

AC 433V0 106.888

AC 364V0 106.889

AC 464V0 106.793

Bedienungsanleitung BETA-Heißluftofen Seite 1 bis 22

D/A/CH

Instruction manual BETA Convection oven from page 23 to 44



Mode d'emploi Four à convection BETA de page 45 à page 66



Gebruiksaanwijzing Heteluchtoven BETA blz. 67 t/m 88



Instrukcja obsługi Piec konwekcyjny BETA strony od 89 do 110







# Keep this instruction manual ready to hand at the product!

1. General Information	24
1.1 Information about the instruction manual	24
1.2 Key to symbols	24
1.3 Liability and Warrantees	25
1.4 Copyright protection	25
1.5 Declaration of conformity	25
2. Safety	26
2.1 General information	26
2.2 Safety instructions for use of the device	26-27
2.3 Intended use	27
3. Delivery, packaging and storage	28
3.1 Delivery check	28
3.2 Packaging	28
3.3 Storage	28
4. Technical data	29
4.1 Convection oven properties	29
4.2 Technical specification	29
5. Installation and operation	30
5.1 Safety instructions	30
5.2 Installation and connection	31-33
5.3 Operating	34-42
6. Cleaning and maintenance	43
6.1 Safety advice	43
6.2 Cleaning	43
6.3 Safety instructions for maintenance	43
7. Waste disposal	44

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#### 1. General information

#### 1.1 Information about the instruction manual

This instruction manual contains information about the installation, operation and maintenance of the device and should be consulted as an important source of information and reference guide.

Awareness of the safety instructions and instructions for use in this manual will ensure the safe and correct use of the device.

In addition to the information given here, you should comply with any local Health and safety Controls and generally applicable safety regulations.

The instruction manual forms part of the product and should be kept near the device and easily accessible for anyone carrying out the installation, servicing, maintenance or cleaning.

# 1.2 Key to symbols

In this manual, symbols are used to highlight important safety instructions and any advice relating to the device. The instructions should be followed very carefully to avoid any risk of accident, personal injury or material damage.



#### **WARNING!**

This symbol highlights hazards, which could lead to injury.

Please follow the instructions very carefully and proceed with particular attention in these cases.



#### WARNING! Electrical hazard!

This symbol draws attention to potential electrical hazards. If you do not follow the safety instructions, you may risk injury or death.



#### **CAUTION!**

This symbol highlights instructions, which should be followed to avoid any risk of damage, malfunctioning and/or breakdown of the device.



#### NOTE!

This symbol highlights tips and information, which have to be followed for an efficient and trouble-free operation of the device.



#### WARNING! Hot external surface!

This symbol is a warning that the device surface is hot when in use. Ignoring this warning may result in burns!



# 1.3 Liability and Warrantees

All the information and instructions in this manual take into account standard safety regulations, current levels of technical engineering as well as the expertise and experience we have developed over the years.

The instruction manual was translated with all due care and attention. However, we do not accept liability for any translation errors. The German version of this instruction manual is definitive.

If the delivery consists of a special model, the actual scope of delivery may differ from the descriptions and illustrations in this manual. This is also the case for special orders or when the device has been modified in line with new technology. If you have any questions, you should contact the manufacturer.



Read the instruction manual carefully before using the device. The manufacturer does not accept liability for any damage or malfunction resulting from not following the instructions for use.

The instruction manual should be kept near the device, easily accessible for anyone wishing to work with or using it. We reserve the right to make technical changes for purposes of developing and improving the useful properties.

# 1.4 Copyright protection

The instruction manual including any texts, drawings, images or other illustrations is copyright. No part of this publication may be reproduced, transmitted or used in any form or by any means without permission in writing from the manufacturer. Any person who commits any unauthorized act in relation to this publication shall be liable to claims for damages. All rights reserved.



The contents, texts, drawings, pictures and any other illustrations are copyright and subject to other protection rights. Any person unlawfully using this publication is liable to criminal prosecution.

# 1.5 Declaration of conformity

The device complies with the current standards and directives of the EU. We certify this in the EC declaration of conformity.

If required we will be glad to send you the according declaration of conformity.



# 2. Safety

This section provides an overview of all important safety aspects.

