

# Convotherm mini

compact creativity



Combi oven  
Convotherm mini

OES mini 6.06, 6.10, 10.10  
Installation manual - Original, ENG

*Advancing Your Ambitions*



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## 1 General information

### 1.1 Environmental protection

#### Statement of principles

Our customers' expectations, the legal regulations and standards and our company's own reputation set the quality and service for all our products.

We have an environmental management policy that not only ensures compliance with all environmental regulations and laws, but also commits us to continuous improvement of our green credentials.

We have developed a quality and environmental-management system in order to guarantee the continued manufacture of high-quality products, and to be sure of meeting our environmental targets.

This system satisfies the requirements of ISO 9001:2015 and ISO 14001:2015.

#### Environmental protection procedures

We observe the following procedures:

- Use of residue-free compostable wadding materials
- Use of RoHS-compliant products
- REACH chemical law
- Multiple re-use of cardboard packaging
- Recommendation and use of bio-degradable cleaning agents
- Recycling of electronic waste
- Environmentally friendly disposal of old appliances

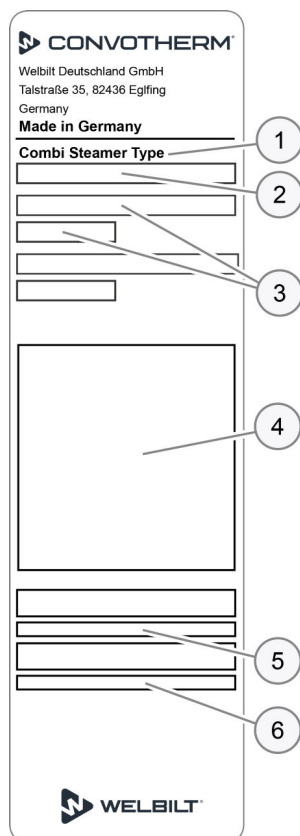
**Join us in our commitment to protect the environment.**

## 1.2 Identifying your combi oven

### Position of type plate

The type plate is located on the left-hand side of the combi oven.

### Layout and structure of the type plate



Item	Name	
1	<b>Name of appliance</b> Combi Steamer	
2	<b>Trade name</b>	
	Element	Meaning
	OES	Electric appliance with water injection
	numbers xx.yy	Appliance size
	mini	Appliance series
3	<b>Electrical values</b>	
4	<b>Appliance tests</b>	
5	<b>Serial number</b>	
6	<b>Part number</b>	

## 1.3 Structure of customer documentation

### Contents of the appliance documentation

Book type	Contents
Installation manual	<ul style="list-style-type: none"><li>▪ Describes how to move, set up and install the appliance, and how to put the appliance into service</li><li>▪ Describes the hazards and appropriate preventive measures relevant to all installation tasks</li><li>▪ Contains the technical data</li></ul>
User manual	<ul style="list-style-type: none"><li>▪ Describes the working procedures and operating steps for cooking and cleaning</li><li>▪ Contains the servicing schedule and information on troubleshooting</li><li>▪ Describes the hazards and appropriate preventive measures relevant to operation</li></ul>
Operating instructions	<ul style="list-style-type: none"><li>▪ Describes the appliance user interface</li><li>▪ Contains instructions on how to use the software</li></ul>

### Documentation for accessories

Please refer to the relevant instructions for the accessory concerned (e.g. recoil hand shower, hood, wheeled stand, stacking kit) for information on how to install the accessory.

## 1.4 About this installation manual

### Who should read the installation manual

Name of target group	Tasks
Owner of the combi oven or owner's member of staff who is responsible for the appliance and for the operating personnel	<ul style="list-style-type: none"><li>▪ Made aware of all safety-related functions and devices of the combi oven by the start-up engineer</li><li>▪ Instructed by the start-up engineer on how to operate the appliance</li><li>▪ Provides assistance as instructed with conveying the appliance within the establishment and setting up the appliance.</li></ul> See 'Owner obligations' on page 16 for further details
Equipment mover	Conveying within the establishment
Service engineer	<ul style="list-style-type: none"><li>▪ Setting up the appliance</li><li>▪ Installing the fully automatic oven cleaning system (optional)</li><li>▪ Putting the appliance into service and removing the appliance from service</li></ul>
Electrical installation engineer	<ul style="list-style-type: none"><li>▪ Connecting the appliance to the building's electrical supply</li><li>▪ Disconnecting the electrical connection</li></ul>
Plumber	<ul style="list-style-type: none"><li>▪ Connecting the appliance to the building's water supply</li><li>▪ Disconnecting the water connection</li><li>▪ Connecting the appliance to the building's drain connection</li><li>▪ Disconnecting the drain connection</li></ul>
Start-up engineer (Service engineer)	<ul style="list-style-type: none"><li>▪ Overall responsibility for putting the combi oven into service</li><li>▪ Instructing the user</li></ul>

### Notation for decimal points

A decimal point is always used in order to achieve international standardization.

## 1.5 Essential reading relating to safety

### Safety information in the customer documentation

Safety information relating to the combi oven appears only in the installation manual and the user manual.

The installation manual contains the safety information for the tasks covered by the manual and which are performed when transporting, setting up and installing the appliance and when putting the appliance into service and removing the appliance from service.

The user manual contains the safety information for the tasks covered by the manual and which are performed during cooking, cleaning and servicing work.

The safety information contained in the user manual and installation manual must always be considered to be part of the operating instructions. The safety information contained in the user manual and installation manual must always be observed when performing tasks that go beyond merely operating the software.

### Parts of this document that must be read without fail

If you do not follow the information in this document, you risk potentially fatal injury and property damage.

To guarantee safety, all people who work with the combi oven must have read and understood the following parts of this document before starting any work:

- the chapter 'For your safety' on page 13
- the sections that describe the activity to be carried out

### Danger symbol




Danger symbol	Meaning
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Warns of potential injuries. Heed all the warning notices that appear after this symbol to avoid potential injuries or death.

### Form of warning signs

The warning signs are categorized according to the following hazard levels:

Hazard level	Consequences	Likelihood
 <b>DANGER</b>	Death / serious injury (irreversible)	Immediate risk
 <b>WARNING</b>	Death / serious injury (irreversible)	Potential risk
 <b>CAUTION</b>	Minor injury (reversible)	Potential risk
<b>NOTICE</b>	Damage to property	Potential risk

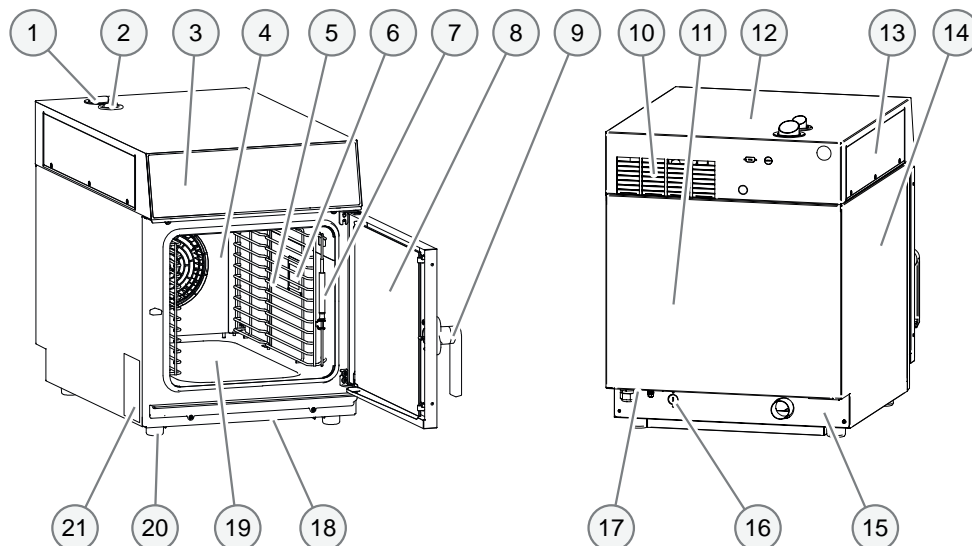


## 2 Design and function

### 2.1 Design and function of the combi oven

#### Components and function

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:

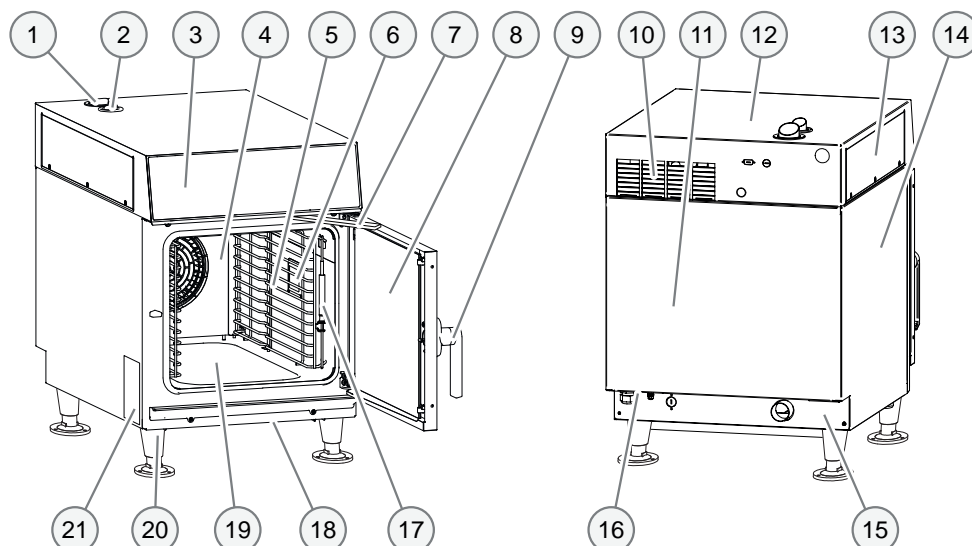


Item	Name	Function
1	Ventilation port	External air intake for removing the moisture from the cooking chamber
2	Air vent	Allows hot vapour to escape
3	Operating panel	Used for operating the appliance
4	Suction panel	Distributes the heat evenly inside the cooking chamber
5	Rack	Holds standard-sized food containers
6	Oven light	Illuminates the cooking chamber
7	Core temperature probe (optional)	Used for measuring the core temperature
8	Appliance door	Closes the cooking chamber
9	Door handle	<ul style="list-style-type: none"> <li>Opens and closes the appliance door</li> <li>Venting position for opening the appliance safely ("safety catch") (optional)</li> </ul>
10	Ventilation slots	Used for ventilation
11	Rear wall	Covers the appliance wiring compartment
12	Top box	Covers the controller electronics of the appliance
13	Cover on top box	Used to access the electronics in the top box
14	Outer casing	Used for covering the appliance interior
15	Connecting bracket	Used for covering the connection area
16	Condensation hood connection (optional)	Used to connect a mini Condensation Hood Pro
17	Network connection (only for easyTouch)	Used for connecting to a network
18	Openings in the base	Used for ventilation
19	Cooking chamber	Contains the food during cooking operation

