



Manual
Examples
Installation instructions

ClimaPlus Combi[®]
Electric and Gas




...because details make the difference

Your Customer service

We give a 12-month guarantee which is valid from the date of the invoice.
It does not cover damage to glass, light bulbs or gaskets.

Right of new developments and technical modifications reserved.

	For inquiries please indicate the following:
	Type of unit:
	<input type="text" value="RATIONAL ClimaPlus Combi® CPC"/>
	Unit serial number:
	<input type="text"/>
	Your unit was checked by:
	<input type="text"/>

If you need further assistance, please do not hesitate to call us on +49 8191 3270.

For operational problems call our Hotline on +49 8191 327300.

Your RATIONAL UK Team: 01582 480388.

Contents

Control panel	5, 7
Features	6, 8
General hints/for your safety	9
General information	11
ClimaPlus Control®	13
Cooking with the ClimaPlus Combi®	15
“Moist heat” mode	17
“Dry heat” mode	22
“Dry and moist heat” mode	25
Cooking with the IQT sensor	30
IQT key: + Profiles	34
IQT key: + Low-temperature cooking	37
IQT key: + Delta-T	40
IQT key: Program library	42
Programming	44
Copying of programs	49
Time settings: Duration, real time and preselecting start time	51
Additional function: Humidifying	53
Additional function: Half fan speed	54
Additional function: Phased ventilation	55
Additional function: Cool down	56
Additional function: IQT key	57
National settings	62
Examples	70
Accessories	86
Cleaning	95
CalcDiagnosis System®/ descaling	108
Maintenance	110
Installation instructions	113

Dear Customer,

Congratulations on deciding to buy a **ClimaPlus Combi®**, featuring the unique **“Ideal Cooking Climate”** technology monitored and controlled entirely automatically by **„ClimaPlus Control®”**.

Let the **IQT® sensor** and the **IQT® logic programs** assist you in your cooking tasks and benefit from the innovative intelligence of the **RATIONAL IQT® technology**.

The **ClimaPlus Combi®** is operated on a visual basis, which means you can learn to use it in no time at all and will soon be producing top-quality food.

Just take a couple of minutes to look through this manual, and you'll be ready for the off.

Instead of long blocks of text, the manual contains easy-to-understand **information in pictorial form**. The main points of how to operate the unit are highlighted in **blue, red and green**, enabling you to identify and understand them virtually instinctively.

However, this manual has been prepared by RATIONAL chefs, and will repay careful study. This will enable you to get the most out of the many facilities and advantages the **ClimaPlus Combi®** has to offer.

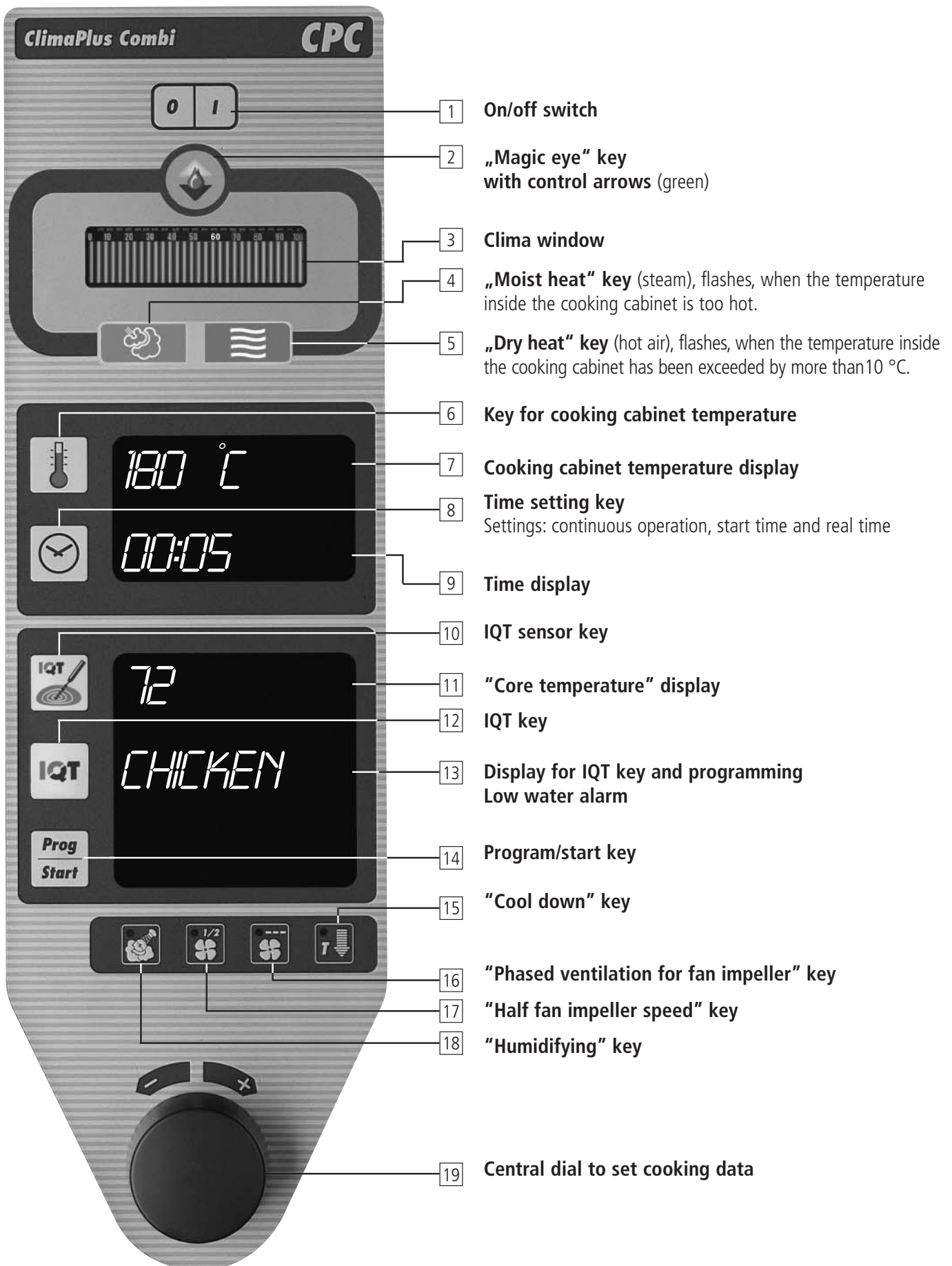
Keep this manual safe and within easy reach.

Please let us know about your practical experiences, suggestions and ideas so we can share them with our other customers.

And now enjoy your new **ClimaPlus Combi®**.

Yours
RATIONAL AG

CPC Electric Control panel

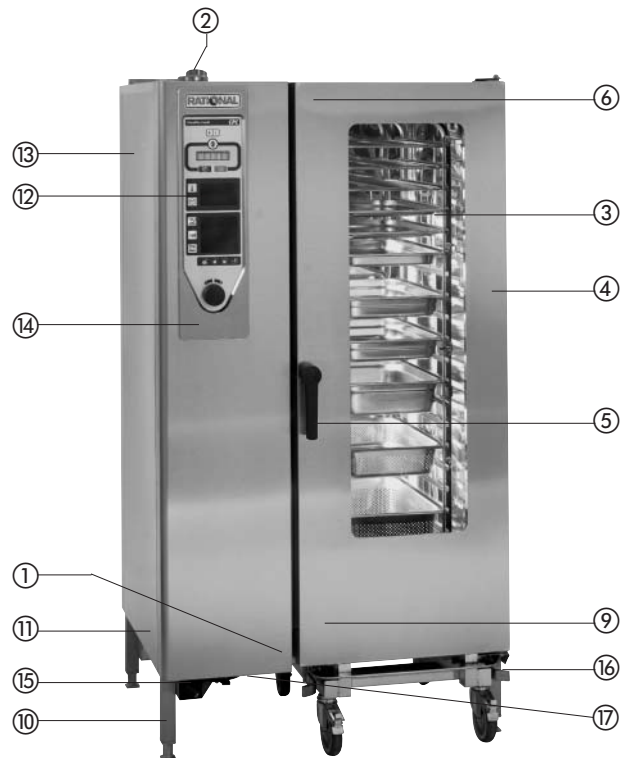


Features

- ① **Unit serial number** (inner edge of installation door, bottom).
- ② **Clima ducting with safety valves to counter over and under pressure.**
- ③ **Interior light** (heat and shock-resistant cerane flat glass and halogen lighting).
- ④ **Unit door with double glass.**
- ⑤ **Door handle** (Table models: one-handed operation with slam function. Floor models: one-handed operation).
- ⑥ **Unlocking device for opening the double glass** (inside).
- ⑦ **Integrated self-emptying, removable door drip collector.**
- ⑧ **Unit drip collector directly connected to the main drainage.**
- ⑨ **Contactless door contact switch.**
- ⑩ **Legs** (adjustable).
- ⑪ **Unit data plate** (containing all important electrical data such as power input, voltage, number of phases and frequency, as well as unit model and serial number).
- ⑫ **Control panel** (see page 5).
- ⑬ **Protection cover for electrical installation area.**
- ⑭ **Service door** (swivel function, for service and control purposes)
- ⑮ **Hand shower** (with automatic rewind).
- ⑯ **Run-in guide** (floor models).
- ⑰ **Air filter** (for ventilation of installation area)

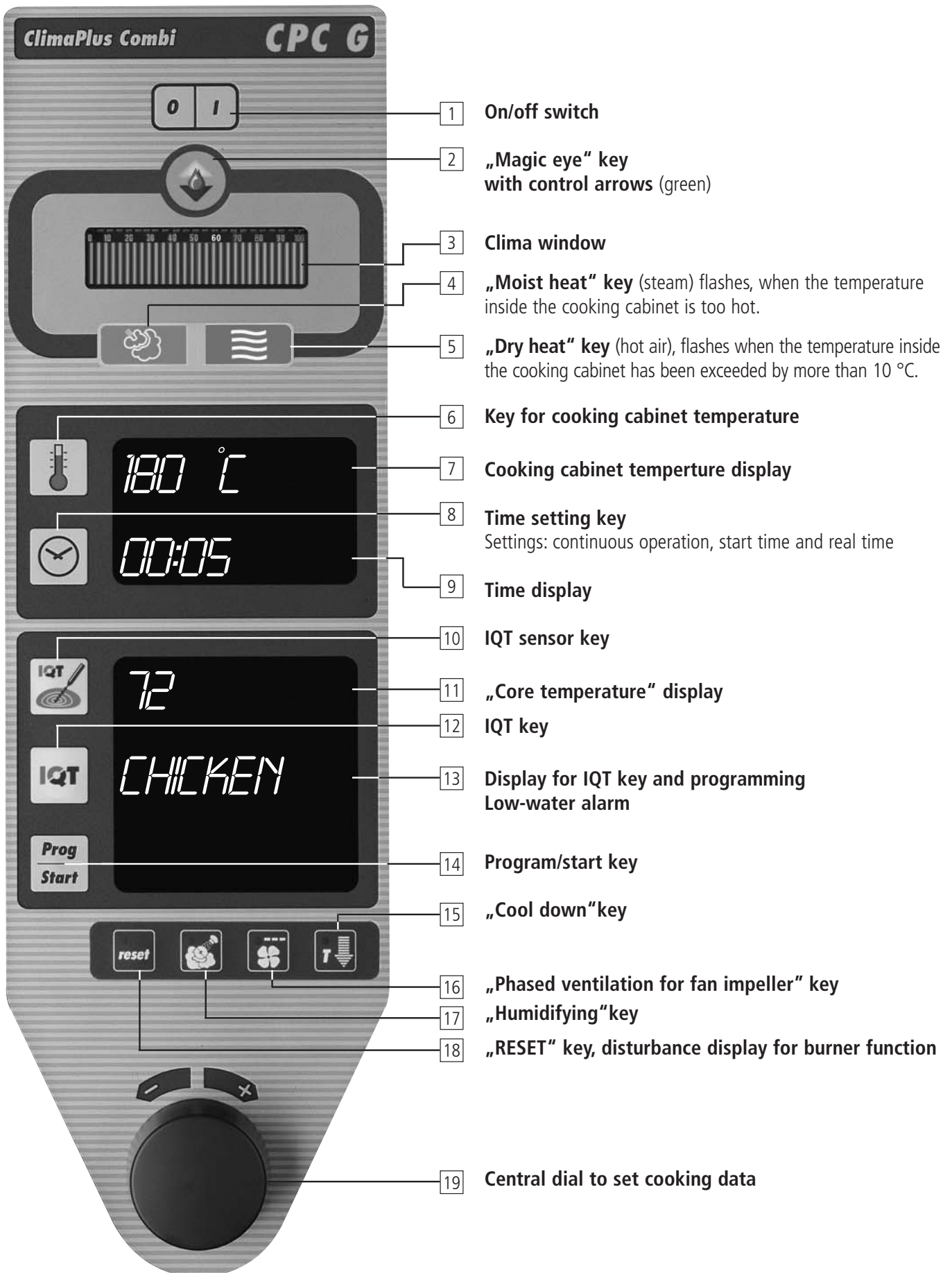


ClimaPlus Combi® 6 x 1/1 GN, identical for 10 x 1/1 GN and 10x2/1 GN.



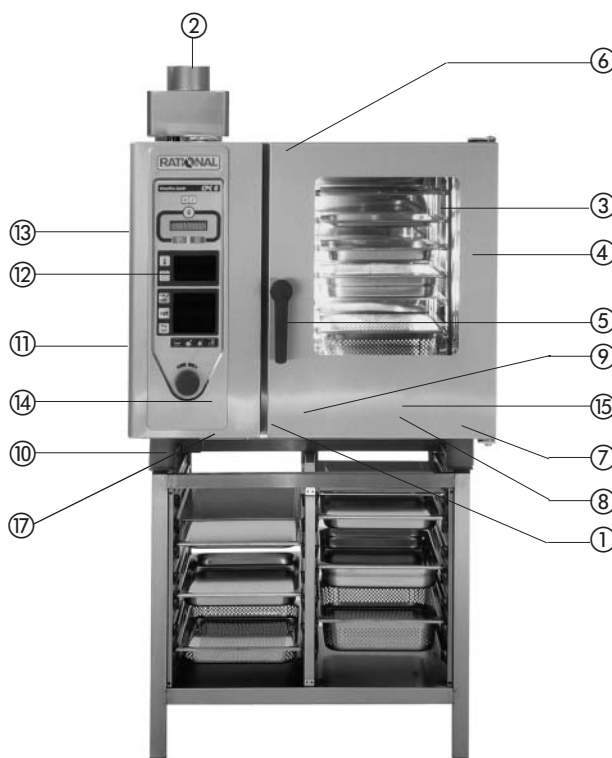
ClimaPlus Combi® 20 x 1/1 GN, identical for 20 x 2/1 GN.

CPC Gas Control panel

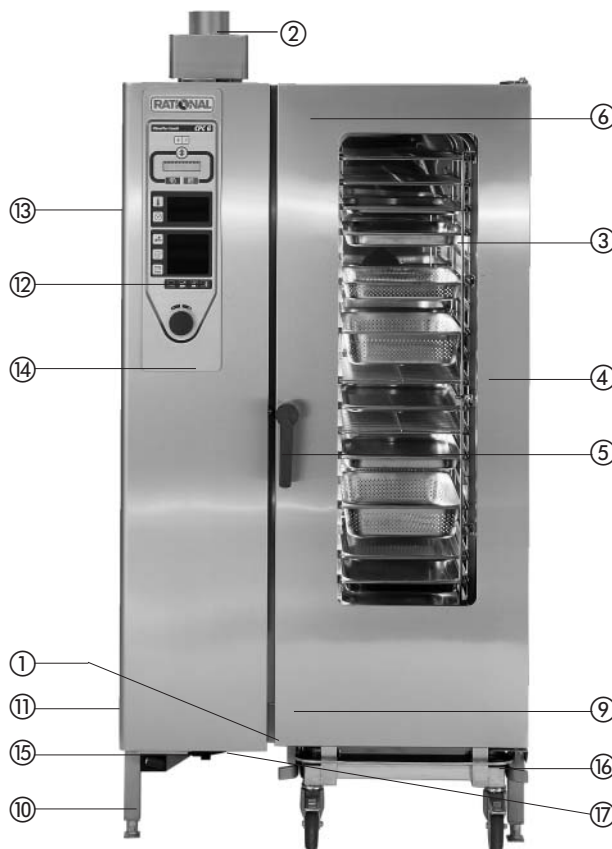


Features CPC Gas

- ① **Unit serial number** (inner edge of installation door, bottom)
- ② **Draft diverter**
- ③ **Interior light**
(heat and shock-resistant cerane flat glass and halogen lighting).
- ④ **Unit door with double glass.**
- ⑤ **Door handle**
(Table models: one-handed operation with slam function.
Floor models: one-handed operation).
- ⑥ **Unlocking device for opening the double glass** (inside).
- ⑦ **Integrated self-emptying, removable door drip collector.**
- ⑧ **Unit drip collector directly connected to the main drainage.**
- ⑨ **Contactless door contact switch.**
- ⑩ **Legs**
(adjustable).
- ⑪ **Unit data plate**
(containing all important electrical data such as power input, voltage, number of phases and frequency, as well as unit model and serial number).
- ⑫ **Control panel**
(see page 7).
- ⑬ **Protection cover for electrical installation area.**
- ⑭ **Service door**
(swivel function, for service and control purposes)
- ⑮ **Hand shower**
(with automatic rewind).
- ⑯ **Run-in guide**
(floor models)
- ⑰ **Air filter**
(for ventilation of installation area)



ClimaPlus Combi® Gas 6 x 1/1 GN, identical for 10 x 1/1 GN.



ClimaPlus Combi® Gas 20 x 1/1 GN

General hints / for your safety

Checks before switching on each day

- Secure the air baffle at the top and bottom.
- Ensure the grid shelf or mobile oven rack is properly locked in place in the cooking cabinet
- When starting the "Moist heat" mode, the display may show "WATER". This means the steam generator has not yet been filled with water. Once this has been done, the indicator lamp will automatically go out.
- If the indicator is still on, check whether the water valve is open and ensure that the strainer on the water supply is not blocked.
- If the ambient temperature is below +5°C, the cooking cabinet is heated up to room temperature before starting to operate.

For table-top units using a standard stand or base cabinet the maximum working height on the top shelf is 1708.5 mm.

WARNING – If containers are filled with liquid or with cooking matter which liquefies during the cooking process, no higher shelves may be used than would allow the user to see into the container (DIN: IEC 60335-2-42). A warning sticker is affixed to the unit – see operating instructions.

Take care when removing containers from this height. Be careful of containers with hot liquids in them.

Take great care not to scald yourself with the hot steam! The containers are hot!

Loading/Unloading

Open the door slowly.

When the door is opened the unit automatically switches itself off. The fan will continue to rotate for a while.

Only slide in GN containers or grids if the grid shelf is properly fixed or the mobile oven rack has been pushed in as far as it will go.

The maximum permitted load weight per insertion is 15 kg for 1/1 GN appliances and 30 kg for 2/1 GN appliances

Caution!

On all 10x2/1, 20x1/1 and 20x2/1 GN units, ensure that the GN containers on the mobile oven rack are properly secured on both sides!

Using mobile oven racks

Use the handle supplied to pull the mobile oven rack out of the unit.

Fixing and swivelling the grid shelf (6x1/1, 10x1/1, 10x2/1 GN)

Removing

Push the grid shelf upwards and lift it out of the mountings. Reverse the procedure to replace the rack.

Swivelling

Gently raise the grid shelf, lift it out of the front locking device and swivel it.



Using mobile oven racks and transport trolleys with table-top units (optional)

- Remove the grid shelf.
- Place the rail on the floor of the unit and engage it.
- Push the oven rack in.



Picture: Rail

CPC Gas

"RESET" BUTTON

If there is a fault in the incinerator, RESET will light up in the IQT-key indicator panel. After 15 seconds you will hear an acoustic signal. Press RESET to re-start the automatic ignition procedure.

If the RESET indicator does not light up again after about 15 sec., the flame is burning and the equipment is ready for operation. If the indicator is lit in spite of pressing the button several times, please call customer service.



Mobile oven rack inside the unit

- Push the mobile oven rack in as far as it will go and lock it in place.

Working with the transport trolley

- The transport trolley must be properly secured in the unit with the retainers.
- Use the handle supplied to pull the mobile oven rack out of the unit.
- When transporting the mobile oven rack on the transport trolley, the transport safety catch must always be engaged. In addition, containers with liquids must always be covered and secured in such a way that there is no danger of scalding from the liquid spilling over.

Working with the "IQT sensor"

- The IQT sensor may be hot.
- Never allow the IQT sensor to hang loose outside the cooking cabinet.
- Before removing a load, take the IQT sensor out of the food.

Cool down

- **Caution!** During the "Cool down" phase the fan impeller is running when the door is open!
- Only activate the "Cool down" function if the air baffle system is properly locked.
- **Never** use the hand shower to cool the cooking cabinet down, as this can put excessive strain on the materials. **Never** use cold water to cool the unit down.

Cleaning

- Do **not** clean the unit with high-pressure cleaner.
- Do not use acids or let acid fumes come into contact with the protective layer of stainless steel, as otherwise it will be damaged and could cause discolouring.
- Follow the instructions on the cleaner canister.
- The cleaning routine is described in the chapter on "Cleaning" (p. 70).

SC automatic function / descaling

- Don't forget that the steam generator has to be descaled at regular intervals (consult chapter "SC-Automatic function" / Intervals between descaling).

Servicing

- Inspection work to be carried out by qualified electricians:
Caution! Disconnect the ClimaPlus Combi® at the mains before opening the service door and working with live parts!

Maintenance

- To guarantee that your ClimaPlus Combi® is in a perfect technical condition, a basic maintenance should be carried out by an authorised service partner at least once a year.

General

- The temperature of the glass door may increase by more than 60°C.
- If there are long breaks between operation the built-in water stop valve should be closed.
- If the low water alarm flashes, check the water supply.

Note:

It is absolutely essential to train staff regularly on safety procedures. In order to prevent the risk of accident or damage to the appliance, we recommend that you carry out regular training briefings with your staff.

General information

Switching the unit on

- "ON" appears for 2 seconds in the clock display
- The real time (current time) is then displayed



Cooking settings

All cooking data, e.g. temperature, time, core temperature and ClimaPlus settings are input using the **central dial**.

All cooking data (such as temperature and ClimaPlus settings) is set using the **central dial**. Press the convenient function, e.g. time setting, and enter the desired value using the central dial. You can enter settings as long as the relevant display continues to flash.



General information

“Heating-up” display

“Dry heat”

A flashing „ ° ” in the temperature display means that the hot-air heating has been activated.



“Magic eye”

The indicator arrow in the ClimaPlus function display lights up if “Moist heat” is being fed in.



Caution!

Do not load the ClimaPlus Combi until the preheating temperature is reached.

Unit too hot

Depending on the cooking mode selected, the keys for “Dry” or “Moist” heat will flash.

Checking the current cooking data

Press the temperature key for one second.



The following values are displayed:

- Current humidity in the cooking cabinet
(The blue barcode shows the percentage)
- Current temperature in the cooking cabinet
- Time elapsed (cooking time)
- Current core temperature
- Program number / program step
(only when working with programs)





Advantages

- Intensive browning
- Ease of operation
- All products are ready to serve (part and full loads)
- Extra quality
- More slices
- Reduced cooking times for many products
- Perfect crackling and juice for roasting

Users can decide on the following at the touch of a button:

- **Crispiness** (perfect crackling, crispy skin)
- **Moistness** (meat, pies, mince)
- **Consistency** (bakery products are deliciously light, and not greasy)
- **Surface** (tasty crackling, typical roast taste, mouth-watering appearance)
- **Rising** (various doughs: yeast, flaky pastry, etc., rolls, croissants, etc.)

What ClimaPlus Control does

„ClimaPlus Control®“ is a patented piece of technology which allows chefs to precisely measure and control not only temperatures, cooking times and cooking modes, but also humidity in the cooking climate, which may be between 30 °C and 300 °C.

ClimaPlus Control® **checks** on the humidity level set and controls it completely automatically.

The cooking climate/desired climate selected is permanently displayed in the Clima window.

Blue represents the **“moist heat”** being actively fed in from the steam generator and/or the humidity escaping from the food.

In other words, in the “Combination of moist and dry heat” mode, **the more blue in the Clima window display, the more humid the cooking climate.**

Red represents the dry heat generated by the heating elements in the cooking cabinet.

In other words, in the “dry heat” and “Combination of moist and dry heat” modes, **the more red in the Clima window display, the drier the cooking climate.**

The **green** figure above the red/blue display shows



Perfectly controlled cooking climate - even with sensitive products





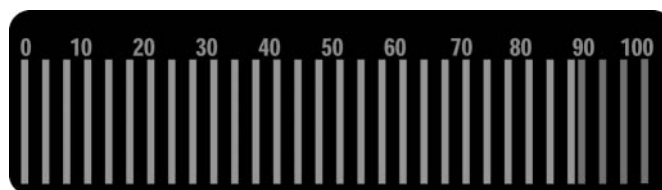
the exact **percentage** of humidity.

Control of the cooking cabinet climate is represented by **two control arrows** in the **"Magic eye"**.

If the **arrow** is illuminated **pointing upwards**, humidity is being fed into the cooking cabinet.



If the **arrow** is illuminated **pointing downwards**, humidity is being extracted.



Examples:

Pies, strudels, quiches, choux pastry, sponges, flaky pastry, all types of joints, flash fried food, crackling, all types of poultry, frozen convenience food (side dishes, roasts, desserts).

In other words, whenever the quality and appearance of the product are particularly important.

Cooking mode



Moist and dry heat, individually, successively or combined.

Operating:

- Select the cooking mode



- Press the **"Magic eye"** key



- Use the central dial to select the desired humidity level.



Checking the current humidity level

Press the key for the cooking cabinet temperature. The current humidity level in the cooking cabinet appears in the Clima window. The **blue** bars (or the **red** bars if you work with dry heat) only display the percentage of humidity.

Hints

Use ClimaPlus Control®:

- If the food is intrinsically very moist
- If the food needs to be cooked very evenly
- If the humidity in the cooking cabinet needs to be adjusted to the food individually - particularly during the cooking process
- If the food "sweats"
- If a lot of condensation is visible on the undersides of the containers
- If, for example, poultry is still frozen inside
- Whenever you would use conventional "dodges" to remove moisture from the cooking cabinet
- If you need to respond to how the individual foods behave, rather than rethinking the whole process

Example: Sponges

"Dry heat": 180 °C; baking time: 12 minutes.

"ClimaPlus": the final 4 minutes, 40%.

Advantages: Sponges don't blister or stick to the baking tray, and are cooked evenly.

Bakery products do not collapse when they are removed.



The ClimaPlus Combi has two cooking modes:

„moist heat“



steam

+

„dry heat“



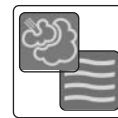
hot air

These two cooking modes can be used either

- **singly**
- **in sequence, or**
- **in combination**



The ClimaPlus Combi allows almost all traditional cooking processes to be used in just **one** unit!



“Moist heat”

The steam generator produces hygienic steam. This is fed, unpressurized, into the cooking cabinet and is circulated at high speed by the fan. The patented control system regulates the input of steam; only as much steam is fed in as the food is able to absorb. The cooking temperature can be set to between 30 °C and 130 °C.



“Dry heat”

High-capacity heating elements heat the dry air. The fan circulates this hot air evenly throughout the cooking cabinet. The temperature can be set to between 30 °C and 300 °C.



“Moist heat” + “Dry heat”

The “Moist heat” and “Dry heat” cooking modes are combined by a control system. This creates a hot, humid climate for particularly intensive cooking. The temperature can be set to between 30 °C and 300 °C. The combination of moist and dry heat, in conjunction with ClimaPlus Control, guarantees the right cooking climate for all products and the ideal level of humidity.

The additional functions and the ClimaPlus automatic control system mean that there are now no limits on the individual range of food.

Depending on how you want to cook the food, you can choose or combine the relevant modes either singly, in sequence or in combination.

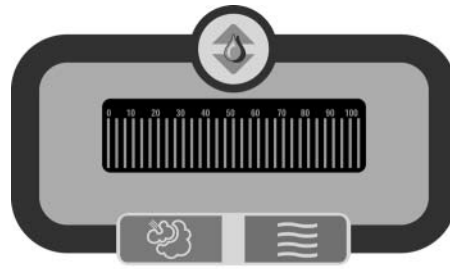
„Moist heat“ mode



Basic setting

Preselected temperature: 100 °C

The Clima window is illuminated in blue and signals 100% humidity in the cooking cabinet.



Operating:

Select “Moist heat”

Set the temperature, if necessary

Set the time/continuous operation or core temperature.

ClimaPlus Control® is preset at maximum saturation and **cannot be changed**. All additional functions (except for humidifying and cool down) can be integrated.

Preheating

Preheat until steam condenses on the glass door.

Checking

The food can be checked at any time by:

- Reading the displays
- Manual checks (using a finger or a needle, or applying pressure)
- Inserting the IQT sensor.

Loading/unloading

- Ensure that the grid shelves and/or mobile oven racks are properly secured.
- The door of the unit can be opened at any time. The unit automatically switches itself off; the fan continues to rotate.

Safety hints

- **Caution! Hot steam! The containers are hot!**
- **Caution! Take care not to scald yourself!**
- **Make sure the mobile oven rack is properly secured!**



Hints

- Check every day which types of food can be cooked together using moist heat, in order to get the most out of the Clima Plus Combi. Remember that fish, meat, vegetables, side dishes and fruit can be **cooked together** so long as the same cooking mode is being used for all of them.
- **Potatoes** should always be cooked in perforated containers. The perforations let the steam circulate and the potatoes are cooked more quickly and more intensively.
- **Vegetable stock** can be collected by inserting a container in the bottom of the mobile oven rack.
- It is better to use two shallow containers rather than one high one. The food is **not piled so high** and so is not packed so tightly together.
- **Dumplings** should be placed in shallow containers (not too close together).
- **Rice and cereals** are the only type of food where water needs to be added (1 part rice to 1.5 - 2 parts water).
- **Tomatoes** can be skinned easily. Steam them for 30-60 seconds and then chill them in cold water.

“Moist heat” mode



1. “Moist heat” 100 °C

Advantages

- Extremely short preheating periods
- Excellent quality food
- Vitamins are conserved
- Colour is preserved
- Less fat
- Food is not overcooked
- Different products can be cooked simultaneously
- No taste transfer
- Partial batches can be unloaded at any time, e.g. à la carte/right on time.

Sample dishes

• Mise en place

Tomato concassée, garnishes (vegetables or fruit), mushrooms, blanching juliennes and brunoises, blanching vegetables for stuffings, roulades, etc., peeling onions and chestnuts, soaking pulses.

• Starters

Scrambled eggs, poached eggs, hard-boiled eggs, vegetable pies, steamed salads, asparagus, vegetable flans, stuffed vegetables (onions, leeks, celery, etc.), cannelloni.

• Soup garnishes

Dumplings, ravioli, royale of vegetables.

• Main courses

Boiled beef, cured ham, tongue, turkey legs, steamed fish.

• Side dishes

Rice, dumplings, noodles (spaghetti), fresh and frozen vegetables, vegetable casseroles, boiled/jacket potatoes.

• Desserts

Fresh or frozen fruit (e.g. hot raspberries), stewed fruit, rice pudding.



Tastes are not transferred when different products are cooked together

Cooking methods

Steaming, stewing, blanching, poaching, simmering, soaking, vacuum cooking, thawing, regenerating (reheating), preserving.



“Moist heat” 30°C to 99°C

Advantages

- Extremely short preheating periods

Advantages of “Gentle cooking”:

- Excellent quality food
- The intrinsic taste of the food is preserved
- Excellent consistency and elasticity for different sorts of meat and fish dishes. Improved handling during service.
- Prevents curdling and crumbling
- No blistering = flat surface
- Large joints and pieces for exhibition purposes are cooked gently, resulting in less weight loss and less shrinkage
- Less fat
- Temperatures are regulated precisely during cooking without having to be constantly checked
- Reduced cooking times compared to traditional methods
- Partial batches can be unloaded at any time, e.g. à la carte/right on time.

Sample dishes

• Mise en place

Blanching bacon and ham, poaching fish garnishes, pasteurizing soups, sauces, stocks, fumets, etc. (off-premises sales).

• Starters

Galantines, fish cakes, terrines, mousselines, vacuum cooking (e.g. scallops), etc.

• Soup garnishes

Dumplings, royales.

• Main courses

Fish (salmon, sole, etc.), poultry, diet food, vacuum cooking (chicken breasts, tongue, liver), turkey fillets, chicken breasts, fillet of beef, sausages, etc.

• Side dishes

Flans, vegetable casseroles.



Delicate products turn out well every time with little effort and no risk

• Desserts

Fruit, crème caramel, cabinet pudding, semolina pudding.

Cooking methods

Scalding, simmering, soaking, poaching, blanching, vacuum cooking, thawing, regenerating (reheating), pasteurizing, main cooking.



“Moist heat” 30°C to 99°C

Hints

• Cooking time with “Moist heat” under 100°C

The cooking times are in principle the same as those for “Moist heat” cooking at 100°C.

Generally, the lower the cooking temperature the longer the cooking time.

• Guidelines for cooking temperatures:

Soup garnishes:	75 bis 90 °C
Fish and shellfish:	65 bis 90 °C
Meat products and sausages:	72 bis 75 °C
White meat:	75 bis 85 °C
Dark meat:	80 bis 90 °C
Poultry:	80 °C
Desserts:	65 bis 90 °C

• Seasoning

Season lightly. The low cooking temperatures mean the intrinsic taste of the food is intensified.

Do not use too much alcohol, fumet, essence, reducing agent, etc.

• Preserving fruit and vegetables

Depending on how firm the raw product is and the consistency required, cover the food with hot or cold liquid. The diameter of the glass jars should not exceed 100-120 mm. The cooking temperature depends on the product (how ripe it is, how it was cut).

Temperature guide: 74 -100°C

• Scalding

The process is very gentle, with no weight loss.

• Advantages compared with cooking in boiling pans:

- Firm structure of fillings
- Intensified aroma and taste of products
- Weight loss is very low for fatty foods.
- Bursts can be avoided, especially when using natural skins which are damaged.

Recommended temperature: 72°C - 80°C

• Foods such as fish can be cooked directly on the plate.

Vacuum cooking

• Vacuum cooking developed out of the method of preserving food in a vacuum. The most important requirement is that the raw material must be 100% vacuum packed. It should be either shrink-wrapped or sealed in vacuum bags. After being cooked in a vacuum the food is cooled down very quickly to +2°C.

• Recommended cooking times are the same as those for “Moist heat”.

Practical experience:

• The higher the standard of vacuuming, the shorter the cooking time.

Application methods:

- Fish, meat, poultry, vegetables, side dishes and fruit can be prepared in the conventional way. Various garnishes and special fillings can be prepared with particular care.
- Goods to be vacuum cooked should be placed on grids.

Vacuum cooking:

Fish, stuffing, goose livers:	70 °C
White meat:	80 °C
Vegetables, mushrooms, fruit:	90 °C
Dark meat, side dishes:	100 °C

Note:

Ask for our special manual on vacuum cooking!



“Moist heat” mode over 100 °C

“Moist heat” 101°C to 130°C

Advantages

- The food is intensively steamed.
- Cooking times are reduced.
- Don't forget the advantages of “Moist heat” cooking.

Examples of food cooked using forced steaming

• Side dishes

Potatoes, firm cooking vegetables (e.g. kohlrabi, carrots)

Checking

The food can be checked at any time by:

- Reading the display
- Manual checks (using a finger or a needle, or applying pressure)
- Inserting the IQT® sensor.

Hints

Guide cooking temperatures:

Celery:	110°C
Potatoes:	115°C

Safety hints

- **Caution! Hot steam!**
Take care not to scald yourself!
- **Caution! The containers and grids are hot!**
- **Make sure that the mobile oven rack is properly secured!**



Notes

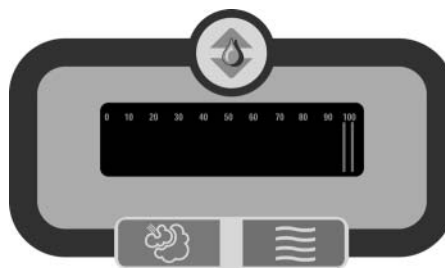
„Dry heat“ mode



Basic setting

Preselected temperature: 160°C

Two red bars light up in the Clima window. ClimaPlus Control® restricts the level of own humidity to 100%, i. e. the humidity released by the food products is retained in the cooking cabinet.