In addition every chapter provides precise safety advice for the prevention of dangers which are highlighted by the use of the above mentioned symbols.

Furthermore, attention should be paid to all pictograms, markers and labels on the device, which must be kept in a permanent state of legibility.

By following all the important safety advice you gain an optimal protection against all hazards as well as the assurance of a safe and trouble-free operation.

#### 2.1 General Information

This device is designed in accordance with the presently applicable technological standards. However, the device can pose a danger if handled improperly and inappropriately.

Knowing the contents of the instruction manual as well as avoiding mistakes and thus operating this device safely and in a fault-free manner is very essential to protect yourselves from the hazards.

To prevent hazards and to ensure optimum efficiency, no modifications or alterations to the device that are not explicitly approved by the manufacturer may be undertaken.

This device may only be operated in technically proper and safe condition.

# 2.2 Safety instructions for use of the device

The specifications regarding the industrial safety are based on the Regulations of the European Union applicable at the time of manufacturing the device.

If the device is used commercially, the user is obliged to ensure that the said industrial safety measures concur with the state of the rules and regulations applicable at the time in question for the entire period of use of the device and to comply with the new specifications.

Outside the European Union, the industrial safety laws applicable at the place of installation of the device and the regional territorial provisions must be complied with.

Besides the industrial safety instructions in the instruction manual, the general safety and accident prevention regulations as well as environment protection regulations applicable for area of application of the device must be followed and complied with.





#### CAUTION

- o The device is not intended for use by individuals (including children) with physical or mental disabilities, insufficient experience, and/or insufficient knowledge unless such persons are under the care of a person responsible for their safety or have received instructions regarding appropriate use of the device.
- o Children should be observed to ensure that they are not playing with the device.
- Preserve this manual safely. When passing on/selling the device to a third party, the manuals must be handed over along with the device.
- Every person using the device must act in accordance to the manuals and under consideration of the safety advice.
- o The device is to be used indoors only.

#### 2.3 Intended use

Safe operation is only guaranteed when using the device for its intended purpose.

Any technical interventions, as well as assembly and maintenance are to be made by a qualified customer service only.

The convection oven is intended <u>only</u> for preparing the following types of food products:

- cooking meat, fish and vegetables;
- baking bread, cake and pie;
- heating prepared food products;
- defrosting deep-frozen food products;
- toasting;
- preparing chilled and deep-frozen food products.



#### CAUTION!

Any use going beyond the intended purpose and/or any different use of the device is forbidden and is not considered as conventional.

Any claims against the manufacturer or his authorized representative as a consequence of experiencing damages resulting from unconventional use are impossible.

The operator is liable for all damages resulting from inappropriate use.



# 3. Transport, packaging and storage

# 3.1 Delivery check

Please check the delivery upon completeness and transport damage immediately after receipt.

In case of visible damage do not accept or accept the delivery with reservation only.

Note the extent of damage on the carrier's bill of delivery. Trigger off the complaint.

Hidden damages should be reclaimed immediately after notice, as claims for damages can only be asserted within the effective period for complaints.

# 3.2 Packaging

Please do not throw away the covering carton of your device as it might be useful for storage purposes, when moving or, in case of damages, when the device must be sent back to a repair center. The outer and inner packing material should be removed completely from the device before installation.



If you liked to dispose the packing, consider the regulations applicable in your country. Supply re-usable packing materials to the recycling.

Please inspect the device upon completeness. In case any part is missing please contact our customer service center immediately.

# 3.3 Storage

Keep the package closed until installation and under consideration of the outside indicated positioning- and storage markings.

Packages should be stored under consideration of the following:

- Do not store outdoors.
- Keep it dry and dust-free.
- Do not expose it to aggressive media.
- Do not expose it to direct sunlight.
- Avoid mechanical shocks and vibration.
- In case of longer storage (> 3 months) make sure you check the state of the packaging and the parts regularly.
   If required refresh or renew.