Item	Name	Function
20	Appliance feet	Used for setting up and adjusting level of appliance
21	Type plate	Identifies the appliance

### Components and function (marine model)

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:



Item	Name	Function
1	Ventilation port	External air intake for removing the moisture from the cooking chamber
2	Air vent	Allows hot vapour to escape
3	Operating panel	Used for operating the appliance
4	Suction panel	Distributes the heat evenly inside the cooking chamber
5	Rack	Holds standard-sized food containers
6	Oven light	Illuminates the cooking chamber
7	Door holder	Fixes the appliance door so that it cannot close accidentally
8	Appliance door	Closes the cooking chamber
9	Door handle	<ul style="list-style-type: none"> <li>Opens and closes the appliance door</li> <li>Venting position for opening the appliance safely ("safety catch") (optional)</li> </ul>
10	Ventilation slots	Used for ventilation
11	Rear wall	Covers the appliance wiring compartment
12	Top box	Covers the controller electronics of the appliance
13	Cover on top box	Used to access the electronics in the top box
14	Outer casing	Used for covering the appliance interior
15	Connecting bracket	Used for covering the connection area
16	Network connection (only for easyTouch)	Used for connecting to a network
17	Core temperature probe (optional)	Used for measuring the core temperature
18	Openings in the base	Used for ventilation
19	Cooking chamber	Contains the food during cooking operation

Item	Name	Function
20	Appliance feet	Used for setting up and adjusting level of appliance
21	Type plate	Identifies the appliance

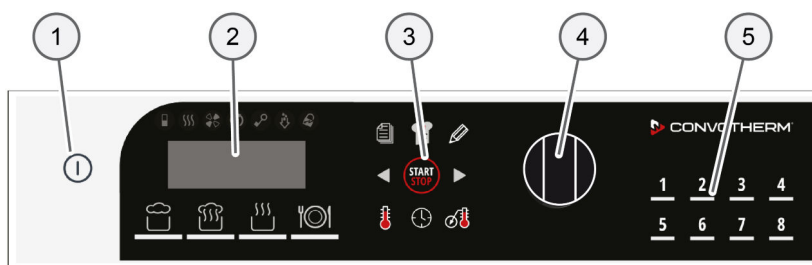
### Material

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The interior and exterior structure of the appliance is made of stainless steel.

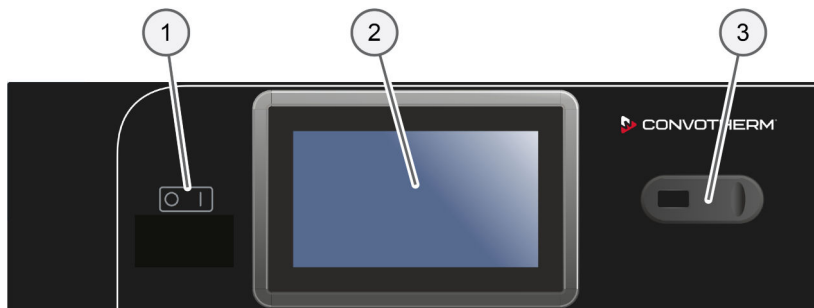
## 2.2 Layout and function of the operating panel

### Layout and elements of the operating panel (standard)



Item	Name	Function
1	ON/OFF Appliance switch	Switches the combi oven on and off
2	Display and program selection	<ul style="list-style-type: none"> <li>Shows the selected cooking program and any extra functions that have been selected</li> <li>Selects the main cooking program or the regenerating program.</li> </ul>
3	Data input	<ul style="list-style-type: none"> <li>Selects the cooking parameters to be set.</li> <li>Starts the stops the cooking program</li> </ul>
4	Tilt selector switch	Rotating the switch adjusts the cooking parameters and extra functions
5	Press&Go buttons	Buttons that can be assigned to quick selection

### Layout and elements of the operating panel (easyTouch)



Item	Name	Function
1	ON/OFF Appliance switch	Switches the combi oven on and off
2	Full touchscreen display	Central controls for appliance <ul style="list-style-type: none"> <li>Appliance operated by touching icons on the control panel (full touch screen display)</li> <li>Status displays</li> </ul>
3	USB port	For connecting a USB stick

## 3 For your safety

### Purpose of this chapter

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This chapter provides you with all the information you need in order to use the combi oven safely without putting yourself or others at risk.

**This is a particularly important chapter that you should read through carefully.**

### 3.1 Basic safety code

#### Object of this safety code

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This safety code aims to ensure that all persons who use the combi oven have a thorough knowledge of the hazards and safety precautions, and that they follow the warning notices given in the user manual and on the combi oven. If you do not follow this safety code, you risk potentially fatal injury and property damage.

#### Referring to the user manuals included in the customer documentation

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Follow the instructions below:

- Read in full the chapter 'For Your Safety' and the chapters that relate to your work.
- Always keep to hand the manuals included in the customer documentation for reference.
- Pass on the user manuals included in the customer documentation with the combi oven if it changes ownership.

#### Ground rules for installation

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Installation must comply with all national and regional laws and regulations and comply with the local regulations of the relevant utility companies and local authorities and with other relevant requirements.

#### Working with the combi oven

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Follow the instructions below:

- Only those persons who satisfy the requirements stipulated in this user manual are permitted to use the combi oven.
- Only use the combi oven for the specified use. Never, under any circumstances, use the combi oven for other purposes that may suggest themselves.
- Take all the safety precautions specified in this user manual and on the combi oven. In particular, use the prescribed personal protective equipment.
- Only stand in the working positions specified.
- Do not make any changes to the combi oven, e.g. removing parts or fitting un-approved parts. In particular, you must not disable any safety devices.

#### More on this ...

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##### Related topics

▷ Intended use of your combi oven	14
▷ Warning signs on the combi oven	15
▷ Hazards arising from the appliance	17
▷ Safety devices	19
▷ Requirements to be met by personnel, working positions	21
▷ Personal protective equipment	23

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## 3.2 Intended use of your combi oven

### Intended use

- The combi oven is designed and built solely for cooking different foodstuffs in standard-sized food containers (e.g. Gastronorm containers, standard baking trays). Steam, convection and combi-steam (non-pressurized superheated steam) are used for this purpose.
- The food containers can be made of stainless steel, ceramic, plastic, aluminium, enamelled steel or glass. Glass food containers must not exhibit any form of damage.
- The combi oven is intended solely for professional, commercial use.

### Restrictions on use

Some materials are not allowed to be heated in the combi oven:

- NO dry powder or granulated material
- NO highly flammable objects with a flash point below 270 °C, such as highly flammable oils, fats, plastics
- NO food in sealed tins or jars

### Requirements to be met by personnel

- The combi oven must only be operated and installed by personnel who satisfy specific requirements. Please refer to 'Requirements to be met by personnel, working positions' on page 21 for the training and qualifications requirements.
- Personnel must be aware of the risks and regulations associated with handling heavy loads.

### Requirements relating to the operating condition of the combi oven

- The combi oven must only be operated when all safety devices and protective equipment are fitted, in working order and fixed properly in place.
- The manufacturer regulations for operating and servicing the combi oven must be observed.
- The combi oven must not be loaded over the maximum permissible loading weight for the given model or shelf allowance; see 'Technical Data' on page 57.

### Requirements relating to the operating environment of the combi oven

#### **Specified operating environment for the combi oven**

- The ambient temperature lies between +4 °C and +35 °C
- NOT a toxic or potentially explosive atmosphere
- NEVER use or store gasoline or other flammable vapours, gases or liquids in the vicinity of a combi oven
- A dry kitchen floor to reduce the risk of accidents

#### **Specified properties of the installation location**

- NO fire alarm, NO sprinkler system directly above the appliance
- NO flammable materials, gases or liquids above, on, beneath or in the vicinity of the appliance

#### **Mandatory restrictions on use**

- Shelter from rain and wind must be provided if operated outdoors
- Appliance must NOT be shifted or moved during use

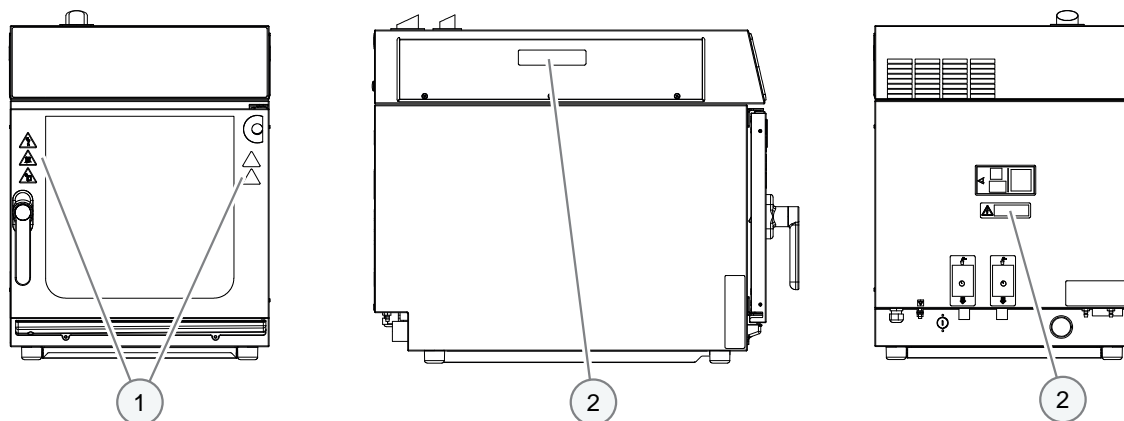
### Cleaning requirements

- Use only cleaning agents that have been approved by the manufacturer.
- Use only materials specified by the manufacturer for cleaning; please refer to the 'Cleaning instructions' in the User manual.
- High-pressure cleaners must NOT be used for cleaning.
- Water spray or jets must NOT be used for cleaning the exterior. Use of an external water spray is permitted solely for cleaning the cooking chamber.
- The combi oven must NOT be treated with acids or exposed to acid fumes, except for the purpose of descaling the cooking chamber by an authorized service company in accordance with the manufacturer's instructions.