Operating:

Select "Dry heat"



Set temperature



Set time/continuous operation or core temperature



If necessary, select **ClimaPlus Control®** /humidity. In order to do so, press the „Magic eye“ key and set the max. admissible level of humidity with the central dial. **The setting can be anywhere between 100 and 0%.**



ClimaPlus Control® can be used to **restrict** the humidity in the cooking cabinet. Red bars and the relevant percentage show the humidity level in the cooking cabinet. **The more red** in the display, **the drier** the atmosphere in the cooking cabinet (in other words the humidity level is lower).

All additional functions (except "Cool down") can be integrated.

Preheating

Preheat the unit until the set temperature is reached.



Generally,

the preheating temperature is the same as the cooking temperature.

With pan-fried food, frozen products or gratins, preheat the unit to **300°C**.

Checking

The food can be checked at any time by:

- Reading the display
- Manual checks (using a finger or a needle, or applying pressure)
- Inserting the IQT sensor.

Loading/unloading

- Ensure that the grid shelves and/or mobile oven racks are properly secured.
- The door of the unit can be opened at any time. The unit automatically switches itself off; the fan continues to rotate.

Safety hints

- **Caution! Hot vapours! Take care not to burn yourself!**
- **Caution! The containers and grids are hot!**
- **Make sure that the mobile oven rack is properly secured!**



“Dry heat” mode



Advantages

- 300°C back-up capacity - especially when fully loaded
- Very short preheating periods
- Excellent quality food
- Less fat
- Cooking is possible on all levels
- Less cooking time needed compared to traditional methods
- Partial batches can be unloaded at any time, e.g. à la carte/right on time.

Sample dishes

- **Mise en place**
Sweating bacon, roasting bones, preparing natural meat juices, allowing dough (yeast) to rise.
- **Starters**
Meatballs, meat puddings, gratinated vegetables, vegetable pies, sirloin, chicken wings, finger food, fast food, duck breasts, quiches, shortcrust pastry, tartlets, blind baking.
- **Soup garnishes**
Profiteroles, cheese croutons, cheese straws.
- **Roasts/main courses**
Steak, rump steak, T-bone steak, porterhouse steak, liver, hamburgers, chicken legs and breasts, half or whole chickens, turkey, pheasant, quail, meat in breadcrumbs, breaded convenience food, fried chicken, vegetarian cutlets, loin, duck breasts, sausages in natural skins, pizzas.
- **Side dishes**
Potato pancakes, fried, roast and baked potatoes, potato soufflés, duchesse potatoes, etc.
- **Desserts**
Sponges, marble cakes, plain cakes, fancy cakes, flaky pastry, fleurons, croissants, bread, rolls, baguettes, shortcrust pastry, frozen apple puffs.

Cooking methods

Roasting, grilling, baking, gratinating.



Food is browned evenly on all sides without having to be turned



Hints

• Cooking times

Cooking times depend on the quality, weight, temperature, humidity contents and size of the product.

Do not overload grids or containers, to enable air to circulate evenly.

• General hints

- **Preheating** to 300 °C, in order to build up sufficient stored heat.
- Do not open the door of the unit before the fan **stops rotating** so that as little heat as possible escapes while the food is being loaded.
- Load the unit as **quickly as possible** to prevent a drop in temperature in the cooking cabinet.
- Use ClimaPlus Control **during** cooking (with a full load) in order to allow excess moisture to escape

• Pan-fried cuts

Rule of thumb: well done:

allow approximately 8 to 10 minutes cooking time per centimeter of meat thickness.

Preheating: to 300 °C.

Ideal cuts: 1,5 to 2 cm
– medium, 5-6 minutes.

Do not tenderize the meat with a mallet, and do not flour it.

Containers: The advantage of grids is that the top and bottom of joints, etc. will brown evenly. Ensure that the same thickness and cuts of similar sizes are placed on the same grids.

Breaded products: All conventional types of breadcrumbs can be used. Browning of food is improved by coating the surface with either fat or a paprika oil mixture. Press the breadcrumbs firmly onto the meat, cover with melted fat and do not overload the unit.

ClimaPlus Control®

The elimination of excess humidity at the end of the clima-grilling program provides for best browning results.

Preheating grids (à la carte)

Preheating of grids will provide cuts with the typical grill marks .

• Gratinating

of soups, light and dark meat dishes, fish, mussels, asparagus, chicory, broccoli, fennel, tomatoes, toast.

Preheating: to 300 °C

After loading, set to the convenient temperature.

Containers: Use grids or containers (20 mm) to grate toast, steaks and soups.

Set „ClimaPlus Control®“ to 20% – if necessary, adjust setting to load volume and type of food.

• Baking

Preheating: Preheat to baking temperature. With a full load, you may need to preheat to a higher temperature.

The **baking temperature** is 20° to 25°C lower than in conventional ovens.

When baking bread and rolls, use only every second shelf. Baking tins should not be higher than 70 mm.

If there is excessive **humidity** in the **cooking cabinet**, use „ClimaPlus Control®“ to reduce it to the preset level. For ideal heat transmission, use granite enamelled containers and trays.

When baking **deep-frozen products**, **preheat to 300 °C** – do not defrost.

Defrost frozen bread dough/bretzels and let it rise for a short time (Use: Teflon coated aluminium trays).

Do not forget the special „Humidifying“, „Half fan speed“ and „half power“ functions.



Place pan-fried food preheated on grids:
e.g. lamb chops, dry heat mode, ClimaPlus Control® 10%.

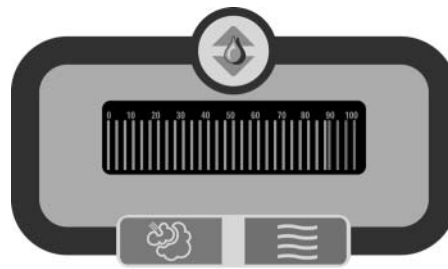
„Dry heat“ + „Moist heat“



Basic setting

Preselected temperature: 160 °C

The combination of moist and dry heat is visible in the Clima window. The moisture level is set to 90% (shown in blue).



Operating:

Select „Moist heat“ and „Dry heat“ simultaneously



Set temperature



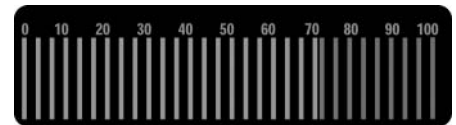
Set time/continuous operation or core temperature



If necessary, select **ClimaPlus Control®**.

Press the „Magic eye“ key and set the desired level of humidity with the central dial.

The setting can be anywhere between 100 and 0%.



ClimaPlus Control® is used to measure and regulate the humidity in the cooking cabinet.

A blue/red bar and the relevant percentage show the humidity level in the cooking cabinet.

The more blue in the display, **the moister** the atmosphere in the cooking cabinet (in other words, the higher the humidity level). **The more red** in the display, **the drier** the atmosphere in the cooking cabinet (in other words, the humidity level is lower).

All additional functions (except Humidifying and Cool down) can be integrated.

Preheat the unit until the set temperature is reached.

Generally, the preheating temperature is the same as the cooking temperature (except with deep-frozen bakery products)

Checking

The food can be checked at any time by:

- Reading the display
- Manual checks (using a finger or a needle, or applying pressure)
- Inserting the IQT sensor.

Loading/unloading

- Ensure that the grid shelves and/or mobile oven racks are properly secured.
- The door of the unit can be opened at any time. The unit automatically switches itself off; the fan continues to rotate.

Safety hints

- **Caution! Hot steam and vapours!**
Take care not to burn yourself!
- **Caution! The containers and grids are hot!**
- **Make sure the mobile oven rack is properly secured!**





Advantages

- Extremely short preheating periods
- Excellent quality food
- Food does not dry out and has excellent crusts and crackling
- Automatic basting, which reduces weight loss
- Joints are moist and have the right consistency
- Intensive, gentle cooking
- Less fat
- Large joints of meat are cooked evenly
- Roasts have a firm consistency which makes portioning easy
- Less cooking time needed compared to traditional methods
- Partial batches can be unloaded at any time, e.g. à la carte/right on time.

Sample dishes

“Moist and dry heat” in combination

- **Mise en place**
Roasting bones.
- **Starters**
Quiches, vegetable pies, flans, moussaka, lasagne, cannelloni, paella.
- **Roasts/main courses**
Roasts (beef, veal, pork, lamb, poultry, game), roulades, stuffed vegetables (peppers, aubergines, onions, cabbage, etc.), vegetable gratins (cauliflower), turkey legs, stuffed breast of veal, ham noodles, leg of pork, belly pork, various omelettes.
- **Side dishes**
Gratinated potatoes, frozen products, baked potatoes.
- **Desserts**
Yeast doughs, choux pastry, cream puffs, apple strudel.
- **Miscellaneous**
Bread, rolls (frozen dough)

Cooking methods

Combi-steaming, combi-roasting, combi-baking, glazing, gratinating, humidifying, basting.



Large joints of meat are cooked evenly

„Dry heat“ + „Moist heat“



Hints

- Do not place joints too close together, so that they cook evenly.
 - Meat fibres must be placed parallel to the air circulation. This will make it easier for heat to be absorbed and will reduce the cooking time.
 - Joints with rinds or larger pieces of meat should be steamed for approximately one third of the cooking time.
 - Catch the condensation in a container placed on a lower shelf and add it to the lightly roasted bones for the sauce.
- Preparation of sauces**
- Place a high-sided container on the bottom shelf.
 - Add bones, mirepoix and seasonings to the container and let them roast under the meat.
 - Add the collected stock.
 - Leave under for the duration of the cooking process.
 - The result is a concentrated sauce.

Baking

Yeast doughs, flaky pastry and choux pastry should be cooked on granite enamelled trays.



Preparing sauces in granite enamelled containers

Reheating

Operating

Reheating temperature

For best results, average temperatures should be between **100°C and 140°C**, but the temperature can be varied for different products.



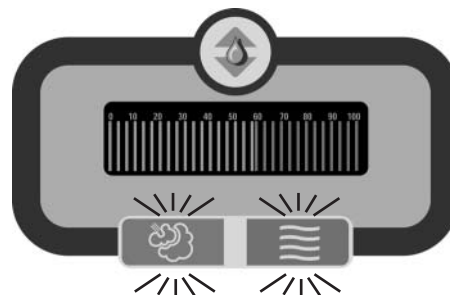
Reheating time

The reheating time depends on the product, product temperature, number of plates, fullness and desired serving temperature, but as a general rule should be approximately 5 to 8 minutes for food arranged on plates.



ClimaPlus Control for reheating

To avoid puddles of water and dried-up edges, the ClimaPlus setting should be between **40% and 60%**.



Checking

The food can be checked at any time.

- **Ideal serving temperature:** 70-75 °C
The serving temperature can be controlled by using the the IQT-Sensor.
- Change the set values as required.



Reheating

Advantages

- No loss of heat.
- Quality is retained or even improved, since you have more time to arrange the plates and dishes, and can ensure that the food looks attractive.
- All food can be reheated without being covered.
- There is no time limit between cooking and reheating or serving.
- Can be used for banquets, large functions, travel groups, à la carte meals, free-flow and convenience loading, and relay cooking.
- Can be used anywhere (in canteens, large industrial kitchens or the catering trade).
- Staff work more efficiently.

Sample dishes

• Starters

Spaghetti, cannelloni, lasagne, vegetable dishes, cheese noodles, quiches, spring rolls, onion flans.

• Soup garnishes

Dumplings, pancakes, vermicelli, noodles, pasta squares.

• Roasts/main courses

Roasts, meatloaf, pies, frozen meat and fish, vegetable burgers, leg of pork, leg of veal, roasts with crackling (cooked in beer), roulades, stuffed vegetables, ready-to-serve meals.

• Side dishes

Rice, potato pancakes, noodles, vegetables, potatoes (mashed, gratinated, soufflés), french fries.

• Desserts

Apple strudel, cheesecake, hot fruit, stewed fruit.

Time saving

No more warming food up and keeping it warm.
Pre-cooked food can be reheated using the cook chill method. Food can be reheated on plates and dishes or in containers.



Reheating

Hints

- **Reheating utensils**
Porcelain plates, earthenware, glass, silver dishes, copper pans, brass beakers, aluminium, stainless steel, chrome.
- For banquets and travel groups
Reheat food on plates, using the mobile plate rack for plates up to 31 cm in diameter
 - Large quantities - saves time
 - Loading and unloading is fast
 - Shorter serving times, so more economical, more customers, more turnover.
- Heat the food on the serving utensils: this helps to retain heat when the food has to be transported a long way before it is served.
- **Heat retaining hood:** for bridging short periods or for transporting food.
- Arrange the food evenly on the plates or dishes and do not place too close together.
- Mise-en-place: season and lightly butter first. This saves brushing the food with butter while it is being served.
- **Sauces:**
Place a small amount on the plates or pour over the food after reheating.
- Procedures which frequently re-occur can be programmed individually.
- **“ClimaPlus Control”:** Humidity in the cooking cabinet can be controlled individually, to ensure that it is just right for all kinds of products. The humidity setting can be changed at any time, even while the food is being cooked.
- Don't forget the set programs in the program library (see page 42).
- **Variable reheating**
You can select your individual reheating program to suit particular types of food in any ClimaPlus Combi cooking mode.



Reheating on plates using the special transport trolley. Available for table and floor models.



Heat retaining hoods for the mobile plate rack. Available for table and floor models.



Cooking with the IQT sensor

Advantages

- Possibility of checking the actual core temperature at any time, thanks to the automatic compensation of irregularities when inserting the IQT sensor.
- The IQT sensor is easy to insert. The various measuring points cover a larger area of the core and facilitate the detection of the core temperature.
- Perfect results, e.g. roasts "à point" via intelligent detection of the actual core temperature and temperature of the food.
- Excellent, reproducible quality products.
- No overcooking of joints, less weight loss, perfect results.
- Staff are free to get on with other work while the food is being cooked.
- Guarantees high, constant quality standards as opposed to traditional methods (needle, fork, finger, lips, or cutting test slices).

Function

Automatic detection of the actual core temperature of food, even if the IQT sensor is inserted inaccurately. Measurement of the core temperature of food to regulate the cooking process. No risks and perfect results without any need for additional control.

Cooking mode

Can be used in all modes.

Operating

Insert the IQT sensor into the center of the thickest part of the food. Sensor must be clean and cold when inserting.

- Select the cooking mode.
- Set cooking temperature.
- Set core temperature— display shows the preselected temperature.
- The timer is not in operation.
- A buzzing sound indicates that the preselected temperature has been reached and the unit switches itself off .



Perfect results "à point" every time, with the IQT sensor.



Target temp.

Actual temp.



Cooking with the IQT sensor

- The timer is not in operation.

If the IQT® sensor is not set or is completely incorrectly set, the wording "SENSOR" will flash in the cooking cabinet display,

"POSITION" ... in the clock display and a buzzer will sound.



SENSOR



POSITION

- A buzzing sound indicates that the preselected temperature has been reached and the unit switches itself off .

Time query



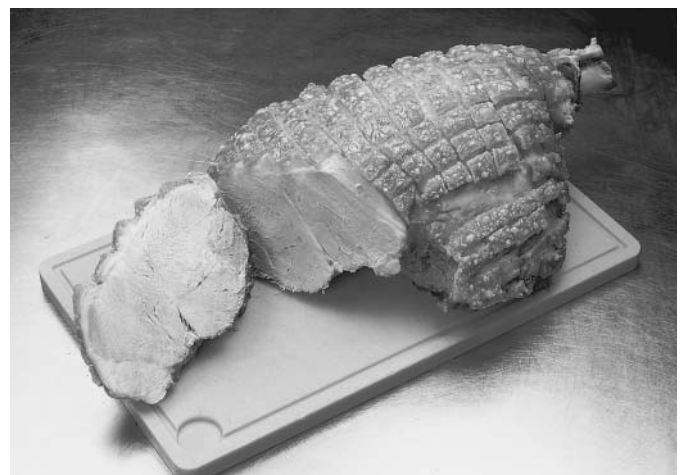
Press: timer display shows how long the food has been cooking for

Hints

- When roasting meat for slicing, set the core temperature approx. 5°C lower than usual, as the joint continues to cook during the cool down phase.
- To avoid holes in the meat (caused by protein coagulation) cool the IQT sensor before using it.
- Set temperatures and cooking modes may be changed whenever necessary.
- The core temperature can be programmed.

Safety hints

- The IQT sensor may be hot.
- Never allow the IQT sensor to hang loose outside the cooking cabinet.
- Before removing a load, take the IQT sensor out of the food.



Perfectly cooked food and reduced weight loss. Juicier roasts.



General information on core temperatures in meat

Meat	Core temperature
Beef	
Rare bleu	45°C
Medium rare Saignant	50°C
Medium a point	52-58°C
Well done bien cuit	75 – 85 °C
Veal	
Pink	72 °C
Well done	over 77°C

General information on core temperatures in meat

Meat	Core temperature
Pork	
Well done	75-80°C
Cured	68°C
Lamb	
Well done	79°C
Mutton	
Well done	82°C
Poultry	
Well done	85°C

Notes



Core temperature values

	State	Core temperature
Beef		
Fillet of beef	medium	55-58°C
Sirloin	medium	52-56°C
Beef rose	well done	85-90°C
Roast beef	well done	80-85°C
Aitchbone	well done	90°C

Pork

Leg	well done	75°C
Leg	light pink	65-68°C
Saddle	slightly light pink	65-70°C
Shoulder	well done	75°C
Belly/stuffed	well done	90°C
Belly	well done	80-85°C
Knuckle, roasted	well done	80-85°C
Knuckle, cured	well done	80-85°C
Ham	juicy	68°C
Smoked pork chops (buffet slices)		65-70°C 55-60°C
Knuckle, pickled	well done	75-80°C
Ham in breadcrumbs	well done	65-70°C
Tongue	well cooked	85-90°C
Pig's head		75-82°C

Veal

Saddle	light pink	65-70°C
Leg, top-side, fricandeau	well done	78-80°C
Kidney	well done	75-80°C
Shoulder	well done	75-80°C
Breast (often stuffed or boned)	well done	75-90°C

Core temperature values

	State	Core temperature
Mutton		
Saddle	light pink	70-75°C
Saddle	well done	80°C
Leg	light pink	75-78°C
Leg	well done	82-85°C

Lamb

When the meat is well done, the core temperature varies between 79°C and 85°C. The colour of the meat core is grey, slightly pale pink. The meat juice is clear.

Poultry

Chicken	well done	82°C
Goose	well done	82-90°C
Turkey, duck	well done	82-90°C

Pies, patés, etc.

Pies		72-74°C
Meatloaf		70°C
Terrines		60-70°C
Galantines		65°C
Ballotines		65°C
Foie gras		45°C
Salmon		60°C
Pike		63°C
Fish mousse		65°C

IQT key: Program library

What are COOKING PROFILES and how do they work?

RATIONAL cooking profiles are stored ideal procedures for cooking meat, in particular for **roasts** such as leg of lamb, roast of pork etc.

The special feature of these intelligent profiles is that they detect automatically the size of the meat and the volume of food in the cooking cabinet. In addition, with the assistance of the IQT sensor, they also determine the exact core temperature of the food, the remaining cooking time and the current level of browning. The profiles are self-regulating, i.e. they adjust the cooking processes to the size of the meat and the load of food in the cooking cabinet, giving you top-quality results in terms of the following points:

- Center of joint: Even if the IQT sensor is inserted inaccurately (sensor not exactly on core) the automatic detection of the actual core temperature ensures that the meat fibres inside the joint are really "tender" (with just the right texture) and are beautifully moist all the way through, until just below the browned skin.
- Outer skin: The different settings (1 - 7 lighter/darker) allow you to regulate the degree of browning and crust crispness to perfection and to easily adjust it to your customer's taste. The colour, real „roast“ flavour and crispy crust come automatically, and the drying effect caused by the browning is only minimal.
- Weight loss in the joint is therefore automatically kept to a minimum.
- The indication of the remaining cooking times allows for better planning of cooking processes, reduces the amount of

Operating:

- Deselect the cooking modes and programming.
- Press the IQT key: +PROFILE appears on the corresponding display.
- Activate the program using the Program/Star key.
- The temperature display on the cooking cabinet door shows the preselected setting:

Set the desired level of browning while the figure "4" is flashing. When it stops, press the cooking temperature key and use the central dial to select the convenient level of browning.



control tasks and helps you get the most out of your unit. To achieve these top-quality results - compared to meat cooked in a conventional combi-steamer - the cooking process for a profile runs through a sequence of changing temperature and humidity settings, in the product-specific ideal climate. The „intelligent“ software of the cooking profiles keeps the food under „observation“ by automatically and continuously **measuring** and **recalculating** the data of the relevant cooking process. It can automatically detect the size of the joint, thus ensuring that the desired core temperature is **always reached at the same time** as the ideal degree of browning).

Easy operation

Set the desired degree of browning and the target core temperature and leave the rest to the ClimaPlus Combi®. The recommended settings are given in the table on page 36. Once the roast has been in for about one third of the total cooking time, the timer display will automatically show the remaining time.

This will enable you to ascertain the availability of your CPC well in advance and plan and match simultaneously cooking processes ahead of time.



IQT key: +Profile

- The IQT sensor display shows a preselected core temperature of 72°C.



Press the IQT sensor key and use the central dial to set the desired core temperature.



- Use the Program/Start key to confirm and activate +PROFILE.



Since +PROFILE operates with all 3 cooking modes, the clima window will permanently display a blue-red barcode and the keys for combined Moist heat /Dry heat will be activated.

Simultaneously, the target core temperature appears to the left of the IQT sensor display, and the actual temperature to the right.



Target temp.

Actual temp.

On reaching a third (± 10 min.) of the cooking time, the remaining cooking time is shown on the clock display.



If the IQT® sensor is not set or is completely incorrectly set, the wording "SENSOR" will flash in the cooking cabinet display,



"POSITION" ... in the clock display and a buzzer will sound.



What can or can't be cooked using the profiles?

Basically, the cooking profiles require joints of meat of at least 8 cm in diameter, since the program is intended for best possible roasting results.

You should load cuts of meat of approximately the same size and insert the IQT sensor in the thickest part of the joint.

The emphasis with the profiles is on roasting. In other words, the minimum cooking time should never be less than 30 or 40 minutes. This means that +PROFILE is not suitable for: chickens, ducks or other small birds (use Clima Grilling for these), pan-fried food and smaller fillets of meat, chops, etc.



Hints:

+PROFILE is a program of its own, so it may not be inserted into another program and used as a programming step. You may, however, copy it to create individual cooking profiles (see chapter: Copying of programs, P. 50).

The control panel is blocked during the entire program execution (apart for the few exceptions indicated below). This is to prevent the settings you entered from being altered accidentally.

To stop execution of the +PROFILE program, it is necessary to switch off the CPC .

If the door is open, the program is simply interrupted and the execution continues as soon as the door is closed.

The following functions can still be selected during program execution:

- HACCP
- Scale

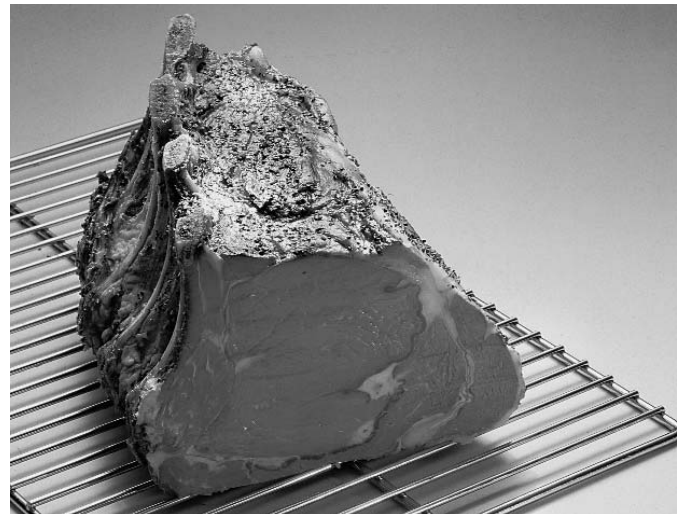
Recommended settings for browning level and final core temperature

Product	CT	Recom. browning	Temp. range
Joint of veal	75-80 °C	level 1-5	130-190 °C
Meatfarce	68-72 °C	level 1-6	130-210 °C
Turkey breast	72-75 °C	level 1-4	130-170 °C
Knuckle of veal	80 °C	level 1-4	130-170 °C
Stuffed belly of pork	80-85 °C	level 5-7	190-230 °C
Neck of pork	75 °C	level 1-7	130-230 °C
Knuckle of pork	82 °C	level 7	190-230 °C
Shoulder of beef	82-85 °C	level 1-3	130-150 °C
Silverside	82-85 °C	level 2	140 °C
Rump roast	78-82 °C	level 1-2	130-140 °C
Topside of beef	78-82 °C	level 1-2	130-140 °C
The recommended level of browning corresponds to the temperature range indicated in this table.			
Hints: Seasoning mixes with high sugar contents and spices which encourage browning should be used sparingly when cooking with the upper browning levels.			

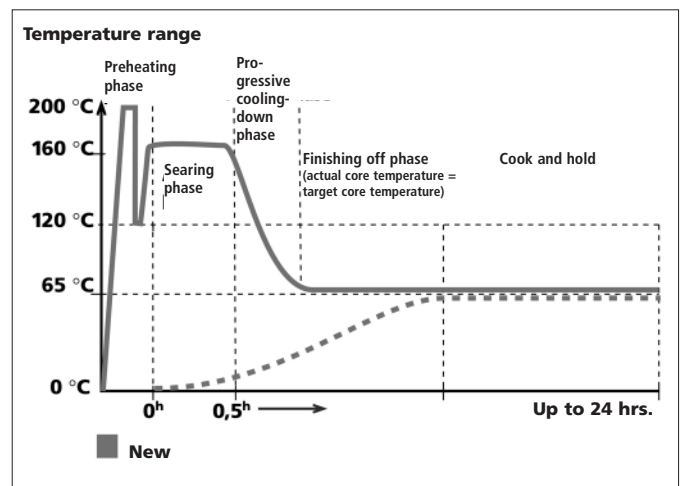
LT cooking (Low-temperature cooking)

Advantages

- A gentle cooking process which cooks the meat (finishes it off) slowly and retains its intrinsic taste.
- Less weight loss, thanks to the mild climate conditions in the cooking cabinet. The meat retains its juice, stays moist and the weight loss is further reduced.
- The rapid cooling after roasting prevents edges from over-cooking. The colour of the meat is uniform when carving.
- Possibility of cooking overnight, by means of the automatic cook and hold phase (up to 24 h).
- Optimum climate conditions in the cooking cabinet intensify the natural finishing off process of meat.
- Perfect finishing off of recently slaughtered meat.
- No need to control food while it is being cooked; climate and air circulation adapt themselves automatically to the different types of products.
- Less moisture loss when the food is portioned.



Less loss of moisture when meat is cooked and then portioned.



Operating

- Deselect cooking modes and programs
- Press IQT key
- Use central dial to select + LT cooking
- Activate the program using the Program/Start key
- The preselected settings appear on the cooking temperature and IQT sensor display.

Note:

If the IQT® sensor is not set or is completely incorrectly set, the wording "SENSOR" will flash in the cooking cabinet display, "POSITION" in the clock display and a buzzer will sound. (see also pages 30 and 31).



IQT key: +LT cooking

- Press the temperature key and enter the desired cooking temperature in the display
- Press the IQT sensor key and enter the desired cooking temperature in the display
- Activate the program using the Program/Start key



Note:

The cooking temperature setting can be anywhere between 130 °C and 200 °C , the core temperature setting between 45 °C and 80 °C.

- + LT cooking operates with the dry heat mode, consequently, the red bar code appears permanently in the Clima window and the dry heat key is activated
- The desired cooking temperature appears in the display of the cooking cabinet
- The following appears in the timer display



When the preheating temperature is attained, the cooking cabinet display flashes the instruction "LOAD" on and off.



Load the CPC with the products and set the IQT sensor. Close the door of the unit. The +LT cooking process begins.

After a while, the current core temperature (actual) appears automatically on the IQT sensor display .



Target temp.

Actual temp.

Finishing off:

During this cooking phase, the core temperature increases slowly in the low temperature range and the temperature inside the cooking cabinet is made to match the core temperature automatically.

This process ensures a uniform colour of the meat when carving.

When the finishing off phase begins, the word "RIPENING" appears automatically in the timer display.



IQT key: +LT cooking

Holding:

As soon as the core temperature is equivalent to the entered value, the word "HOLDING" appears in the timer display. This cooking phase can take as long as 24 hours.

You may interrupt the holding phase at any time, by deselecting the cooking mode. To do so, simply press the illuminated cooking mode shown on the display. All displays go off, and the timer display goes back to indicating the real time.

If you've already slightly browned your meat, and wish to continue roasting in the low temperature range, simply switch to LT cooking in the finishing off phase. Leave the doors of the CPC open. Observe the following hints and proceed as indicated under "Operating":

Do not alter the cooking temperature setting, select the convenient core temperature and start the LT cooking process with the Prog./Start key.

Continue to press the Prog./Start key, until "RIPENING" appears in the timer display.

Load the CPC, set the IQT sensor and close the door of the unit.

The program starts automatically.

The slightly browned meat will cook gently in the finishing/holding phase and the roast will be juicier and tender.



Recommended settings for core and slight browning temperatures

Product	Recom. CT	Recom slight browning temp.
Prime Rib	52 °C	130-180 °C
Topside of beef	55 °C	130-180 °C
Fricandeau	58 °C	130-150 °C
Leg of lamb	58 °C	130-170 °C
Turkey breast	75 °C	130-160 °C
Sirloin	52-56 °C	130-190 °C
Shoulder of beef	55 °C	130-160 °C
Roast beef	58-80 °C	130-150 °C
Game	55-58 °C	130-170 °C

The slight browning temperature may be set anywhere between 130 and 200 °C, depending on the desired level of browning .

Hint:

+LT cooking is a program of its own, so it may not be inserted into another program and used as a programming step.

You may, however, copy it to create your own LT cooking programs (see chapter: Copying of programs, p. 50).

The control panel is blocked during the entire program execution (apart for the few exceptions indicated below). This is to prevent the settings you entered from being altered accidentally.

To stop execution of the +LT cooking program, it is necessary to switch off the CPC. In the holding phase, you may also stop it by deselecting the displayed cooking mode.

If the door is open, the program is simply interrupted and the execution continues as soon as the door is closed.

The following functions can still be selected during program execution:

- HACCP
- Scale



Advantages

- An effective and gentle way of roasting hams and large, marinated, salted or cured joints of meat (topside of beef).
- The meat protein is coagulated at the start of cooking, but the meat fibres can still expand. This stops protein from escaping, as this process does not allow the surface to stretch as a result of a crust forming at too early a stage.
- This gentle cooking method reduces the evaporation of meat juices during cooking, the joint stays moist and tender and the weight loss is minimized.
- This delicate cooking process ensures beautifully moist joints of meat with just the right texture.

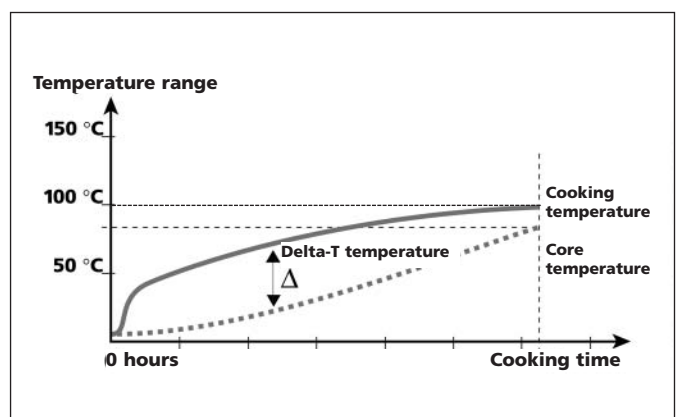


Juicy roast ham – cooked very gently.

Function

The cooking temperature increases at the beginning in compliance with the entered Delta temperature and approaches the core temperature gradually during the cooking process. The cooking temperature increases gently to 100°C without damaging the product. This reduces the evaporation of meat juices during the cooking process.

Delta-T = the difference between the core temperature and the temperature in the cooking cabinet.



The Delta T temperature is the difference between the core temperature and the temperature in the cooking cabinet .

Operating

- Deselect the cooking mode and the programs.
- Press the IQT key

- Use the central dial to select + DELTA -T

- Activate the program with the Program/Start key

- The preset values appear in the cooking cabinet temperature and IQT sensor displays.

Press the cooking cabinet temperature key and use central dial to enter the Delta temperature



IQT key: +Delta-T

Press the IQT sensor key and use central dial to enter the core temperature



- Use the Program/Start key to confirm and activate + DELTA-T



+ DELTA-T operates with the moist heat mode, consequently, the blue bar code appears permanently in the Clima window and the moist heat key is activated.

- The target core temperature appears to the left of the IQT sensor display, and the actual temperature to the right of the display.



Target temp.

Actual temp.

Note:

If the IQT® sensor is not set or is completely incorrectly set, the wording "SENSOR" will flash in the cooking cabinet display, "POSITION" in the clock display and a buzzer will sound. (see also pages 30 and 31).

Hint:

The Delta-T temperature may be set anywhere between 20°C and 60°C, the core temperature between 45°C and 99°C.

+Delta-T cooking is a program of its own, so it may not be inserted into another program and used as a programming step.

You may, however, copy it to create your own Delta-T cooking programs (see chapter: Copying of programs, p. 50).

The control panel is blocked during the entire program execution (apart for the few exceptions indicated below).

This is to prevent the settings you entered from being altered accidentally.

To stop execution of the +Delta-T cooking program, it is necessary to switch off the CPC. In the holding phase, you may also stop it by deselecting the displayed cooking mode.

If the door is open, the program is simply interrupted and the execution continues as soon as the door is closed.

The following functions can still be selected during program execution:

- HACCP
- Scale

Recommended Delta-T and core temperature settings

Product	Recom. CT	Recom. Delta-T temp.
Smoked pork	68 °C	Δ30 °C
Veal (shoulder)	80 °C	Δ40 °C
Prague ham	68 °C	Δ30 °C
Ham on the bone	68 °C	Δ20 °C
Burgundian ham	65-68 °C	Δ25 °C
Gammon	62-65 °C	Δ20 °C

With the IQT key you can select the applications
Program library and
Additional function.



The Program library is described below.
 The additional functions are described in the chapter "IQT key: Additional Functions" (p. 57).

The program library contains **cooking programs** for various products and applications. The programs have been **developed** and extensively tested **by RATIONAL** and give you the assurance of excellent results every time.

Advantages:

- Programs developed by **Rational chefs**
- **Excellent results** without testing in advance
- No need to enter programs

Each program is stored under its own name which allows the product to be easily identified.

Depending on the **user language** chosen, the names will appear in German, English, French, Spanish or Portuguese. You can also assign a name in your own language. You should register the names under "User". Proceed as described under "Programming, naming programs" (p. 46).

The following programs are stored in the library:

Deutsch	*BAGUETTE	Español	*BAGUETTE
English	*BAGUETTE	Portug	*BAGUETTE
Français	*BAGUETTE	User	_____

Program for baking baguettes.

Recommended products: preprepared, deepfrozen products.
 Hint: Use aluminium trays coated with Teflon. The program includes a preheating step in order to ensure sufficient stored heat.

Deutsch	*CC-HAEHN	Español	*CCH-POLLO
English	*CC-CHICK	Portug	*CC-FRANG
Français	*LF-POULE	User	_____

Cook-chill chickens

Program for cooking chickens. The chickens are fully cooked, but the skin is only lightly browned. The second grilling phase (= „REG-CHIC“ program) is used to reheat the chickens to serving temperature and to achieve the desired level of browning and crispiness

of the skin. The chickens are cooked in a vertical position on RATIONAL chicken grids. When they are subsequently reheated they can if desired be left on the grids.

Recommended products: Fresh chickens weighing 1000 g to 1100 g.

The program includes a preheating step in order to ensure sufficient stored heat.

Deutsch	*CROISSAN	Español	*CROISSAN
English	*CROISSAN	Portug	*CROISSAN
Français	*CROISSAN	User	_____

Program for baking croissants.

Recommended products: preprepared, deep frozen products.
 Hint: Use aluminium trays coated with Teflon.
 The program includes a preheating step in order to ensure an ample amount of stored heat.

Deutsch	*GRILHAEH	Español	*POLLO-ASA
English	*ROASTCHI	Portug	*FRANGASS
Français	*POULROTI	User	_____

Program for grilling whole chickens.