## 4. Technical data

# 4.1 Convection oven properties

- Interior and exterior: stainless steel construction
- Operated by electronically, with capacity to save 20 programs with 6 settings each
- For baking trays 340 x 460 mm or 600 x 400 mm
- Lighted cooking chamber
- Double glaze door
- Humidification program
- Rounded corners in cooking chamber
- Easy-to-understand symbols for simple use

# 4.2 Technical specification

# Convection ovens for bakeries / shops

Name	BETA convection oven with humidity				
Model:	AC 433V0	AC 364V0	AC 464V0		
Article no.:	106.888	106.889	106.793		
Insertions:	4 x 340 x 460 mm	3 x 600 x 400 mm	4 x 600 x 400 mm		
Distance between trays:	80 mm				
Temperature range:	0°− 270℃				
Time settings:	up to 9 h 59 m				
Power:	3,3 kW /1 NAC 230 V	4,0 kW /3 NAC 400 V	6,6 kW /3 NAC 400 V		
Water connection:	3/4"	3/4"	3/4"		
Dimensions (W x D x H mm):	650 x 770 x 500	760 x 955 x 460	760 x 955 x 540		
Weight:	30 kg	40 kg	50 kg		
Equipment:	2 grilles, 2 baking trays	3 baking trays	4 baking trays		

We reserve the right to make technical changes!



# 5. Installation and operation

# 5.1 Safety instructions



#### WARNING! Electrical hazard!

The device must only be connected to a properly installed single socket with protective contact.

Never yank cord to disconnect from outlet.

Cable must not touch any hot parts.

 See that the cable does not touch any heat sources or sharp edges. Do not let the cable dangle over the counter edge.



#### WARNING! Hot surface!

During operation some elements of the device very become hot. To avoid burns, do not touch hot elements!

- Do not use the device in case it does not function properly, has been damaged or dropped.
- Do not use any accessory or spare parts that have not been recommended by the manufacturer. These can be dangerous for the user or lead to damages of the device or personal injury, and further, the warranty expires.
- Do not lay the cable over carpets or heat insulations. Do not cover the cable. Keep away the cable from operating range and do not dunk it into water.
- Do not move or tilt the device when in operation.



#### WARNING! Hazard via electrical current!

The device can cause injuries due to improper installation!

Before installation the local power grid specification should be compared with that of the device (see type label).

Connect the device only in case of compliance!

Take note of the security advice!



#### 5.2 Installation and connection

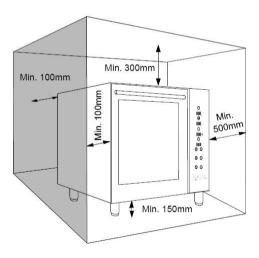


#### **CAUTION!**

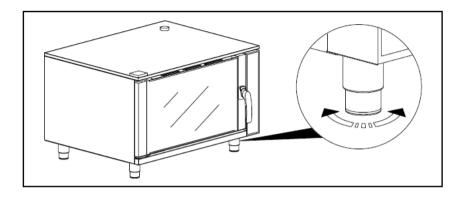
#### Installation and maintenance can only be performed by qualified personnel!

#### Setup

- Unpack the device and remove all packing material.
- Place the device on a flat, secure surface that can support its weight and is resistant to high temperatures.
- Never place the device on a flammable surface.
- Do not place the device near an open flame, electric or coal oven, or other heat source.
- Place the device in a well-ventilated area. The device may only be installed in a space with proper ventilation, optimally under an oven hood that will direct fumes to the outside.
- Ensure that ventilation openings are not blocked in any way.
- Do not place the device directly against walls or other objects made of flammable material.
- Keep a minimum distance of 300 mm from the ceiling if it is made of flammable material or does not have heat insulation.
- To enable installation and maintenance, keep a distance of at least 500 mm between the device's right side and walls or other device (see diagram at right).
- Keep a minimum distance of 100 mm on the left side and at the rear of the device from walls or other objects, and 150 mm from the top.



# **B**artscher



- To make dampening and height adjustments, use the adjustable legs as shown in the above diagram. Large differences in height or tilt can negatively impact the device's operation.
- Before first use, remove the protective foil from the device. Peel the foil off slowly, so as not to leave any glue. If some glue remains, remove it using an appropriate solvent.



The device is not designed to be built-in or for serial installation!