### 3.3 Warning signs on the combi oven






#### Positioning of warning signs

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:




#### Warnings on the appliance door

Warning signs (1) on the appliance door:

Warning sign	Description
	<p>Warning of hot food, hot food containers and hot liquids</p> <p>There is a risk of burns from hot food and hot food containers if food containers tip out of the shelf levels or food slips off food containers that are not held level. This risk is particularly high for shelf levels that lie above the sightline of the user.</p> <p>Spillage of hot liquid foods can result in scalds if the upper shelf levels are loaded with liquids or foods that produce liquid during cooking. Do not use shelf levels that lie above your sightline for liquid foodstuffs or food that will liquefy during cooking.</p>
	<p><b>Only for ConvoClean / ConvoClean+ option</b></p> <p>Warning of corrosive cleaning agents injected into oven</p> <p>There is a risk of chemical burns or irritation to skin, eyes and respiratory system from contact with sprayed cleaning agents and their vapours if the appliance door is opened during fully automatic cleaning (ConvoClean system).</p>
	<p>Hot steam and vapour hazard warning</p> <p>There is a risk of scalding from hot steam and vapour escaping when the appliance door is opened.</p>
	<p>Tipping or toppling warning for combi oven</p> <p>There is a risk of the combi oven toppling over if moved. Always take great care when moving the combi oven.</p>
	<p>Damage or detachment warning for appliance connections</p> <p>There is a risk of the appliance connections being damaged or detached if the combi oven is moved. Always ensure there is enough length in the supply cables and pipes when moving the combi oven.</p>

#### Warning signs on the combi oven case

Warning signs (2) on the combi oven case:

Warning sign	Description
	<p>High voltage / electric shock hazard warning</p> <p>There is a risk of electric shock from live parts if the safety cover is opened.</p>

## 3.4 Owner obligations

### Personnel for working at the combi oven

The owner must ensure that all work relating to conveying, setting up and installing the appliance, and taking the appliance out of service, is performed solely by qualified personnel as specified in 'Requirements to be met by personnel, working positions' on page 21.

### Personnel for working on electrical parts

The owner/operator must ensure that only qualified electricians carry out installation, putting into service, servicing, maintenance or repair work on the combi oven.

Electrical installation, putting into service, servicing, maintenance, repair and testing work on the combi ovens must be carried out solely by authorized service representatives and in accordance with the documentation specified by Convotherm for initial start-up, servicing, maintenance and repair.

The required tasks must be performed solely by qualified electricians who are suited to do so because of their training and recent professional experience and who have the requisite knowledge of relevant standards, rules and accident prevention regulations.

Every qualified electrician who carries out installation, initial start-up, service, maintenance or repair work must have read and understood the installation manual.

### Rules for working on electrical parts

The combi oven's electrical connection must be made in accordance with the respective valid regulations, accepted engineering standards and the procedures listed in the installation manual.

Before putting the appliance into service and after any servicing, maintenance or repair work, electrical safeguards and all protective equipment (mechanical and electrical) must be checked for compliance and proper function, and, if stipulated by applicable regulations, relevant measurement-based verification and documentation provided.

Before starting any work, the appliance must be disconnected from the power supply, protected against being switched on again, and checked to verify that it is actually de-energized.

After de-energization has been ascertained, a waiting time of at least 15 minutes is mandatory to allow full discharge of the DC bus capacitors.

To ensure operational and functional safety, all electrical connections must be checked and all mandatory electrical tests required for putting the appliance into service and operating the appliance must be carried out.

### Cybersecurity

The owner must ensure that the measures they take in order to ensure cybersecurity are always up to date with the latest developments.



## 3.5 Hazards arising from the appliance

### General rules for working with the appliance

The combi oven is designed to protect the user from all hazards that can reasonably be avoided by design measures.

The actual purpose of the combi oven, however, means that there are still residual risks; you must therefore take precautions to avoid them. A safety device can provide you with a certain degree of protection against some of these hazards. You must always ensure, however, that these safety devices are in place and in working order.

The nature of these residual risks and what effect they have are described below.

### Moving heavy loads

When conveying and setting up the appliance, the following hazards can arise when moving heavy loads:



#### **Risk of injury from overexerting your body**

When?

- When moving or lifting the appliance

How can I avoid the hazard?

- ▷ Use a forklift truck or pallet truck to place the appliance in the installation position or to move it to a new position
- ▷ When adjusting the appliance position, always use the correct number of persons and observe the limits specified for lifting and carrying (guide value: 15 to 55 kg max., depending on age and gender)
- ▷ Observe the local occupational safety regulations
- ▷ Wear personal protective equipment

### Loss of stability of appliance

When conveying and setting up the appliance, the following hazards can arise when moving the appliance:



#### **Risk of body parts being crushed if the appliance is dropped**

When?

- When moving or lifting the appliance

How can I avoid the hazard?

- ▷ Use suitable handling gear
- ▷ Move the appliance slowly and carefully, and secure it against tipping over
- ▷ Be aware of the centre of gravity to keep the appliance balanced
- ▷ Avoid jolts

#### Live parts

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The following hazards can arise at the appliance when performing any installation work:



##### **Risk of electric shock from live parts**

Where?

- Under covers
- Under the operating panel
- On the mains power lead

How can I avoid the hazard?

- ▷ Switch off all connections to the power supply
- ▷ Take protective measures at every power switch to ensure that the power cannot be switched on again
- ▷ Wait 15 minutes to allow the DC bus capacitors to discharge
- ▷ Ensure that all electrical connections are in perfect condition and fixed securely
- ▷ Make sure that the statutory safety checks have been carried out.

#### Contact with cleaning agents

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The following hazards can arise at the appliance when performing any installation work:



##### **Risk of chemical burns or irritation to skin, eyes and respiratory system from contact with cleaning agents and their fumes**

When?

- When fitting the cleaning system
- When handling cleaning-fluid canisters
- When abrasive cleaning products are used

How can I avoid the hazard?

- ▷ Wear personal protective equipment
- ▷ Observe the labels on the cleaning agents and the relevant safety datasheets
- ▷ Always use the specified cleaning products

#### General hazards

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Over and above the hazards mentioned here, also be aware of the general dangers associated with the kitchen environment; please refer to the chapter 'For your safety' in the User manual.

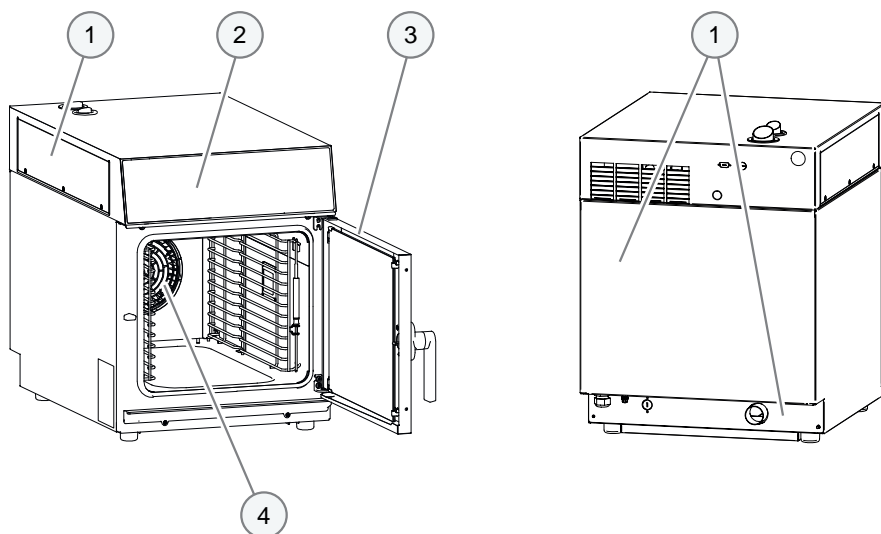
## 3.6 Safety devices

### Meaning

The combi oven has a number of safety devices to protect the user from hazards. It is absolutely essential that all safety devices are fitted, secured correctly and in working order when operating the combi oven.

### Position and function

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:



Item	Protective device	Function	Check
1	Covers can only be removed using a tool	<ul style="list-style-type: none"> <li>Prevents live parts from being touched accidentally</li> <li>Prevents access to the moving fan from the wiring compartment</li> </ul>	Check that the covers are in place
2	Operating panel can only be removed using a tool	Prevents live parts from being touched accidentally	Ensure that the operating panel is in place
3	Appliance door	Protects the user and outside environment from hot steam	Check regularly for scratches, cracks, indentations etc. and replace door if any are found
4	Suction panel in cooking chamber; can only be removed using a tool	Prevents access to the moving fan and ensures good heat distribution	See 'Releasing and securing the suction panel' in the user manual

Item	Protective device	Function	Check
<b>5</b> (no picture)	Safety thermostat for cooking chamber	Switches off the appliance if temperature too high	An error code is output in the event of a fault (Please contact an authorized service company to reset the safety thermostat)
<b>6</b> (installed by customer)	Disconnecter	<ul style="list-style-type: none"> <li>Installed by the customer close to the appliance; easily visible and accessible, all-pole action, minimum contact separation 3 mm</li> <li>Used to disconnect the appliance from the power supply during cleaning, repair and servicing work and in a hazardous situation</li> </ul>	<b>Action:</b> <ul style="list-style-type: none"> <li>Trip the disconnecter</li> <li>Make sure that there is no live voltage at the mains supply connecting terminals</li> </ul>

### Safety measures

The following measures increase the safety additionally:

Measure	Function	Check
Magnetic switch for appliance door (electric door sensor)	<ul style="list-style-type: none"> <li>When the appliance door is opened, the switch stops: <ul style="list-style-type: none"> <li>rotation of the fan wheel (comes to a stop after a few seconds)</li> <li>operation of the heating element</li> </ul> </li> <li>Distribution of the cleaning agents by the fully automatic oven cleaning system</li> <li>Prompt to close the appliance door</li> </ul>	Check magnetic door switch at low temperature <b>Action:</b> <ul style="list-style-type: none"> <li>Open the appliance door fully</li> <li>Press Start</li> </ul> <b>Result:</b> Motor must not start up.
Appliance door handle with venting position (optional)	<ul style="list-style-type: none"> <li>Prevents scalding of user's face and hands from escaping steam</li> </ul>	When appliance is at low temperature, check door positions as described in 'Opening and closing the appliance door safely' in the user manual
Door holder (marine model only)	Fixes the appliance door so that it cannot close accidentally	Check that the door holder keeps the appliance door open.
Restart after power failure in case cleaning agent was left in the appliance	<ul style="list-style-type: none"> <li>Restarts fully automatic oven cleaning in a defined state after power failure</li> </ul>	None

### 3.7 Requirements to be met by personnel, working positions

#### Requirements to be met by personnel

The table shows the skills required to perform the specified roles. One person may perform more than one role depending on need and organization of work, provided this person has the skills required for the role concerned.