The chickens are cooked in a vertical position on the Rational chicken grids. This ensures that they are cooked evenly both inside and outside. A special cooking profile guarantees that chickens are always moist inside and crispy on the outside. Because the chickens are cooked in a vertical position, the cooking process is reduced to 35 minutes.

The chickens are ready for serving immediately.

Recommended products: Fresh chickens weighing 1000 g to 1100 g.

The program includes a preheating step in order to ensure sufficient stored heat.

Deutsch	*REG-BANK	Español	*REG-BANQ
English	*REG-BANQ	Portug	*REG-BANQ
Français	*REG-ASS	User	_____

Program for reheating food arranged on plates (banquet service).

The prepared plates are stored on a plate regeneration rack, chilled, reheated and taken to be served.

IQT key: Program library

This ensures a quicker turnaround for batches and quicker service.

The program comprises two steps:

1. Preheating: The CPC is preheated to a temperature higher than the subsequent reheating temperature in order to create a reservoir of heat.



Once the preheating temperature is reached, the following appears in the display



and the buzzer sounds in intervals. The CPC is now ready for loading.

2. Reheating

Deutsch	*REG-CART	Español	*REG-ALCA
English	*REG-CART	Portug	*REG-ALCA
Français	*REG-CART	User	_____

Program for reheating in day-to-day à la carte business.

For loading precooked food on plates or dishes, or in containers, on an ongoing basis.

Recommended products: See „Reheating“ in the chapter on „Moist + Dry heat“ (p. 27).

Deutsch	*REG-HAEH	Español	*POLLO-REG
English	*REG-CHIC	Portug	*FRANGESQ
Français	*REG-POUL	User	_____

Operating:

- Deselect cooking modes and programs
- Press IQT key and use central dial to select the desired program.

The three IQT logic programs appear in the display followed by a series of asterisks. The standard program appears behind it, marked by an asterisk.

- Use the Program/Start key to activate the program.

Program for reheating precooked chickens (2nd grilling phase) from the „CC-CHICK“ program.

The chickens are reheated in a vertical position on chicken grids. This program is used to brown the precooked chickens to a crispy crust.

Product: Precooked chilled chickens from the cook-chill chicken program.

Deutsch	*REINIGEN	Español	*LIMPIEZA
English	*CLEAN	Portug	*LIMPEZA
Français	*NETTOYAG	User	_____

Cleaning program for the ClimaPlus Combi®.

Cleaning time: 40 minutes.

Please consult the chapter on "Manual cleaning" (p. 82).

Hints:

All library programs are fixed programs, i.e. they may not be altered in the program library and they always retain their original status. All fixed programs are identified by an initial asterisk. If you wish to modify them outside the program library, copy them to your variable program memory and make the necessary modifications (see chapter: Copying of programs, p. 49).

With copied standard programs, the following additional functions may be selected:

- Humidify
- 1/2 fan impeller speed
- Phased fan impeller ventilation
- 1/2 power
- HACCP
- Scale



Programming

Advantages

- Saves time, because the programs are available all the time.
- Staff are free to get on with other work while the food is being cooked.
- The cooking program is fully automatic.
- Quality is assured for calibrated and convenience products.
- Standard cooking processes can be used even by untrained staff, completely in line with your settings.

Operating

- Deactivate the cooking mode and open the door of the unit

- Press the Program/Start key



- Select the desired program number using the central dial. Unallocated program locations flash on and off



- Once you've selected a cooking mode, you will find yourself in the first step of the program.



Select the additional parameters, e.g. cooking climate, cooking time, core temperature and any required additional function.



- To generate a program step, select the corresponding cooking method and then set the required parameters.



- When the program has ended, press ... to save the settings



Checking

To check the program, open the door and continue to press the Program/Start key until you've checked every step and nothing appears in the display.

Programming: Preheating/Calling up programs

Option of setting preheat function in the first program stage:

Advantages:

- You can define a preheat phase in the first program stage. This generates a heat buffer in the oven prior to loading, which ensures that the desired cooking temperature is reached more quickly, especially when cooking deep frozen and chilled products.
- Reliable and easy handling, as the "load" command indicates that the required preheat temperature has been reached and the oven is ready for loading.

Hints

- Preheat to the highest possible temperature (300 °C), in order to build up sufficient heat buffer.
- Load as quickly as possible in order to keep temperature drop to a minimum.
- Preheat when baking - to baking temperature, but in the case of a full load select a higher preheat temperature.

Operating

– Deselect cooking mode

– Call up the program



– Use the central dial to select the desired program number

– Select the cooking mode you wish to preheat with

– Set temperature of cooking cabinet

– Continue to press until „PREHEAT“ appears in the display



– The selection of a cooking mode automatically takes you to the next program step. Continue now as described in the chapter "Programming" (p. 44).

Changing program settings:

- While a program is running, you can intervene and change
 - the cooking temperature,
 - cooking time or core temperature,
 - moisture control and
 - additional functions, at any time.

The stored program is retained unchanged.

You can save these changes by pressing the temperature button and the program/start button; the text display flashes for four seconds to confirm.



In order to be retained, changes must be saved for each program stage.

- Programming of continuous operation is not possible.
- Retrospective insertion of program stages is not possible.

Hints

- Free program areas flash.
- You may also carry out all 9 stages of a program with one item at different temperatures.
- For your individual programming, copy the programming help section on pages 47 and 48.

Working with a stored program

1. Switch the unit on
Press the Program/Start key
2. Select the desired program number using the central dial. Example:
3. Press the Program/Start key.



- The cooking steps are executed automatically in sequence.
- When the program finishes, a buzzer sounds and the unit automatically switches itself off.

Programming: Naming programs

Naming programs

To identify your programs faster and more reliably you can name them individually. Each name can contain up to nine letters and appears in the text display.

Operating

- Deselect the cooking medium or program step
- Use the Program/Start key to call up the program
- Press the IQT key until an underscore or cursor flashes under the first digit
- Select letters with the central dial and confirm with the IQT key
- The cursor flashes to the right of the selected letter. Select new letters and confirm as indicated above...
- To save, press the IQT key until the underscore disappears.



Hint

- If you save a product several times, the unit will assign index numbers, e.g. Chicken 1, Chicken 2, etc

Storing saved programs

The programs you save are stored by

- program number or
- program name.

Storing by program number

- The ClimaPlus Combi® stores programs by number **automatically**.
- All saved programs are indicated by illuminated digits.
- Unallocated** programs **flash on and off** when selected.

Storing programs by name

- Each program can be named individually.
- Programs which have been named are automatically sorted and stored in **alphabetical order**.
- When the program mode is called up, all **named programs** are displayed **first** in alphabetical order, **followed by numbered ones in numerical order**.
- Program numbers which have been given a product name are no longer listed in the numeric display.

Hint:

Programs will be easier and quicker to find, if you enter first the letters and then the digits when naming them e.g.:



Programming: Deleting programs/Programming aids

Deleting a program setting

Programs can be deleted as follows and need not be overwritten.


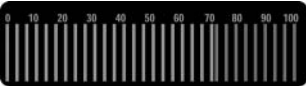



- Select the appropriate program number
- Select the cooking mode
- 00.00 is automatically displayed
- Press Prog/Start for 5 seconds, the displayed text disappears
- and the program location flashes again on and off.



Program number:

Product:


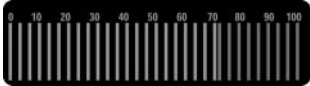



Belly of pork (with crust)

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
 Cooking mode	<i>mo. heat</i>	<i>mo. + dry heat</i>	<i>dry heat</i>						
	<i>100%</i>	<i>70%</i>	<i>70%</i>						
	<i>100°C</i>	<i>160°C</i>	<i>220°C</i>						
 	<i>30 Minuten</i>	<i>76°C</i>	<i>78°C</i>						
 Special functions	-	-	-						
	<i>Pro-tein binding crust swelling</i>	<i>Climate cook-ing</i>	<i>Crust</i>						

Programming aids


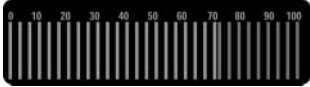



Program number:

Product:

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
									
									
									
									
									

Program number:

Product:

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
									
									
									
									
									

Copying of programs

Copying of programs

1. Copying of standard programs

Operating:

- Use IQT key and central dial to select the standard program.
- Press Program/Start key once to activate the program.
- Continue to press the IQT key until display flashes on and off with an unallocated program location.
- You may either accept the proposed unallocated program location or use the central dial to select one of your own choice.
- Press the IQT key.
All displays go out, the standard program has now been accepted in the variable program memory (1-99 locations). The name of the selected program remains and the asterisk placed before it is deleted.



Notes:

With copied standard programs, the following additional functions may be selected:

- Humidify
- 1/2 fan impeller speed
- Phased fan impeller ventilation
- 1/2 power
- HACCP
- Scale

Copying of programs

2. Copying IQT programs

Operating:

- Select program and enter the required settings (e.g. cooking cabinet temperature, core temperature etc.). Do **not** use Program/Start key to activate, instead:
- Continue to press the IQT key until display flashes on and off with an unallocated program location.



You may either accept the proposed unallocated program location or use the central dial to select one of your own choice.



Press the IQT key. All displays go out, the IQT program has now been accepted in the variable program memory (1-99 locations). The name of the IQT program remains and the + placed before it is maintained.



Hint

If a standard or an IQT program is copied into the variable memory several times, an index number to the program name is automatically attached for ease of identification.

e.g.

If you still wish to give the program a new name, proceed as described under „Programming; Naming Programs“.



Notes:

With copied IQT® programs, the following additional functions may be selected:

- Humidify
- 1/2 fan impeller speed
- Phased fan impeller ventilation
- 1/2 power
- HACCP
- Scale



Continuous operation

Timer

Press the timer



The display shows



Continuous operation

Press timer, keeping it pressed for a moment



The display shows



Setting the realtime

Operating

- Deselect cooking mode and program
- Press the timer for 10 seconds
(Skip start-time display)



- The display shows



- Set the desired real time using the central dial.



- Press the timer.
The real time is stored.





Entering start time

Depending on how your kitchen is organized, you may let the ClimaPlus Combi® **switch on automatically**, provided: all cooking modes and programs are deactivated.

- Press the timer for 5 seconds
(Skip the duration display)
- The display shows
- Set the desired start time using the central dial
- Press the timer.
The start time is stored.

The preset start time is stored in the memory and does not have to be entered afresh every day.

Operating

- Input item to be cooked, time, etc.
- Activate the start time by pressing first the timer and then the Prog/Start key. Keep both keys pressed simultaneously for a few seconds.
- While the unit is in standby mode waiting to switch itself on, the current time and the start time appear alternately in the display.

Selecting the start time for stored programs (standard)

Select the first step of the program, press the timer and the Prog/Start key as described above until the current time and the start time appear alternately in the display.

Selecting the start time for stored programs (IQT):

Select IQT program without starting it. Instead: press the timer and the Prog/Start key as described above until the current time and the start time appear alternately in the display.



Hint

- Cooking processes entered manually and existing programs can all be started automatically.

Safety hints

Caution! We must point out that keeping food, for lengthy periods, in a cooking cabinet which is neither chilled nor heated cannot be recommended!

Additional function „Humidifying“



Advantages

- Doughs rise exceptionally well due to the quick addition of moisture.
- Pastries shine slightly.
- Sudden addition of moisture.

Function

Sudden addition of moisture.

Sample dishes “Humidifying”

- **Mise en place**
Blind baking (tartlets, etc.).
- **Starters**
Profiteroles, vol-au-vents, baguettes, fleurons, flûtes.
- **Soup garnishes**
Profiteroles.
- **Main courses**
Ham in bread dough, smoked pork in yeast dough, Wellington fillet etc.
- **Desserts**
Eclairs, cream puffs, flaky pastries, croissants, Danish pastries, poppy seed cake, nut strudel.

Cooking mode

“Dry heat”.



Temperature range

120°C - 250°C cooking temperature.



Perforated aluminium strays conduct the heat more quickly and evenly to the underside of the food.

Operating

- Press “Humidifying” key

- **Duration of humidifying:** The moisture is produced for as long as the key is depressed, or is restricted to four seconds (green LED shows function is activated).

Humidifying within a program

In all program steps involving dry heat or dry and moist heat between 30°C and 300°C, the additional function “Humidify” may be programmed.

If the additional function “Humidify” is included in a program step, the preset value of 70% humidity is displayed in the climate window. This value may be adjusted using the “magic eye”.

Hint

- Humidify pastries shortly after cooking has begun.



Dry heat



Dry and moist heat



Additional function „Half fan speed“

Advantages

- Quiet in operation.
- Light pastries retain their shape, no fluttering of baking paper.
- Light and sensitive products such as cheesecakes and sponges rise evenly.

Function

Fan rotates at half speed.

Cooking mode

Can be selected with any cooking mode.

Sample dishes

Light items such as sponges, small pastries (e.g. profiteroles, cheesecakes, meringues), cheese straws, flaky pastries, soufflés, stuffings, fillings (e.g. stuffed sole, stuffed fillet of beef).

Operating

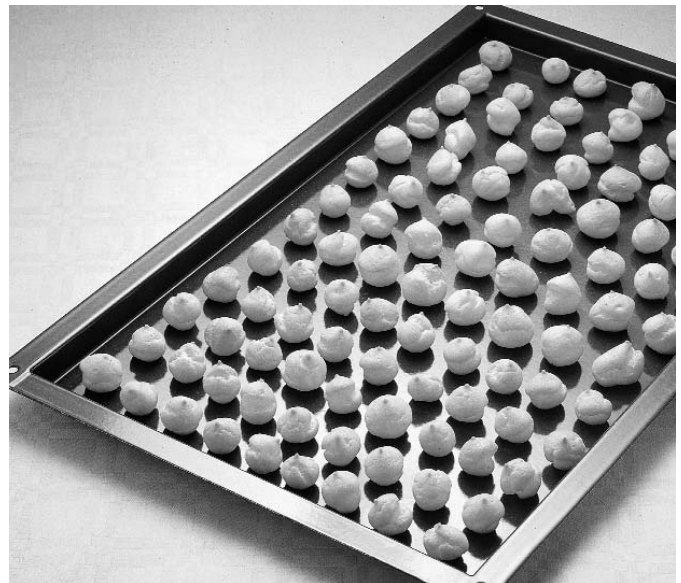
- Select cooking mode
- Selected desired temperature, time or core temperature.
- Select “Half fan speed” (green LED shows the function is activated).

1/2 fan speed, gas

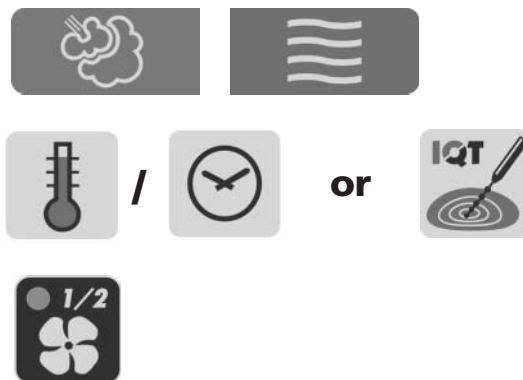
- Input cooking process with item to be cooked, temperature and time/core temperature
- Press IQT button
- Using the central control dial, select the additional functions
- The selected additional functions will be shown in the text display
- Confirm with “Program/Start button”

Hints

- Half fan speed can be programmed.
- Combining “Phased ventilation” and “Half fan speed” creates an even more gentle cooking climate.
- Ideal for baking heavy loaves of bread.



„Light“ pastries retain their shape.





Additional function „Phased ventilation“

Advantages

- Gentle cooking climate.
- Less weight loss.
- Less power consumption.
- Ideal cooking at low temperatures.
- Gentle heat transfer.

Function

The fan operates at set intervals.

Cooking mode

Can be selected with any cooking mode.

Sample dishes with “Phased ventilation”

• Starters

Sirloin (cold/warm), saddle of venison, saddle of veal, loin of pork, turkey breast, duck breast, goose liver, poultry breast.

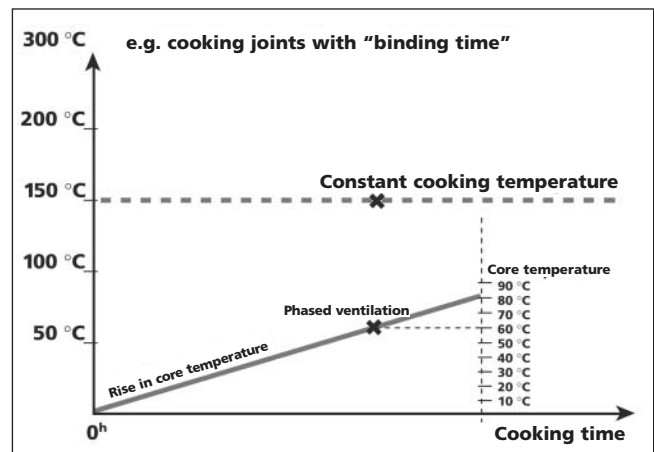
• Main courses

Leg of lamb, sirloin (cold/warm), turkey, smoked pork chops, ham, topside, legs of beef, veal and pork (exhibition pieces).

• Cooking joints:

For example: combination of moist and dry heat 150°C, core temperature 52°C - well done.

Once the core temperature has reached 40°C it is no longer necessary to control the input of heat using full fan speed - the heat stored in the food is sufficient for it to be cooked using “Phased ventilation”. The meat juices bind better and there is less weight loss.



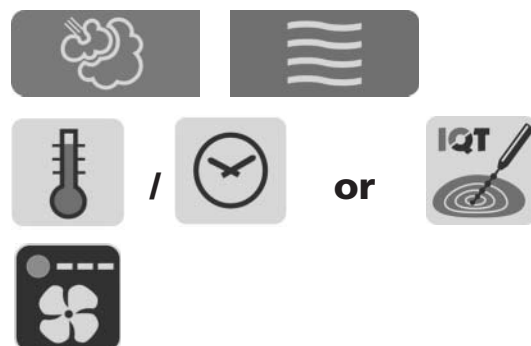
Phased ventilation

Operating

- Select cooking mode.
- Enter desired temperature, time or core temperature.
- Press the key „Phased ventilation“ (green LED shows function is activated).

Hints

- “Phased ventilation” can be programmed.
- For even gentler cooking, “Phased ventilation” can be combined with “Half fan speed”.



Additional function „Cool down“



Advantages

- The cooking cabinet temperature is reduced quickly and without harming materials.
- Staff are free to do other things

Function

Cools the cooking cabinet down quickly without harming materials.

Operating

- Close the door.
- Select the "Cool down" key.



- The following appears in the display:

OPEN DOOR

- Open the door.

- The following appears in the display:

COOL DOWN

The green LED shows the function is activated.
The current cooking cabinet temperature flashes on and off.

Safety hints

- **Caution! The fan does not switch itself off when the door is opened during "Cool down".**
- Use the "Cool down" function only if the air baffle system is properly closed.
- **Caution! Close the door before selecting the "Cool down" function.**
- The "Cool down" function cannot be programmed.
- **Never use cold water to cool the cooking cabinet down!**





Special functions are applications which in general are less used in day-to-day operation. This is why they are not shown on the control panel, but can be called up as required.

The special functions can be integrated into all manual or programmed cooking processes.

The following special functions are available:

- Half-power
- Delta-T cooking
- HACCP logging
- ProgLock (programming lock)

Operating

- Enter the cooking process with: cooking mode, temperature and time/core temperature
- Press the IQT key
- Select the desired special function with the central dial.
- The special function selected appears in the text display.
- Confirm with the "Program/Start key".



e.g. 





IQT key: Additional function „Half power“ (E 1/2)

Advantages

- Power overloads are avoided by reducing the power draw.

Function

Uses only 50% of the mains power.

Cooking mode

Can be selected with any cooking mode.

Operating

Press the IQT key.

- Select "E 1/2" using the central dial.
- Activate "Half power" using the "Prog/Start" key
- An „E" following appears in the cooking cabinet display:



Hints

- **Caution!**
The additional function "E 1/2" may extend the cooking time.

Notes

IQT key: Additional function „Delta-T cooking“

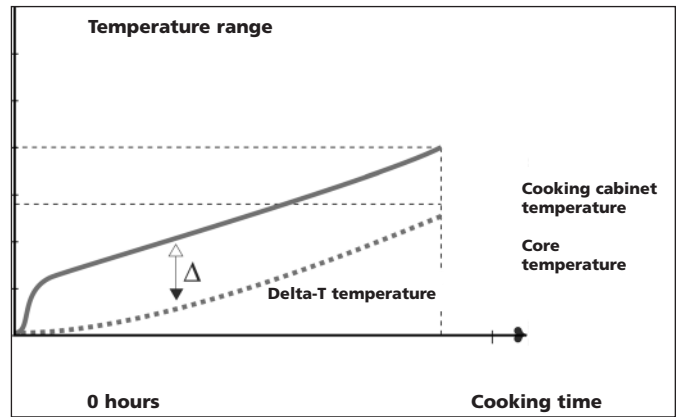
Advantages

- A very gentle way of roasting hams and large, marinated joints of meat.

Function

Because the temperature in the cooking cabinet rises slowly, with a constant difference from the relevant core temperature, the meat undergoes a longer cooking process.

Delta-T = the temperature difference between the core temperature and the cooking cabinet temperature.



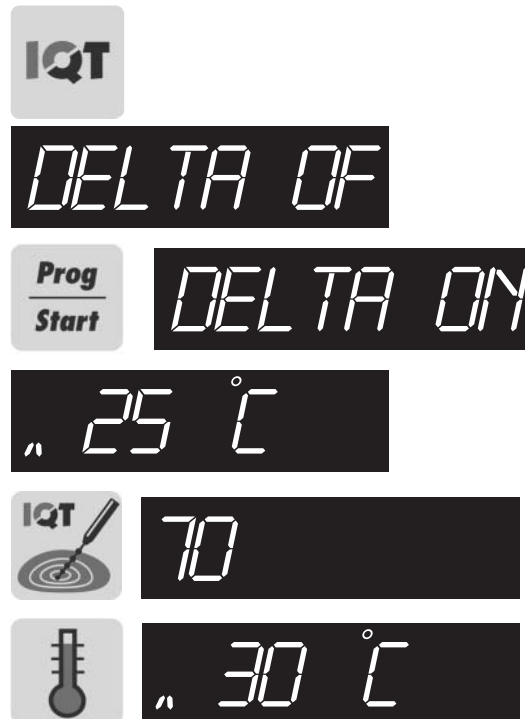
The Delta-T temperature is the difference between the core temperature and the cooking cabinet temperature.

Cooking mode

Can be selected with any cooking mode.

Operating

- Press the IQT key.
- Select "Delta" with the central dial.
- Activate using the "Prog/Start" key
- The following appears in the cooking cabinet display:
- Set the target core temperature.
- Press the temperature key and enter the delta temperature in the cooking cabinet display.



Hints

- Experience shows that the Delta-T temperature generally resides between 25 °C and 60 °C. „Delta-T“ can be programmed and all three cooking modes can be selected.



Advantages

- The standard interface (9-pin SubD plug) allows you to print out data on cooking processes online and to log it at any time.
- For your safety: reference logs document your standard of work.

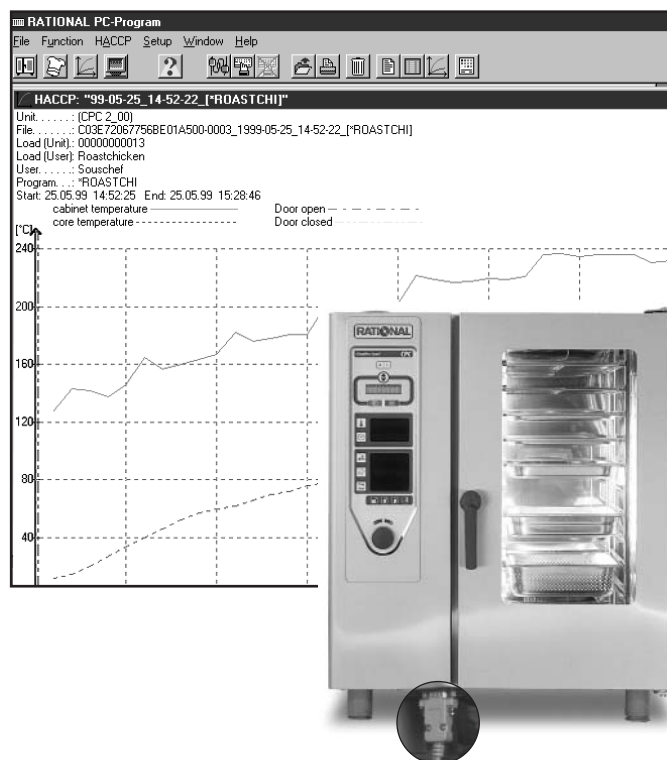
The following data is logged:

Data output every 60 seconds (in ASCII format)

- batch number
- time
- cooking program number or name
- cooking cabinet temperature
- core temperature
- door open / door closed

Function

The process data can be output via the interface. The data can be output in the following ways: You will need a PC and the RATIONAL PC program. For further details, consult the appropriate manual.



Operating

- Connect the PC with the RATIONAL PC program
- Press the IQT key.
- Use the central dial to select "HACCP".
- Confirm using the "Prog/Start" key
- A flashing dot appears in the display to show the logging:

For configuration of the RATIONAL PC program, refer to the users manual.









The output of cooking data is terminated by:

- the timer expiring
- the core temperature being reached
- the cooking mode being deselected













IQT key: Additional function „Program lock“

Unallocated program locations do not flash on and off! Activate and deactivate as follows:

- Select the operating mode e.g.  In order to cancel the alarm, open the door or set the time
- Press the IQT key  and use the central dial  to call up "LOCK ON"/"LOCK OFF".
- Press the Prog/Start key.  The timer display shows "*****", and the first digit flashes on and off.
- Use the central dial to enter the password RATIONAL (the factory setting).
- Select characters using the central dial. 
- Use the timer key to move forward, and the cooking cabinet temperature key to confirm.  
- The password can have fewer than eight digits.
- Once all characters have been entered correctly, use the cooking cabinet temperature key to select "LOCK ON" or "LOCK OFF"
- Save the desired status using the Prog/Start key. 
- If the program lock is active, no programs can be stored and "LOCK ON" appears in the IQT display

New password Factory settings Password = RATIONAL

General: Enter the old password for authorization, then enter the new password twice.

- Select operating mode e.g. 
- Press the IQT key  and use the central dial  to call up "LOCK OFF"/"LOCK ON".
- Press the Prog/Start key.  The timer display shows "*****", and the first digit flashes on and off.
- Select the characters for the old password with the central dial.  Use the timer key to move forward until the password is complete. 
- Once all characters have been entered correctly, use the cooking cabinet temperature key to select "LOCK ON" or "LOCK OFF"
- Press the central dial.  The timer display shows "*****" and the first digit flashes on and off.
- Use the central dial to select and enter the characters for the new password.  Move on to the next digit by
- Pressing the Prog/Start key. The timer display shows "@@@@@@@@", and the first digit flashes on and off. 
- Repeat the new password (confirm!)
- Save the desired status using the Prog/Start key. 

Attention!

In case of not knowing the password anymore, an authorised service agency has to be consulted for a reset.



National settings

The ClimaPlus Combi can be adapted to suit your own national requirements and can talk to you in your own language. Users can choose time and temperature settings and the language in line with their own preferences.

Time format

You can choose between two different formats for displaying the time.

- 24-hour clock



- 12-hour clock



Enter the USER language

Operating:

- Deselect the cooking mode
- Press the expert key
- Use the central dial to select the program names to be changed.
- Hold the expert key down until an underscore (" _ ") flashes in the first position
- Use the central dial to select the desired letters (move forward by pressing the timer symbol)
- To save, hold the expert key down until the underscore disappears.

Language setting

The ClimaPlus Combi "talks" to you in your language. In other words, all text entries can be called up in the following languages:

- DEUTSCH
- ENGLISH
- FRANCAIS
- ESPANOL
- PORTUG

If you would like ClimaPlus to use another language, you can program in everything that appears in the text display in your own language via the "user" setting. The advantage of this is that everyone in your kitchen is able to understand the ClimaPlus Combi messages.

Converting the temperature from °C to F

The ClimaPlus Combi can use either Celsius or Fahrenheit. You can choose between:

Unit	CPC display	Temperature range
°C	[CELSIUS]	30°C - 300°C
°F	[FAHRENH]	85 F - 575 F

Mode	Position number	German	English	French	Spanish	Portuguese
Low water alarm	9	WASSER	WATER	EAU	AGUA	AGUA
T PCB	9	T-PLATINE	T-PCB	PLATINE T	PLATINA-T	PLACA-T
Cooking cabinet	9	T-GARRAUM	T-CABINET	CELLULE T	CAMARA-T	CAMATA-T
T generator	9	T-KESSEL	T-GENERAT	CHAUD T	GENERA-T	GERADOR-T
Fan motor defective	9	MOTOR DEF	MOTOR-DEF	MOT DEF	MOTOR-DEF	MOTOR DEF
Enter realtime	8	ECHTZEIT	REALTIME	HORLOGE	HORAREAL	HORAREAL
Enter start time	8	STRTZEIT	STRRTIME	H DEPART	INI-HORA	INI-HORA
Continuous operation	8	DAUER	CONT-RUN	DIRECT	CONTINUO	DURACAO
Cooldown	9	COOLDOWN	COOLDOWN	COOLDOWN	COOLDOWN	COOLDOWN
Start	9	START	START	START	INICIAR	INICIAR
Button	9	TASTE	BUTTON	TOUCH E	PULSADOR	PULSADOR
Pre-heating	8	VORHEIZE	PRE HEAT	PRECHAUF	CALENTAR	ESQUENTA
Loading	8	BELADEN	LOADING	CHARGER	CARGAR	CARREGAR
Open door	9	TUER AUF	OPEN DOOR	PORTE	PUERTA	PORTA
Reset	9	RESET	RESET	RESET	REINICIAR	REINICIAR
Lock programming	9	PROG AUS	PROGLOCK	NON PROG	CORTAPROG	CORTAPROG
Unlock programming	9	PROG EIN	UNLOCK	PROG	PROG	PROG
For after-sales service		KESSEL <0	GENER <0	CHAUD <0	GENER <0	GERAD<0
For after-sales service		E-10000	E-10000	E-10000	E- 10000	E-10000
For after-sales service		E-DD	E-DD	E-DD	E-DD	E-DD

National settings

Operating:

- Switch the unit off and on again.
- Press the temperature key and timer together for about 10 seconds.

1. Selecting the time format

- Use the central dial to choose the desired time format, and press the cooking cabinet temperature key.



2. Selecting the language

- Use the central dial to choose the desired language, and press the cooking cabinet temperature key.



3. Selecting the temperature unit

- Use the central dial to choose the desired temperature, and confirm all entries with the prog/start key.



- If you have chosen the "user" language, press the cooking cabinet key instead of the prog/start key.



- The first term appears in the display for cooking cabinet temperature, e.g.



- The term is repeated in the text display, and there is a flashing underscore (the cursor) under the first letter.



- The central dial can be used to replace the letter individually.

- Confirm the letter by pressing the IQT key



- The cursor flashes under the next letter. Proceed as above.

- Go to the next term by pressing the cooking cabinet key. Proceed as above.



- To end the entry, confirm with



Hint

If you do not want to change all the national settings, but only the time format, you can immediately leave the national settings by pressing the prog/start key.

Following messages/program names, which are represented in English language in the manual, are displayed in your ClimaPlus Combi® version in japanese writing:

Engl. terms	japanese
Water	給投中
T-PCB	P c b 高温
T-Cabinet	庫内温度高
T-Generat	タンク内高
Motor-Def	モーター異
Real Time	現在時刻
STRTTIME	開始時刻
Cont-Run	連続運転
Cooldown	クールダウン
Start	スタート
Button	ボタン
Preheat	予熱
Loading	調理可
Reset	リセット
Proglock	ブロック
Unlock	アンロック
Opendoor	扉を開ける
Delta	デルタ t 調
E 1/2	½ エネルギー
HACCP	h a c c p
Password	パスワード
Japanisch	日本語
ON	ON
OFF	OF

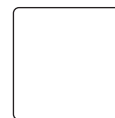
Engl. terms	japanese
Brown	焼き色
Hold	ホールド
Maturing	熟成
Limescale	水垢除去
Searing	焼き
Cooldown	クールダウン
Produkt	PRODUCT
Too	TOO
Small	SMALL
Position	芯温計
Sensor	位置
Abort	中止
End	終了
Activ	洗浄中
Cleanjet	自動洗浄
Container	容器
Refill	補充
Too hot	要冷却
Cleaner	洗剤
Rinser	リンス
Close door	扉を閉じる
Rinse	リンス
Standard	STANDARD
+Level 0	+LEVEL 0

Following messages/program names, which are represented in English language in the manual, are displayed in your ClimaPlus Combi® version in Japanese writing:

Engl. terms	Japanese
+Level 5 6	+ L E V E L 5
Level 0	ステップ° 0
Quick	急速

The following characters are available for writing your own program names:

あ	い	う	え	お	か	き	く	け	こ	さ	し	す	せ	そ	牛	魚	強	現	庫	高	刻	菜	在	始	時	昇	焼	常	蒸	
た	ち	つ	っ	て	と	な	に	ぬ	ね	の	は	ひ	ふ	へ	水	生	制	装	足	続	置	中	鳥	調	転	度	投	扉	豚	
ほ	ま	み	む	め	も	や	ゃ	ゆ	ゅ	よ	ょ	ら	り	る	内	煮	肉	入	熱	物	米	野	予	卵	理	冷	連	日	本	
れ	ろ	わ	を	ん	ア	ァ	イ	ィ	ウ	ゥ	エ	ェ	オ	ォ	語															
カ	キ	ク	ケ	コ	サ	シ	ス	セ	ソ	タ	チ	ツ	ッ	テ																
ト	ナ	ニ	ヌ	ネ	ノ	ハ	ヒ	フ	ヘ	ホ	マ	ミ	ム	メ	1	2	3	4	5	6	7	8	9	0						
モ	ヤ	ユ	ヨ	ョ	ラ	リ	ル	レ	ロ	ワ	ヲ	ン			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
°	ー	½	異	運	温	下	可	過	貝	開	気	却	給		P	Q	R	S	T	U	V	W	X	Y	Z	.				