# Connecting

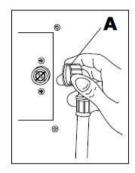
# Connecting to electricity source

- Before connecting the device to an electricity source, ensure that the voltage and frequency values given on the panel correspond to those of the electrical network.
   The maximum permissible voltage difference is ± 10%.
- Check if there is an SL connection fulfilling legal requirements. Use an appropriately
  cut cable when connecting the device to electricity.
- A multipolar breaker must be installed between the device and the electricity supply.
   The distance between contacts should be at least 3 mm, and it should be located in an easily-accessible place.
- Connect the device to the electricity supply in compliance with all international, domestic and local regulations.
- In certain situations, connect the device to a potential equalizing system; follow the relevant regulations.



#### Water connection

- Ensure that the device is located near water connections.
- If a new installation is to be put in, flush it out with water to remove all dirt and impurities before connecting the device so as to protect the magnetic valves.
- Connect an elastic pressure hose to the device's joint (3/4" G) by screwing in a spout (A – see drawing at right). Connect the other end of the hose to the cold water supply, and place a mechanical filter and stopcock between those elements.
- To ensure the device functions properly and prevent the formation of deposits in the water boiling chamber, water must <u>not</u> have a hardness above 7°dH. If water hardness is above 7°dH, it is necessary to install a water softening mechanism.





Water pressure must be 2-3 bar. In case of higher pressure, use a reducing valve.

# **Equipment (not included with device)**



# Reducing valve for convection and steam convection ovens

Made from chrome-plated brass, 3/4" connections, factory set at 3 bar, adjustable from 1-6 bar, incoming pressure max. 16 bar, max. operating temperature 65 ℃

Article no. 533,051

# Safety features

The device is equipped with the following security and safety features:

**Safety thermostat** in the cooking compartment: if the cooking compartment overheats, the safety thermostat is activated and the flow of electricity to hearing elements is interrupted.

**The door switch** interrupts the oven's functioning when the doors are opened: the heating and ventilator are also turned off.



#### 5.3 Operation

# Cooking in the convection oven

The convection oven cooks by circulating hot air inside the device. This allows for even cooking owing to a stable and consistent temperature throughout the device.

One advantage of the convection oven is that various food products can be prepared at the same time (if their cooking temperature is the same) without the risk of flavours mixing.

## Preparing the device

- Clean the device prior to first use (see 6.2 "Cleaning").
- Before activating the device, check that it is properly installed in a stable location, and check the electrical and water connections.
- Prior to first use heat the device without food products inside (according to directions below).
- If the device is heating up for the first time, ensure proper ventilation.
- Next. leave the device to cool.



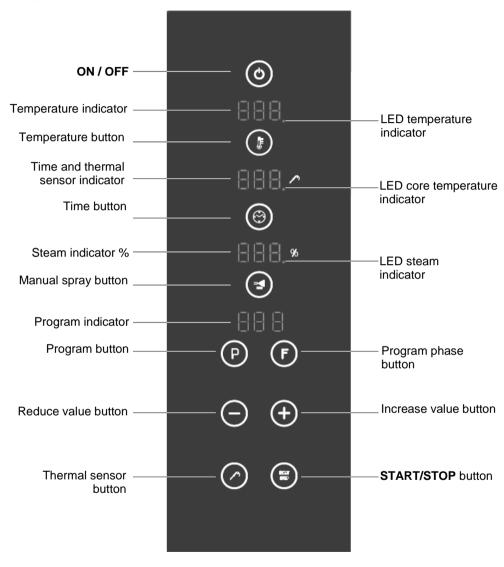
Before each use preheat the device thoroughly.

For baked goods, take special care to preheat the convection oven before placing food products inside.

 Place the desired food products into appropriate GN containers or on baking trays, then put them inside the cooking chamber on the grille.



# Digital control panel





#### **Button functions**

#### ON/OFF

If the device is connected to electricity, the program name will be displayed for a few seconds on the screen. The device will then enter into **STANDBY mode** and the **ON/OFF** button will light up. The device will wait for further instructions.

By pressing the **ON/OFF** button the device will turn on and all indicators on the display will light up. The temperature indicator will flash. The following initial settings will be displayed:

Temperature- initial setting 100 ℃

Time- initial setting 000

Steam- initial setting 00 %

Program- initial setting MA

(MA - manual mode)

Desired settings can now be entered.

Set the desired **temperature** using the buttons "" or "+". The temperature indicator will flash for
15 seconds, then accept the value entered. This
value will be displayed on the temperature
indicator.