Role	Skills required	Tasks
Owner of the combi oven or owner's member of staff who is responsible for the appliance and for the operating personnel	Knows the regulations associated with handling heavy loads	<ul style="list-style-type: none"> <li>As the representative for the entire team of operating personnel, is made aware of all safety-related functions and devices of the combi oven by the start-up engineer</li> <li>As the representative for the entire team of operating personnel, is instructed by the start-up engineer on how to operate the appliance</li> <li>Provides assistance as instructed with conveying the appliance within the establishment and setting up the appliance.</li> </ul>
Equipment mover	<ul style="list-style-type: none"> <li>Trained in the use of a pallet truck and forklift truck</li> <li>Knows the regulations associated with handling heavy loads</li> </ul>	Conveying within the establishment
Service engineer	<ul style="list-style-type: none"> <li>Is an employee of an authorized service company</li> <li>Has relevant technical training</li> <li>Is trained in the particular appliance</li> <li>Knows the regulations associated with handling heavy loads</li> <li>Can assess whether the electrical, water supplies and the wastewater system have been connected correctly.</li> </ul>	<ul style="list-style-type: none"> <li>Setting up the appliance</li> <li>Installing the fully automatic oven cleaning system (optional)</li> <li>Putting the appliance into service</li> <li>Removing the appliance from service</li> </ul>
Electrical installation engineer	<ul style="list-style-type: none"> <li>Is an employee of an authorized service company</li> <li>Has relevant professional training</li> <li>Is a qualified electrician and knows the applicable technical standards</li> </ul>	<ul style="list-style-type: none"> <li>Connecting the appliance to the building's electrical supply</li> <li>Disconnecting the electrical connection</li> </ul>
Plumber	<ul style="list-style-type: none"> <li>Is an employee of an authorized service company</li> <li>Has relevant professional training</li> </ul>	<ul style="list-style-type: none"> <li>Connecting the appliance to the building's water supply</li> <li>Disconnecting the water connection</li> <li>Connecting the appliance to the building's drain connection</li> <li>Disconnecting the drain connection</li> </ul>
Start-up engineer (Service engineer)	<ul style="list-style-type: none"> <li>Is an employee of an authorized service company who has overall responsibility for preparing the combi oven for first-time use</li> <li>Has relevant technical training</li> <li>Is trained in the particular appliance</li> <li>Knows the regulations associated with handling heavy loads</li> <li>Can assess whether the connections to the electrical supply, water and wastewater system have been installed correctly, and knows the applicable technical standards.</li> </ul>	<ul style="list-style-type: none"> <li>Instructing the owner and/or member of staff with relevant responsibility</li> <li>Checking the work procedures and status values against the check-lists</li> </ul>

**Working positions when installing the appliance and putting the appliance into service**

The working position for personnel installing the appliance and putting the appliance into service is the entire appliance area.

## 3.8 Personal protective equipment

### Moving and setting up the appliance

Activity	Materials used	Personal protective equipment
<ul style="list-style-type: none"><li>▪ Conveying within the establishment</li><li>▪ Setting up the appliance on a work surface, stand, ship oven stand or in a stacking kit</li><li>▪ Setting up the appliance in the installation location</li></ul>	<ul style="list-style-type: none"><li>▪ Suitable lifting gear</li><li>▪ Lifting straps (for size 10.10 mini)</li></ul>	<ul style="list-style-type: none"><li>▪ Protective gloves</li><li>▪ Safety boots</li><li>▪ Hard hat (e.g. when heavy loads are being lifted, working overhead,...)</li></ul>

### Installation, putting into service and removal from service

Activity	Materials used	Personal protective equipment
Installing and removing (from service) the <ul style="list-style-type: none"><li>▪ Electrical connection</li><li>▪ Water connection</li><li>▪ Drain connection</li></ul>	Tools and equipment depend on the task	Work wear and personal protective equipment depending on the job that needs doing as specified in national regulations
Fitting and removing the fully automatic oven cleaning system (optional)	Tools and equipment depend on the task	Items of protection equipment, depending on cleaning agent being used: <ul style="list-style-type: none"><li>▪ Breathing mask</li><li>▪ Safety goggles</li><li>▪ Protective gloves</li><li>▪ Protective clothing/apron</li></ul> The EC safety datasheet for the relevant cleaning agent contains a more precise specification of these items. An up-to-date copy can be obtained from the manufacturer. Refer to the label on the cleaning agent concerned.
<ul style="list-style-type: none"><li>▪ Putting the appliance into service</li><li>▪ Instructing the user</li></ul>	Tools and equipment depend on the task	Work wear as specified in country-specific standards and directives (BGR 111 in Germany) for kitchen work, in particular: <ul style="list-style-type: none"><li>▪ Protective clothing</li><li>▪ Heat protective gloves (compliant with EN 407 in European Union)</li><li>▪ Safety boots</li></ul>
Dismantling the appliance (removal from service)	<ul style="list-style-type: none"><li>▪ Lifting straps</li><li>▪ Suitable lifting gear</li><li>▪ Forklift truck or pallet truck</li></ul>	<ul style="list-style-type: none"><li>▪ Protective gloves</li><li>▪ Safety boots</li><li>▪ Hard hat (e.g. when heavy loads are being lifted, working overhead,...)</li></ul>

## 4 Transportation

### 4.1 Conveying the appliance to the installation location

#### Space required for conveying the appliance

Make sure that there is enough width and height along the entire route used for conveying the appliance to ensure it can get through to its installation location.

The table below shows the dimensions of the appliances including packaging, which are needed to determine the minimum doorway dimensions required to allow the appliance to be brought to its installation location:

		6.06 mini	6.10 mini	10.10 mini
Width	[mm]	580	580	580
Height	[mm]	850	850	1085
Height (marine model)	[mm]	955	955	1225
Depth	[mm]	740	910	910

#### Load bearing capability for conveying the appliance

Provide moving equipment that is rated capable of carrying the load.

Refer to the weight of the appliance including packaging to determine the minimum working load limit of handling equipment; see 'Dimensions and weights' 'Technical data' on page 57.

#### Conveying the appliance to the installation location for the first time

Please observe the following points when conveying the appliance:

- Always move the appliance on a pallet.
- Always move the appliance in an upright position.
- Move the appliance slowly and carefully, and secure it against tipping over.  
Make sure that you do not knock against things with the appliance.  
Avoid moving appliance along uneven routes or up or down steep slopes.

**For size 10.10 mini appliances the following also applies:**

- Use a forklift truck or pallet truck to lift the appliance.

### 4.2 Preparing to unpack

#### Preparing to unpack

Perform the following tasks before unpacking the appliance:

- Check the outer packaging for damage.
- Take the unpacking instruction leaflet out of the shipping documents.



## 4.3 Scope of delivery

### Appliance and Accessories

---

The following parts are supplied:

- 1x combi oven
- 1x left-hand rack
- 1x right-hand rack
- 1x empty canister (10 litres) for cleaning agent (optional)

### Documentation

---

The following documents are supplied with the appliance:

- 1x Installation manual
- 1x User manual (hardware)
- 1x Operating instructions (software)
- 1x Unpacking instruction leaflet
- 1x Checklist for installation and putting into service

## 5 Setting up the appliance

### 5.1 Adjacent systems

#### Dealing with the discharged air

During operation, the combi oven generates heat and moisture, which mainly escape upwards into the surrounding air as hot vapour from the air vent. It is not permitted to connect air ventilation pipes directly to the air vent of the combi oven.

The manufacturer recommends using a fume extractor hood or ceiling-fitted ventilation equipment to extract the discharged air from the room in which the combi oven is operating.

In order to avoid the risk of fire or other damage to the building such as corrosion, mould growth and/or reduced stability, there must be a sufficiently large distance between the top of the appliance and the ceiling. This distance depends on the following factors:

- For guidance on the minimum vertical clearance, see 'Requirements for the installation location' on page 27
- Type of air-vent system
- the nature of the ceiling in the installation location

It is a fundamental requirement that the combi oven is always set up, installed and operated in accordance with national and local standards and regulations (in the latest version).

In the German-speaking market area, observe the following in addition to others:

- VDI Directive 2052 'Air ventilation system for kitchens'
- Guidance from the local building authority for fume extraction systems

## 5.2 Requirements for the installation location

### Meaning

---

This section contains information to help you choose a suitable installation location for the appliance. Inspect the intended installation location carefully to ensure it is suitable before bringing the appliance there and starting the installation.

### Regulations for setting up the appliance

---

National, regional and local standards and regulations relating to workplaces in professional kitchens must be observed.

For appliances with NSF certification, the National Sanitation Foundation (NSF) regulations must also be observed.

The rules and regulations of the regional authorities and supply companies that apply to the installation site concerned must be observed.