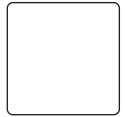


Following messages/program names, which are represented in English language in the manual, are displayed in your ClimaPlus Combi® version in Chinese Old writing:

Engl. terms	Chinese Old
Water	缺水看水源
T-PCB	電路板過熱
T-Cabinet	烤箱溫度過熱
T-Generat	蒸發器過熱
Motor-Def	風扇馬達故障
Real Time	現在時間
STRTTIME	啟動時間
Cont-Run	連續運轉
Cooldown	冷卻
Start	啟動
Button	按鍵
Preheat	預熱
Loading	下量溫度達到
Reset	重新設定
Proglock	程式設定
Unlock	程式開啟
Opendoor	開門
Delta	溫差烹調
E 1/2	一半能源操作
HACCP	重要危害管制
Password	密碼
On	ON
Off	OF
Brown	色澤程度

Engl. terms	Chinese Old
Hold	華後處理階段
Maturing	成熟過程中
Limescale	石灰沉澱
Searing	煎
Cooldown	冷卻
Produkt	PRODUCT
Too	TOO
Small	SMALL
Position	感應器
Sensor	位置
Abort	中斷
End	終止
Activ	操作
Cleanjet	自動清潔
Container	容器
Refill	裝填
Too hot	太熱
Cleaner	清潔劑
Rinser	清洗
Close door	關門
Rinse	沖洗
Standard	STANDARD
+Level 0	+LEVEL 0
+Level 5 6	+LEVEL 5 6

ClimaPlus Combi® with Dot-Matrix (Chinese Old)



Following messages/program names, which are represented in English language in the manual, are displayed in your ClimaPlus Combi® version in Chinese Old writing:

Engl. terms	Chinese Old
Level 0	階段0
Quick	快速

The following characters are available for writing your own program names:

1	2	3	4	5	6	7	8	9	0	香	炸	盅	蚌	飽	點	嫩	骨	腸	鷄	水	檢	查	水	源	電	路	板	門	差
A	B	C	D	E	F	G	H	I	J	肺	苦	類	面	南	軟	洋	膳	絲	春	溫	度	烤	箱	內	部	一	半	過	高
K	L	M	N	O	P	Q	R	S	T	苗	胡	保	柳	筍	饒	覓	茄	粉	糕	蒸	發	器	能	操	作	重	風	馬	
U	V	W	X	Y	Z	人	上	小	子	酒	涼	姜	餃	熱	煙	鹽	圓	翅	澇	達	故	障	現	在	時	間	要	害	
大	川	才	千	干	叉	丸	手	什	心	藥	茶	草	蛇	雪	胸	脆	蛋	海	管	管	運	運	轉	冷	御	啟	動	按	
汽	貝	火	水	牛	王	仁	爪	汁	生	浸	烤	排	烙	燜	烹	脯	甜	鴨	鍵	鍵	預	熱	密	到	達	準	備	下	
北	包	白	扒	龍	片	田	雲	頭	百	野	豬	鼓	球	鹿	煮	鹹	乾	窩	量	重	新	設	定	程	式	鎖	完	碼	
東	瓜	尖	老	米	皮	全	肉	血	羊	菜	腳	臘	蔥	鵝	梅	菌	素	滑	敗	開	關	調	攝	程	華	鎖	成	第	
式	雙	西	扣	羌	灼	豆	肝	時	冷	蛤	鮑	煲	蔥	鵝	菇	菌	黑	粥	二	筒	批	清	洗	噴	潔	完	成	第	
鹵	奶	體	吞	尾	芋	串	肚	旬	青	煎	醬	椒	蔥	鵝	菇	菌	黑	粥	筒	筒	字	劑	險	酒	自	中	看	繁	
芹	寶	拌	肥	果	花	紅	抄	卷	咖	煎	醬	椒	蔥	鵝	菇	菌	黑	粥	筒	筒	字	劑	險	酒	自	中	看	繁	
爐	明	泡	乳	條	湯	味	油	魚	飯	煎	醬	椒	蔥	鵝	菇	菌	黑	粥	筒	筒	字	劑	險	酒	自	中	看	繁	
美	凍	炊	烘	芥	蝦	肺	食	活	參	煎	醬	椒	蔥	鵝	菇	菌	黑	粥	筒	筒	字	劑	險	酒	自	中	看	繁	
										糊	比	司	青	派	玉	培	根	塔	缺										少
																													½

Following messages/program names, which are represented in English language in the manual, are displayed in your ClimaPlus Combi® version in Chinese New writing:

Engl. terms	Chinese New
Water	水量过少
T-PCB	P C B 温度过
T-Cabinet	库内温度过高
T-Generat	蒸
Motor-Def	发动机异常
Real Time	现在的时间
STRTTIME	开始时间
Cont-Run	连续运转
Cooldown	强制冷却机能
Start	开始
Button	电钮
Preheat	预热
Loading	预热完毕
Reset	重新启动
Proglock	l o c k
Unlock	u n l o c k
Opendoor	开门
Delta	d e l t a - t
E 1/2	1 / 2 能量
HACCP	h a c c p
Password	P a s s w o r d
Chinesisch	中文
On	O N
Off	O F

Engl. terms	Chinese New
Brown	色泽程度
Hold	最后阶段
Maturing	成熟过程中
Limescale	石灰化
Searing	煎
Cooldown	冷却
Produkt	P R O D U C T
Too	T O O
Small	S M A L L
Position	传感器
Sensor	位置
Abort	中断
End	终止
Activ	操作中
Cleanjet	自动清洁
Container	容器
Refill	装填
Too hot	过热
Cleaner	清洁剂
Rinser	清洗
Close door	关门
Rinse	冲洗
Standard	S T A N D A R D
+Level 0	+ L E V E L 0

ClimaPlus Combi® with Dot-Matrix (Chinese New)

Following messages/program names, which are represented in English language in the manual, are displayed in your ClimaPlus Combi® version in Chinese New writing:













































Engl. terms	Chinese New
+Level 5 6	+ L E V E L 5 6
Level 0	阶理零
Quick	快速

The following characters are available for writing your own program names:

人上小子大川才千土叉丸手什心气
 贝火水牛王仁瓜尖老米皮全肉血羊式
 田云头百东瓜肝时冷卤奶体吞尾芋
 双西扣羌灼豆肝时冷卤奶体吞尾芋
 甲肚旬青芹宝拌肥果花红炒卷咖炉
 明泡乳条汤味油鱼饭美冻炊芥虾肺
 食活参香炸盅蚌饱点炖骨肠鸡肺苦
 类面南软洋胆丝春苗胡保柳笋烧蚬
 茄粉羔烘酒凉姜饺热烟盐圆翅焗焗
 茶草蛇雪胸清脆蛋海浸烤排烙焗焗
 烹脯甜鸭野猪豉球阉酥掌煮乾焙菜
 脚腊鹿萝喱梅鱿素窝蛤鲍煲葱鹅

菇菌黑滑煎酱椒脯髓煨蒜鲜粽粥腐
 辣蜜嫩腰酸熟醉蔬糕螃糖蹄燕慢薯
 翼糜蒸醋糊墨壕羹螺蟹爆鳗鳝瓣露
 水量过少P C B温度过高库内温
 过高温蒸气发生装置温度过高发
 异常现在的时间开始电钮预热预
 强制冷却机能开始电钮预热预
 毕重新启动 l o c k u n l o c k
 开门 d e l t a - t 烹 调 1 / 2 能
 量 h a c c p p a s s w o r d 0
 1 2 3 4 5 6 7 8 9 中文

Examples beef and veal



































Food	Hints	Container/Grids	Preheat	1st Step
Filet steaks	200 g	grid	 300°C	 260°C, 3 min.  10%
Sirloin	200 g	grid	 300°C	 260°C, 3 min.  10%
Roastbeef, Prime Rib	2 piece each grid	grid		
Braised Beef	ca. 10 kg per container Fill in mire poix and stock	cns container 65 mm	  180°C	  135°C,  95°C,  60% 
Beef roulades	180 g, 30 piece each container	cns container 40mm	  180°C,  60%	  135°C,  95°C,  60%
Beef- boiled, Rump, Veal-tongue	Meat and Mire poix 2/3	cns container 40mm		
Filet of beef Wellington	2 pcs.	aluminium perforated	 280°C	 220°C, 5 min.,  20%
Cutlet of veal	250 g	grid	 300°C	 260°C, 3 min.  10%
Filet of veal Filet of beef, breaded	Trimmed and brushed with oil	grid and cns container 20 mm	 300°C,  10%	 260°C, 3 min.  10%
Liver of veal	slices of 180 g	granit enamelled	 300°C,  10%	  200°C, 5 min.  70%
Loin and Roasts of veal	2-3 kg, 2 each per grid	grid and cns-container 20 mm		
Veal- breast,-stuffed and knuckles	2-3 piece each grid	grid and cns-container 65 mm		
Breaded escalop of veal	80 -100 g, brush with oil each grid for 8-10 pieces	granit enamelled	 300°C,  10%	 230°C, 5 min.  10%
Bones of veal for sauce	2 kg each container and 2/3 of Mire poix	granit enamelled 20 mm	  200°C,  10%	  150°C, 90 min.  40%

Remember that the capacities given always relate to a full load. In some cases reducing the size of the load can improve the quality of the food. Food is a natural product. The temperatures and times given are therefore for guidance only, and may need to be individually adapted.



2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
Cool down ↘ to 85°C	54 °C, 10%		72 pcs.	120 pcs.	240 pcs.	240 pcs.	480 pcs.
Cool down ↘ to 85°C	53 °C, 10%		60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
		+LT cooking, 58°C Searing Temp. 180°C	2 pcs.	3 pcs.	6 pcs.	6 pcs.	12 pcs.
			24 kg	40 kg	80 kg	80 kg	160 kg
			75 pcs.	125 pcs.	250 pcs.	250 pcs.	500 pcs.
		+Delta-T, O60 95°C	24 kg	40 kg	80 kg	180 kg	60 kg
130°C, 50°C, 20%	200°C, 54°C, 20%		24 kg	40 kg	80 kg	80 kg	160 kg
Cool down ↘ to 85°C	54°C, 10%		60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
Cool down ↘ to 85°C	54°C,		24 pcs.	40 pcs.	80 pcs.	80 pcs.	160 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
		+Profile, brown 4 75°C	24 kg	40 kg	80 kg	80 kg	160 kg
		+Profile, brown 5 75°C	24 kg	40 kg	80 kg	80 kg	160 kg
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			12 kg	20 kg	40 kg	40 kg	80 kg

Examples pork and lamb

Food	Hints	Container/Grids	Preheat	1st Step
Legs of lamb without bones		grid		
Loin of lamb	Up to 16 pcs. each grid	grid	 300°C	 260°C, 3 min.  20%
Lamb chops	ca. 70 g each piece 24 pieces on a grid	grid	 300°C	 260°C  54°C  10%
Bones of lamb for sauce	2 kg and 2/3 Mirepoix	granite enamelled 20 mm	  200°C	  150°C, 90 min.  40%
Smoked pork loin Pickled leg of pork Ham knuckles	2 pcs. each grid	grid		
Meat farce	1 kg each form	cns container		
Sparribs	Steam first, marinade and grill	grid	 100°C	 100°C, 60 min.  100%
Medallions of pork filet	70 g each piece 20 pieces on a grid	grid	 300°C	 250°C  20%  58°C
Pork chop breaded	Brush with oil, 5-6 piece each grid	granite enamelled 20 mm	 230°C	 200°C, 10 min.  10%
Burgers Meatloaf	150 g, 14 pieces each grid	granite enamelled	  300°C	  200°C  40%  80°C
Meatballs	50 g, 30 pieces	granite enamelled	  300°C	 180°C, 8 min.  40%
Roast of pork	2 piece each grid	grid		
Leg of pork	2 piece each grid	grid		
Roast of pork with crackling Pork knuckles	2 pcs. each grid	grid		
Bacon	20 slices on each grid	granite enamelled	 300°C	 160°C, 14 min.

Remember that the capacities given always relate to a full load. In some cases reducing the size of the load can improve the quality of the food. Food is a natural product. The temperatures and times given are therefore for guidance only, and may need to be individually adapted.



2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
		+LT cooking 58°C Searing Temp. 180°C	6 pcs.	9 pcs.	18 pcs.	18 pcs.	36 pcs.
Cool down ↘ to 85°C	54°C 20%		72 pcs.	160 pcs.	320 pcs.	320 pcs.	640 pcs.
			144 pcs.	240 pcs.	480 pcs.	480 pcs.	960 pcs.
			12 kg	20 kg	40 kg	40 kg	80 kg
		+Delta-T, O 20 80°C	2 pcs.	3 pcs.	6 pcs.	6 pcs.	12 pcs.
		+Profile Braun 1 75°C	18 kg	30 kg	60 kg	60 kg	120 kg
250°C preheat 60%	180°C, 20 min. 40%		9 kg	15 kg	30 kg	30 kg	60 kg
			72 pcs.	120 pcs.	240 pcs.	240 pcs.	480 pcs.
			48 pcs.	80 pcs.	160 pcs.	160 pcs.	320 pcs.
			86 pcs. 18 pcs.	140 pcs. 30 pcs.	280 pcs. 60 pcs.	280 pcs. 60 pcs.	560 pcs. 120 pcs.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	900 pcs.
		+Profile Brown 2 72°C	24 kg	40 kg	80 kg	80 kg	160 kg
		+Profile Brown 4 72°C	24 kg	40 kg	80 kg	80 kg	160 kg
		+Profile Brown 6-7 80°C	18 kg	27 kg	54 kg	54 kg	108 kg
			120 pcs.	200 pcs.	400 pcs.	400 pcs.	800 pcs.

Examples sausages, terrines and gratins











































Food	Hints	Container/Grids	Preheat	1st Step
White sausages	Grids and hooks	grid	100°C	75°C 70°C
Sausages to regenerate	Core temperature	cns perforated 20 mm	100°C	75°C 70°C
Liver dumpling		cns container 20 mm	100°C	80°C, 15 min.
Tins	Filling of 200 g	grid or cns container 20 mm	100°C	100°C, 40 min.
Rillettes in jares	Glas must be heat resistant	grid or cns container 20 mm	100°C	100°C, 50 min.
Grill-sausages	2 kg each grids	granite enamelled	300°C	180°C, 5 min. 10%
Terrine	Forms filled perfect	grid	100°C	78°C 72°C
Pate		grid	100°C	80°C 70°C, 100%
Terrine of goose liver		grid	100°C	75°C 58°C
Lassagne or Canneloni		cns container 40 mm	260°C	160°C, 35 min. 60%
Potatoe gratin		cns container 40 mm	260°C	160°C, 35 min. 60%
Vegetable gratin		cns container 40 mm	260°C	160°C, 35 min. 60%
Moussaka		cns container 40 mm	260°C	160°C, 35 min. 60%
Quiche Lorraine	Portion of 8 cm	cns container	260°C	160°C, 25 min. 60%

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2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
			160 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			120 pcs.	200 pcs.	400 pcs.	400 pcs.	800 pcs.
			120 pcs.	200 pcs.	400 pcs.	400 pcs.	800 pcs.
			12 kg	18 kg	36 kg	36 kg	72 kg
			24 pcs.	40 pcs.	80 pcs.	80 pcs.	160 pcs.
			12 pcs.	20 pcs.	40 pcs.	40 pcs.	80 pcs.
			15 kg	25 kg	50 kg	50 kg	100 kg
			120 Port.	200 Port.	400 Port.	400 Port.	800 Port.
			120 Port.	200 Port.	400 Port.	400 Port.	800 Port.
			120 Port.	200 Port.	400 Port.	400 Port.	800 Port.
			120 Port.	200 Port.	400 Port.	400 Port.	800 Port.
			120 Port.	200 Port.	400 Port.	400 Port.	800 Port.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.

Examples game and poultry







































Food	Hints	Container/Grids	Preheat	1st Step
Saddle of venison	Bristling with bacon, insert a spear into the backbone	grid or 20 mm granite enamelled	Standard setting  58°C, 130°C Searing Temp.	
Leg of venison	Remove bones	grid or cns container 65 mm	Standard setting  58°C, 130°C Searing Temp.	
Shoulder of venison	Bristling with bacon	cns container 65 mm	Standard setting  58°C, 130°C Searing Temp.	
Saddle of hare	Bristling with bacon	grid or 20 mm granite enamelled	  180°C	  130°C  54°C  40%
Leg of hare	Bristling with bacon add hot sauce	20 mm	  180°C	  140°C  72°C  90%
Pheasant	Bard the pheasants	grid or 20 mm granite enamelled	  200°C	  160°C, 20 min.  20%
Wild duck	Bristling with bacon	grid or 20 mm granite enamelled	  180°C	  140°C, 45 min.  20%
Chicken boiled	For salad and starters	cns container 40 mm	 100°C	 85°C  78°C
Turkey	4 kg, save juice	grid	  160°C	  130°C, 100 min.  40%
Goose		grid or 40 mm granite enamelled	 100°C	 100°C, 20 min.
Duck breast Barbarie	NT-Weiter garen	grid or 20 mm granite enamelled	 180°C	 160°C  54°C  40%
Chicken to roast	Rube dry seasoning 900 - 1100 g	Chicken grilling grid		
1. Cook and Chill Chicken, production	Use a blastchiller	Chicken grilling grid		
2. Cook and Chill Chicken, regenerating	Take out of fridge some minutes before	Chicken grilling grid		
Chicken legs	Use grid	grid		
Duck	1,5 - 2 kg, 8 pieces	Duck grilling grid	 180°C	 150°C, 50 min.  100%

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2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
		+LT cooking	6 pcs.	10 pcs.	20 pcs.	20 pcs.	40 pcs.
		+LT cooking	18 kg 40 lbs	30 kg 66 lba	60 kg 132 lbs	60 kg 132 lbs	120 kg 264 lbs
		+LT cooking	18 kg 40 lbs	30 kg 66 lba	60 kg 132 lbs	60 kg 132 lbs	120 kg 264 lbs
			24 pcs.	40 pcs.	80 pcs.	80 pcs.	160 pcs.
			36 pcs.	60 pcs.	120 pcs.	120 pcs.	240 pcs.
220°C, 5 min. 20%			18 pcs.	30 pcs.	60 pcs.	60 pcs.	120 pcs.
			9 pcs.	15 pcs.	30 pcs.	30 pcs.	60 pcs.
			18 kg	30 kg	60 kg	60 kg	120 kg
150°C, 10 min. 40%			4 pcs.	6 pcs.	12 pcs.	12 pcs.	24 pcs.
40°C, 60 min. 40%	150°C, 60 min. 30%		4 pcs.	6 pcs.	12 pcs.	12 pcs.	24 pcs.
130°C 54°C 40%			24 pcs.	40 pcs.	80 pcs.	80 pcs.	160 pcs.
		GRILHAEHN	16 pcs.	24 pcs.	48 pcs.	48 pcs.	96 pcs.
		(1) CC-HAEHN	16 pcs.	24 pcs.	48 pcs.	48 pcs.	96 pcs.
		(2) REG-HEAN	16 pcs.	24 pcs.	48 pcs.	48 pcs.	96 pcs.
		GRILHAEHN	72 pcs.	120 pcs.	240 pcs.	240 pcs.	480 pcs.
180°C, 20 min. 30%			6 pcs.	10 pcs.	20 pcs.	20 pcs.	40 pcs.

Examples fish, mussels and crustaceans














































Food	Hints	Container/Grids	Preheat	1st Step
Salmon (whole)	Use IQT-sensor	grid and 20 mm	 100°C	 75°C,  60°C
Salomon trout	160 g	grid or 20 mm	 100°C	 75°C, 6 min.
Salmon steak	160 g	grid or 20 mm	 100°C	 80°C, 8 min.
Salmon soufflé	Timbales, Cocott, Dariolform	grid	 100°C	 70°C, 15 min.
Turbot filet	160 g	20 mm	 100°C	 75°C, 6 min.
Halibut	160 g	20 mm	 100°C	 75°C, 6 min.
Sole roulades	80 g, roll together	20 mm	 100°C	 75°C, 6 min.
Plaice	Brush with oil	20 mm granite enamelled	 300°C	 220°C, 10 min.  20%
Panfried trout	Tied mouth and tail together	20 mm granite enamelled	 300°C	 250°C, 15 min.  20%
Boiled trout	brush with oil	20 or 40 mm	 100°C	 100°C, 10-15 min.
Mussels	White wine, vegetablen	40 or 65 mm	 100°C	 78°C, 10 min.
Fish dumplings	Kenels of 40 mm	20 mm	 100°C	 75°C, 8 min.
Terrine of fish		grid	 80°C	 72°C,  62°C
King Prawns		20 mm granite enamelled	 300°C	 260°C, 3 min.  10%
Pike-perch	160 g of filet, with skin, brush with oil	20 mm granite enamelled	  230°C	  200°C, 4 min.  90%

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2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
			2 pcs.	3 pcs.	6 pcs.	6 pcs.	12 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			60 Port.	100 Port.	200 Port.	200 Port.	400 Port.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			30 pcs.	50 pcs.	100 pcs.	100 pcs.	200 pcs.
			30 pcs.	50 pcs.	100 pcs.	100 pcs.	200 pcs.
			30 pcs.	50 pcs.	100 pcs.	100 pcs.	200 pcs.
			6 kg	10 kg	20 kg	20 kg	40 kg
			300 pcs.	500 pcs.	1000 pcs.	1000 pcs.	2000 pcs.
			9 pcs.	15 pcs.	30 pcs.	30 pcs.	60 pcs.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			120 pcs.	200 pcs.	400 pcs.	400 pcs.	800 pcs.

Examples vegetables
































Food	Hints	Container/Grids	Preheat	1st Step
Broccoli	Fresh	40 mm perforated	 100°C	 100°C, 12 min.
Cauliflower	Fresh and whole	40 mm perforated	 100°C	 100°C, 20 min.
Brussels sprouts	Fresh and cut the strung	40 mm perforated	 100°C	 100°C, 15 min.
Spinach	Fresh	65 mm perforated	 100°C	 100°C, 4 min.
Kohlrabi Turnips	Fresh and cut the strung	40 mm perforated	 100°C	 100°C, 15 min.
Carrots	Fresh and cut in sticks or slices	40 mm perforated	 100°C	 100°C, 15 min.
Green peas	Fresh	40 mm perforated	 100°C	 100°C, 8 min.
Asparagus	Fresh tied or lose	40 mm perforated	 100°C	 90°C, 30 min.
Tomatoes	For tomatoe concasser	20 or 40 mm	 100°C	 100°C, 2 min.
Green beans	Fresh, cool after steaming	40 mm perforated perforated	 100°C	 100°C, 12 min.
Mushrooms	Sprinkel with lime	40 mm perforated	 100°C	 100°C, 15 min.
Cabbage (Savoy)	Leafs for blanching	40 mm perforated	 100°C	 100°C, 4 min.
Stuffed Peppers	Turn open side on to the tray	granite enamelled	  180°C	  160°C  75°C  30%
Cauliflower cheese	Every second level, use sauce	grid or 20 mm	 300°C	 250°C, 8 min.  20%
Vegetables in jars	Filling of 1 litre	grid or 20 mm	 100°C	 90°C, 40 min.
Vegetable pudding	Timbale	grid or 20 mm	 100°C	 90°C, 20 min.
Stuffed Cabbages	Bleached cabbage leafs filled with meat	40 mm granite enamelled	  160°C	  140°C, 40 min.  90%
Pan-fried mushrooms	Preheat granite enamelled	granite enamelled	 300°C	 200°C, 5 min.  20%

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2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
			15 kg	25 kg	50 kg	50 kg	100 kg
			12 Heads	20 Heads	40 Heads	40 Heads	80 Heads
			15 kg	25 kg	50 kg	50 kg	100 kg
			6 kg	10 kg	20 kg	20 kg	40 kg
			15 kg	25 kg	50 kg	50 kg	100 kg
			15 kg	25 kg	50 kg	50 kg	100 kg
			15 kg	25 kg	50 kg	50 kg	100 kg
			9 kg	15 kg	30 kg	30 kg	60 kg
			225 pcs.	450 pcs.	900 pcs.	900 pcs.	1800 pcs.
			15 kg	25 kg	50 kg	50 kg	100 kg
			6 kg	10 kg	20 kg	20 kg	40 kg
			9 Heads	15 Heads	30 Heads	30 Heads	60 Heads
			75 pcs.	125 pcs.	250 pcs.	250 pcs.	500 pcs.
			90 Port.	150 Port.	300 Port.	300 Port.	600 Port.
			45 pcs.	75 pcs.	150 pcs.	150 pcs.	250 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
 160°C, 10 min.  20%			75 pcs.	125 pcs.	250 pcs.	250 pcs.	500 pcs.
			6 kg	10 kg	20 kg	20 kg	40 kg

Examples eggs and potatoes












































































Food	Hints	Container/Grids	Preheat	1st Step
Hard boiled eggs		65 mm perforated	 100°C	 100°C, 7 min.
Eggs en cocotte		grid	 100°C	 90°C, 10 min.
Eggs Royal		40 mm	 100°C	 85°C, 45 min.
Scrambled eggs	Whisk eggs before	40 mm	 100°C	 90°C, 20 min.
Salted potatoes	Cut in quarters	100-150 mm perforated	 100°C	 100°C, 30 min.
Potatoes with skin		100-150 mm perforated	 100°C	 130°C, 40 min.
Knödel, Potatoe dumplings		20 mm	 100°C	 100°C, 25 min.
Roasted potatoes		20 mm granite enamelled	 300°C	 230°C, 15 min.  20%
Jacked potatoes	Wrap big potatoes in aluminumfolie	grid or 20 mm	  300°C	  200°C, 40 min.  90%
Maccaire potatoes	Dress evenly on tray	20 mm granite enamelled	 300°C	 220°C, 10 min.  20%
Rice	Use water or stock, 1:2 soak it will reduce cooking time	40 or 65 mm	 100°C	 100°C, 20 min.
Wild rice	Soak rice, 1:3	40 or 65 mm	 100°C	 100°C, 45 min.
Milk rice	1:3, use vanilla, sugar	40 or 65 mm	 100°C	 90°C, 40 min.

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2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
			300 pcs.	500 pcs.	1000 pcs.	1000 pcs.	2000 pcs.
			60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			12 Liter	20 Liter	40 Liter	40 Liter	80 Liter
			12 Liter	20 Liter	40 Liter	40 Liter	80 Liter
			24 kg	42 kg	85 kg	85 kg	170 kg
			18 kg	36 kg	66 kg	66 kg	137 kg
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			12 kg	20 kg	40 kg	40 kg	80 kg
			120 pcs.	200 pcs.	400 pcs.	400 pcs.	800 pcs.
			240 pcs.	400 pcs.	800 pcs.	800 pcs.	1600 pcs.
			6 kg	10 kg	20 kg	20 kg	40 kg
			6 kg	10 kg	20 kg	20 kg	40 kg
			6 kg	10 kg	20 kg	20 kg	40 kg

Examples pastry, bread, rolls, desserts

Food	Hints	Container/Grids	Preheat	1st Step
Apple Strudel	Clarified butter	20 mm granite enameled or Alu perf.	 250°C	 170°C, 25 min.  20%
Sponge-cake	sauber austreichen	20 mm granite enameled	 300°C	 180°C, 12 min.  60% 
Sponge-cake	Ø 26 cm, for cake, every second level	grid	 300°C	 160°C, 40 min. 60%
Puff-pastry, Fleurons	Brush with oil	20 mm granite enameled or Alu perf.	 180°C	 160°C, 12 min.  90% 
Small puff-pastry		20 mm granite enameled or Alu perf.		
Short pastry		20 mm granite enameled	 240°C	 180°C, 5 min.  100% 
Croissants		20 mm granite enameled or Alu perf.		
Fruit compote	Cut fruits evenly	65 mm	 100°C	 90°C, 8 min.  100%
Fruit compote	Apple, Pears turned or cut evenly	cns container 20 mm	 100°C	 90°C, 6 min.  100%
Stewed fruits	Frozen mixed berries	grid	 100°C	 70°C, 4 min.  100%
Fruit-jars	Ø 4" /11 cm, for sample Pears Filling of 1 litre	grid or 20 mm	 100°C	 100°C, 60 min.  100%
Cabinet pudding	Line a cake form with (Folie or baking paper)	grid	 100°C	 90°C, 45 min.  100% 
Caramel Custard	Dariolen, Cocotte or Timbales	grid or 20 mm	 100°C	 85°C, 35 min.  100% 
German style cheese cake		40 mm granite enameled	 160°C	 130°C, 60 min.  40%  
Short-pastry		40 mm granite enameled	 200°C	 170°C, 25 min.  60%
Marble cake		grid	 180°C	 160°C, 45 min.  60%
Bread dough	Use humidifying key in the first minute	20 mm granite enameled or Alu perf.	 180°C	  160°C, 75 min.  100% 
Biscuits	Cut or form them evenly	20 mm granite enameled	 180°C	 160°C, 12 min.  100% 
Savarin		grid	  200°C	  175°C, 15 min.  60%
Sponge cake Vienna style		grid	 200°C	 160°C, 50-70 min.  100% 
Toast bread dough	Every second level	20 mm granite enameled or Alu perf.	 220°C	 180°C, 10 min.  100%
Baguette, Rolls	Ready proofed	20 mm granite enameled or Alu perf.		
Cinnamon Rolls	Proof them in moist heat at 30°C	20 mm granite enameled or Alu perf.	 220°C	 190°C, 10 min.  80%
Plum cake		20 mm granite enameled	 180°C	 160°C, 35 min.  20%

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2nd Step	3rd Step	IQT-program	Approx. loading capacity				
			6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
			6 pcs.	10 pcs.	20 pcs.	20 pcs.	40 pcs.
			13 lbs 6 kg	22 lbs 10 kg	44 lbs 20 kg	44 lbs 20 kg	88 lbs 40 kg
			6 Forms	10 Forms	20 Forms	20 Forms	40 Forms
200°C, 5 min. 60%			45 pcs.	75 pcs.	150 pcs.	150 pcs.	300 pcs.
		CROISSAN			size of backing items		
160°C, 8 min. 100%			45 pcs.	75 pcs.	150 pcs.	150 pcs.	300 pcs.
		CROISSAN	36 pcs.	60 pcs.	120 pcs.	120 pcs.	240 pcs.
			90 Port.	150 Port.	300 Port.	300 Port.	600 Port.
			180 pcs.	300 pcs.	600 pcs.	600 pcs.	1200 pcs.
			90 pcs.	150 pcs.	300 pcs.	300 pcs.	600 pcs.
			30 pcs.	50 pcs.	100 pcs.	100 pcs.	200 pcs.
			12 pcs.	20 pcs.	40 pcs.	40 pcs.	80 pcs.
			120 pcs.	200 pcs.	400 pcs.	400 pcs.	800 pcs.
			150 Port.	250 Port.	500 Port.	500 Port.	1000 Port.
			150 Port.	250 Port.	500 Port.	500 Port.	1000 Port.
			12 Forms	20 Forms	40 Forms	40 Forms	80 Forms
			9 pcs.	15 pcs.	30 pcs.	30 pcs.	60 pcs.
			144 pcs.	240 pcs.	480 pcs.	480 pcs.	960 pcs.
			30 pcs.	50 pcs.	100 pcs.	100 pcs.	200 pcs.
			12 Forms	20 Forms	40 Forms	40 Forms	80 Forms
180°C, 20 min. 30%			12 pcs.	20 pcs.	40 pcs.	40 pcs.	80 pcs.
		BAGUETTE	60 pcs.	100 pcs.	200 pcs.	200 pcs.	400 pcs.
			36 pcs.	60 pcs.	120 pcs.	120 pcs.	240 pcs.
			90 Port.	150 Port.	300 Port.	300 Port.	600 Port.



Stainless steel:

- Rust free
- More stable through double flanging design!
- Better handling quality
- Long lasting

Perforated stainless steel:

- Perforated sides and corners – allows better steam circulation
- Large perforation diameter – better cooking quality
- Perforation even on the side walls

Perforated aluminium:

- Better heat conductivity • Better crusts, crackling
- Teflon coating

Granite enamelled containers:

- Better heat conductivity • No sticking
- Better baking quality – no greasy base
- Better raising • Minimum fat consumption
- No loss in portioning – edges well formed

High gloss nickel plated grids:

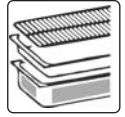
- For roasting, grilling and baking

CNS frying basket:

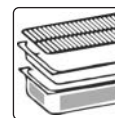
- Fat-free preparation of fried food
- Three times greater filling depth than preparation on baking trays
- Even browning without darker contact areas

Size	Item (Depth)	Art.-No.	Illustration	Example	Example for Equipment				
					6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
1/3 GN 325 x 175 mm	Container CNS 20mm	6013.1302		for fried potatoes, hamburgers, potatoe dumplings, thawing, vegetables, poaching fish, side dishes	3	6			
	40mm	6013.1304		for vegetables, meat loaf, vegetable casseroles, steamed and poached fish, hamburgers	3	6			
	65mm	6013.1306		for stuffed peppers, stews, different fruit, egg royal, vegetables, rice	3	6			
1/2 GN 325 x 265 mm	Container CNS 20mm	6013.1202		for fried potatoes, hamburgers, potatoe dumplings, thawing, vegetables, poaching fish side dishes	2	4			
	40mm	6013.1204		for vegetables, meat loaf, vegetable casseroles, steamed and poached fish, hamburgers	2	6			
	65mm	6013.1206		for stuffed peppers, stews, different fruit, egg royal, vegetables, rice	2	4			
Container perforated CNS 55mm	90mm	6015.1216		for vegetables without juice, side dishes, dumplings etc.	1	2			
	140mm	6015.1295		for vegetables, eggs, blanching		1	2		
		6015.1215		for potatoes		1	2		
Container granite enamelled 20mm	40mm	6014.1202		preparation of pan-fried cuts, roasting of nuts and bones ect.	2	2			
	65mm	6014.1204			2	2			
		6014.1206			1	1			
Container CNS	Frying basket	6019.1215		for chips, wedges, calamari, prawns	2	4			

Accessories



Size	Item (Depth)	Art.-No.	Illustration	Example	Example for Equipment					
					6x1/1	10x1/1	10x2/1	20x1/1	20x2/1	
1/1 GN 530 x 325mm	Container CNS 20mm	6013.1102		for roast potatoes, gratinating different dishes, saddle of hare, thawing etc.	6	10	5	20	10	
		40mm	6013.1104		for vegetables, meat loaf, steamed and poached fish, pastry, duck, goose etc.	3	5		10	
		65mm	6013.1106		for stuffed peppers, rice, noodles, vegetables, different fruits, stews etc.	4	5	5	10	10
		100mm	6013.1110		for collecting stock, boiled ham, preparation of sauces etc.		1	2	2	4
	Container perforated CNS 55mm	90mm	6015.1165		for vegetables without stock, different side dishes, dumplings etc.	3	5	6	10	10
		140mm	6015.1195		for vegetables, eggs, potatoes, blanching etc.	3	5	3	5	6
			6015.1115		for potatoes	2	3	6	5	12
	Container granite- enamelled 20mm	40mm	6014.1102		for baking plain cake, biscuits, sponges, roasting, braising, gratinating etc.	6	10	6	20	10
		65mm	6014.1104			3	5	6	10	10
		65mm	6014.1106			3	5	4	10	10
Container aluminium perf. Teflon coating		6015.1103		for different pastries	6	10		20		
	Grids CNS high gloss nickel plated	6010.1101		for large roasts, grilled meats, toasts, thawing, gratinating, chicken, duck, goose, preserving etc.	6	10	6	20	10	
		6010.1100								
1/1 GN	Chicken grilling grid H 8 - 1/1	6035.1006		for cooking 8 chickens, each weighing between 1000 g and 1500 g	2	3	6	6	12	
	Chicken grilling grid H 10 - 1/1	6035.1010		for cooking 10 chickens, each weighing up to 1000 g	-	-	6	6	12	
	Duck grilling grid	6035.1009		for cooking 8 ducks, each weighing between 1600 g and 2200 g	1	2	4	5	10	
	Frying basket CNS	6019.1115		for chips, wedges, calamari, prawns	2	4	6	10	10	
530x 373mm	Chicken grilling grid H 12 - S	6035.1011		for cooking 12 chickens, each weighing up to 1000 g. The grill mobile oven rack is required	2	3	-	-	-	



Stainless steel:

- Rust free
- More stable through double flanging design!
- Better handling quality
- Long lasting

Perforated stainless steel:

- Perforated sides and corners – allows better steam circulation
- Large perforation diameter – better cooking quality
- Perforation even on the side walls

Perforated aluminium:

- Better heat conductivity
- Better crusts, crackling
- Teflon coating

Granite enamelled containers:

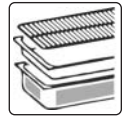
- Better heat conductivity
- No sticking
- Better baking quality – no greasy base
- Better raising
- Minimum fat consumption
- No loss in portioning – edges well formed

High gloss nickel plated grids:

- For roasting, grilling and baking

Size	Item (Depth)	Art.-No.	Illustration	Example	Example for Equipment				
					6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
2/1 GN 650 x 530mm	Container CNS 20mm	6013.2102		for roast potatoes, saddle of hare, gratinating, thawing, vegetables, dumplings, hamburgers etc.			10		20
	40mm	6013.2104		for vegetables, meat loaf, hamburgers, steamed or poached fish, duck, goose, vegetable casseroles, pastries etc.			5		10
	65mm	6013.2106		for stuffed peppers, rice, vegetables, noodles, stews etc.			2		5
	100mm	6013.2110		for collecting stock, boiled ham, preparation of sauces etc.			1		1
	Container perforated CNS 55mm	6015.2165		for vegetables without stock, dumplings etc.			2		5
	90mm	6015.2195		for vegetables, eggs, potatoes etc.			1		2
	Container granite- enamelled 90mm	6014.2102		for baking plain cake, sponge rolls, pastries, biscuits, gratinating, braising, roasting etc.			5		10
	40mm	6014.2104					2		5
	65mm	6014.2106					5		10
	Container aluminium perforated 20mm	6015.2103		for various pastries			10		20
400 x 600 mm	Grids CNS	6010.2101		for large roasts (eg. pork, beef etc.), grilled meats, toasts, chicken, duck, goose, gratinating, thawing, baking in moulds etc.			7		15
	high gloss nickel plated	6010.2100							
	Grids CNS	6010.0103							
	Aluminium trays, Teflon coating	6015.1000		for various pastries			-		-

Accessories



The high operational performance of the unit is complemented by an efficiently coordinated accessory line of accessories. Therefore, the unit can be easily adjusted to meet individual requirements.

The stands and cabinets are made out of stainless steel and they guarantee a stable, practical installation of the unit.



Stand UG I
Frame completely out of stainless steel with shelf and adjustable feet.



Cabinet US III
Frame complete with shelf base, adjustable feet, and sides; also features 14 pairs of rails for 1/1 GN containers.



