1. The edge of the Griddle Plate has to be guided over the edge of the cut out
- 2. Treat the surface of the countertop and the lower end of the Griddle plate with Pactan primer.
- 3. A thin silicone joint should be added along the edge of the Griddle plate and on the counter top.

The silicone must be cured for about 48h. During this time the griddle plate should not be heated.

#### 3.8 **Assembly**

The conditions of the "Requirements of installation" must be guaranteed.

If the voltage is wrong, the griddle can be ATTENTION damaged. Follow strictly the indication on the rating plate.

The induction unit is equipped with a mains cable following the national standards and has to be connected to a wall socket.

The installation for the electricity must be fitted by approved installation contractors in accordance with specific national and local regulations. The installation contractors are responsible for the correct layout and installation in conformity with all safety regulations. The warning signs and specification plates put up to the units must be strictly followed.

Check and ensure that the mains voltage matches the voltage given on the rating plate.

Max. tolerance of the supply voltage +6%/-10%

Frequency 50/60Hz

- Turn the power switch on O (OFF)
- Remove all objects from the griddle plate

The installation is completed and a function test must be done according to chapter 4.

#### 4 Function test

#### **ATTENTION**

The Griddle plate as well as the case will be warmed-up during operation. In order to avoid injuries, do not touch the unit during operation

- Turn the power switch on set value of 200°C
- The display shows the desired set value.
- If the set value is not changed, the display changes within approx. 2 seconds from the set temperature (with point) to the actual temperature (without point)
- The Griddle plate warms up to the set temperature
- After reaching the set value of 200°C turn the power switch to position 0
- The ventilation system should start working once 200°C is reached
- If the sensor detects enough residual heat, the display still shows ,,hot"
- If the residual temperature of the Griddle plate is low, the regulation of the induction unit changes into the "stand-by" mode. The point on the display flashes once a second
- If in spite of all positive controls and tests the Induction unit does not work, refer to the Fault Finding Section

#### 5 Operation

#### 5.1 Frying process

#### ATTENTION

The griddle plate as well as the case will be warmed-up during operation. In order to avoid injuries, do not touch the unit during operation

The patented RTCSmp (Realtime Temperature Control System) detects the temperature of the Griddle plate in real-time and feeds energy if required. The temperature is chosen by turning of the power switch. Basically, we recommend a plate temperature of between 170° to 200°C.

For the frying process, only little grease is required. This grease can be applied onto the HPCR-INOX Griddle plate by vaporizer or brush. Breaded products require more grease. In order to avoid an overheating or burning of the grease, a permanent check of the Griddle plate during the heat-up process is required.

If frozen food is used regularly, put it on varying positions as otherwise the plate could deform itself locally.

For the turnover of food pieces, use exclusively the enclosed griddle spatula. The use of sharp-edged or pointy objects (knife or fork) will damage the Griddle plate.

The temperature loss, occurring when the food is put onto the Griddle plate, is immediately recognized and corrected. This fast reaction time avoids the exit of protein and water out of the meat.

The turning of the power switch to position 0 stops the energy supply to the Griddle plate. If enough residual heat on the Griddle plate is detected, the display shows "hot". Is the residual heat of the Griddle plate low, the control system changes into the "stand-by" mode. The point on the display flashes once a second.

## **6** Safety instructions

#### 6.1 Risk at non-observance of the safety information

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

In detail, the non-observance can lead to the following risks (examples):

- Danger to persons through electrical causes
- Danger to persons through an overheated heating surface
- Danger to persons through overheated oil or grease
- Danger to persons through a hot case

#### 6.2 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 special working, operating and safety regulation stipulated by the operator must be observed.

#### 6.3 Safety information for the operator/operating personnel

The frying area is warmed up by the set-in temperature.

- The Griddle plate and the case is warmed up during operation. In order to avoid injuries, do not touch them
- Avoid liquid entering into the griddle. Do not let water or food overflow the frying area. Do not clean the griddle with a jet of water
- The induction Griddle-Line unit must only be used for frying or keeping warm of food. Do no put any other object than food onto the frying plate
- Do never heat-up frying devices as e. g. pans or bacs on the griddle plate as this could lead to thermal damage or destruction.
- Do not put any piece of paper, cardboard, cloth, etc. on the frying area, as this might initiate a fire
- Do not place damageable objects like credit cards, phone cards, cassette tapes, or other objects on the heating surface
- As metallic objects are heated up very quickly when placed on the frying area, do not
  place any other objects (closed cans, aluminum foil, cutlery, jewelry, watches etc.) on the
  induction griddle
- Persons with a pacemaker should ask their doctor whether they are safe near an induction griddle or not

- The induction griddle has an internal air-cooling system. Do not obstruct air inlet- and air outlet-slots with objects (cloth) as this would cause an overheating and the griddle would switch off
- If the mains cable is damaged, have it replaced immediately by the manufacturer or by an approved installation contractor

#### 6.4 Improper operating methods

The operating reliability of the griddle 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 griddle or changes to the griddle is not allowed. Contact the manufacturer if you intend to make any changes on the griddle. To guarantee safety, use only genuine spare parts and accessories authorized by the manufacturer. The use of other components voids all warranty.

## 7 Out of operation

If the induction griddle is not in use, make sure that the temperature knob is in the "OFF" position. If you do not use the griddle for a longer period (several days), unplug the unit. Make sure that no liquid can enter into the griddle and do not clean the griddle with a jet of water.

## **8** Fault finding / Rectification

The griddle may only be opened by authorized service personnel.