The time indicator flashes.

The desired **cooking time** can be set using the buttons "-" or "+". The temperature indicator will flash for 15 seconds, then accept the value entered. This value will be displayed on the time indicator.

The steam indicator flashes.

Now the **steam** power can be set using the buttons "-" or "+". After entering the desired value the steam indicator will flash for 15 seconds, then accept the value entered if no other settings are changed.







If further settings are adjusted by pressing one of the buttons within 15 seconds, the device will immediately accept the previously entered values.

Entering values is complete, the values set will be displayed on the corresponding indicators.

The program indicator will remain in the **MA** position and not flash, unless the program button **P** is pressed to start the programming function.

While cooking, the settings can be changed by pressing the appropriate button (temperature, time, steam) and then the buttons "-" or "+". To confirm the changed settings, press the corresponding button or wait 15 seconds until the adjusted values are saved.

If the device is placed in **STOP** mode and no action is taken within 15 minutes, the device will automatically switch off the same as if the **ON/OFF** button is pressed.

The **ON/OFF** button is not active while cooking. To activate it, first press **START/STOP**. The settings entered will remain in the device's memory for 5 minutes after cooking time has expired or if the device is turned off by the **ON/OFF** button.

The device will return to its startup sequence 5 minutes after being turned off, and when the **MA** function is activated (manual operation).



#### START/STOP button

By pressing the **START/STOP** button, the cooking time begins and the internal lighting comes on.

The temperature indicator will switch from displaying the set temperature to the actual temperature in the cooking compartment. The corresponding LED indicator will remain lit up until the desired value is reached, go off if this value is exceeded, and come on if the value has not yet been reached.

The time indicator will count down, and the corresponding LED indicator will flash. After time has expired the LED indicator will shine without interruption.

The steam indicator displays without interruption the entered value, and the corresponding LED indicator will come on if spraying is activated.

The program indicator will continue to display MA (manual operation), or if a program is selected it will display the number and stage of the program if the stage has been set.

If the **START/STOP** button is pressed during cooking, the cooking process will be suspended. All settings entered will be remembered. The cooking time will resume where it was interrupted. If the **START/STOP** is pressed again, the cooking process will resume and the settings will be remembered.

After cooking time expires a signal will sound for 10 seconds or until the doors are opened, and the device will go into **OFF** mode.

Opening the doors during cooking has the same effect as pressing **START/STOP**. Closing the doors will cause the device to automatically resume functioning.





# **Temperature button**

Temperature range 0 ℃ to 270 ℃ Initial temperature setting: 100 ℃

The temperature can be adjusted during the cooking cycle by first pressing the temperature button. If the temperature indicator is flashing, the temperature setting can be changed using the buttons "-" or "+".



#### Time button

Time value range from **0.00** to **9.59** Initial time setting: **000** 

Set the cooking time in hours and minutes by using the button "+".

If the time selected exceeds **9.59**, the oven will go into continual cooking mode and the indicator will display "InF". In this mode the device will function until deactivated.

If the time is lowered to a fixed value using the "" button when the device is in continual cooking
mode, it will return to the minimum time.



# |nF.^ ⊚

#### **Preheating**

By pressing and holding the time button, the preheating function is activated. If the device is in manual mode or during the first stage of a program, in place of the time the display will read "PRE".

If the cooking process is activated with the button **START/STOP**, the device will begin functioning. When the set temperature is reached a signal will sound until the device's doors are opened.

If the doors are closed again while a program is in process, the next stage of the program is automatically activated.



When in manual mode, at the moment doors are closed all settings return to zero and resets to the beginning of the setup process. If the time button is pressed the time indicator will be set to **000** and preheating will be stopped.



#### Steam button

Setting range from **0** to **99** Initial steam setting: **00** 

The initial value of **00** % will flash on the steam indicator.

Press the steam button and set the desired value using the buttons "-" and "+".

The value can be changed during the cooking cycle by again pressing the steam button. When the steam indicator flashes, change the value by pressing "-" or "+".



### Thermal sensor setup / Thermal sensor button

Setting range from 0 ℃ to 99 ℃ Initial core temperature setting: 0 ℃

After pressing the thermal sensor button the LED indicator will shine continuously.