Stand UG II
Frame complete with shelf base and adjustable feet; also features 14 pairs of rails to take grids and GN containers.



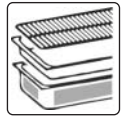
Cabinet US IV
Frame complete with shelf base and adjustable feet; also features 14 pairs of rails closed on all sides, with two duplex swing doors.

Size of stands:

Model	Article-No.	Size mm		
		depth	width	height
6x1/1 and 10x1/1GN				
UG I	6201.1020	638	788	720
UG I-low	6201.1024	638	788	460
UG II	6201.2020	638	788	720
UG II-low	6201.2024	638	788	460
UG II-baking quantity 400x600mm	6201.2014	638	788	460
US III	6201.3020	640	904	720
US IV	6201.4020	688	904	720

Model	Article-No.	Size mm		
		depth	width	height
10x2/1GN				
UG I	6201.1022	707	1220	720
UG II	6201.2022	707	1220	720
UG I-low	6201.1023	707	1220	340
UG I for Combi-Duo (Only CPC/CM/CD 61 on CPC/CM/CD 61)	6201.1029	638	788	260
Rack raiser CPC/CM/CD 61 see page 9 Exhaust hood	6201.1030	638	788	160

Accessories



Completely made of nickel chromium steel

All rails feature

- tilt-resistant U profiles, to prevent GN containers tilting in the mobile oven rack
- notched recesses, for fast loading and unloading
- Optional rail configuration on request

Extra mobile oven racks and transport trolleys increase the cooking capacity, make work more efficient and enable loads to be exchanged more quickly.

Table-top units

With:

- locking devices to prevent anything sliding out by accident
- tilt security

Floor models

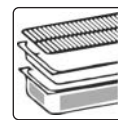
With:

- GN container locks at the front and back, for loading and unloading from both sides
- four smooth-running castors (two with brakes)
- drip pan with drain valve

Size of Mobile oven racks:

Model	Article-No.:	Size mm		
		depth	width	height
6x1/1 GN	6020.1020	565	431	480
10x1/1 GN	6030.1020	565	431	740
10x2/1 GN	6030.1021	687	620	740
20x1/1 GN	6040.1020	835	540	1790
20x2/1 GN	6050.1020	978	730	1790
Grill rack 6x1/1 GN	6020.1022	565	431	480
Baking rack 6x1/1 GN	6020.1024	565	431	480
Grill rack 10x1/1 GN	6030.1024	565	431	740
Baking rack 10x1/1 GN	6030.1026	565	431	740





Accessories

For reheating precooked food on plates, e.g. for banquets. The plates, which can be up to **310 mm in diameter**, are **positioned exactly** on support rings. The plate rack is completely made of high-grade nickel chromium steel.

The plate racks for 6x1/1 GN, 10x1/1 GN and 10x2/1 GN should only be used in conjunction with the transport trolley.

Sizes of Mobile Plate Racks:

Model	Article-No.	No. of plates	Max. plate height (mm)	Size mm		
				depth	width	height
6x1/1 GN	6007.1020	19	25	630	402	479
10x1/1 GN	6007.1021	31	25	630	402	740
10x1/1 GN*	6007.1023	25	32	630	402	740
10x2/1 GN	6007.1022	50	32	805	620	740
20x1/1 GN	6007.5020	62	25	835	540	1790
20x1/1 GN*	6007.5022	50	32	835	540	1790
20x2/1 GN*	6007.5021	100	32	981	730	1790
20x2/1 GN	6007.5023	120	25	981	730	1790

* for plates covered with cloches, the max. total height of plate and cloches is limited to 72 mm



Example: 10 x 1/1 GN



Example: 20 x 2/1 GN

Transport trolley for table models

Enables easy transport and quick load changes. Made completely of stainless steel. They can be locked into the unit, includes 4 revolving casters (two with brakes). Locks secure mobile oven rack to transport trolley, while U-profiles prevent containers from tilting.

Size of Transport trolley

Model	Article-No.	Size mm		
		depth	width	height
6x1/1 GN, 10x1/1 GN	6003.1020	901	541	1000
6x1/1 GN, 10x1/1 GN-low	6003.1023	901	541	620
6x1/1 GN, 10x1/1 GN Bake standard	6003.1025	901	541	1000
10x2/1 GN	6003.1021	1030	790	1000
10x2/1 GN-low	6003.1022	1030	790	620



6 x 1/1 GN and 10 x 1/1 GN



10 x 2/1 GN

Accessories



RATIONAL heat retaining hoods mean food can be kept warm for 15-20 minutes between reheating and serving. RATIONAL heat retaining hoods are available for all sizes of unit.

Model	Article-No.:
6x1/1 GN	6004.1007
10x1/1 GN	6004.1009
10x2/1 GN	6004.1014
20x1/1 GN	6004.1011
20x2/1 GN	6004.1012



Example: 10 x 1/1 GN



Example: 20 x 1/1 GN

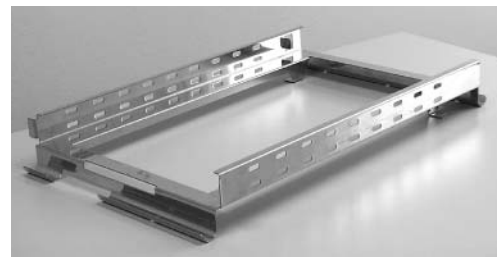
Run-in rail for mobile oven rack

Run-in rail type 6x1/1 GN and 10x1/1 GN

Article-No.: 6021.1306

Run-in rail type 10x2/1 GN

Article-No. : 6021.1307



Hinging racks

Hinging rack for baking trays (400x600mm)

Type 61 Article-No.: 6020.1023

5 L-shaped guides (88 mm apart)

Type 101 Article-No.: 6030.1025

8 L-shaped guides (88 mm apart)

Hinging rack for meat trays (150x350mm)

Type 61 Article-No.: 6020.1029

6 L-shaped guides 400x600 mm (88 mm apart)

Type 101 Article-No.: 6020.1031

10 L-shaped guides 400x600 mm (88 mm apart)

Hinging rack for chicken grilling grids H 12-S

Type 61 Article-No.: 6020.1036

2 guides for grill trays, H 12

3 U-guides for 400 x 600 mm grill trays

Type 101 Article-No.: 6030.1039

3 guides for grill trays, H 12

5 U-guides for 400 x 600 mm grill trays

Containers with lids and grease drainage facilities

For collecting grease that drips down during grilling, and for disposing of it safely.

Grease drip container 1/1 GN

Height 40mm: Article-No.: 8710.1135

Height 65mm*: Article-No.: 8710.1136

*not for grill or mobile oven rack





Combi-Duo

lower unit \ upper unit	CPC/CM/CD 61 Electric	CPC/CM 61 Gas
CPC/CM/CD 61 Electric	Art.-Nr.: 6008.1300	Art.-Nr.: 6008.1300
CPC/CM/CD 101 Electric	Art.-Nr.: 6008.1300	Art.-Nr.: 6008.1300
CPC/CM/CD 102 Electric	Art.-Nr.: 6008.1301	Art.-Nr.: 6008.1301
CPC/CM 61 Gas		Art.-Nr.: 6008.1309
CPC/CM 102 Gas		Art.-Nr.: 6008.1307

CleanJet® complementary kit Combi-Duo

lower unit \ upper unit	CPC/CM/CD 61 Electric	CPC/CM 61 Gas
CPC/CM/CD 61 Electric	Art.-Nr.: 6008.1313	Art.-Nr.: 6008.1313
CPC/CM/CD 101 Electric	Art.-Nr.: 6008.1313	Art.-Nr.: 6008.1313
CPC/CM/CD 102 Electric	Art.-Nr.: 6008.1314	Art.-Nr.: 6008.1314
CPC/CM 61 Gas		Art.-Nr.: 6008.1315
CPC/CM 102 Gas		Art.-Nr.: 6008.1316

In the case of CPC units must be used with CleanJet®!

UltraVent® condensation extraction hood



Whether up front or at outside catering events, **UltraVent®** ensures a pleasant working environment, anytime, anywhere. The perfectly co-ordinated **UltraVent®** condensation extraction hood opens up unlimited

application possibilities.

The patented condensation technology of the **UltraVent®** condensation extraction hood draws in steam completely and conducts it to the integrated waste gas extraction system. Unpleasant cooking smells are substantially reduced. Complicated and expensive measures for waste gas extraction installations are now a thing of the past. The ClimaPlus Combi® can be incorporated at any time into existing systems without structural alterations. The integrated heat recirculation system optimises energy consumption and reduces water consumption by up to 50%.

Article-No.:	Type
6100.2010	CD/CM/CPC 61/101 Electric
6100.2013	Combi-Duo Electric
6100.2011	CM/CPC 61/101 Gas

For use with Combi-Duo 61/61 Electric the UG I for Combi-Duo is recommended. When installing in Type 61 appliances, a rack raiser is recommended.

Exhaust hood



Keeps the air in the kitchen fresh by removing steam and hot vapours. For 6 x 1/1 GN and 10 x 1/1 GN units. Ideal for small kitchens, counter sales or party services.

Article-No.:	Type
6100.2000	CD/CM/CPC 61/101 Electric
6100.2001	Combi-Duo Electric
6100.2004	CM/CPC 61/101 Gas

For use with Combi-Duo 61/61 Electric the UG I for Combi-Duo is recommended. When installing in Type 61 appliances, a rack raiser is recommended.

Lamb and pork roasting spit

Lamb and pork roasting spit
 Type 201 Article-No.: 6035.1003
 Type 202 Article-No.: 6035.1002



Trolley for special cleaners

Trolley to hold the canisters for cleaners and rinse aid agents; additional space for up to 4 cleaning arms possible.

Article-No.: 6003.1030



Cleaner and rinse-aid for CleanJet®

Only original RATIONAL products have been developed, coordinated and authorized especially for optimum cleaning success with CleanJet®. Needless to say, RATIONAL cleaner gives excellent cleaning results even when combi-steamers are cleaned in the traditional way by hand.

Special cleaning agent, 10 litres Article-No.: 9006.0137

Rinse aid, 10 litres Article-No.: 9006.0137

Descaler, 10 litres Article-No.: 6006.0110

Picture selector switch for CPC/CM

Start your most important programs with this simple, easy-to-recognise pictorial symbol switch. Individual cooking sequences can be input into 12 symbol switches. Ideal for snacks and fast food, supermarkets, butchers, and for large-scale catering systems.

Picture selector switch for CPC Article-no.: 8720.1392

Picture selector switch for CM Article-no.: 8720.1390



PC-program

The RATIONAL PC-program helps you with programming, with managing programs and with monitoring cooking processes. It also lets you manage one or more units via a cable or modem link, so that even RATIONAL ClimaPlus Combis® situated some distance away (e.g. in branches) can be managed with ease.

Do you work in industrial catering or operate as a chain operator, do you have multiple outlets or are you interested in keeping full evidence in line with the HACCP/LMHV guidelines? The RATIONAL PC-program can answer all your needs.

Incidentally, the software also supports our CM range in conjunction with the serial port.



Cleaning procedure

For hygiene reasons and to avoid interruptions to operation, it is essential that the ClimaPlus Combi is cleaned every day at the end of operations.

The CleanJet® is a patented, fully automatic system for cleaning the cooking cabinet of the ClimaPlus Combi®. There are four different cleaning steps to choose from depending on how dirty the cooking cabinet is. Robust, tried and tested materials and innovative technology make the CleanJet® easy to use and guarantee perfect cleaning results every time.

Benefits for you:

- The CleanJet® is fully automatic. Simply select the appropriate cleaning step, switch on the power and that's it. ClimaPlus Combi® units are approved for unsupervised operation, which means that CleanJet® can be left to get on with the cleaning after working hours or over night.
- Now you can achieve perfect cleaning results without having to worry about how much detergent to use and how long to leave it on. CleanJet® does these chores for you automatically - effortless cleaning at the touch of a button.
- The multi-step program adjusts temperatures, soaking times and drying times depending on how dirty the cooking cabinet is and calculates exactly how much detergent and rinsing agent to use, ensuring perfect, hygienic cleaning results in accordance with HACCP every time.
- The CPC switches off automatically once the cleaning step has finished, making for greater safety in your kitchen and reducing supervision to a minimum.
- The various steps enable the cleaning process to be adapted depending on how dirty the cooking cabinet is. This means you can choose the step which is most suitable for your particular requirements.
- The cleaning mechanism, detergents and time / temperature settings are carefully co-ordinated to prevent the build-up of cooking residues and lime-scale, guaranteeing top food quality every time.
- Odourless detergent is applied automatically with the door closed, protecting the users health and preventing unpleasant smells.

For reasons of hygiene and in order to prevent operational faults the ClimaPlus Combi® must be cleaned daily after it has been used. When you switch off the power supply in your kitchen after you have finished cooking for the day, please ensure that the electricity and water supply for the CleanJet® are still switched on. It is advisable to check the temperature of the cooking cabinet before switching on the CleanJet® system. Press the cooking cabinet temperature button. The current temperature will appear in the display. If it is above 100°C, reduce the temperature to below 80°C using the automatic cool-down function.

NOTE!

Make sure that the CleanJet® moves up and down during cleaning and that the spray heads rotate. This is the only way to guarantee a satisfactory cleaning result. After cleaning, check that the cleaning solution is completely rinsed away.



Follow the procedure described below:

- Make sure no cooking media or programs are selected.
- Remove racks, trays, containers etc. Mobile oven racks and run-in rails can be left in the cooking cabinet.
- Insert Clean Jet® (see page 80). If the temperature is too high, follow the instructions on page 77/78.
- Close the door of the unit.

Hints:

Using a damp cloth, wipe under the drip tray on the outside of the unit and around the glass panel on the inside of the door, including the door drip tray, to ensure that these areas are also cleaned properly. Replace the door drip tray before starting the CleanJet® system as water and detergent collect here during cleaning.

Operating CleanJet®

Once the CleanJet® has been placed in position the ClimaPlus Combi® automatically goes into self-clean mode.

The following appears in the cooking cabinet temperature display

The pre-set cleaning step STEP 1 appears in the IQT display.

Select the appropriate cleaning step, e.g. STEP 3 using the central dial.

Cleaning steps 1 to 4 and QUICK can be selected depending on how dirty the cooking cabinet is (see table on page 79). To select the additional steps 0 and 5/6, see page 73.

Start the CleanJet® system using the Program/Start button.

The following messages will appear during the cleaning step:

- Time display: time remaining until end of step.
- IQT® Sensor display: the program is running, i.e. is active.
- IQT® display: CleanJet® has started.

Once the selected cleaning program has finished the buzzer sounds for 20 seconds and END appears in the time display.

As soon as you open the door of the cooking cabinet, END and ACTIVE disappear. CLEANJET and the number of the cleaning step which has just finished reappear. The CPC is then ready for another cleaning program.

As soon as you remove the cleaning arm the unit goes into stand-by mode (the time appears in the display) and is ready for cooking.



The ClimaPlus Combi® is approved for unsupervised operation. No-one needs to be present while the cleaning program is running or after it has finished.

Operating CleanJet®

Selecting cleaning steps "0", 5 and 6

In addition to the steps mentioned above (steps 1-4 and QUICK) you can also select steps 0, 5 and 6.

Follow the procedure described below:

- Do not insert CleanJet®
- After ensuring that no cooking medium is selected, hold cooking cabinet temperature and clock button down together for about 10 seconds

You are now in the menu for RATIONAL settings (see also page 62 of the manual).

The time display will initially show the time system (choice of 24.00 or AM:PM). If you now press the cooking cabinet temperature button you will come to the language selection option, then the °C/Fahrenheit F selection option and finally to CleanJet® mode

The following appears in the cooking cabinet temperature display

The time display shows STANDARD or the last selected step

Using the central dial you can choose the STANDARD step, +STEP 0 and +Step 56.

Confirm your program selection using the Program/Start button and slot the CleanJet® into position

The steps selected here supplement steps 1-4 and QUICK offered in the IQT® display i.e.

- If you select "+STEP 0" you can also select step 0 from the IQT® display. In other words, you can now choose from steps 0,1,2,3,4 and QUICK.
- If you select "+Step 56" you can also select Step 5 or Step 6 from the IQT® display. In other words, you can now choose from steps 1,2,3,4, QUICK and steps 5 and 6.
- If you select the STANDARD step you will be able to choose from the basic steps 1,2,3,4 and QUICK mentioned above.



e.g.

A description of the steps and details of how long each takes are given on page 79.

Interrupting the cleaning program

If the cooking cabinet door is opened during the cleaning program the detergent / rinsing agent pump, the cleaning arm and the rotary jet are immediately switched off.

Only open the door if absolutely necessary!

When the cleaning arm is removed, the message "RINSE/START" appears in the IQT®-display, flashing alternately.

In this mode all cooking functions are locked.

To continue with the program slot the CleanJet® back in place and close the door.

If necessary top up the rinsing agent in the dispenser.

Then press the Program/Start button until the rinse program starts.

The following appears in the time display

The following appears in the IQT® Sensor display

The following appears in the IQT® display

The rinse program lasts around 3 minutes and flushes all residual detergent and rinsing agent out of the cooking cabinet and the supply pipes. This means that no chemical residues can get onto your food even if the cleaning program is interrupted accidentally.

At the end of the rinse program the buzzer sounds. The time display first shows "END" and, once the door has been opened, "CLEANJET". You can now either select another cleaning step using the central dial or remove the CleanJet®. When the arm is removed all displays apart from the time display disappear and the unit is ready for cooking.

Detergent/rinsing agent may escape as the rotary jet gradually comes to a halt. Important: Hot steam may escape. Danger of scalding. Please open door slowly



Interrupting the cleaning program

If you accidentally interrupt the cleaning step and want to start the rinse program but have not replaced the arm or closed the cooking cabinet door, the CPC will automatically tell you that you have forgotten to do so:

If you press the Program/Start button when the door is open, the instruction CLOSE DOOR appears in the time display and CLEANJET starts flashing in the cooking cabinet temperature display.

The buzzer also sounds.

Slot the arm into place and close the door.

You can now start the rinse program by pressing the Program/Start button.

To guarantee perfect cleaning results please ensure that there is sufficient detergent and rinsing agent in the dispenser.

Insufficient detergent and rinsing agent

If the detergent or rinsing agent runs out while the cleaning step is running the buzzer sounds for about 30 seconds.

The IQT® Sensor display indicates whether detergent or rinsing agent is required.

A message in the IQT® display indicates that the dispenser needs filling.

Fill the dispenser within 4 minutes (see page 81) and restart the cleaning program by pressing the Program/Start button.

For safety tips and information on refilling the dispenser see page 81.

Tip:

If the rinse-aid refill container is empty and there is no rinse-aid available, it is possible to refill it with water once only.



CLOSE DOOR



CLEANJET

Prog
Start



CLEANER / RINSE



CONTAINER /

REFILL

Prog
Start

Insufficient detergent at the end of a step or after the refill time has expired

If a cleaning problem goes unnoticed, e.g. while the cleaning program is running at night, or if the fill-up time of 4 minutes is exceeded, the program continues automatically despite the problem.

The following messages are displayed at the end of the cleaning program to let you know that the detergent or rinsing agent ran out:

The following appears in the time display



A message instructing you to fill up the dispenser with detergent or rinsing agent flashes alternately in the IQT® Sensor and IQT® display.



Once the door has been opened "CLEANJET" will be displayed in the clock display and "LEVEL" in the IQT-display.

Once the door has been closed, cleaning can be started again.

When the arm is removed all displays apart from the time display disappear and the unit is ready for cooking

Too little rinsing agent at end of program or if the refill time is exceeded.

RINSE/START is displayed alternately in the IQT display.



Please fill up the rinsing agent and press START. The device is rinsed for 3 minutes and is then ready for operation again.

Troubleshooting

Fault	Cause of fault	Remedy
Unit is not cleaned	No cleaning agent in the device	Fill cleaning agent (Page 105)
	Cleaning level set is too low	Select suitable cleaning level (refer also to page 97)
	Original RATIONAL cleaning agent is not being used	Use original RATIONAL cleaning agent
Display "SPUELEN" - "STARTEN"	CleanJet arm faulty	Contact RATIONAL Service or Service Partner
	No rinsing agent in the device.	Fill rinsing agent (Page 105)
Display "SERVICE 5" "SERVICE 6"	Hose assembly under the device bent or interrupted	Remove container from the device (only 61, 101, 102) (Page 105) and check hose assembly. If damaged please request Service.
	Cleaning system faulty	Contact RATIONAL Service or Service Partner! Rinse out device thoroughly with hose attachment! Display goes out when the keys "Cooking chamber temperature" "+CLOCK+IQT" are pressed simultaneously for longer than 10 seconds. Warning: There can be cleaning agent in the hose assembly. Please heat the device for at least 5 minutes in the operating mode "Humid heat" and then rinse thoroughly! Please repeat this procedure 3 times! Then you can use the unit for cooking again.

Operating CleanJet®

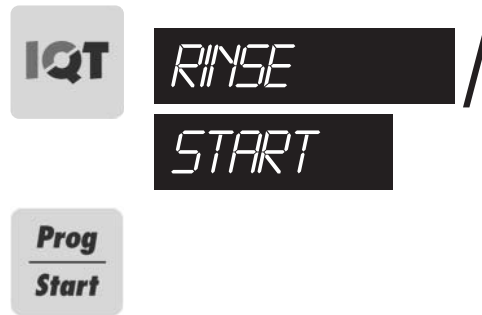
Power failure

If there is a power failure while the program is running or if the device is switched off for more than 4 seconds, only the word CLEAN will be shown in the IQT® display.

Once power has been restored hold the Program/Start button down until the rinse program starts. This will remove any residual rinsing agent and detergent from the cooking cabinet.

At the end of the rinse program the buzzer sounds. The time display first shows END and, once the door is opened, CLEANJET. You can now either select another cleaning step using the central dial or remove the CleanJet®.

When the arm is removed all displays apart from the time display disappear and the unit is ready for cooking.



TOO HOT message

CleanJet® displays a TOO HOT message in the following cases:

1. Cooking cabinet temperature too hot **before** CleanJet® is started This happens if the cooking cabinet is still very hot from a previous program.
2. Cooking cabinet temperature too hot **after** CleanJet® has been started This happens if the temperature is low enough to start the CleanJet® but residual heat causes the temperature of the cooking cabinet to rise during the cleaning program

Re 1.

If the temperature in the cooking cabinet is more than 100°C and you insert the CleanJet® to start a step the following messages appear:

In the cooking cabinet temperature display
The buzzer also sounds.



In the time display



The last selected step appears in the IQT® display



e.g.

Remove the CleanJet® and close the door. Start the cool-down step (see page 56 of the manual) and cool the cooking cabinet down to below 80°C.

Re. 2.

If the temperature is only just below 100°C when you start the CleanJet®, residual heat can make the temperature rise to over 100°C during the program.

In this case the following messages are displayed:

The message TOO HOT flashes in the cooking cabinet temperature display and the buzzer sounds



The duration of the cool-down program, which starts automatically if the cooking cabinet is too hot, is shown in the time display



In the IQT® Sensor display



In the IQT® display



A rinse program starts automatically and reduces the temperature of the cooking cabinet to below 100°C. The TOO HOT message disappears, the other displays stay the same and the buzzer stops.

When the cooking cabinet temperature has cooled down to well below 100°C the word END appears in the time display.



Now open the door.

All displays disappear.

The word CLEANJET appears in the time display



You can now either select a cleaning step using the central dial or remove the arm (see below).

The steps are shown in the IQT® display.



e.g.

Select a step, close the door and press the Program/Start button.



or

When the arm is removed all the displays apart from the time display disappear and the unit is ready for cooking.

Description of cleaning steps

Step	When to use
0*	Very light soiling from baked goods
1	Light soiling from cooking vegetables and fat-free products
2	Light soiling from several batches of mixed foods (vegetables, meat) containing small quantities of animal fat
3	Medium soiling from several batches of meat or grilled products
4	Heavy soiling from several batches of meat/grilled products alternated with starchy and sugary foods
Step 5*	Heavy soiling, particularly from multiple batches of fatty grilled products, baked-on cooking residues or heavy soiling from mixtures of vegetables, meat or grilled products
Step 6*	Very heavy soiling from virtually constant preparation of fatty grilled and fried products in conjunction with sugary marinades/spice mixes
QUICK	Quick step for rinsing between batches; particularly suitable for heavy soiling from fatty products. For removing encrusted residues and deposits; no drying step is used, preventing any remaining deposits from being baked onto the surface of the cooking cabinet

Duration of the cleaning programmes

Step-	Duration in minutes	
	CPC 61/ CPC 101	CPC 102/ CPC 201/CPC 202
0	23	39
1	24	42
2	52	61
3	70	82
4	89	103
5	108	124
6	127	145
Quick	12	ca. 14

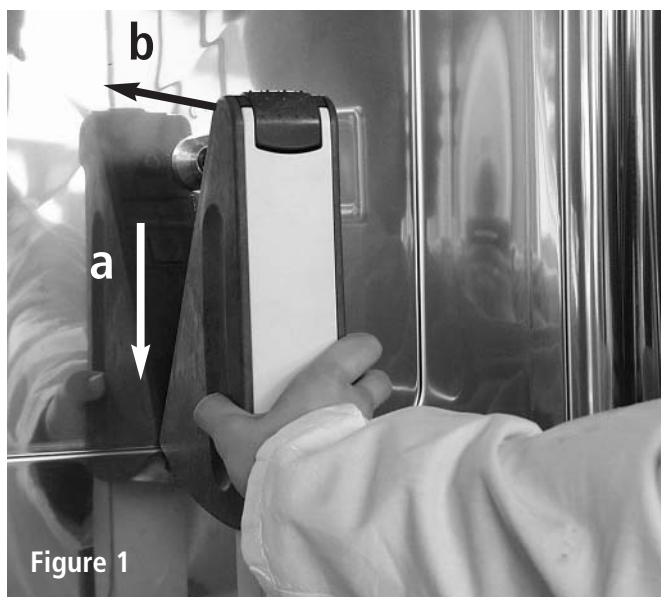
* Description of how selecting the steps, page 73

Using the CleanJet®

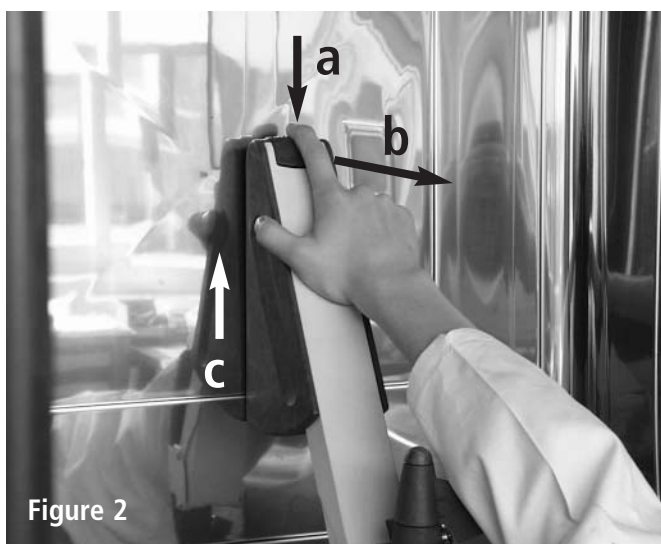
1. Remove CleanJet® from its holder
2. Insert CleanJet® in unit (Figure 1):
 - a) Place CleanJet® at an angle on the guide pins
 - b) Push CleanJet® backwards towards the back wall of the cooking cabinet until you hear it slot into place in the adapter.

6x1/1GN, 10x 1/1GN, 10x2/1GN: 1 CleanJet®

20x 1/1GN, 20x2/1GN: 2 CleanJet®



3. Remove CleanJet® (Figure 2):
 - a) Press ribbed button down using index finger
 - b) Swivel CleanJet® forward and release the button
 - c) Lift CleanJet® out of the adapter
 - d) Turn CleanJet® over so that the water in the arm can drain away via the cooking cabinet. Alternatively you can pour the water down a drain in the kitchen (Figure 3).



Topping up detergent/ rinsing agent

Safety tips

Wear suitable protective clothing, gloves and goggles when topping up or handling detergent and rinsing agent. To achieve the best cleaning results we recommend only using original detergent and rinsing agent. Other detergents/rinsing agents may damage the unit.



RATIONAL bears no liability for damage caused through the use of detergents and rinsing agents produced by other manufacturers. The RATIONAL hygiene guarantee applies only if original RATIONAL detergent and rinsing agent are used



Table-top units

1. Pull out dispenser from under the unit until the coloured lids are clearly visible (Figure 1)

Note: red lid = detergent; blue lid = rinsing agent

Attention:

If you have a CPC with AeroCat® then you should dilute the detergent 1:1 with water.

See also the label on the device (figure 4).

2. Open the lids and pour in detergent/rinsing agent (Figure 2)
3. Close lids
4. Push dispenser back under the unit.



Figure 1



Figure 2

Floor models

1. Remove the screw tops from the canisters
2. Screw the red lid and the red hose onto the canister of detergent; screw the black lid and transparent hose onto the canister of rinsing agent
3. Attach both hose connections to the bottom left of the front of the CPC (Figure 3):

Right-hand connection: detergent

Left-hand connection: rinsing agent



Figure 3



Figure 4

Cleaning the dispenser table-top units

Note: Dispenser must only be cleaned when completely empty.



1. Pull the dispenser out from under the unit until the coloured lids are clearly visible. Do not open the lids!
2. Push the retaining clip on the left-hand side of the runner downwards and away from you until the dispenser can be pulled almost right out.
3. Pull the hose end pieces upwards out of the adapter sleeves on the dispenser.
4. Pull the dispenser right out and clean as required.



Optional for floor models: Trolley for canisters and CleanJets®. Suitable for a range of applications.

Manual cleaning



Manual cleaning

As an alternative to cleaning with CleanJet® you can also clean the ClimaPlus Combi® by hand.

- Let the cooking cabinet **cool down (to below 60 °C)**.
- Switch the appliance off
- Spray the cooking cabinet and inside of the door, the door gasket, **the space behind the swivel air baffle** and both sides of the air baffle with special cleaner.

IMPORTANT:

Follow the safety instructions on the RATIONAL spray bottle and the cleaner container.



- Close the cooking cabinet door and leave the cleaner to **work** for about 20 minutes.
- Set the cooking mode / mode selector to **“Moist Heat”** (steam).
- Set the timer to **15 minutes**.
- Shut the cooking cabinet door.
- After 15 minutes, rinse the appliance thoroughly **(including the space behind the air baffle)** with the integrated hand shower.
- Wipe the cooking cabinet and door gasket with a damp cloth, and if necessary open the inner glass out and wipe it too.
- Dry the cooking cabinet for 10 minutes with “dry heat” (hot air) at 150 °C.
- After cleaning, do not close the door of the cooking cabinet, but leave it slightly ajar.

Alternatively:

Spray on the cleaner.

- Use the IQT® key and central dial to **select and start the “Clean” program** (takes 40 minutes)
- When the program is completed, **rinse** the cooking cabinet and the space behind the air baffle thoroughly with the hand shower.
- **Wipe** the door and door gasket with a damp cloth.
- **Dry** the cooking cabinet for 10 minutes with hot air at 150°C.
- The best way of cleaning the outside of the ClimaPlus Combi is with a soft, damp cloth.

Replacing the door gasket: look at page 86



Spray the cooking cabinet with the special cleaner



Rinse thoroughly using the hand shower



To clean between the double glass door panel, press the release bar and pull open (open the door).



Manual cleaning



Hints

- If the cabinet is heavily soiled, apply "moist heat" to the residue for ten minutes before cleaning to soften it up, and if necessary repeat the cleaning routine.
- Even if the ClimaPlus Combi is only used with "moist heat", it must be cleaned daily.
- The cooking cabinet, oven rack and floor of the cooking cabinet must be thoroughly rinsed out with water, so that all residues are removed.
- Then dry the cabinet as described.
- Leave the oven rack, grids and containers in the cooking cabinet during cleaning.
- Residues on grids and containers which have first been softened up but are not removed by rinsing can be cleaned by placing in the dish-washer.
- Never use acidic or corrosive liquids on the aluminium trays as this could cause damage to the material and discolouring.

Safety hints

- Do not use a high-pressure cleaner.
- Do not use acids or let acid fumes come into contact with the protective layer of the unit's stainless steel, otherwise it will be damaged and could cause discolouring.
- Observe the handling instructions on the cleaner canister.



1. Materials

Hand pressure spray gun

(always use the original RATIONAL spray pistol!)

The practical cleaning aid.

Robust pressurized container with pump handle.

Fitted as standard with two different spray nozzles and separate extension.

Holds 1.5 litres.

Special cleaner

Dissolves even encrusted dirt without scrubbing. Easy to use, gentle to surfaces and biologically degradable. 11 kg container.

Follow the safety instructions on the cleaner container.

An EC safety data sheet is available on request.

Handling the spray bottle

Fill the spray bottle

- Fill the bottle with liquid no higher than the "max" level.
- Put the pump in place, screw it on and tighten it so that the pressure needed for spraying can be built up.
- Pump air into the container using the pump lever.
- Depress the pump lever while pointing the spray nozzle into the unit.



Safety hints:

- Wear the proper protection: protective glasses and gloves.
- Never leave the container unused and under pressure for any length of time. Slowly unscrew the pump head so that the compressed air can escape.
- Rinse the nozzle, nozzle extension and nozzle tips after each use.
- Clean and rinse the cleaning bottle with warm water two or three times a week.
- If the pump piston becomes stiff, apply 2 or 3 drops of oil.



- RATIONAL's CalcDiagnosis® system constantly monitors lime-scale levels in the steam generator of your ClimaPlus Combi®. The current level can be called up on the display at the touch of a button.
- If there is a heavy build-up of lime-scale the ClimaPlus Combi® indicates the level automatically using star symbols when it is switched on. This warning system means you can arrange for the unit to be descaled by a service technician at a time which is most convenient for you
- Having your ClimaPlus Combi® descaled regularly and in good time helps your investment retain its value.
- Having your unit descaled at the last possible minute, i.e. only when it really needs it, keeps costs to a minimum.

Follow the procedure described below:

If a program is not already running, select a cooking medium and set a time. Then proceed as follows.

Press the IQT® button and select the lime-scale removal display from the additional functions menu using the central dial.

The word LIMSCAL will appear in the IQT® display

Press the Program/Start button.

The word LIMSCAL will appear in the IQT® Sensor display for as long as you hold the button down.

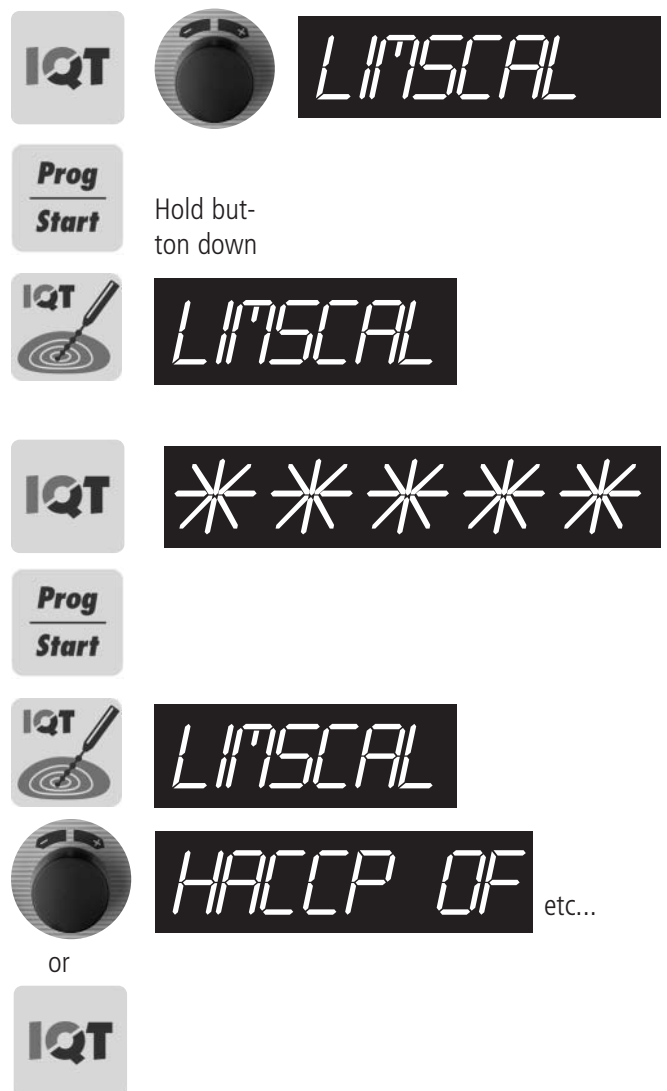
At the same time the IQT® display indicates the current lime-scale level using star symbols.