**ATTENTION** Do not open the griddle – dangerous electric voltage inside!

#### 8.1 Fault finding with error code

The function of the induction device is continuously controlled through the control- and surveillance system. When it detects a malfunction, then appears an error code on the display (for example E03). The error code is showed alternately with the actual temperature on the display.

Error-code	Signification	Measure to take
E03	Excess temperature heat sink 1)	Check air supply and air exhaust
		Check function of fan
		Contact your service partner
E04	Excess temperature griddle zone 1)	Reduce set value temperature
		Contact your service partner
E05	Error on power switch	Contact your service partner
E06	Excess temperature inside the unit 1)	Check air supply and air exhaust
		Contact your service partner
E10	Communication BUS 1)	Contact your service partner
E12	Warning temperature heat sink <sup>2)</sup>	Reduce set value temperature
		Check air supply and air exhaust
		Check function of fan
E20	Warning temperature inside the case <sup>2)</sup>	Check air supply and air exhaust
E21	Error temperature of heat sink 1)	Contact your service partner
E24	Error temperature inside the case <sup>1)</sup>	Contact your service partner
E30	Excess temperature inside the case 1)	Reduce set value temperature
		Check air supply and air exhaust
		Contact your service partner

Error-code	Signification	Measure to take
E41	Excess temperature or error of	Reduce the adjusted temperature
	Sensor 1 *)	Contact your service partner
E42	Excess temperature or error of Sensor 2 *)	Reduce the adjusted temperature
		Contact your service partner
E43	Excess temperature or error of Sensor 3 *)	Reduce the adjusted temperature
		Contact your service partner
E44	Excess temperature or error of	Reduce the adjusted temperature
	Sensor 4 *)	Contact your service partner
E45	Excess temperature or error of Sensor 5 *)	Reduce the adjusted temperature
		Contact your service partner
E46	Excess temperature or error of Sensor 6 *)	Reduce the adjusted temperature
		Contact your service partner
E47	Griddle plate too hot partial temperature over 290°C 1))	Cool down the unit
		Reduce the adjusted temperature
		Contact your service partner

<sup>1)</sup> The induction unit stops working immediately

<sup>&</sup>lt;sup>2)</sup> The induction unit is still working with reduced power cycles

<sup>\*)</sup> The Unit operates as normal

## 8.2 Fault finding without error code

Error	Cause	Action to take
No heating indicator operation is	No mains supply	Electrical supply (cable plugged in the wall socket)
OFF (dark)		Check preliminary fuses
	Temperature knob in position 0	Turn temperature knob ON
Poor heating, display is ON (shines)	Air-cooling system obstructed	Is the air supply and air exhaust obstructed
	Ambient temperature is too	Is hot air sucked into the air supply
	high	Can the air circulate sufficiently. Can the air circulation be ameliorized
	One phase is missing (concerns units with three phase supply)	Check preliminary fuses
	Induction unit defective	Unplug the Griddle line unit from the electrical supply and contact your service partner
No reaction to temperature knob positions	Temperature knob defective	Unplug the Griddl-Line unit from the electrical supply and contact your service partner
Reduced heating output, fan is working	Air inlet or outlet obstructed	Remove objects from air inlet and air outlet slots, clean grease filter
	Fan is dirty	
Reduced heating	Fan defective	Unplug the unit from the electrical
output, fan does not work	Fan control defective	supply and contact your service partner
Reduced heating output after a long operation time	Frying area overheated overheated oil on frying area	Switch unit off, wait until the frying area has cooled down

#### 9 **Cleaning**

Depending on the degree of soiling, the frying area shall be cleaned repeatedly but at least once a day.

Avoid the entering of liquid into the induction **ATTENTION** unit. The cleaning by a jet of water is not allowed

For the cleaning from soiling or deposits use exclusively water to which a ph-neutral cleaning agent (on the base of non-ionic or anionic tenside) can be added.

Lime residues on the frying area can be removed with a commercial lime detergent.

For the cleaning of the frying area, use the steel sponge and the special griddle spatula which are delivered together with the Griddle-Line unit.

For the cleaning of tough deposits, we recommend the use of water put onto the Griddle plate at a temperature of 80°C. This procedure helps to dissolve the soiling and can be removed into the fat drip tray by the griddle spatula.

Avoid strong detergents and dissolvers such as Ketone and Ester as well as alkaline detergents. Depending on concentration, reaction time and temperature, they could lead to a damage of the Griddle plate. Do not use scratching devices such as steel wool or scratching sponges.

Mechanical influence as strokes can lead to a shortehed life cycle of the heating surface.

Do not clean the induction unit by running water, a jet of water or steam.

The cleaning of the frying area can produce hot steams – danger of burning!

Make sure that the grease filter is cleaned once a month. It can be put into the dishwasher but must be wiped off before installation in the Induction unit.

## 10 Support

A good maintenance of the induction griddle requires 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 griddle has to be examined at least once a year by an authorized technician.

**ATTENTION** Do not open the griddle – dangerous electric voltage inside!

The induction unit may only be opened by authorized personnel.

## 11 Waste disposal concept

A product labeled with (on the product or on the wrapping) must not be disposed as household waste but has to be handed over to a collection point for electric and electronic waste. A professional waste disposal helps to avoid a negative impact on environment and human health which could accur at inadequate disposal. For more detailled information regarding recycling of the product, contact your local office, a waste disposal service or the salesperson.

When the life cycle of the induction griddle ends, make sure that it will be safely disposed.

#### 11.1 Prevention of abuse

The Griddle-Line unit must not be used by any unqualified person. Avoid that the unit, provided for disposal, will be brought back into operation.

The unit is built up with common electrical, electromechanical and electronic parts. No batteries are used.

The operatos is responsible for a proper and safe disposal of the induction griddle.