### Rules for setting up the appliance safely

---

To prevent hazards that arise from the installation site and environment of the appliances, the following rules must be observed:

- Compliance with the operating conditions must be possible. For operating conditions, see 'Requirements relating to the operating environment of the combi oven' on page 14.
- There is a fire hazard from the dissipated heat from hot surfaces. Therefore there must not be any flammable materials, gases or liquids above, on, beneath or in the vicinity of the appliance. When choosing where to install the appliance it is essential to remember this requirement together with the information in the topic 'Adjacent systems' on page 26 and the minimum space required for the appliance.
- Heat sources in the vicinity must lie at a minimum distance of 500 mm.
- Deep-fat fryers or appliances that use hot, uncovered fat that are located in the vicinity must lie at a minimum distance of 1.00 m. The appliance must be installed so that there is absolutely no possibility that liquid from the appliance or liquid coming from cooking processes can reach deep-fat fryers or appliances that use hot, uncovered fat. An appliance fixed on a wall bracket must not be installed above a deep-fat fryer, an appliance that uses hot, uncovered fat or an electrical appliance.
- Do not install the appliance directly under a fire alarm or sprinkler system. Fire alarm installations and sprinkler systems must be set up to handle the level of steam and vapour expected to escape from the appliance.
- For the standard model of the appliance, it must be possible to set up the supporting structure for the appliance (work surface, stand or stacking kit) at the installation site in such a way that the appliance cannot tip over or shift.
- For the marine model of the appliance, the supporting surface must comply with requirements. The marine model of the appliance must be fixed in the installation position by the correct accessories.
- The standard model of the appliance must not be used in environments in which it could be subject to strong vibrations or mechanical shock (e.g. on vehicles or ships).
- The only appliance model permitted for use on ships is the marine model. This model of appliance must be screwed or welded to the floor using the appropriate parts and must never be used with wheeled stands or wheeled stacking kits.

### Requirements for the flooring

---

The subfloor must have the following properties:

- The supporting surface must be flat and horizontal.
- The supporting surface must be able to bear the weight of the appliance.
- The worktop or stand must have a load bearing capacity that is equal to the empty weight plus the maximum permissible load.

The appliance weight depends on the model and fitted equipment and is made up of the following values:

- Weight of your combi oven when empty
- Maximum permissible loading weight
- Maximum weight of cleaning agent (for ConvoClean / ConvoClean+ option)
- Weight of stand or worktable
- Weight of ship oven stand (for marine model)

Add up the following individual weights to find the total appliance weight:

		6.06 mini	6.10 mini	10.10 mini
Individual weights				
Weight of combi oven when empty	[kg]	See weight excluding packaging in 'Technical data' on page 57		
Maximum permissible loading weight	[kg]	13	20	30
Maximum weight of cleaning agents	[kg]	20	20	20
Weight of stand or ship oven stand	[kg]	See weight of stand or ship oven stand in 'Technical data' on page 57		

### Requirements when fixing to the wall by a wall bracket (6.06/6.10 mini)

---

When a wall bracket is used to fix the appliance, it must only be fitted to a load-bearing wall with a suitable construction.

### Actual space requirements

---

Far more room than the specified space requirement is needed in front of the appliances to operate the combi ovens safely, in particular to handle hot food safely.

For the distance that is actually needed between the top of the combi oven and the ceiling, please refer to the topic 'Adjacent systems' on page 26

Larger wall gaps are generally recommended to provide access for servicing.

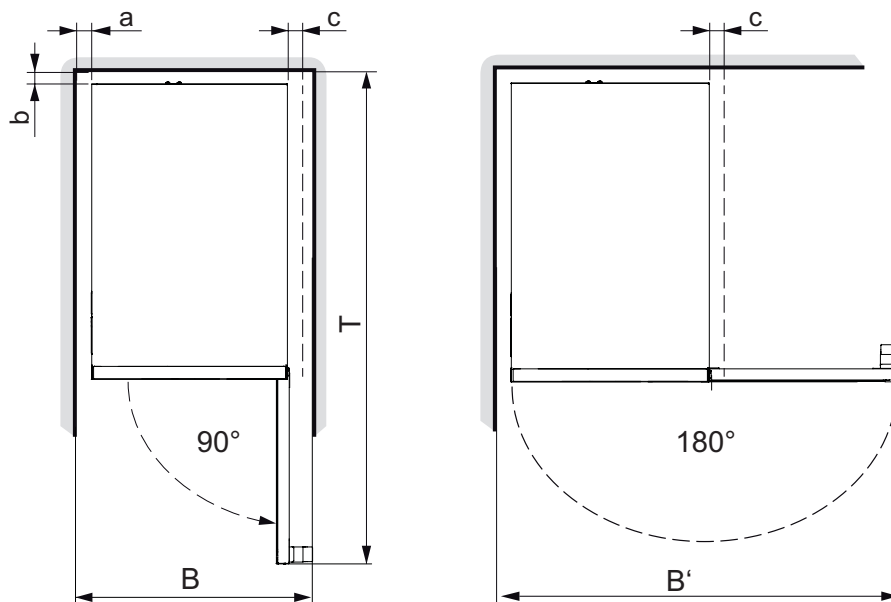
In the installation location, the following parts must not be covered, obstructed or blocked (see also 'Design and function of the combi oven' on page 9):

- Air vent on the top of the appliance
- Ventilation port on the top of the appliance
- Ventilation slots on the rear of the appliance
- Hole between the front appliance feet

### Space required - width and depth

The following diagram and table show the space required for the appliance for different installation and operating situations. They also show the minimum horizontal distances from adjacent walls and surfaces. The safety clearances on the left, right and rear must always be complied with.

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:

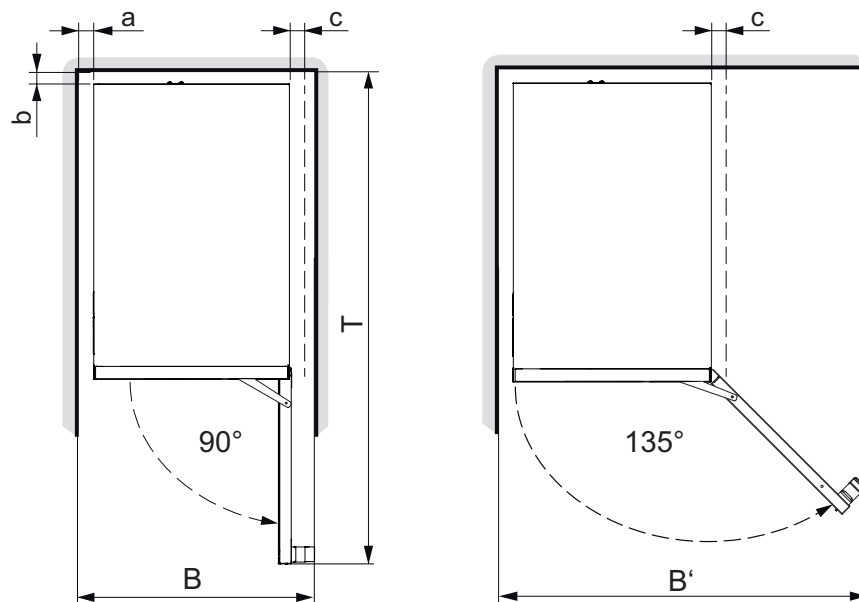


			6.06 mini	6.10 mini	10.10 mini
	<b>Meaning</b>				
B	Width requirement, appliance door open at 90°	[mm]	633	633	633
B'	Width requirement, appliance door open at 180°	[mm]	1055	1055	1055
T	Depth requirement when opening the appliance door	[mm]	1137	1315	1315
a	Safety clearance on left-hand side	[mm]	50	50	50
b	Safety clearance at rear	[mm]	50	50	50
c	Safety clearance on right-hand side	[mm]	50	50	50

### Space required - width and depth (marine model)

The following diagram and table show the space required for the appliance for different installation and operating situations. They also show the minimum horizontal distances from adjacent walls and surfaces. The safety clearances on the left, right and rear must always be complied with.

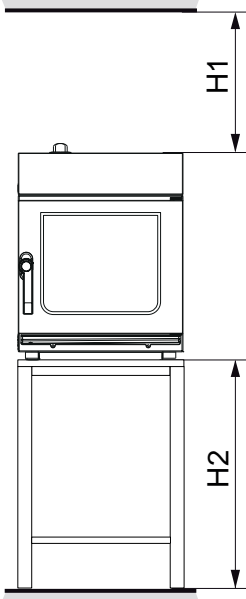
The following illustration shows a size 6.10 mini combi oven as an example for all appliances:



			6.06 mini	6.10 mini	10.10 mini
	<b>Meaning</b>				
B	Width requirement, appliance door open at 90°	[mm]	633	633	633
B'	Width requirement, appliance door open at 135°	[mm]	961	961	961
T	Depth requirement when opening the appliance door	[mm]	1137	1315	1315
a	Safety clearance on left-hand side	[mm]	50	50	50
b	Safety clearance at rear	[mm]	50	50	50
c	Safety clearance on right-hand side	[mm]	50	50	50

Height requirement

The graphic shows a size 6.10 mini combi oven as an example for all appliances:



The service engineer who is responsible for setting up the appliance must take into account the nature of the ceiling and any adjacent systems that may be used (air ventilation system, vapour extractor hood etc.) when designing the particular clearance needed between the top of the appliance and the ceiling. In this context, the vertical distance H1 must be understood as a guide value for the minimum vertical clearance.

Meaning			
H1	Guide value for the minimum vertical clearance	[mm]	500
H2	Installation height	[mm]	700 - 900

The top shelf must not sit at a height greater than 1.60 m.

This requirement is met when the appliance is installed on a ship oven stand from the manufacturer. See 'Dimensions and weights of stand' on page 58.

### 5.3 Taking the appliance off the pallet (10.10 mini)

#### **⚠ Rules for lifting the appliance safely**

Observe the following rules to prevent the appliance toppling over:

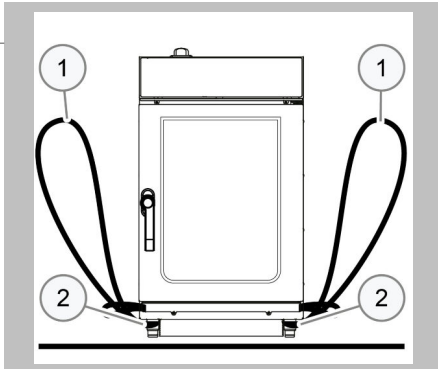
- Always lift the appliance carefully and secure it against tipping over.
- Be aware of the centre of gravity to keep the appliance balanced.

#### **Using lifting straps to take the appliance off the pallet**

The weight of your appliance is given under 'Technical data' on page 57.

1.

2.



Attach the lifting straps (1) to the appliance feet (2).

Lift the appliance carefully off the pallet.