Both displays disappear as soon as you release the Program/Start button.

The additional function LIMSCAL then reappears in the IQT® display.

You can now either select another additional function e.g. HACCP, using the central dial or leave additional functions mode by pressing the IQT® button. The word LIMSCAL will then disappear completely.

You are now back in normal program mode.



Star symbols

Lime-scale build-up is indicated in increments of 10% starting with one star (20%), i.e. 2 stars indicate 30%, 3 stars indicate 40% and so on. The maximum number of nine stars indicates 100% lime-scale build-up in the steam generator.

Automatic lime-scale warning

When **lime-scale levels reach 90%, i.e. 8 stars**

the following appears in the IQT® Sensor display

and 8 stars appear in the IQT® display

when the CPC is switched on.

This warning appears for 10 seconds.

This means that the unit needs to be descaled soon.

If the **lime-scale level is 100%, i.e. 9 stars**, the word CALCCHECK appears in the IQT® display.

The warning appears for 2 minutes.
The display is locked during this time.

When you see CALCCHECK in the display you will know that the maximum admissible lime-scale level has been reached.

This means that the unit must be descaled by a service technician within the next 14 days

Note:

The lime-scale removal display can be selected in all programs (IQT®-Logic, cooking program library, 99 freely selectable programs) and in manual mode. CalcDiagnosis System® cannot be programmed.



Hints

If the steam generator is not going to be used for a while (over the holiday period, for instance), it should be drained as follows:

- Set the "Moist heat" mode.



- Select a cooking cabinet temperature of 31°C.



- Press the "Moist heat" key.



- The steam generator will be drained for as long as the key is pressed.

- Note: the temperature in the steam generator must be less than 75°C.



Service work is to be carried out by electricians

Caution! Disconnect the ClimaPlus Combi at the mains before opening the service door and working on live parts!

1. Changing the interior lighting

When the interior lighting fails to work change the halogen bulb.

First, switch off the unit at the mains.

Cover the outlet inside the unit with a cloth and remove the lamp glass by loosening the 4 nuts with an 8 mm spanner.

Remove the frame, the glass and gasket.

Replace the bulb with a new 12 volt, 10 W, 300°C heat-resistant one (Spare Parts No. 3024.0201).

Also replace both the gaskets.

External gasket frame: Spare Parts No. 5110.1022

Internal gasket frame: Spare Parts No. 5110.1023

Do not come into contact with the hot bulb.

Replace the gasket and glass, and secure into place.

2. Replacing the door gasket

"Damaged door seals must be replaced!"

The door gasket consists of a vulcanized frame which **slots** into a guide on the cooking cabinet. If a gasket needs to be changed, pull the old gasket out of the guide.

Clean the guide rails to remove any soiling. When fitting the gasket, ensure that the rectangular part of the gasket is placed into the frame correctly.

It is recommended that the retaining lips are dampened with soapy water during assembly.

Door gasket 6 x 1/1

Door gasket 10 x 1/1

Door gasket 10 x 2/1

Door gasket 20 x 1/1

Door gasket 20 x 2/1

Spare Parts No. 5105.1020

Spare Parts No. 5105.1021

Spare Parts No. 5105.1022

Spare Parts No. 5105.1023

Spare Parts No. 5105.1024



Interior lighting compl. (screws, frame, glass, gasket, reflector bulb)



Insert the halogen bulb



Door gasket guide

Note:

When disposing of the PC board or the unit, the battery of the control PC board must be disposed of separately.



Changing the quenching temperature

Vapour quenching is not necessary for the ClimaPlus Combi to function correctly, as it also works without quenching.

The quenching temperature can be set as desired.

The factory setting ensures that the waste water temperature is 65°C. However, you can determine water consumption individually.

Factory-set cut-off temperature

70 °C for moist heat and combination

90 °C for dry heat

- < 70 °C the quenching temperature is reduced, and water consumption is increased.
- > 70 °C the quenching temperature is increased, and water consumption is reduced.

Operating:

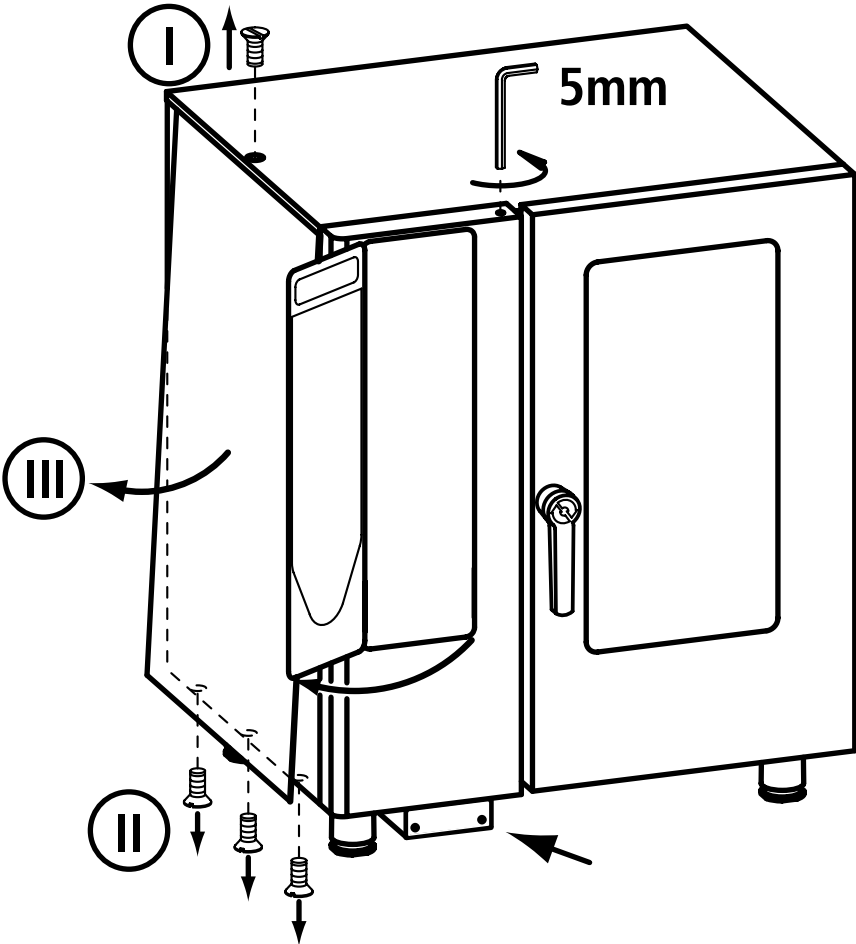
- Select cooking mode at which the quenching temperature is to be changed.
- Press the temperature key and the core temperature key simultaneously for 10 seconds.
- The quenching temperature appears in the display
- Select the desired quenching temperature using the central dial.
- Confirm with



Clean the air filter under the installation area.

1. Remove screws
2. Push filter unit to the right and lift out downwards
3. Remove mat and rinse it with slightly soapy water
4. After drying the mat, replace it and follow the process in reverse.

Installation instructions



Installation instructions



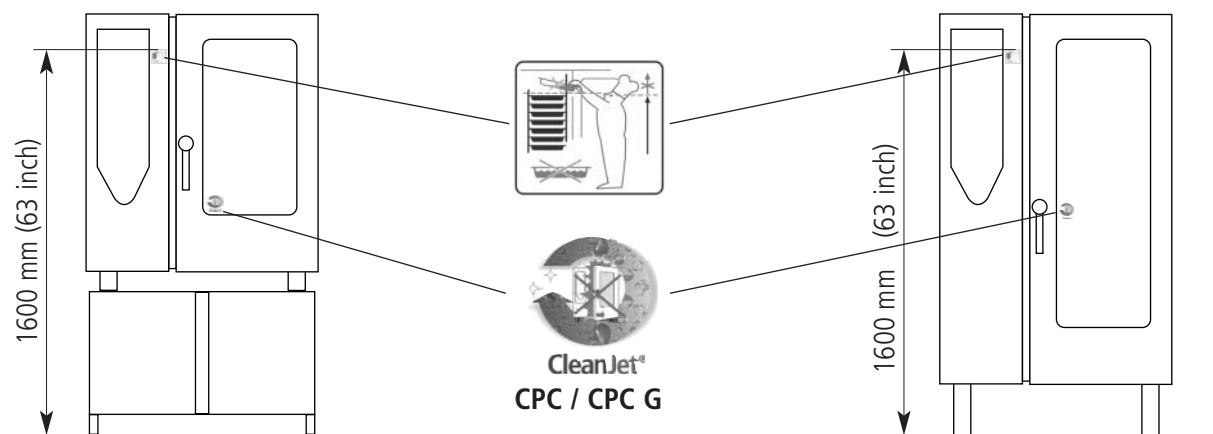
Attention:

The named standards are valid for Germany. In all other countries follow the local standards and valid instructions. Damages based on installation not complying with the directives given hereunder are not covered by warranty terms.

Check for any transport damage.

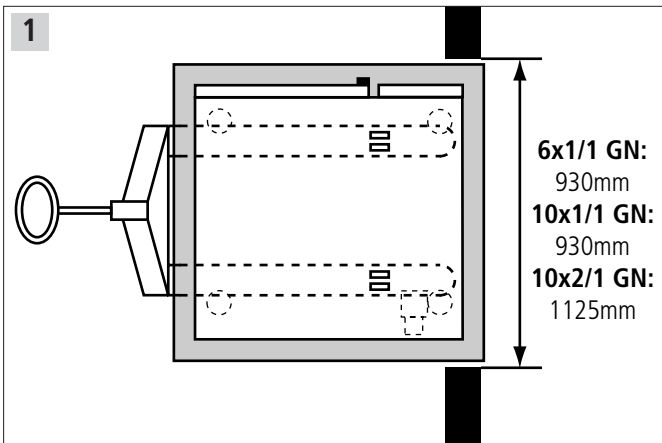
Should there be any signs of transport damage, inform your dealer/freight forwarder **immediately!**

Remove all cartons, packing materials, documents, etc. from the interior cabinet.



Safety label "Max. placement height for vessels containing liquid" and safety label "CleanJet® – do not open door" are affixed in the oven.

Transport of units



Transport of units using a pallet

pic. 1,2

Transport of units without a pallet, 20x1/1 GN and 20x2/1 GN units only

pic. 3

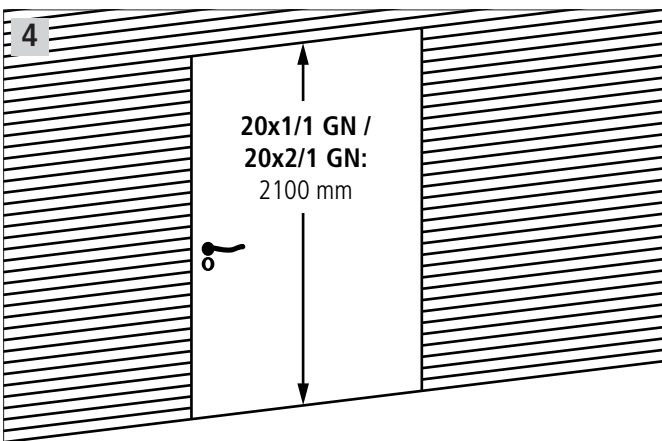
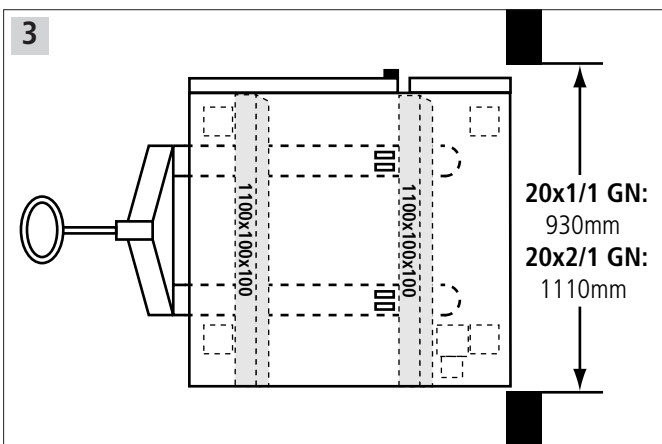
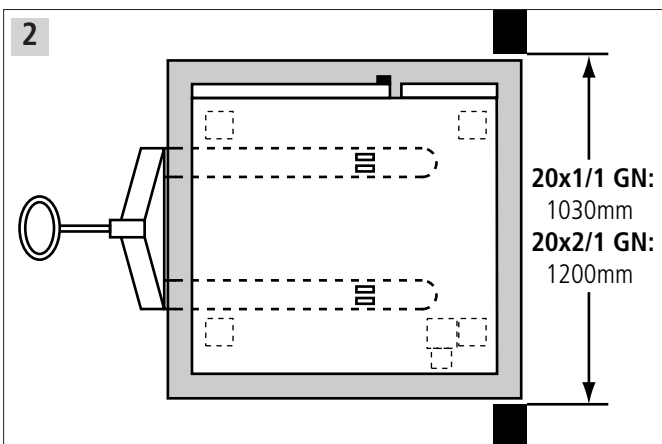
Remove all containers/mobile oven racks from the cabinet.
For floor model, remove corner mountings from the pallet.

Take unit off the pallet. Note: The weights of the units are:

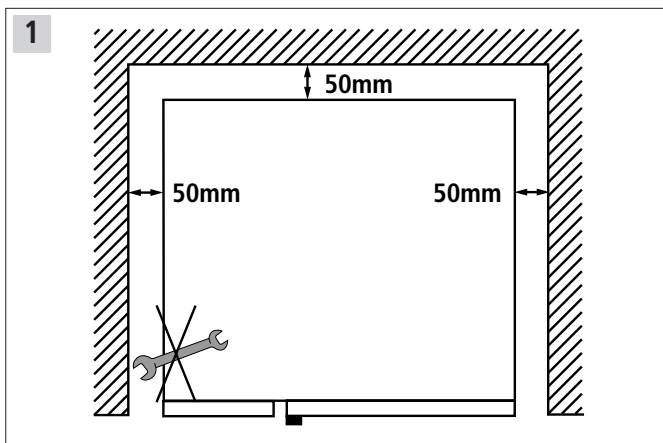
6 x 1/1 GN: 123 kg	10 x 1/1 GN: 152 kg
10 x 2/1 GN: 220 kg	20 x 1/1 GN: 312 kg
20 x 2/1 GN: 387 kg	

The height of the door is:

pic. 4



Minimum clearance



Minimum clearance left / right / behind 50 mm.

pic. 1

Minimum clearance when there are sources of heat on the left-hand side 350 mm.

pic. 2

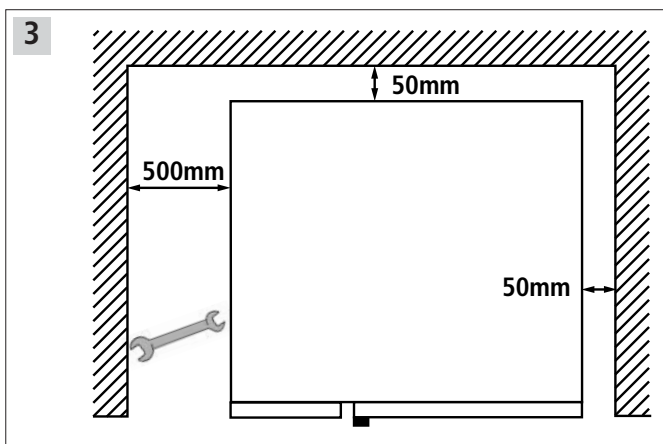
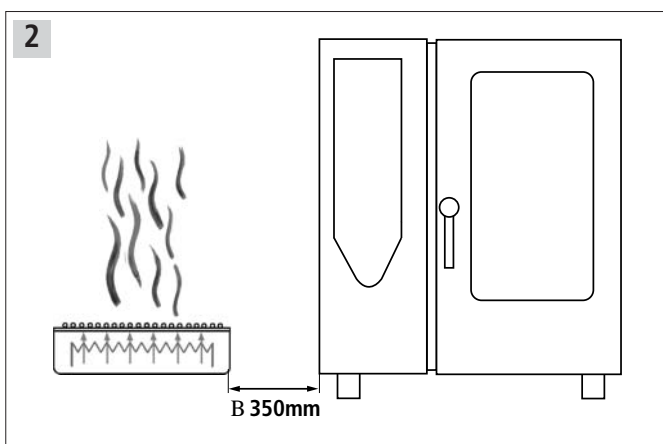
We recommend a clearance of 500 mm to the left of the unit to allow servicing work to be carried out

pic. 3

Please note:

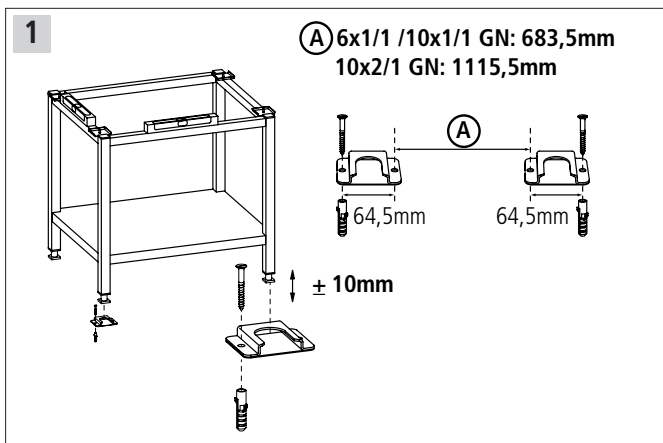
Ensure sufficient space is provided for the cleaning arm wall bracket on units fitted with CleanJet®. The wall bracket of the CleanJet® cleaning arm must not be affixed to the unit.

Warning: The units must only be installed in frost-free rooms.





Installation type 6x1/1 GN, 10x1/1 GN, 10x2/1 GN

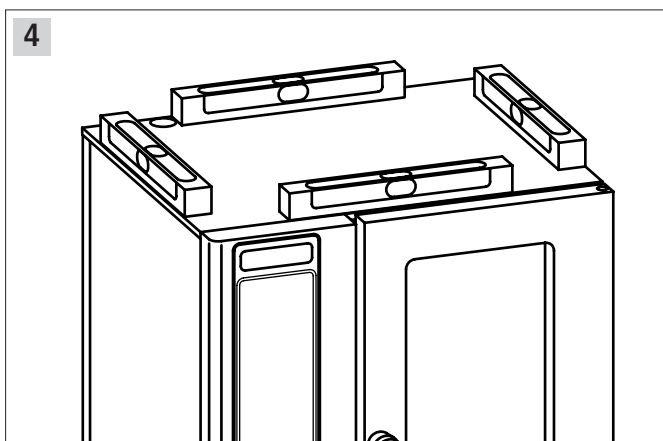
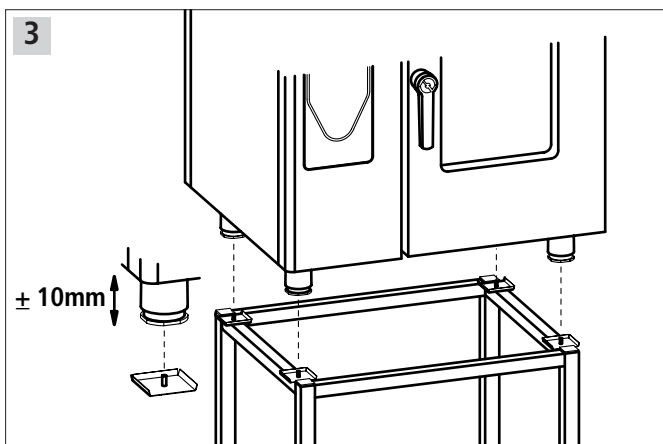
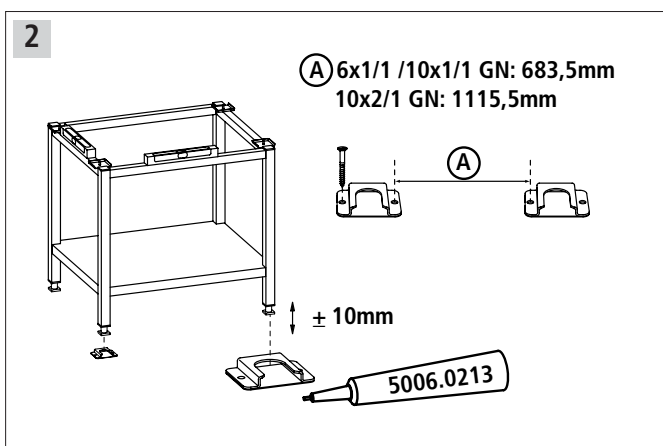


Gas appliances must be fixed to the floor using the fixing set supplied for the lower frame, either with screws and dowels, or with the special adhesive supplied. pic. 1,2

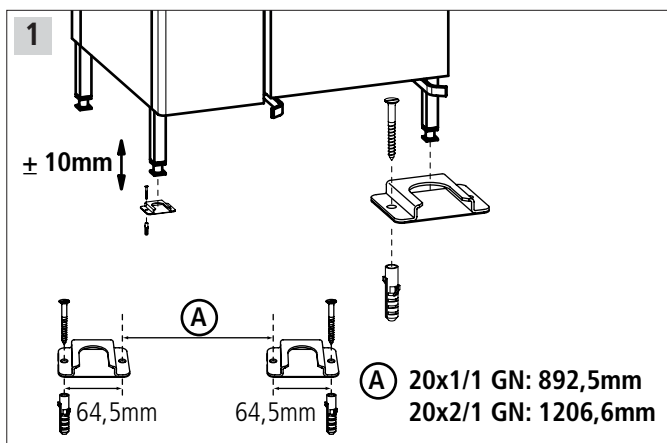
Electrical appliances: Fixing set is not included in the scope of supply, but may be ordered under ref no.: 8700.0317. pic. 1,2

Place the unit on the stand. The feet of the unit must be secured by means of its locating pins pic. 3

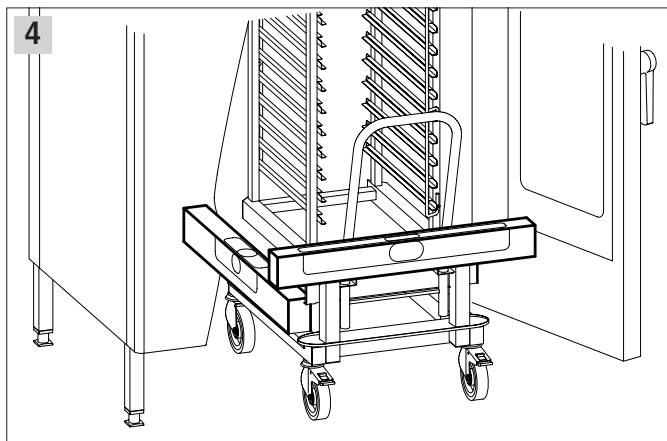
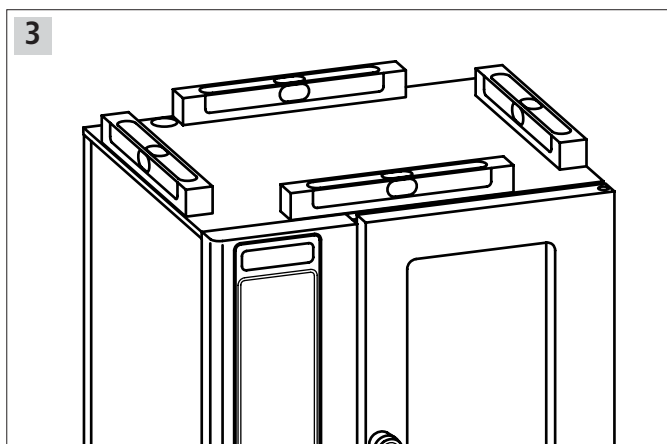
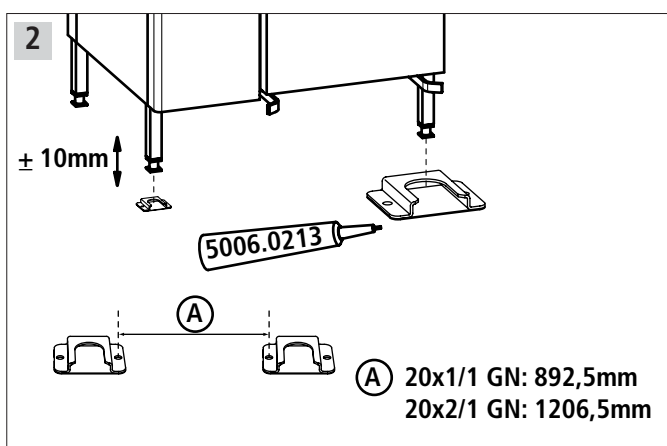
Ensure that the unit is level pic. 4



Installation type 20x1/1 GN, 20x2/1 GN

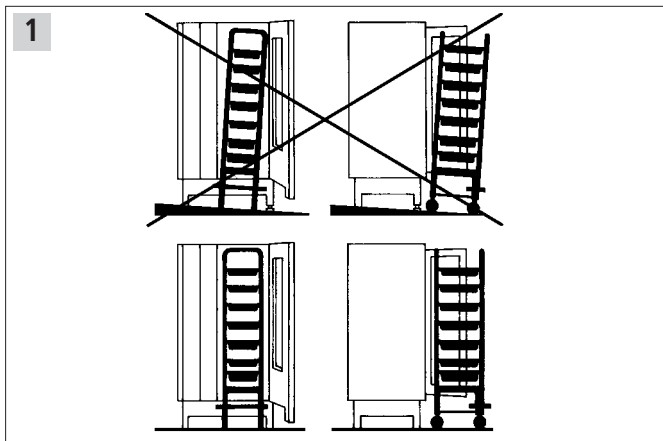


Fix the floor locks to the floor with either screws and pins or with the special adhesive supplied. **pic. 1,2**
Next slide the stand into the floor locks **pic. 1,2**
Ensure that the unit is level **pic. 3**
The mobile oven rack must be level when standing inside the unit **pic. 4**



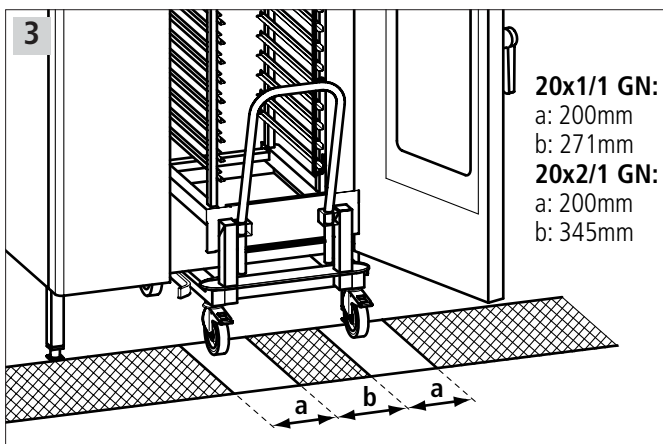
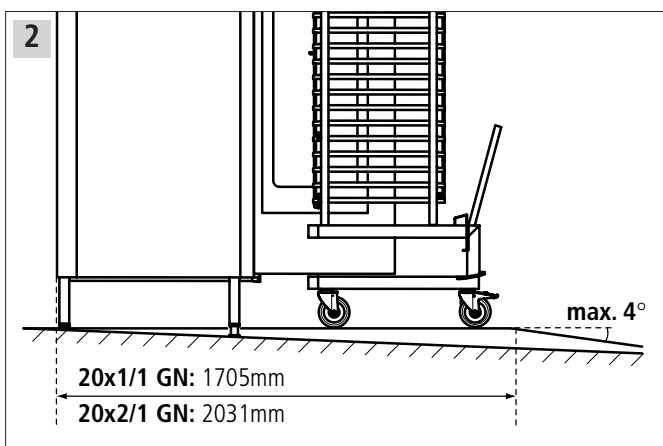


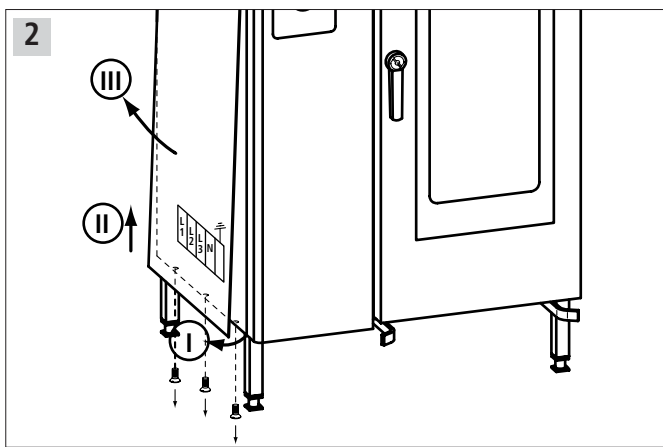
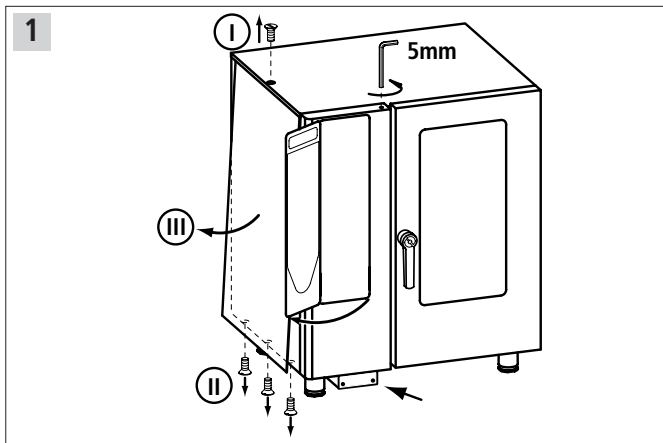
Position of mobile oven racks 20x1/1 GN and 20x2/1 GN



If the floor is not level, an access ramp (not supplied) will be required. The incline must not exceed 4°. pic. 1,2

If there is a drain grill in front of the floor-standing unit, a ramp should be placed over it to enable the mobile oven rack to be used. pic. 3





- Follow the installation instructions and the information on the rating plate when connecting the unit
- Comply with all local regulations and standards!
- Each appliance requires an independent fused power supply line
- We recommend you use an earth leakage circuit breaker
- On-site installation: provide accessible all-pole disconnection device with a minimum of a 3 mm contact gap.
- Connect appliance to earth bonding.
- For electrical connection data, see page 127:
- The cross-section of the connecting cables must be based on the current consumption and on local regulations.
- Applicable standards: EN 60335, IEC 335
- Type 6x1/1 GN: This appliance is suitable for operation with a power supply system with an impedance at the service connection point of less than 0.32 Ohms. If necessary the local power supplier can provide details of the mains supply impedance.

Type 6x1/1 GN, 10x1/1 GN

- Power supply terminal box with the corresponding terminals is located on the bottom side underneath the control panel. The terminals can be accessed by the removeable cap.

pic. 1

Type 10x2/1 GN, 20x1/1 GN, 20x2/1 GN

- Remove left-hand side panel
- The supply terminals are located behind the removable left-hand side panel.

pic. 2

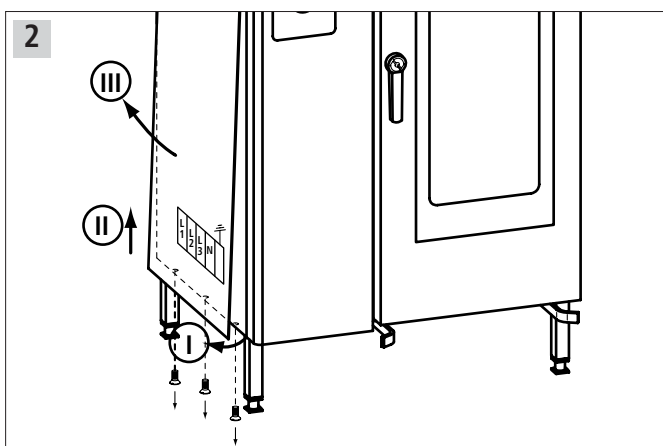
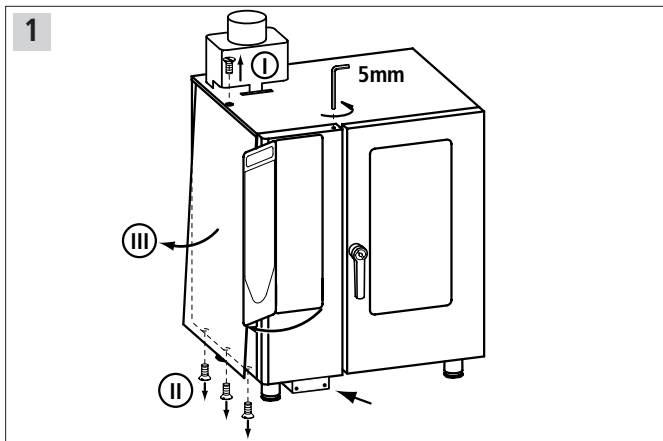
For appliance connections, precise dimensions and connection points, see pages 129 to 139.

- 1 = Shared water supply (cold water)
- 2 = Water supply, cold water
- 3 = Water supply, soft and warm water
- 4 = Drain
- 5 = Electrical connection
- 6 = Earth bonding
- 7 = Gas connection

Connection of mains:

- Connect an H07RN-F supply cable (minimum) and secure the PG screws (strain relief) tight
- Connect the supply as follows:
 - Grey terminal: L1, L2, L3 (non-phase-sequence-dependent)
 - Blue terminal: Neutral (3N AC only)
 - Yellow-green terminal: Earth
- The circuit diagram is located behind the control panel.
- Other voltages available on request.

Electrical connection for gas appliances



- Follow the installation instructions and the information on the rating plate when connecting the unit
- Comply with all local regulations and standards!
- Each appliance requires an independent fused power supply line
- We recommend you use an earth leakage circuit breaker
- On-site installation: provide accessible all-pole disconnection device with a minimum of a 3 mm contact gap.
- Connect appliance to earth bonding.
- For electrical connection data, see page 127:
- Other voltages are available on request
- The cross-section of the connecting cables must be based on the current consumption and on local regulations.
- Applicable standards: EN 60335, IEC 335

Type 6x1/1 GN, 10x1/1 GN

- Power supply terminal box with the corresponding terminals is located on the bottom side underneath the control panel. The terminals can be accessed by the removeable cap.

pic. 1

Type 10x2/1 GN, 20x1/1 GN, 20x2/1 GN

- The appliance is supplied with a power cable approximately 2 m long (plug not included).

pic. 2

Connection of mains:

- Observe the polarity of the electrical connection!
- Colour coding of wires:
Yellow/green = Earth, blue = Neutral
Brown or black = Phase L1 (L2,L3)

Warning!