The time indicator will change its display from "000" to "00".

When the thermal sensor is activated, the timed cooking function is disabled.

Set the desired core temperature using the buttons "-" or "+".

The time indicator will display the core temperature.

When the desired core temperature is reached, the device will react in the same way as when reaching "0" when in timed cooking mode.







# Program button (program phase / stage indicator)

# **Programs**

The device can store 20 programs with six stages (phases) each.

#### Entering a program

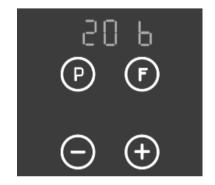
Press the program button **P.** The program indicator will flash. Select the program to be saved or changed using the buttons "-" or "+".

To confirm, wait 15 seconds or press the program button **P** 

To save a program with a larger number of phases (program stages), press **F** and set the phase using the button **,+**" to **1** (first phase/program stage).

Next, enter all desired settings then press **F** and **"+"** again to move to the **second phase**.

When all settings for all phases have been entered, press **P** to confirm the settings.



# Manual setup

To return to manual operation, press the buttons "" or "+" until the program indicator reads **MA**.
Confirm using the program button **P** or wait 15 seconds.



# **Temporary change**

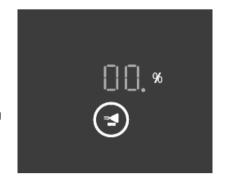
During the cooking cycle, previously entered values can be changed by pressing the temperature, time or steam buttons. The saved values in the start program will not be changed.



# **Manual spray button**

This function is available only during cooking at temperatures **above 100**  $^{\circ}$ C.

When this button is pressed, time in seconds will be displayed on the time indicator for a maximum of 10 seconds. Spraying will begin when the button is released, and the previous steam setting (in percent) will be displayed again.



# Alarm signals

"Pr1" temperature sensor in cooking compartment open or shorted out

"Pr2" thermal sensor open, shorted out or not present

**Pr** appears on the temperature indicator **ERR** appears on the time indicator



# After cooking

- Press ON/OFF to turn the device off.
- Close the water connection valves.
- Disconnect power using the main switch.



# 6. Cleaning and maintenance

# 6.1 Safety advice

- Before beginning with repair or cleaning works make sure the device has been disconnected from power socket (pull the power plug!!!) and has cooled down.
- Do not use any acid agents and make sure no water ingresses the device.
- To protect yourself from electric shock, never immerse the device, its cables and the plug in water or other liquids.



#### CAUTION!

The device is not suited for direct washing via water jets. Therefore, you must not use any kind of pressure water jet for cleaning the device!

# 6.2 Cleaning

- To ensure proper functioning, cleanliness and power of the device, clean it at the end of every working day.
- Before cleaning, disconnect the device from its power supply, close the water valve and leave the cooking compartment to cool.
- Wash the cooking compartment with lukewarm water and appropriate cleaning substances. Wash the chamber thoroughly with clean water and ensure no remaining cleaning substances can be found. Dry the cooking compartment.
- Use only special products for cleaning stainless steel, using inappropriate substances may cause corrosion in the oven.
- When washing surfaces made of stainless steel use only stainless steel wool.
   Never use brushes or scrapers.
- o Do not use any substances containing chlorine (whiteners, hydrochloric acid, etc.).
- o After washing, use a soft, dry cloth to dry and polish the device's surface.

# 6.3 Safety instructions for maintenance

- Check the mains connection cable for damage from time to time. Never operate the
  device when the cable is damaged. A damaged cable must immediately be replaced
  by customer service or a qualified electrician to avoid dangers.
- In case of damage or malfunction, please contact your stockist or our customer service centre.
- Only a qualified technician and using original spare parts and accessories should carry out repairs and maintenance of the device. Do not attempt to repair the device yourself.



# 7. Waste disposal

# Discarding old devices

At the end of its service life the discarded device has to be disposed in accordance with the national regulations. It is advisable to contact a company which is specialized in waste disposal, or just contact the local disposal service in your community.



#### WARNING!

To exclude any abuse and the dangers involved make the waste device unfit for use before disposal. For that purpose disconnect device from mains supply and remove mains connection cable from the device.





For the disposal of the device please consider and act according to the national and local rules and regulations.

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