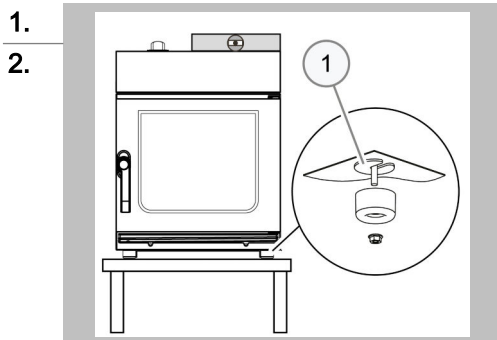
## 5.4 Setting up the appliance on a worktable

### **⚠ Rules for setting up the appliance safely**

Observe the following rules to ensure that the appliance is installed in a stable situation:

- It must be possible to set up the worktable in the installation position so that it cannot tip over or slide about. The subfloor must satisfy relevant requirements.
- The appliance must be installed on the worktable worktop so that it cannot tip over or slide about.

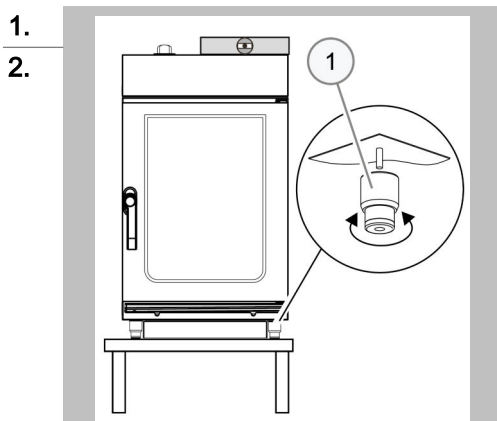
### **Setting up the appliance on a worktable (6.06/6.10 mini)**



Position the appliance on the worktable.

Ensure the appliance is horizontal using the supplied shims (1).  
Use a spirit level to ensure the unit is horizontal in all directions.

### **Setting up the appliance on a worktable (10.10 mini)**



Position the appliance on the worktable.

Ensure the appliance is horizontal by adjusting the height of the appliance feet (1).  
Use a spirit level to ensure the unit is horizontal in all directions.

## 5.5 Setting up the appliance on a stand

### **⚠ Rules for setting up the appliance safely**

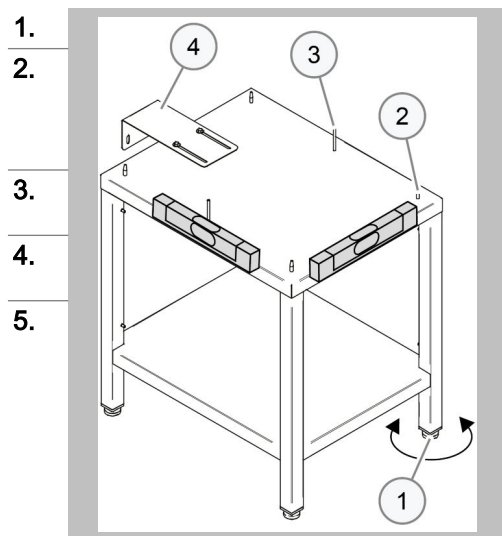
Observe the following rules to ensure that the appliance is installed in a stable situation:

- The stand for the appliance must be fixed so that it cannot tip over when subject to a one-sided load - e.g. appliance door is open.
- It must be possible to set up the stand in the installation position so that it cannot tip over or slide about. The subfloor must satisfy relevant requirements.

The following rules must be observed to meet hygiene standards:

- For stands that contain shelf levels for food containers, the top cover must be fitted on the stand to prevent dirt getting onto any food held temporarily in the stand.

### **Installing appliance on stand with wall bracket**



Position the appliance on the stand

Ensure the stand is horizontal by adjusting the height of the feet (1).

Use a spirit level to ensure the unit is horizontal in all directions.

Locate the appliance feet in the receptacles on the stand (2).

Screw the appliance onto the stand using the screws supplied (3).

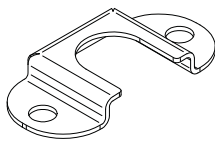
Use the wall bracket (4) to fix the stand and the appliance so that they cannot tip over.

### **Installing appliance on stand with floor attachment**

If it not possible to fix the stand to the wall, the stand can be ordered from the manufacturer with a floor attachment instead.

Observe local regulations on the floor condition for this purpose.

The following diagram shows the floor attachment part:



## 5.6 Fitting appliance to the wall (6.06 mini/6.10 mini)

### **⚠ Rules for setting up the appliance safely**

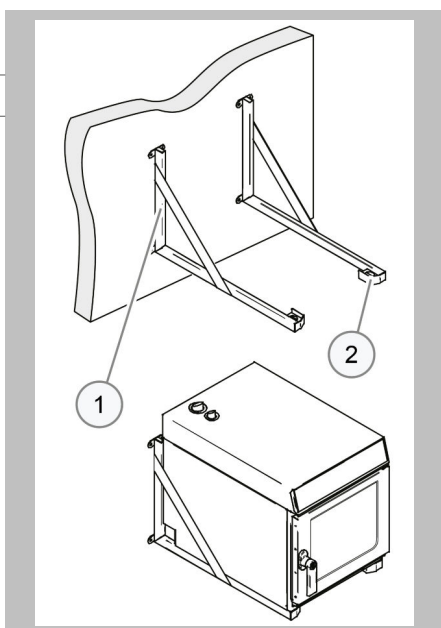
Observe the following rule to ensure that the appliance is stable when fitted to the wall:

- When a wall bracket is used to fix the appliance, it must only be fitted to a load-bearing wall with a suitable construction.
- The appliance in the wall bracket must not be mounted above a counter surface to avoid any contamination of the foods on the counter.
- To prevent scalding or electrical short-circuits, the appliance in the wall bracket must not be mounted above a deep fat fryer or any appliance using hot, uncovered fat or above an electrical appliance.

### **Fitting appliance to the wall with wall bracket (6.06 mini/6.10 mini)**

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:

- 1.
- 2.
- 3.



Fix the wall bracket (1) to the wall using the enclosed screws.

Lift the appliance into the wall bracket.

Locate and engage the appliance feet in the receptacles (2) on the wall bracket.

## 5.7 Installing the appliances in a stacking kit

### **Rules for installing the appliances safely in the stacking kit**

---

Observe the following rules to ensure that the stacking kit fitted with appliances is stable:

- It is only permitted to fit appliances of similar weight in the top and bottom of the stacking kit.
- The stacking kit must never contain an appliance only in the top half.
- It must be possible to set up the stacking kit in the installation position so that it cannot tip over or slide about. The subfloor must satisfy relevant requirements.

### **Installing the appliances in the stacking kit**

Fit and install the appliances in the stacking kit in accordance with the separate fitting and installation instructions.

## 5.8 Setting up the appliance (marine model)

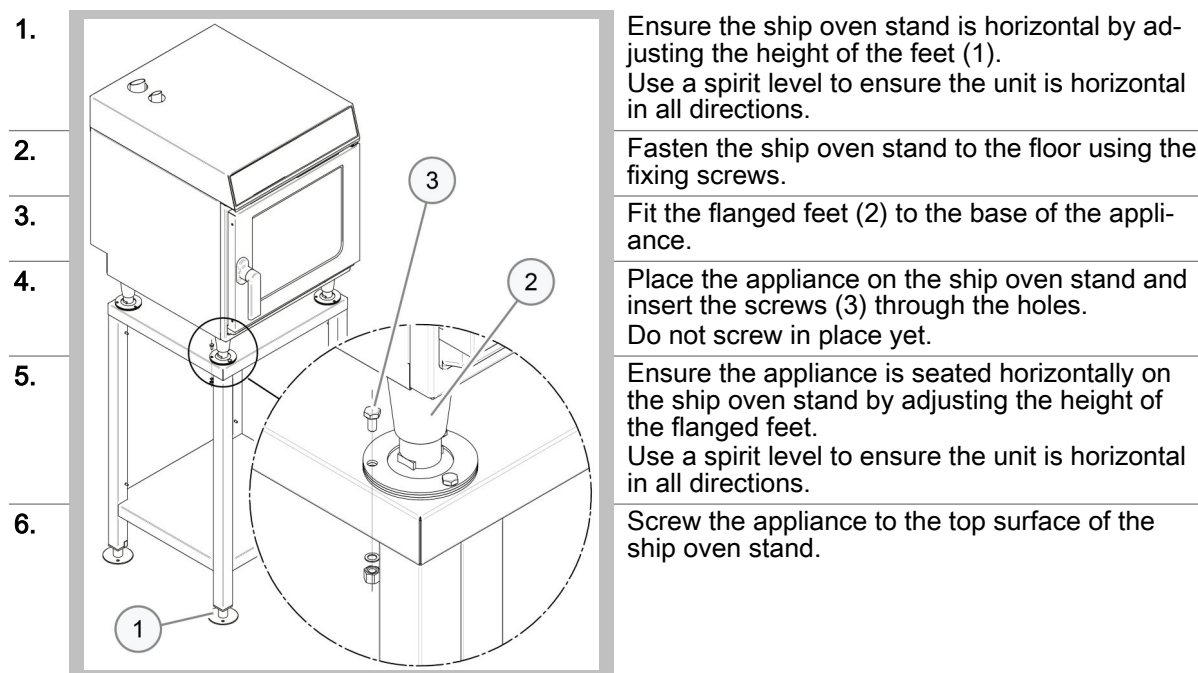
### **⚠ Rules for setting up the appliance safely**

Observe the following rules to ensure that the appliance is installed in a stable situation:

- The appliance must be screwed to a ship oven stand using the appropriate accessory.
- The ship oven stand must be screwed to the floor in the installation position using the appropriate accessory.

### **Setting up and fixing the appliance in place on a ship oven stand**

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:



## 6 Installation

### 6.1 Electrical installation

#### 6.1.1 Planning the electrical installation

##### Meaning

---

It is crucial to the safe and reliable operation of the appliance that the electrical system is installed carefully and correctly. All the rules and regulations listed here, and the described procedure, must be strictly followed.