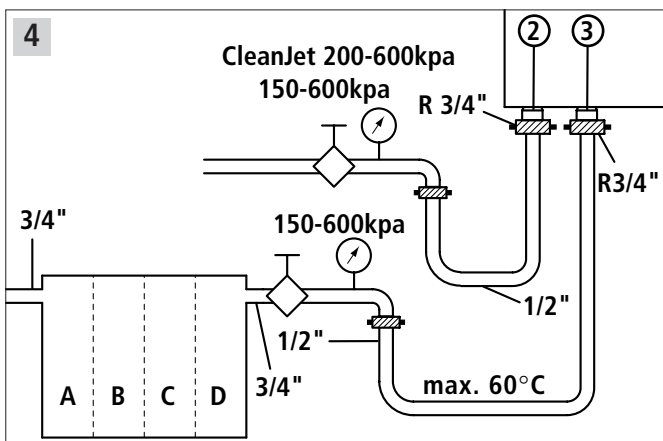
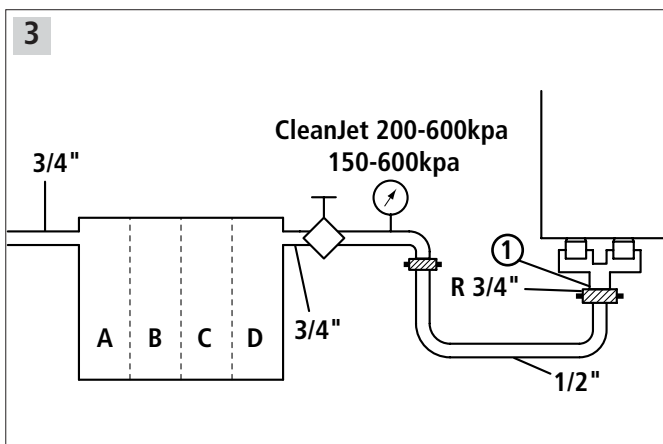
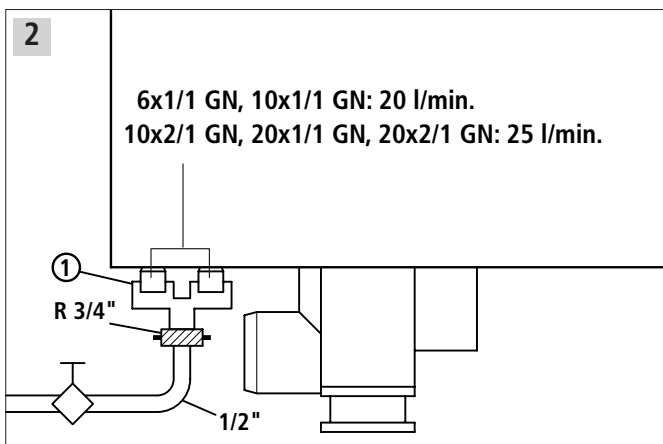
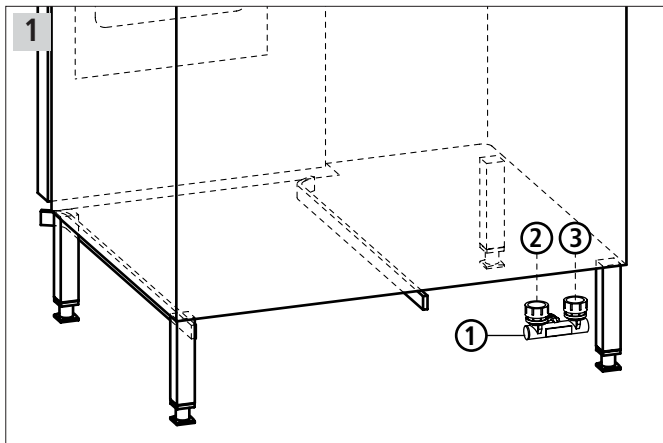
If the polarity is wrong, the burners will not operate!

If the burners on a **ClimaPlus** unit fail to operate, "**RESET**" will appear on the expert display.

A buzzer sounds after 15 seconds. Pressing the RESET button restarts the automatic ignition sequence.

For appliance connections, precise dimensions and connection points, see pages 129 to 139.

- 1 = Shared water supply (cold water)
- 2 = Water supply, cold water
- 3 = Water supply, soft and warm water
- 4 = Drain
- 5 = Electrical connection
- 6 = Earth bonding
- 7 = Gas connection



- The unit conforms to the relevant regulations (DVGW, SVGW, KIWA, WRC)
- The unit can be connected to cold water and to soft water of drinking-water quality. pic. 1,2,3,4
- Rinse the water line before connecting the water supply to the unit!
- On units fitted with CleanJet®, the dynamic water pressure must be min. 200 kPa or minimum flow volume 12l/min.
- On units not fitted with CleanJet®, water pressure 150 kPa - 600 kPa, recommended 300 kPa
- Water cock stop for each appliance (fitted by customer)
- Water conductivity: 50 – 2000 µS/cm. Lower conductivity on request.
- Maximum chloride concentration (Cl⁻): less than 150 mg/litre
- Chlorine concentration (Cl₂): less than 0.2 mg/litre (△ppm)
- For the water supply connection we recommend using hoses with internal Ø 13 mm (Spare part no.: 2067.0709).

Optional soft water connection:

pic. 4

Please note that the units have already been prepared at the factory for connection to a soft water supply. One connection for steam generator, hand shower and moistener, one connection for quenching and CleanJet®. After removing the T distributor, connect soft/hot water up to a max. 60 °C to connection "3".
Connect normal / cold water supply to connection "2".

In most cases it is not necessary to install a filter or water treatment appliance into the water supply line. The unit's steam generator is equipped with SC-Automatic. Depending on how much the unit is used, the SC-Automatic regularly rinses the steam generator out and refills it with fresh water. This means that the generator does not need to be descaled so often.

Under extreme water conditions, filters and/or water treatment appliances should be installed in order to ensure that the unit functions reliably in the long term and to avoid corrosion. Depending on the results of the water quality analysis, the filters can be installed individually or one behind the other.

A) Particle filter

pic. 3,4

When the water contains sand, iron particles or suspended matter, we recommend you install a 5-15 µm particle filter:

Water connection



B) Active carbon filter

pic. 3,4

When the level of chlorine (Cl₂) in the water exceeds 0.2 mg/l (= ppm) (information available from the water company), an active carbon filter must be installed.

C) Reverse osmosis system

pic. 3,4

When the water has a chloride concentration Cl⁻ above 150 mg/l (= ppm) (information available from the water company), a reverse osmosis system must be installed to avoid corrosion. Note that the water has a minimum conductivity of 50 µS/cm.

D) Water softener:

pic. 3,4

A water softener is recommended when a high level of scale (not containing chloride) is experienced. Systems recommended: H⁺ Ion Exchanger or Kleensteam. Sodium ion exchangers (as used in dishwashers) must not be used because of sodium deposits and delays in boiling caused by a high salt content.

Filter systems (A,B,C,D) from the following manufacturers are recommended:

Schumacher, Grünbeck, Culligan, Cuno, Everpure, Britta Christ, Seral.

When selecting a filter, bear the following flow rates in mind:

Average soft water consumption for steam generator/ humidifying (excluding handshower)

6x1/1GN	10x1/1GN	10x2/1GN	20x1/1GN	20x2/1GN
3,0 l/h	6,3 l/h	10,4 l/h	12,5 l/h	15,0 l/h

Maximum flow rate (necessary for selecting the right size of filter connection)

6x1/1GN	10x1/1GN	10x2/1GN	20x1/1GN	20x2/1GN
10 l/min	10 l/min	10 l/min	10 l/min	10 l/min

Total average water consumption for steam generator, humidifying and quenching (excluding handshower)

6x1/1GN	10x1/1GN	10x2/1GN	20x1/1GN	20x2/1GN
12.0 l/h	25.2 l/h	41.4 l/h	49.8 l/h	60.0 l/h

Maximum flow rate (necessary for selecting the right size of filter connection)

6x1/1GN	10x1/1GN	10x2/1GN	20x1/1GN	20x2/1GN
20 l/min	20 l/min	25 l/min	25 l/min	25 l/min

The recommendations are constantly updated on the basis of test results. Addresses are available from the after-sales service department.

For dimension drawings, see pages 129 - 139

- 1 = Shared water supply (cold water)
- 2 = Water supply, cold water
- 3 = Water supply, soft or cold water
- 4 = Drain
- 5 = Electrical connection
- 6 = Earth bonding

Ventilation:

An exhaust fan is not essential. If one is fitted, bear the following points in mind:

- Comply with all local regulations and standards;
- The fan should project 300-500 mm in front of the appliance;
- Install a grease filter in the projecting part of the fan;
- An exhaust fan is available as an option for 6x1/1 GN and 10x1/1 GN units. This can also be retrofitted;

Technical data

Noise emission level: <70dBA

Hoseproofness: IPX5

Heat emission:

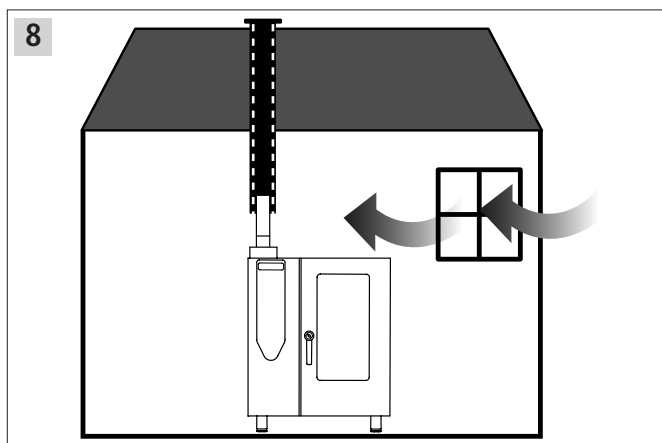
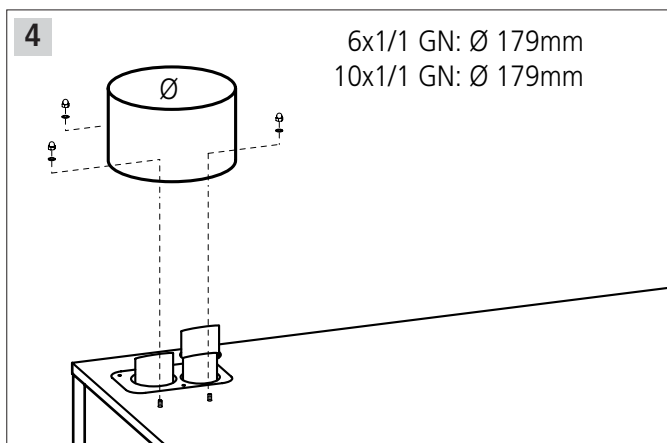
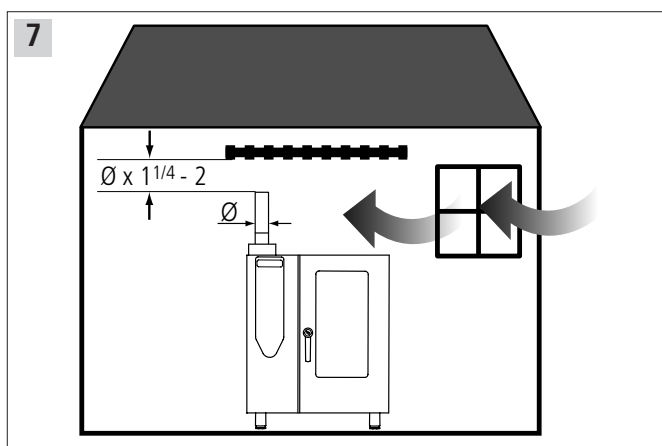
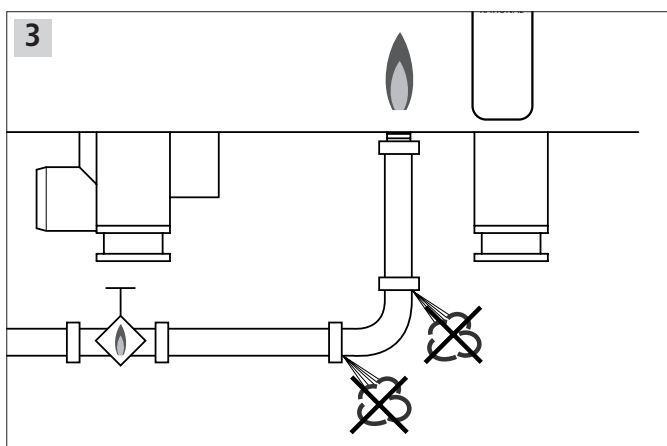
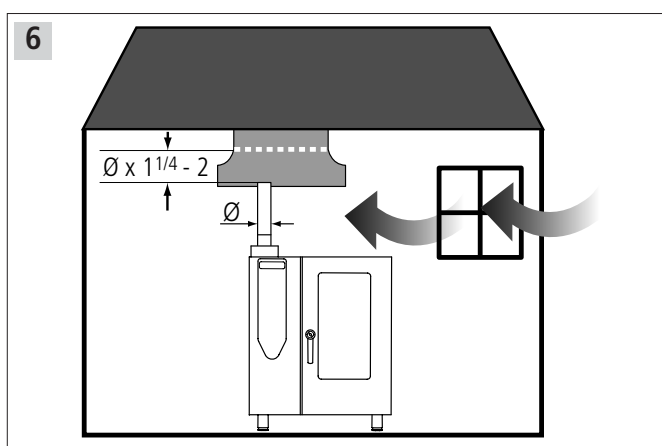
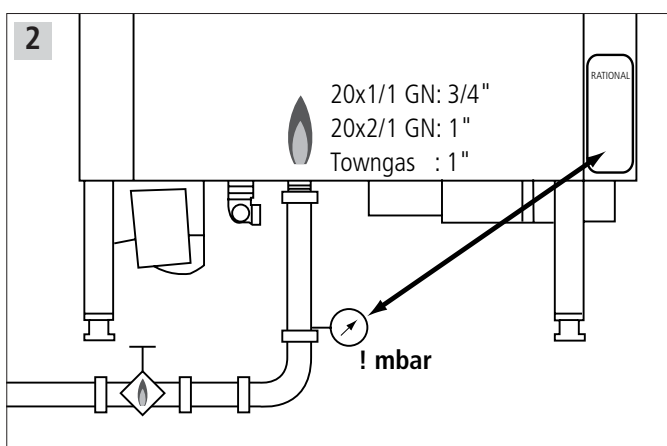
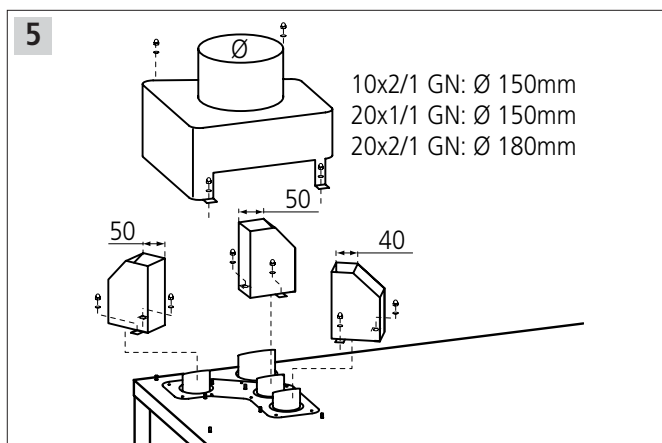
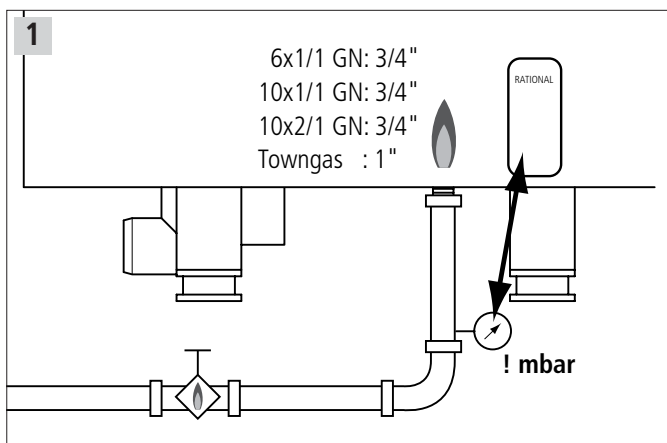
	6x1/1 GN	10x1/1 GN	10x2/1 GN
Latent:	2,300 kJ/h	3,800 kJ/h	6,000 kJ/h
Sensible:	2,930 kJ/h	5,000 kJ/h	8,500 kJ/h
	20x1/1 GN	20x2/1 GN	
Latent:	7,670 kJ/h	13,350 kJ/h	
Sensible:	9,600 kJ/h	15,340 kJ/h	

Heat emission for gas appliances:

	6x1/1 GN	10x1/1 GN	
Latent:	2,300 kJ/h	3,800 kJ/h	
Sensible:	2,760 kJ/h	4,560 kJ/h	
	10x2/1 GN	20x1/1 GN	20x2/1 GN
Latent:	6,000 kJ/h	7,670 kJ/h	12270 kJ/h
Sensible:	8,220 kJ/h	9,430 kJ/h	14730 kJ/h

Right of technical modifications reserved.

Gas connecting





Important!

To ensure that the burner settings made at the factory conform with the actual installation conditions, the waste gas (CO, CO₂) from the steam and hot-air burners must be analysed during commissioning. The corresponding values must be documented inside the unit. If the undiluted CO values are above 1000 ppm, the burner settings must be checked and if necessary adjusted by engineers trained and certified by the company.

Gas type	Required flow pressure mbar	Wobbe index (15°C, 1013mbar)		max. consumption at nominal heat load				
		Wi MJ/m ³	Ws MJ/m ³	6x1/1 GN 25 kW	10x1/1 GN 38,4 kW	10x2/1 GN 66 kW	20x1/1 GN 73,4 kW	20x2/1 GN 120 kW
Natural gas H G20	18-25	45,67	50,72	2,6 m ³ /h	4 m ³ /h	7 m ³ /h	7,8 m ³ /h	13,2 m ³ /h
Natural gas L G25	20-30	37,38	41,52	3,1 m ³ /h	4,7 m ³ /h	8,1 m ³ /h	9,5 m ³ /h	15,2 m ³ /h
Liquid gas G30	25-57,5	80,58	87,33	2 kg/h	3 kg/h	5,3 kg/h	5,9 kg/h	10,0 kg/h

Comply with local gas authority regulations!

Follow installation instructions!

- Check that the gas type supplied is suitable for the unit.
- The diameter of the pipe must comply with local regulations (DVGW-TRGI '86 or TRF 1988).
- External thread of gas connection: pic. 1,2
- Gas stop valve supplied for each unit.
- Gas connection with gas outlet socket only possible on 6x1/1 GN units.
- All gas supply connectors must comply with local regulations (DIN-DVGW).
- The unit must be secured against movement.
- Check the gas supply line for leakage. pic. 3

The unit is only to be connected to the gas supply by a locally approved gas installer. It is vital to ensure that the gas connection pipes as well as the connection pipes for the associated gas metering systems match the stipulated pipe widths.

Warning!

If the flow pressure deviates from the specified flow pressure (see table), inform the gas authorities. If the flow pressure of natural gas exceeds 30 mbar, the unit must not be switched on and the gas supply must be disconnected.

Type B13 and A3 gas unit

(A3 not applicable for Germany)

- Ambient-air-dependent gas-powered cooking range with fan assisted burners and draft diverter
- Automatic direct ignition with ignition monitor.
- Total nominal heat load gas

6x1/1 GN 25 KW	10x1/1 GN 38.4 KW
10x2/1 GN 66 KW	20x1/1 GN 73.4 KW
20x2/1 GN 120 KW	

Gas exhaust system 6x1/1 GN Gas and 10x1/1 GN Gas

pic. 4

Gas exhaust system 10x2/1 GN Gas 20x1/1 GN Gas and 20x2/1 GN Gas

pic. 5

Gas exhaust system downstream of draft diverter

- Check that gas exhaust pipes are leakproof, in accordance with local regulations (DVGW-TRGI '86 or TRF 1988).
- Waste gas pipes of aluminium or other materials which are not resistant to temperatures up to 200°C should not be used because of the high waste gas temperatures!

Gas exhaust system can be connected to the following in compliance with DVGW Instruction Sheet G634:

1. Extractor hood
2. Fan roof
3. Directly to the flue

pic. 6

pic. 7

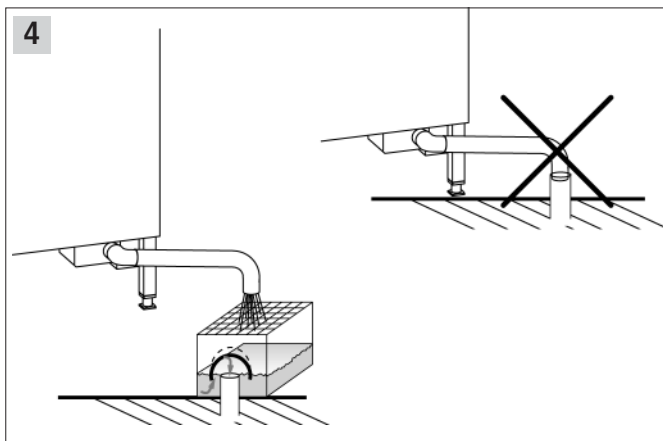
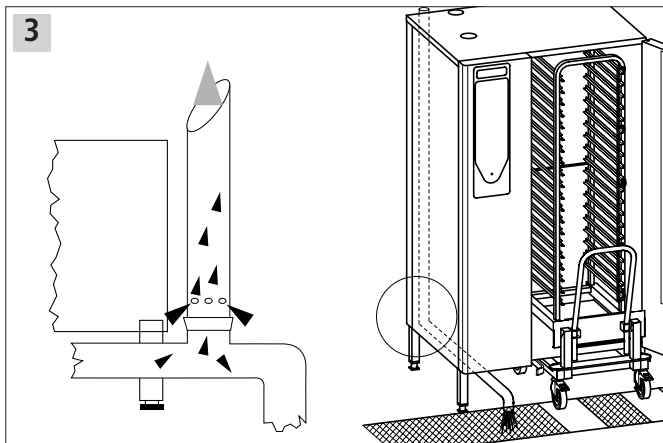
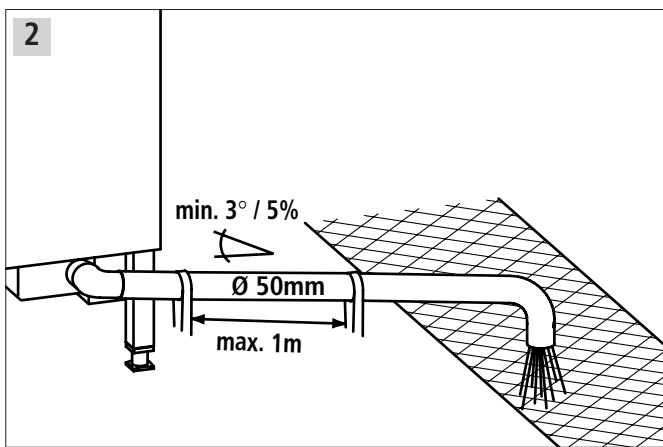
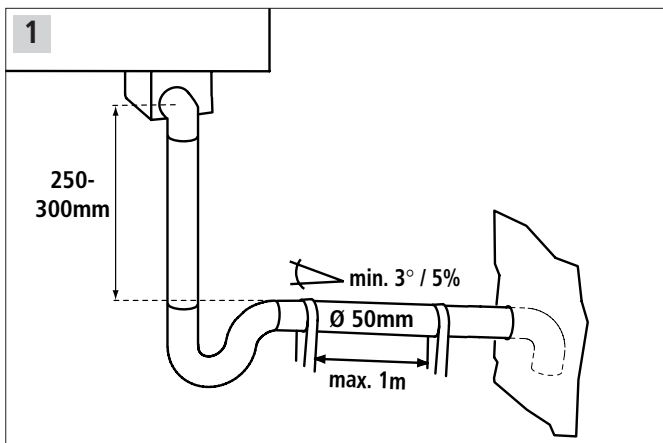
pic. 8

Room ventilation

The rooms in which these appliances are installed must be well ventilated, in order to prevent an unacceptable build-up of harmful combustion products.

We recommend that your gas installation is serviced once a year in accordance with the specified standards.

Drain connection



- The appliance complies with the relevant regulations (DVGW, SVGW, KIWA, WRC)
- **Pipe capable of withstanding steam temperature - no hoses**
- **DN 50 pipe** with constant gradient (min. 5% or 3°); do not reduce the diameter of the pipe.
- Fixed connection with odour lock permissible; a ventilated drain line is integral to the appliance pic. 1,2
- An additional ascending pipe helps to reduce excessive outlet of steam at the appliance drain. pic. 3
- Note drainage dimensions: short-term pumped discharge volume of steam generator 0.7 l/sec
- Average waste water temperature: 65°C
- Applicable standard: DIN 1986, Part 1
- Where there is an existing floor drain without air trap, a clear outflow of 2 cm must be provided. pic. 4

Connecting values



	P = kW					I = A				
	6x1/1	10x1/1	10x2/1	20x1/1	20x2/1	6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
2 AC 208V	10kW	-	-	-	-	48A	-	-	-	-
2 AC 240V	10kW	-	-	-	-	42A	-	-	-	-
3 AC 200V	10kW	19kW	31,5kW	38kW	63kW	29A	55A	91A	110A	182A
3 AC 208V	10kW	19kW	31,5kW	38kW	63kW	28A	53A	87,5A	106A	175A
3 AC 230V (220V)	10kW	19kW	31,5kW	38kW	63kW	25A	48A	79A	96A	158A
3 AC 240V	10kW	19kW	31,5kW	38kW	63kW	24A	46A	76A	92A	152A
3 NAC 400V (380V)	10kW	19kW	31,5kW	38kW	63kW	15A	28A	45,5A	56A	90A
3 AC 400V	10kW	19kW	31,5kW	38kW	63kW	15A	28A	45,5A	56A	90A
3 NAC 415V	10kW	19kW	31,5kW	38kW	63kW	14A	26,5A	44A	53A	88A
3 AC 440V	10kW	19kW	31,5kW	38kW	63kW	13A	25A	41,5A	50A	83A
3 AC 480V	10kW	19kW	31,5kW	38kW	63kW	12A	23A	38A	46A	76A



						⊆ mm ²				
	6x1/1	10x1/1	10x2/1	20x1/1	20x2/1	6x1/1	10x1/1	10x2/1	20x1/1	20x2/1
2 AC 208V	50A	-	-	-	-	10mm ²	-	-	-	-
2 AC 240V	50A	-	-	-	-	10mm ²	-	-	-	-
3 AC 200V	35A	63A	100A	125A	200A	4mm ²	10mm ²	25mm ²	35mm ²	95mm ²
3 AC 208V	35A	63A	100A	125A	200A	4mm ²	10mm ²	25mm ²	35mm ²	95mm ²
3 AC 230V (220V)	35A	50A	80A	100A	160A	4mm ²	10mm ²	16mm ²	25mm ²	50mm ²
3 AC 240V	35A	50A	80A	100A	160A	4mm ²	6mm ²	16mm ²	25mm ²	50mm ²
3 NAC 400V (380V)	16A	35A	50A	63A	100A	2,5mm ²	4mm ²	6mm ²	10mm ²	25mm ²
3 AC 400V	16A	35A	50A	63A	100A	2,5mm ²	4mm ²	6mm ²	10mm ²	25mm ²
3 NAC 415V	16A	35A	50A	63A	100A	2,5mm ²	4mm ²	6mm ²	10mm ²	25mm ²
3 AC 440V	16A	35A	50A	63A	100A	2,5mm ²	4mm ²	6mm ²	10mm ²	25mm ²
3 AC 480V	16A	25A	50A	50A	80A	2,5mm ²	4mm ²	6mm ²	6mm ²	16mm ²



						⊆ mm ²	
	6x1/1 G	10x1/1 G	10x2/1 G	20x1/1 G	20x2/1 G	6x1/1 G	20x2/1 G
1 N AC 230V	4,4A	4,4A	4,6A	8,2A	8,5	2,5mm ²	
1 N AC 240V	4,2A	4,2A	4,4A	8,0A	8,0A	2,5mm ²	
1 N AC 100V	10A	10A	-	-	-	2,5mm ²	
2 AC 200V	5A	5A	5,5A	9,5A	9,5A	2,5mm ²	

Connecting values

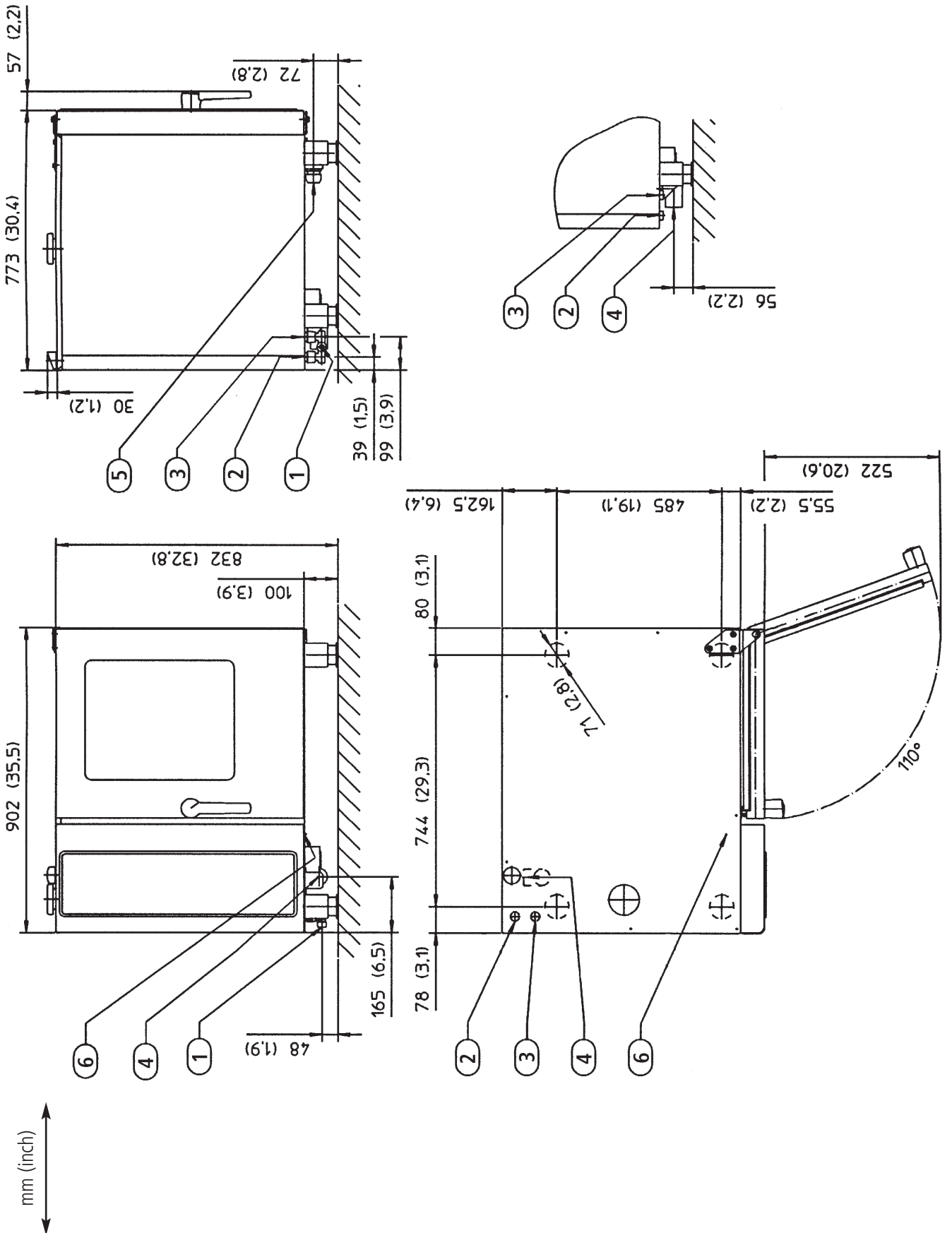


	°dH	°f	°e	ppm	mmol/l	gr/gal(US)	mval/kg
1 °dH	1	1,79	1,25	17,9	0,1783	1,044	0,357
1 °f	0,56	1	0,70	10,0	0,1	0,584	0,2
1 °e	0,8	1,43	1	14,32	0,14	0,84	0,286
1 ppm	0,056	0,1	0,07	1	0,01	0,0584	0,02
1 mmol/l	0,00056	0,001	0,0007	100	1	0,00058	2
1 gr/gal (US)	0,96	1,71	1,20	17,1	0,171	1	0,342
1 mval/kg	2,8	5,0	3,5	50	0,5	2,922	1

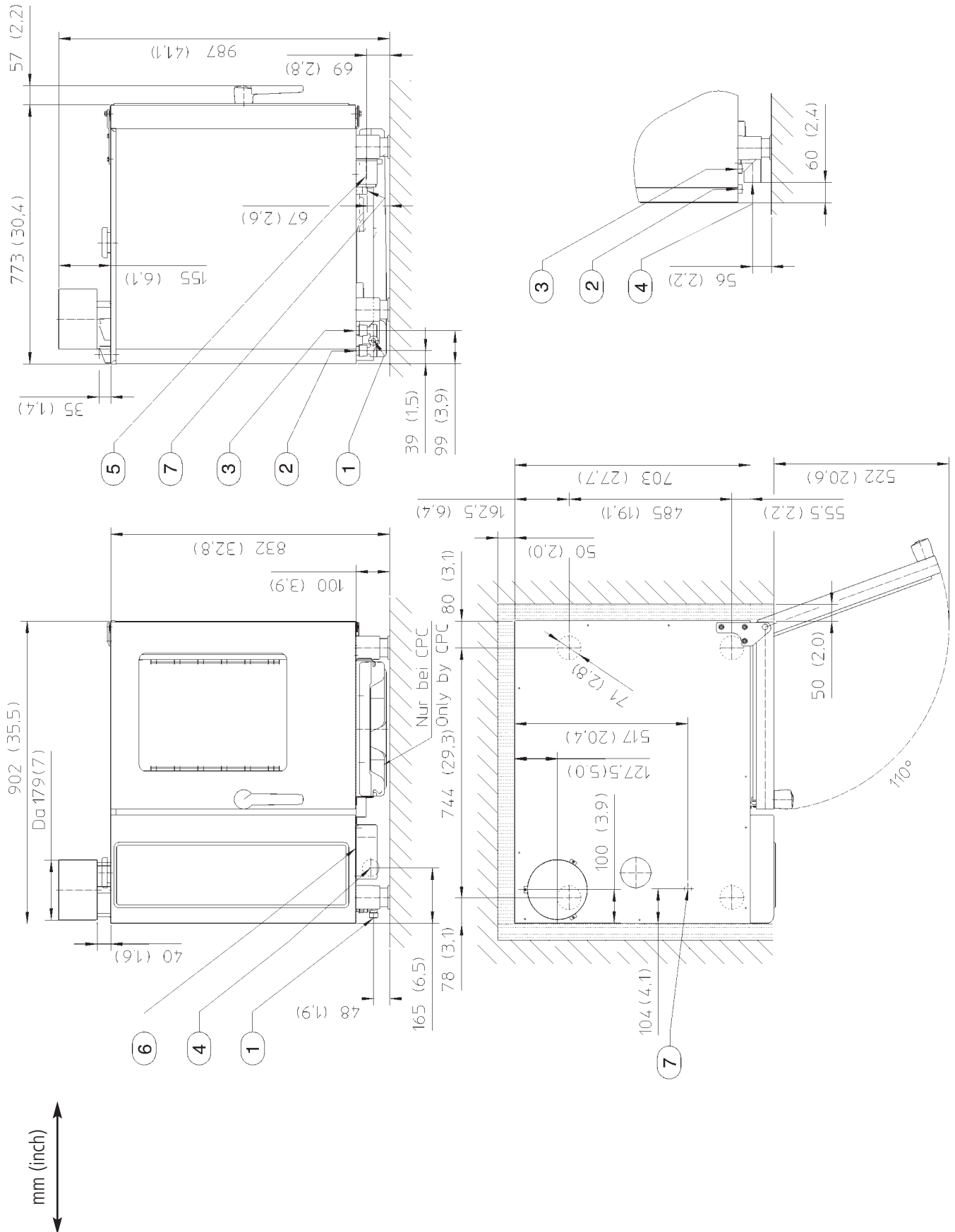
1 °dH:	10,00 mg CaO/kg	1 ppm :	0,56 mg CaO/kg	1 gr/gal :	9,60 mg CaO/kg
(Germany)	17,86 mg CaCO ₃ /kg	(USA)	1,0 mg CaCO ₃ /kg	(USA)	64,8 mg CaCO ₃ /gal
	7,14 mg Ca ²⁺ /kg		0,40 mg Ca ²⁺ /kg		17,11 mg CaCO ₃ /kg
1 °f :	5,60 mg CaO/kg	1 mmol/l :	56,00 mg CaO/kg		6,85 mg Ca ²⁺ /kg
(France)	10,0 mg CaCO ₃ /kg	(chem. konz.)	100,0 mg CaCO ₃ /kg		
	4,00 mg Ca ²⁺ /kg		39,98 mg Ca ²⁺ /kg		
1 °e :	8,01 mg CaO/kg	1 mval/kg :	28,00 mg CaO/kg		
(GB)	14,3 mg CaCO ₃ /kg	(Milliäquivalent)	50,0 mg CaCO ₃ /kg		
	5,72 mg Ca ²⁺ /kg		19,99 mg Ca ²⁺ /kg		

kPa	mbar	psi	in H ₂ O	kPa	mbar	psi	in H ₂ O
0,1	1	0,0147	0,4014	4	40	0,588	16,0560
0,2	2	0,0294	0,8028	4,5	45	0,6615	18,0630
0,3	3	0,0441	1,2042	5	50	0,735	20,0700
0,4	4	0,0588	1,6056	5,5	55	0,8085	22,0770
0,5	5	0,0735	2,0070	6	60	0,882	24,0840
0,6	6	0,0882	2,4084	6,5	65	0,9555	26,0910
0,7	7	0,1029	2,8098	7	70	1,029	28,0980
0,8	8	0,1176	3,2112	7,5	75	1,1025	30,1050
0,9	9	0,1323	3,6126	8	80	1,176	32,1120
1	10	0,147	4,0140	8,5	85	1,2495	34,1190
1,2	12	0,1764	4,8168	9	90	1,323	36,1260
1,4	14	0,2058	5,6196	9,5	95	1,3965	38,1330
1,6	16	0,2352	6,4224	10	100	1,47	40,1400
1,8	18	0,2646	7,2252	20	200	2,94	80,2800
2	20	0,294	8,0280	30	300	4,41	120,4200
2,5	25	0,3675	10,0350	40	400	5,88	160,5600
3	30	0,441	12,0420	50	500	7,35	200,7000
3,5	35	0,5145	14,0490	100	1000	14,7	401,4000

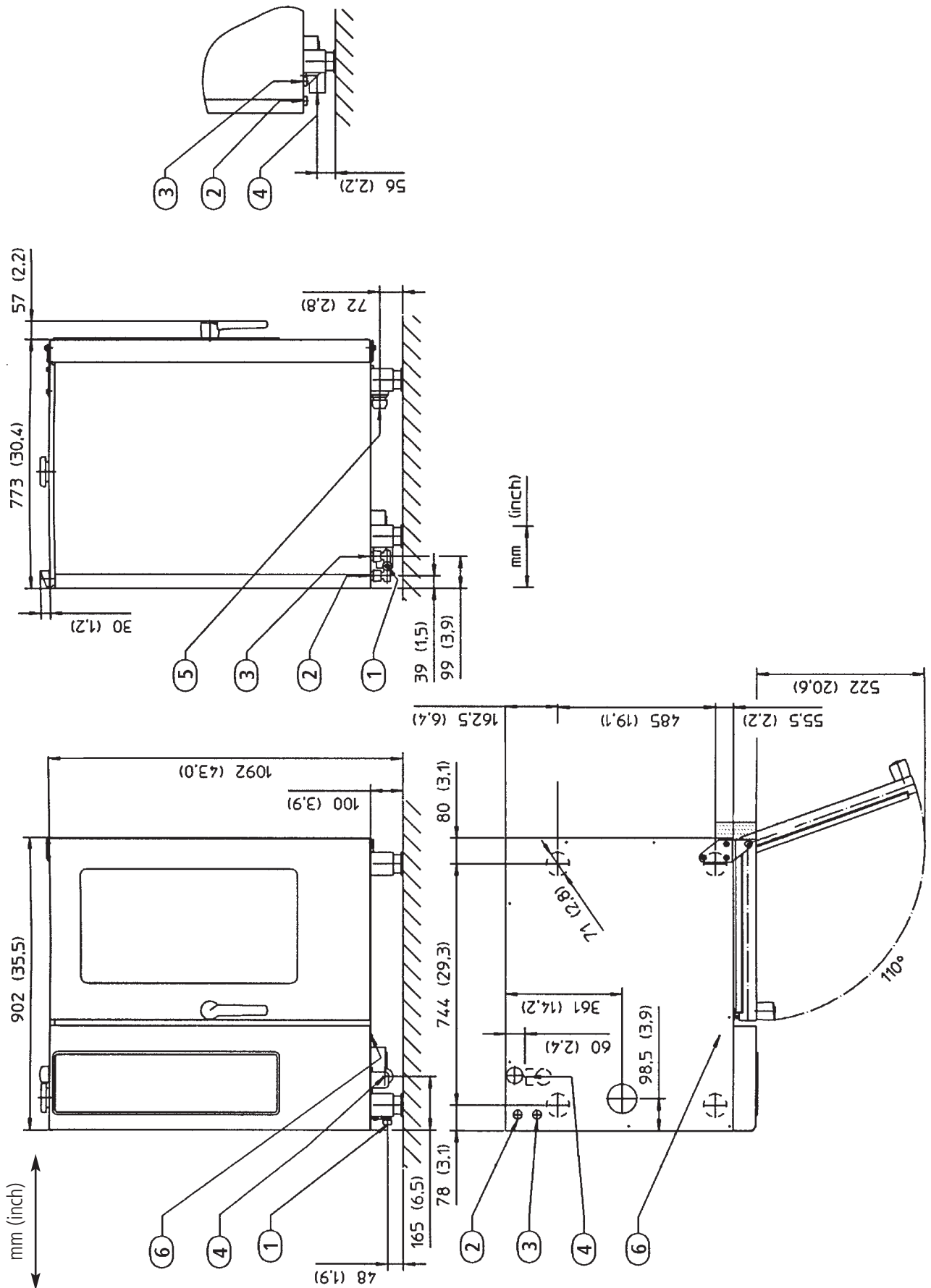
Connecting diagram 6x1/1 GN



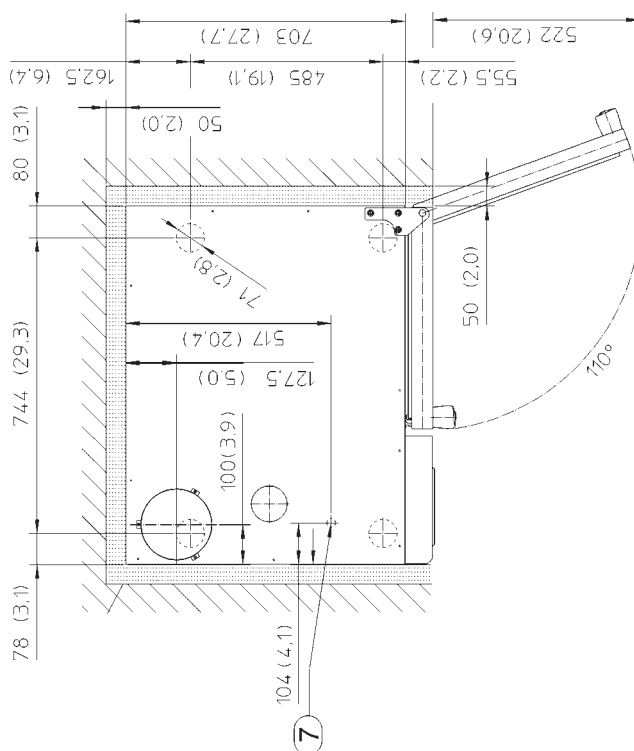
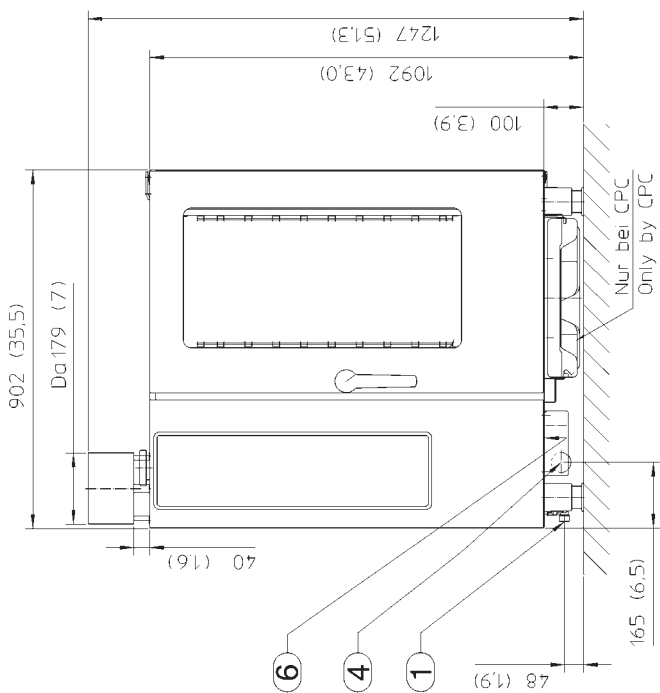
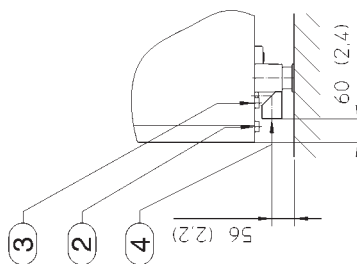
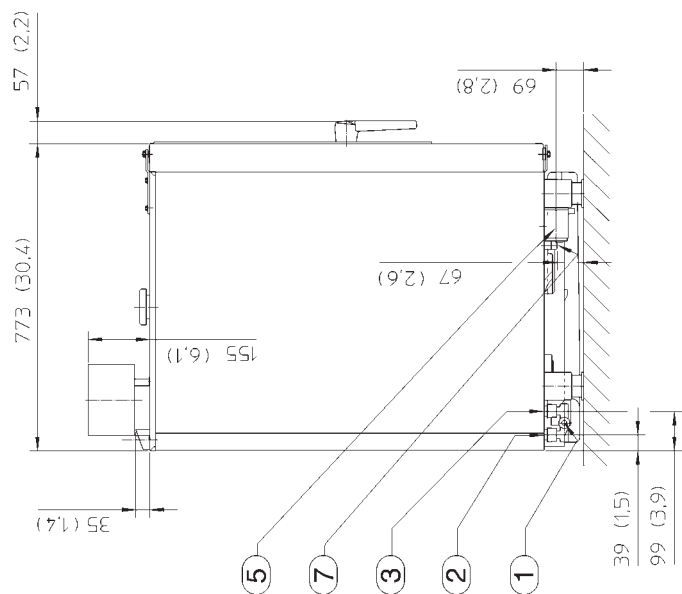
Connecting diagram 6x1/1 GN Gas



Connecting diagram 10x1/1 GN

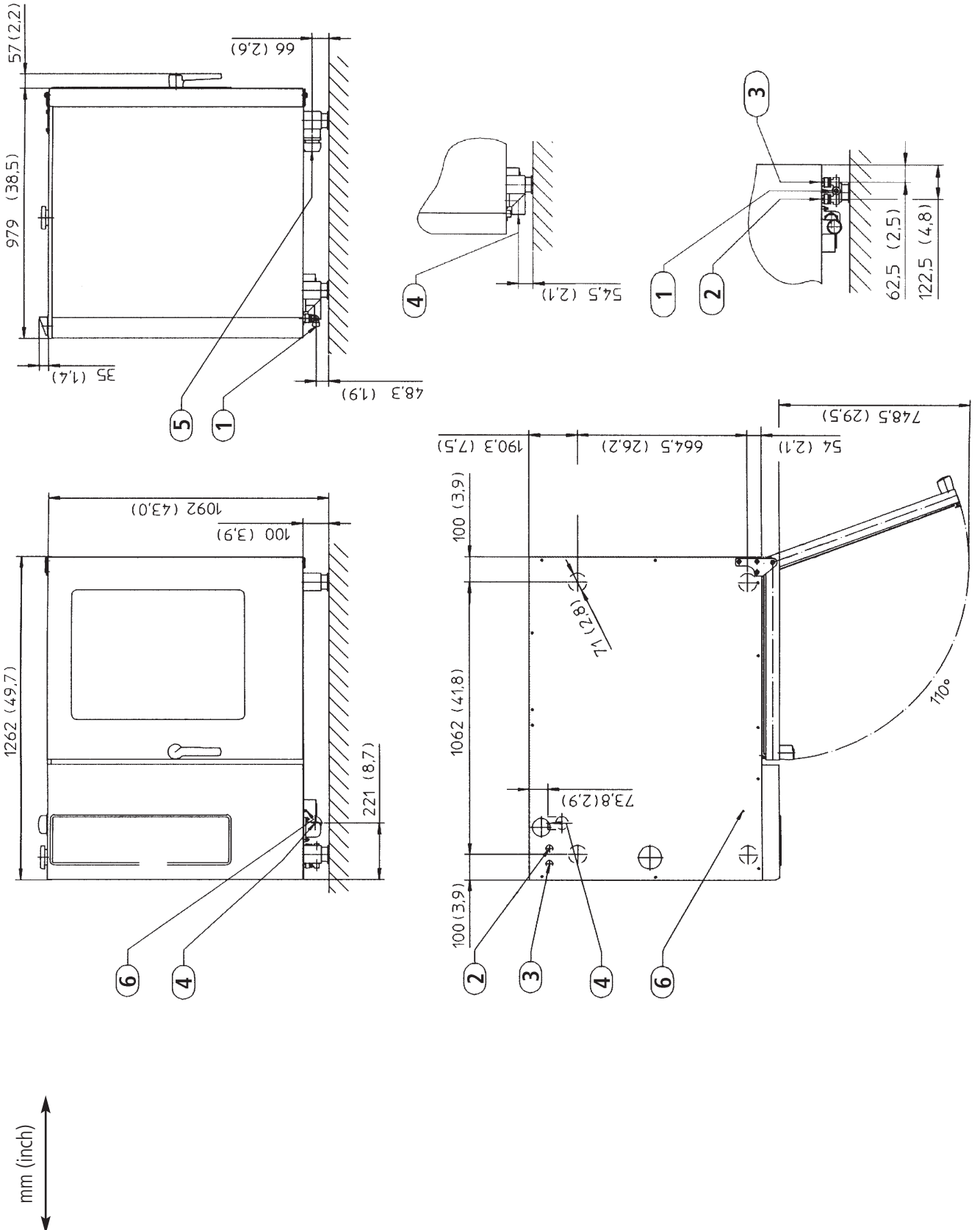


Connecting diagram 10x1/1 GN Gas

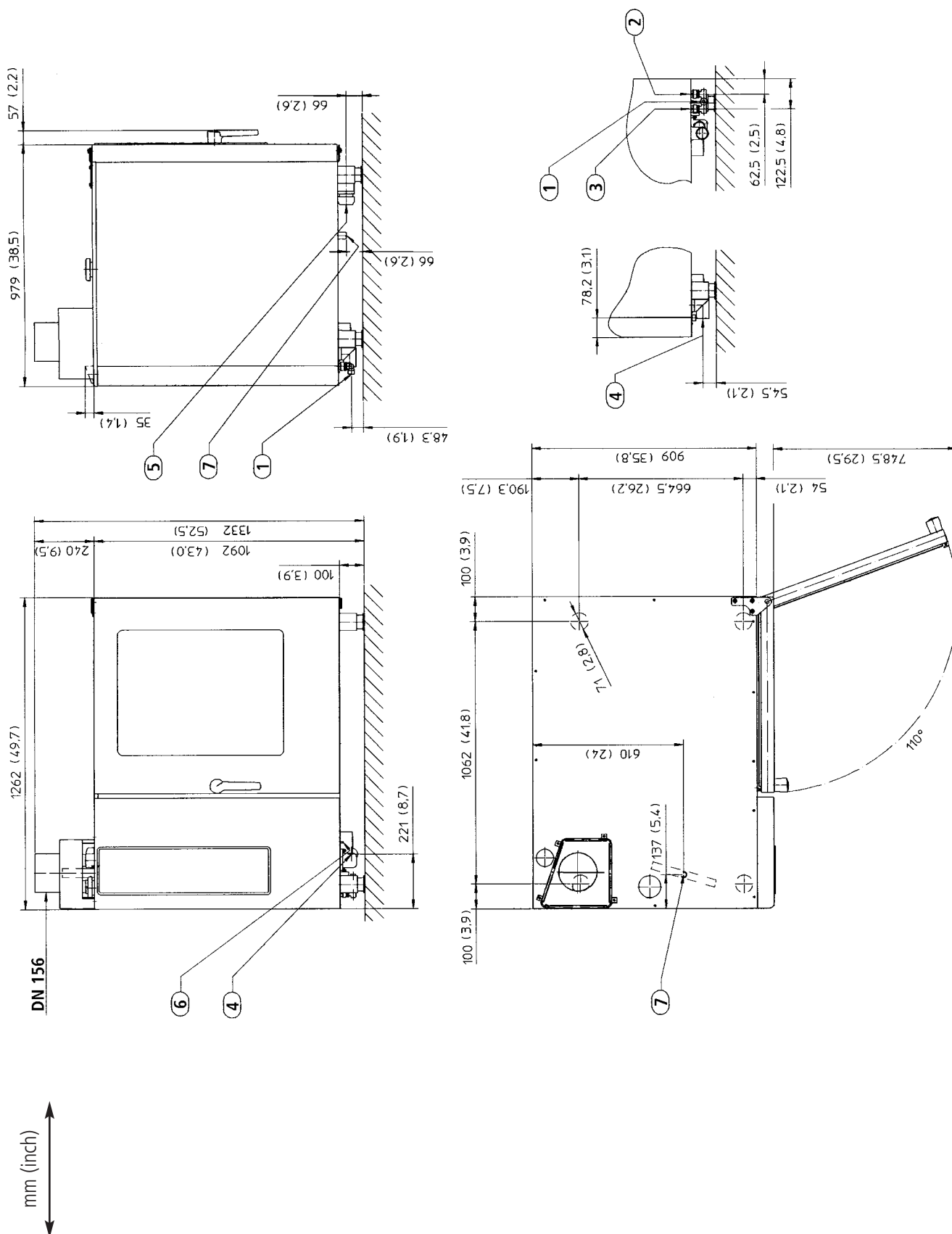


mm (inch)

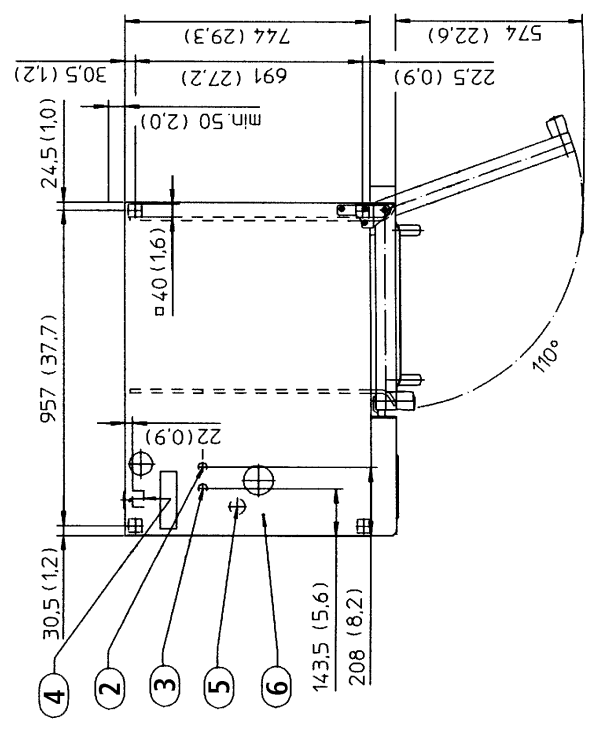
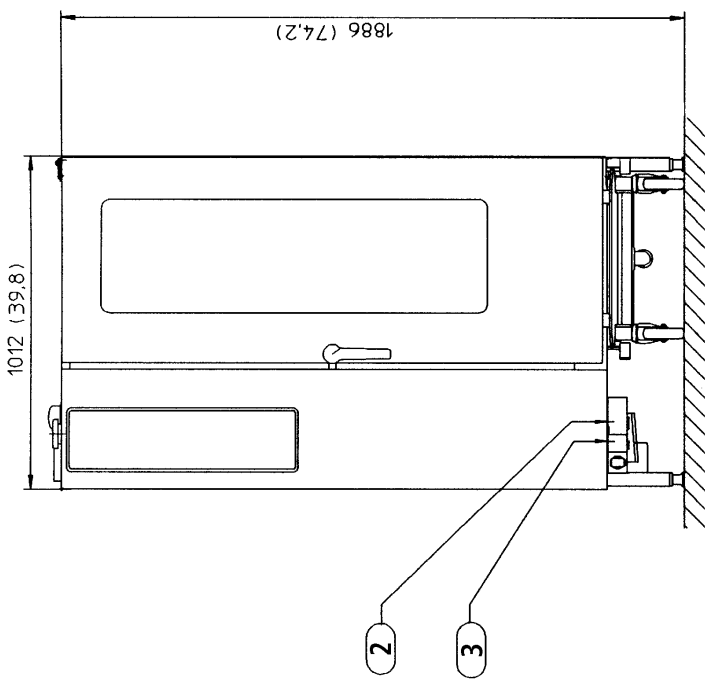
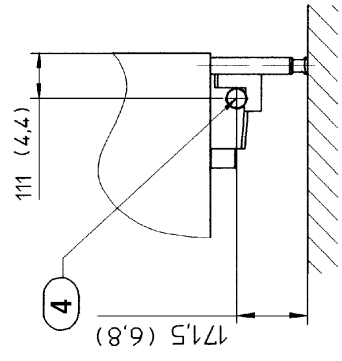
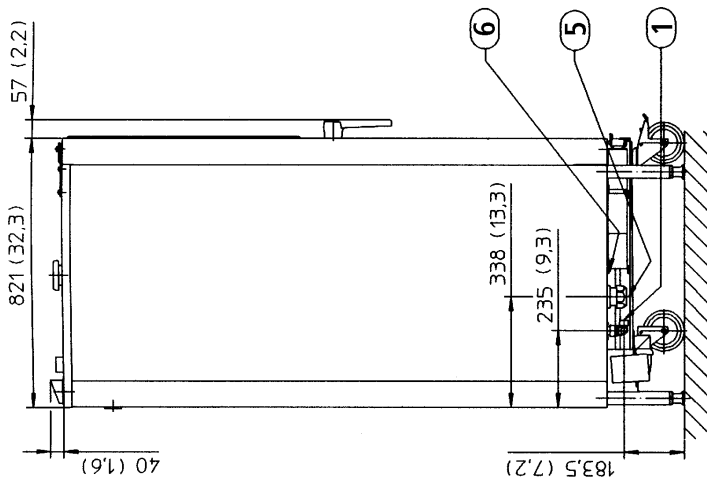
Connecting diagram 10x2/1 GN



Connecting diagram 10x2/1 GN Gas

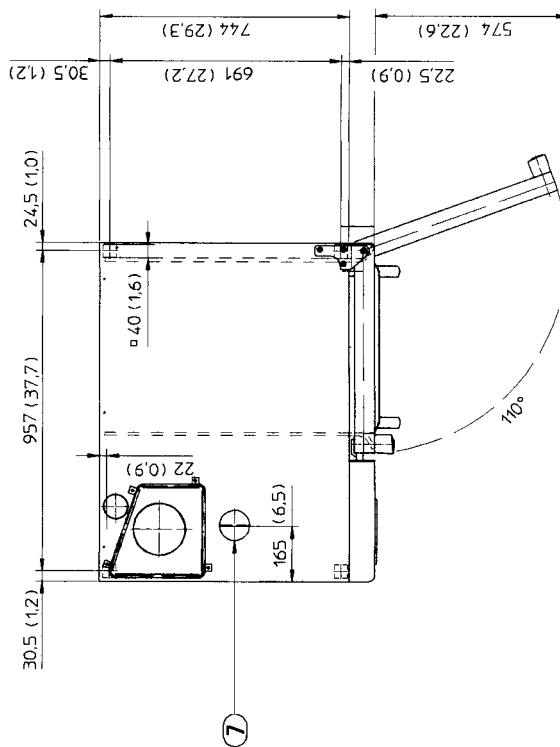
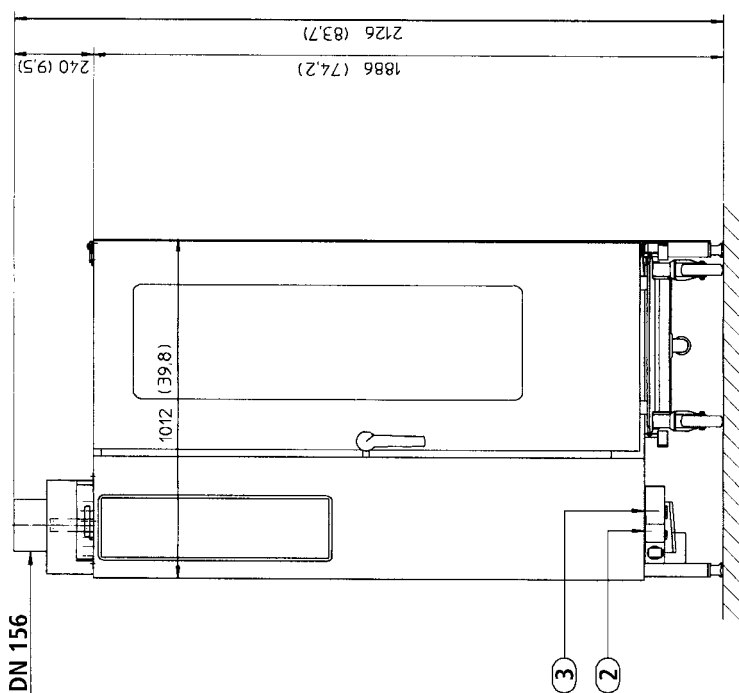
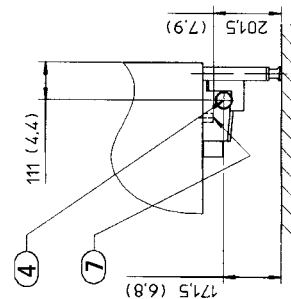
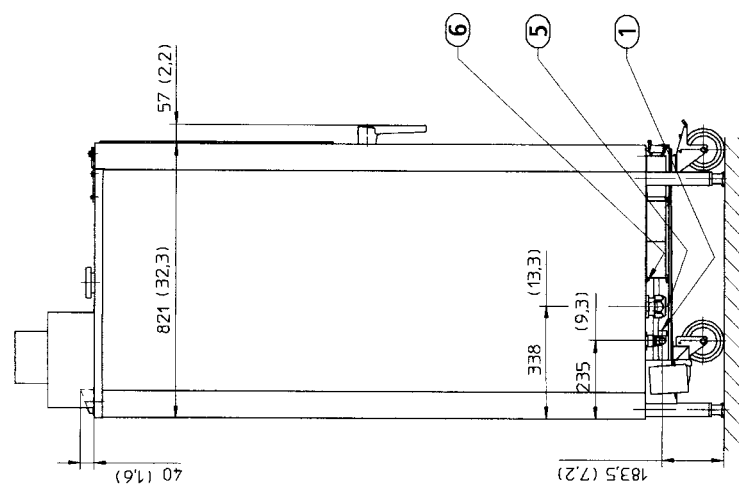


Connecting diagram 20x1/1 GN



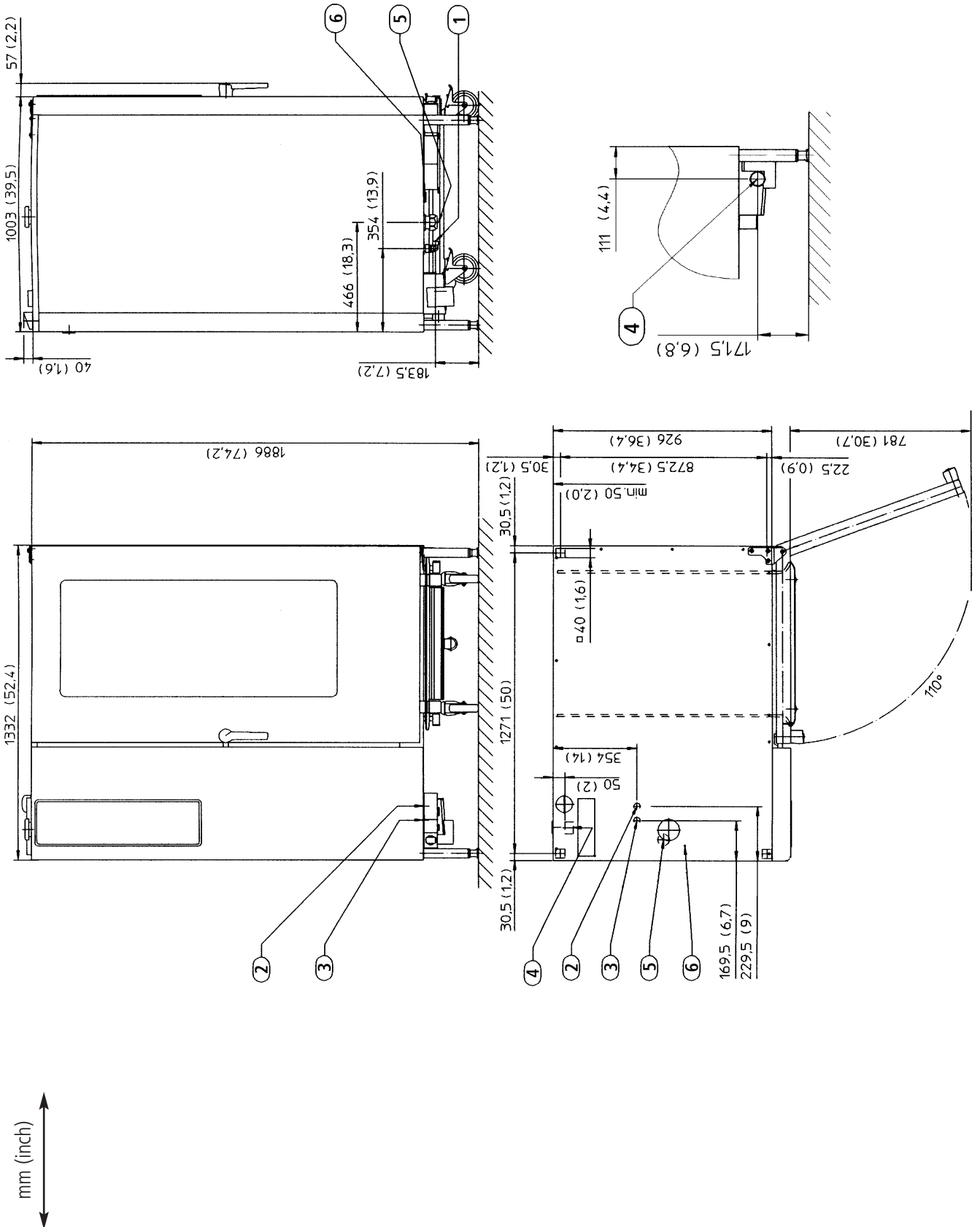
mm (inch)

Connecting diagram 20x1/1 GN Gas

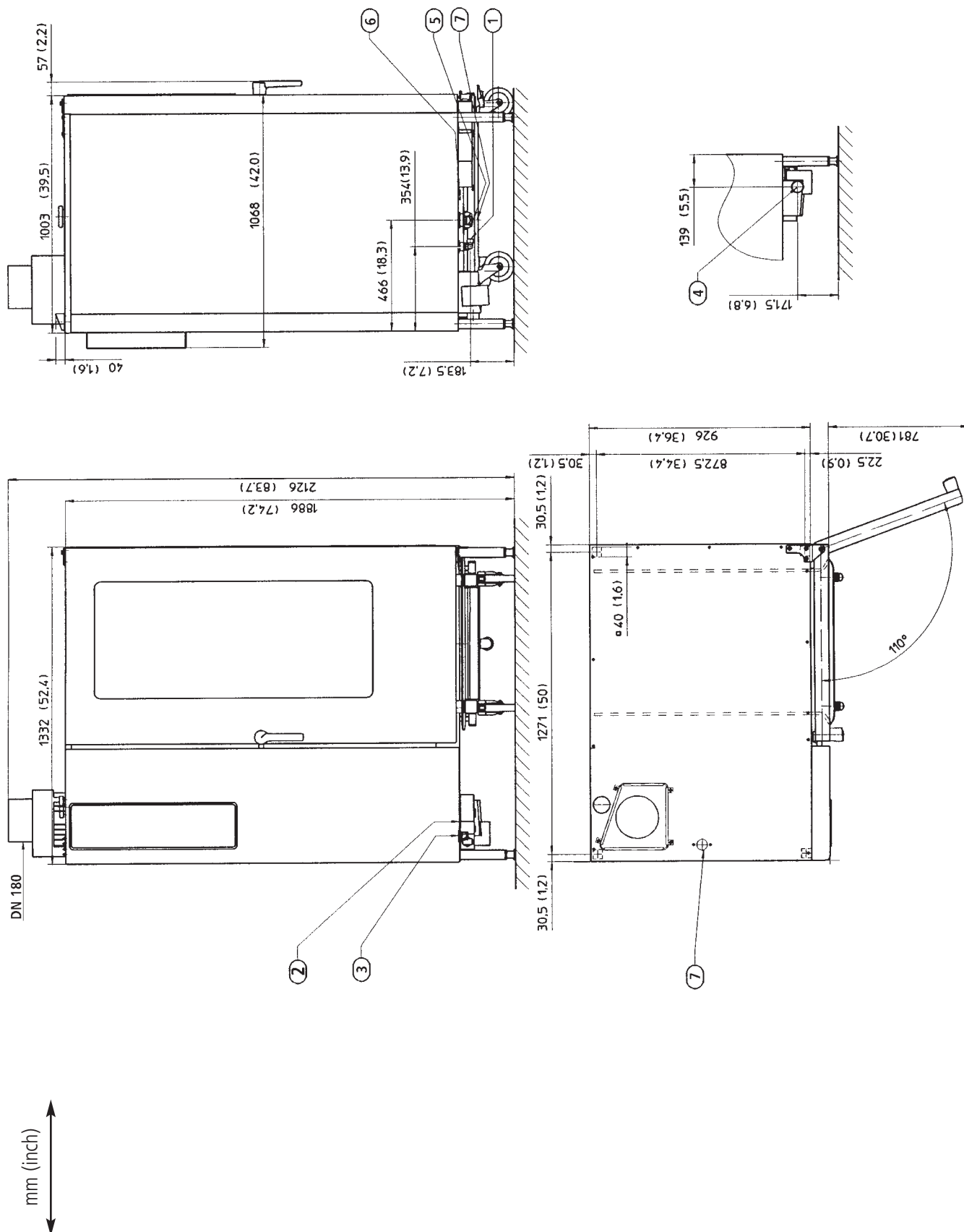


mm (inch)

Connecting diagram 20x2/1 GN

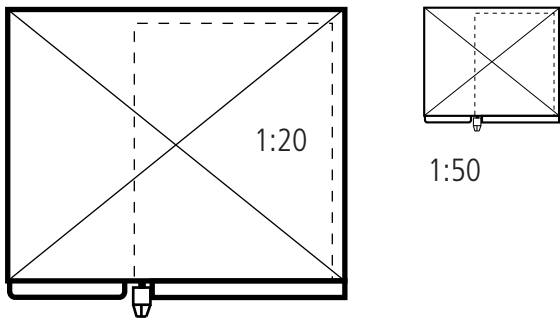


Connecting diagram 20x2/1 GN Gas

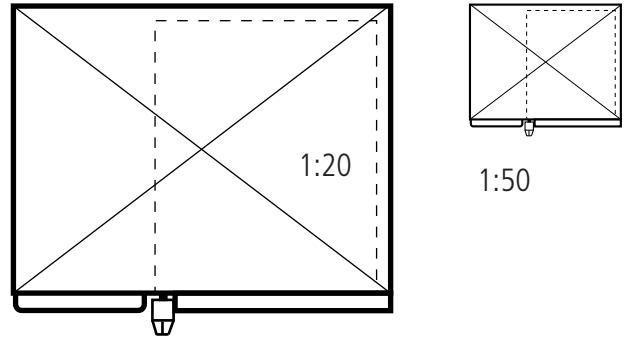




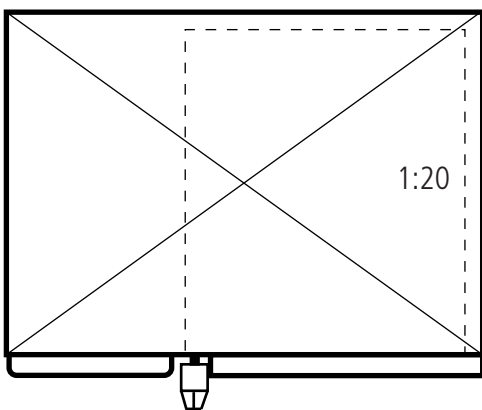
Type 6x1/1 GN, 10x1/1 GN



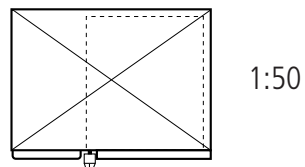
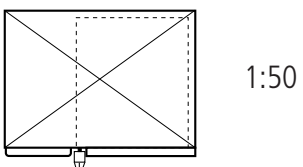
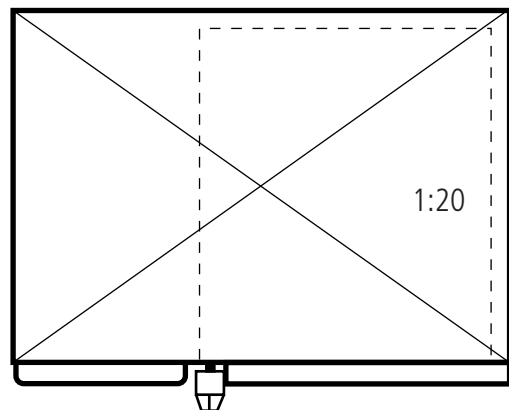
Type 20x1/1 GN



Type 10x2/1 GN



Type 20x2/1 GN



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