##### Rules for safe electrical installation of the appliances

---

Observe the following rules to prevent hazards caused by faulty electrical connections:

- The case of the appliance must be grounded and connected to the protective equipotential bonding system in accordance with the recognized codes of practice.
- If two appliances are installed in a stacking kit, each of the appliance cases and the stacking kit itself must be grounded and connected to the protective equipotential bonding system in accordance with the recognized codes of practice.
- All electrical cables and connections must be checked when the appliance is put into service to ensure cables are laid correctly and connections are made properly.

##### Regulations for the electrical installation

---

Observe the following requirements to prevent hazards caused by faulty electrical connections:

- The electrical supply must be connected in accordance with German VDE requirements 0100 and/or with applicable local regulations of the professional associations and of the relevant utility.

##### Equipment provided by customer and electrical installation regulations

---

The table below shows what equipment must be provided by the customer and what regulations must be observed when connecting the appliance.

Equipment	Rules
Fuse	Short-circuit & overload protection and connection of the appliance must comply with local regulations and national installation requirements.
Protective equipotential bonding system	The appliance must be incorporated in a protective equipotential bonding system. If two appliances are installed in a stacking kit, each of the appliance cases and the stacking kit itself must be connected to the protective equipotential bonding system. Equipotential bonding: Electrical connection that ensures that the frames of electrical equipment and any external conductive components are at an equal (or practically equal) potential.
Residual-current device for detecting all current types (type B)	If the installation regulations require protection by a residual-current device (RCD), then suitable residual-current devices meeting the relevant national regulations must be used. If the installation includes more than one appliance, one residual-current device must be provided for each appliance.
Disconnecter for fixed connection	An easily accessible all-pole disconnector with a minimum contact separation of 3 mm must be installed close to the appliance. The appliance must be connected after this disconnector. The disconnector is used to disconnect the appliance from the electrical supply for cleaning, maintenance, servicing and repair work.

##### Mains supply connection

---

The power cord must be an oil-resistant, sheathed and flexible cable in accordance with IEC 60245 (e.g. H05RN-F, H07RN-F). A maximum cable length of 5 m is recommended.

The appliance does not need to be connected in a specific phase configuration or direction of rotation. The cross-section of the mains supply cable must be specified in accordance with the recognized codes of practice.

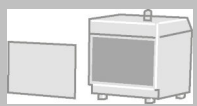

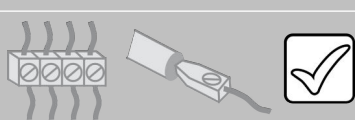
## 6.1.2 Carrying out the electrical installation

### Requirements

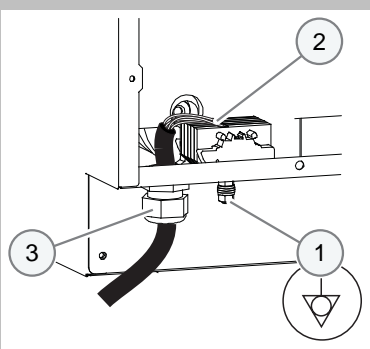
Check that the following requirement has been met:

- The connection point of the appliance is disconnected from the customer power supply and protective measures taken to ensure the power cannot be switched on again.

### Checking the supply ratings and electrical connections

- |    |   |   |
|----|---|---|
| 1. |  | Remove the rear panel from the appliance.<br>The circuit diagram and spare parts list are located in the wiring compartment.  |
| 2. |  | Check that the electrical supply ratings on the type plate (see 'Identifying your combi oven' on page 6) match the figures for the building's power supply and those given in the circuit diagram. It is only permitted to connect the appliance if all these values tally with each other. |
| 3. |  | Check all screw connections and terminals on the appliance.<br>The connections may have worked loose during transport.  |

### Carrying out the electrical installation

- |    |   |  |
|----|---|--|
| 1. |  | Remove the rear panel from the appliance.  |
| 2. |   | Connect the appliance to a protective equipotential bonding system at the designated connection point (1). |
| 3. |   | Use the mains power cable to connect the power supply to the appliance at the -X10 terminal block (2).     |
| 4. |   | Make sure that the cable gland (3) is tightened firmly because it also acts as a cable strain relief.      |
| 5. |   | Reset the safety thermostat for the cooking chamber if necessary.  |
| 6. |   | Fit the rear panel on the appliance and check that it is fixed correctly in place.                         |



### 6.1.3 Converting the electrical supply to a single-phase supply (6.06 mini)

#### Objective

To convert the electrical supply from 3N~ 400V 50/60Hz (3/N/PE) to 1N~ 230V 50/60 Hz (1/N/PE).

#### Requirements

Check that the following requirement has been met:

- The connection point of the appliance is disconnected from the customer power supply and protective measures taken to ensure the power cannot be switched on again.

#### Converting to a single-phase supply (1N~ 230V)

1.		Insert the jumper as shown in the circuit diagram (page 2).
2.	1N~ 230V 50/60 Hz 3,0kW 13,1A	Stick the relevant label on the type plate.
3.		After conversion, the injection times for the steam generator must be corrected. Contact an authorized service company or the manufacturer about correcting the relevant operating parameters.

#### Service values for the moisture setting (standard)

Service item	Description	3N~ 400 V 50/60 Hz (3/N/PE)	1N~ 230 V 50/60 Hz (1/N/PE)
c07	Moisture D	25 sec	14 sec
c08	Moisture HD	12 sec	6 sec
c09	Moisture Quick	12 sec	6 sec

#### Service values for the moisture setting (easyTouch)

ID	Description	3N~ 400 V 50/60 Hz (3/N/PE)	1N~ 230 V 50/60 Hz (1/N/PE)
13	Quick-steam	12 sec	6 sec
14	Steaming	25 sec	14 sec
15	Combi-steam	12 sec	6 sec

### 6.1.4 Converting the electrical supply to a three-phase supply (6.06/6.10 mini)

#### Objective

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To convert the electrical supply from 3N~ 400V 50/60Hz (3/N/PE) to 3~ 230V 50/60Hz (3/PE).

#### Requirements


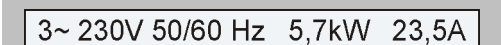
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Check that the following requirement has been met:

- The connection point of the appliance is disconnected from the customer power supply and protective measures taken to ensure the power cannot be switched on again.


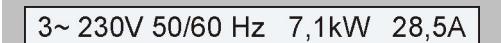
#### Converting to a three-phase supply (3~ 230 V) (6.06 mini)

---

- |    |   |   |
|----|---|---|
| 1. |  | Insert the jumper as shown in the circuit diagram (page 2). |
| 2. |  | Stick the relevant label on the type plate.                 |

#### Converting to a three-phase supply (3~ 230 V) (6.10 mini)

---

- |    |   |   |
|----|---|---|
| 1. |   | Insert the jumper as shown in the circuit diagram (page 2). |
| 2. |  | Stick the relevant label on the type plate.                 |

## 6.2 Network connection

### 6.2.1 Planning the network connection

#### Meaning

Safe and reliable operation of the appliance depends on access to the Internet, and therefore it is crucial that the network connection is installed carefully and correctly.

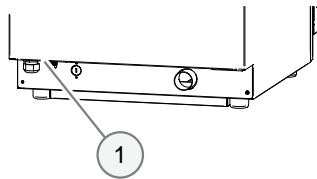
Contact your Service partner with regard to this matter.

#### Customer-installed equipment and rules relating to the network connection

The table below shows what equipment must be provided by the customer and what regulations must be observed when connecting the appliance.

Equipment	Rules
RJ45 network socket	There must be a network connection for the combi oven installed close to the appliance. When connecting more than one combi oven, a dedicated network connection must be installed for each appliance. Alternatively, the appliances can be networked together by additionally installing a router.

#### Position of the network port



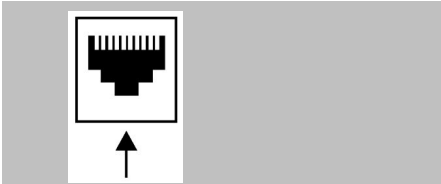
Item	Name	Function
1	RJ45 network socket	Network port on the rear of the combi oven

## 6.2.2 Connecting to the network


### Installation procedure

Follow the steps below to establish an Internet connection:

1.

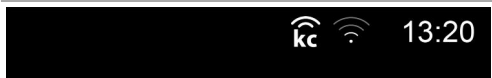



Use a network cable to connect the network socket on the combi oven to the network socket which the customer has pre-installed and given clearance for use.
2.



When putting the combi oven into service, check whether the 'kitchenconnect®' Internet icon in the user interface indicates that the connection is enabled.

### Checking the network connection

Display in easyTouch	Button	Meaning
	'kitchenconnect®' white	Internet is enabled, installation successful
	'kitchenconnect®' grey	Internet is disabled, installation unsuccessful

## 6.3 Water connection

### 6.3.1 Water supply

#### **Regulations for the water connection**

---

Water pipes and connections must comply with local and national regulations. In particular these include:

- DIN 1988 part 2 and part 4
- EN 61770
- EN 1717

For appliances with an NSF certificate, the following regulations must also be observed:

- Regulations from the National Sanitation Foundation (NSF)
- International Plumbing Code 2003
- International Code Council (ICC)
- Uniform Plumbing Code 2003, International Association of Plumbing and Mechanical Officials (IAPMO)

The appliance must be installed with suitable backflow protection to comply with applicable federal, state, and local codes.

#### **For Australia and New Zealand:**

Water installation must be done in compliance with AS/NZS 3500 Plumbing and Drainage Code.

#### **Connecting the water supply**

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The appliance is designed to be permanently connected to the customer's water supply. Dirt filters must be provided.

#### **Connecting the water supply with a flexible connecting pipe**

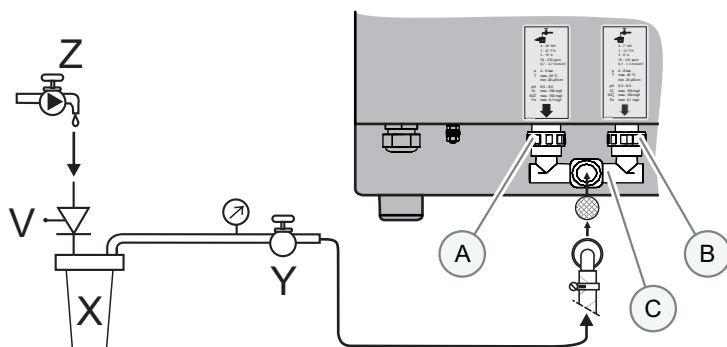
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The combi oven can be connected to the water supply using a flexible DN10 connecting pipe to DIN EN 61770 with a 3/4" screw connection. Dirt filters must be provided.

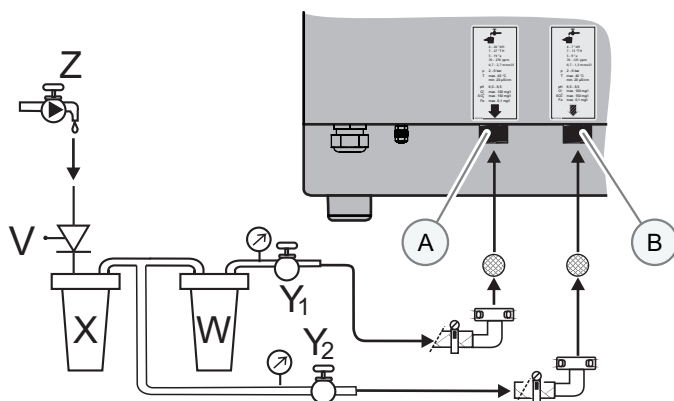
#### **Water quality and water hardness**

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- Find out the water quality and water hardness from your local water supply company, or test the water quality as described in 'Testing the water quality' on page 48.
- Information on the required drinking water quality is given under 'Technical Data' on page 57.
- If necessary, provide suitable water treatment measures. For instance these may be installing a water filter and/or a water treatment system.
- Test the water quality as described in 'Testing the water quality' on page 48 to ensure that after water treatment, the water meets the specified quality values.



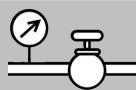
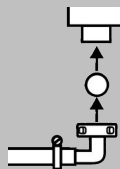

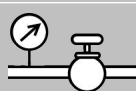

**Connection diagram without water treatment**

Item	Name	Explanation
A	Soft water connection	Drinking water quality, see 'Technical data on page 57'
B	Cold water connection	
C	Water distributor	
Z	Water supply line	
X	0.08 mm sediment filter	A 0.08 mm sediment filter must be installed if the water has a high level of impurity.
Y	Shut-off device with dirt filter	
V	Verifiable check valve	Type EA

**Connection diagram with water treatment**

Item	Name	Explanation
A	Soft water connection	Drinking water quality, see 'Technical data on page 57'
B	Cold water connection	
Z	Water supply line	
X	0.08 mm sediment filter	A 0.08 mm sediment filter must be installed if the water has a high level of impurity.
W	Water treatment	If the water quality does not meet required values, a water treatment system must be installed.
Y	Shut-off device with dirt filter	
V	Verifiable check valve	Type EA

## Installing the water supply

1.		Flush through the customer's water supply pipe (Z).
2.		Fit the sediment filter (X) and, if necessary, a water treatment system (W).
3.		Fit a separate shut-off device for each appliance (Y or Y <sub>1</sub> /Y <sub>2</sub> ).
4.		Connect the appliance as shown in the 'Connection drawing' on page 66.
5.		Rinse out the sediment filter.
6.		Once the water supply has been installed, close the shut-off device.
7.		Inform the user about the service intervals for the filters, and the water treatment system if applicable.

### 6.3.2 Test the water quality

#### Materials required:

---

You will need the following materials:

- 1 sample container for taking samples
- 1 conductivity meter (part no. 3019007)
- Analysis kit for measuring general hardness and carbonate hardness, including two analysis containers (part no. 3019010)
- Protective gloves

#### Test the water quality:

---

Measure the electrical conductivity and general hardness of the water By following the instructions included with the tester and analysis kit.

Compare the measured values with the recommended values; see 'Technical data' on page 57.



### 6.3.3 Drain connection

#### Regulations for the drain connection

You must comply with local and national regulations on the design of the drain connection and on the composition of the wastewater. These include:

- DIN 1988 part 2 and part 4
- DIN EN 1717
- Local wastewater regulations

For appliances with an NSF certificate, the following regulations must also be observed:

- International Code Council (ICC) or the unified Plumbing Code from the International Association of Plumbing and Mechanical Officials (IAPMO)
- Regulations from the National Sanitation Foundation (NSF)

Drain piping and connections must comply with the International Plumbing Code 2003, International Code Council (ICC) or the Uniform Plumbing Code 2003, International Association of Plumbing and Mechanical Officials (IAPMO).

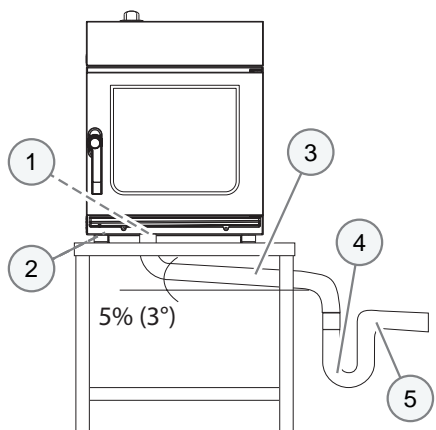
#### Rules for safe installation of the drain connection

Observe the following rules to prevent hazards caused by a faulty drain connection:

- There must be no restriction or reduction in the cross-section of the drain pipe.
- The slope of the drain pipe must equal min. 5% (3°).
- If more than one appliance is connected to one drain pipe, this pipe must be large enough to allow the wastewater to flow out unchecked.
- The appliance must be connected to the drain using a NON-flexible pipe. A fixed connection is recommended; alternatively an open funnel waste trap can be installed.

#### Connection diagram

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:



Item	Name	Function
1	Drain connection	On the back, connection point C, see 'Connection drawing' on page 66
2	Safety overflow	<ul style="list-style-type: none"> <li>▪ On the appliance floor, connection point M, see 'Connection drawing' on page 66</li> <li>▪ Used to drain away water in the event of a fault (blockage).</li> </ul>
3	Waste pipe DN 40	<ul style="list-style-type: none"> <li>▪ Minimum internal diameter = 36 mm</li> <li>▪ Slope min. 5% (3°)</li> </ul>
4	Waste trap / Funnel waste trap	<ul style="list-style-type: none"> <li>▪ Recommended for blocking smells</li> </ul>
5	Drain pipe DN 40	<ul style="list-style-type: none"> <li>▪ Minimum internal diameter = 36 mm</li> <li>▪ Slope min. 5% (3°)</li> </ul>

### **Connecting the appliance to the drain**

Connect the appliance as shown in the connection diagram.

### **Reducing the cold water consumption**

To reduce the amount of cold water that is used, the temperature above which the condenser is cooled with water can be adjusted. A maximum value of 80 °C is permitted. This is the maximum temperature of water allowed to be released into the waste-water system.

This adjustment can be carried out by an authorized service company or the manufacturer.

### **Condenser temperature service value (standard)**

The following table shows the Condenser Temperature service value (temperature above which the condenser is cooled with water) and its range of values:

Service item	Description	Factory setting [°C]	Range [°C]
c02	Condenser temperature	68	50 - 95

### **Condenser temperature operating parameter (easyTouch)**

The following table shows the Condenser Temperature operating parameter (temperature above which the condenser is cooled with water) and its range of values:

ID	Description	Factory setting [°C]	Range [°C]
8	Condenser temperature	68	50 - 95

## 6.4 ConvoClean system installation (for appliances with ConvoClean / ConvoClean+)

### 6.4.1 Layout of the fully automatic oven cleaning system

#### Cleaning agent and rinse aid

Use only the cleaning fluids specified here to clean the combi oven.

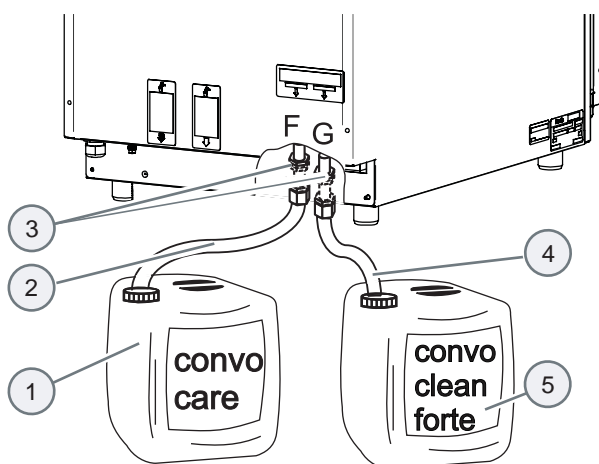
**NOTICE!** Damage caused as a result of improper use of cleaning agents will invalidate any warranty claims.

The following table shows the approved cleaning agent and rinse aid:

Name	Product	Label color
Cleaning agents	ConvoClean forte	red
Rinse aid	ConvoCare	green

#### Layout of the fully automatic oven cleaning using connected canisters

The following illustration shows a size 6.10 mini combi oven as an example for all appliances:



Item	Name	Colour coding
F	Appliance connector for rinse aid supply	green (lettering)
G	Appliance connector for cleaning agent supply	red (lettering)
1	Canister containing ConvoCare rinse aid (ready-to-use solution in defined mixing ratio)	green (label)
2	Delivery tube for rinse-aid suction nozzle	green (tube)
3	D10 wire clip	-
4	Extractor tube for cleaning agent suction nozzle	red (tube)
5	Canister with ConvoClean forte cleaning agent	red (label)

#### Installation location for the cleaning agent and rinse aid canisters

Install the canisters as follows:

- The canisters should be located for easy access beside the appliance on a flat surface.
- The surface on which the canister sits must not lie above the level at which the appliance feet meet the appliance case.
- The surface on which the canister sits must not lie more than 1 metre below this level.

## 6.4.2 Connecting the fully automatic oven cleaning system

### **⚠ Rules for safe connection of the fully automatic oven cleaning system**

If the ConvoClean and ConvoCare connections are swapped over, there is a health risk from eating the cooked dishes.

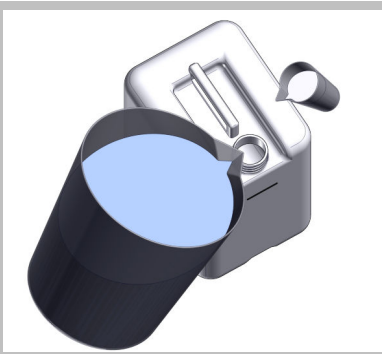
Observe the following rules to prevent these hazards:

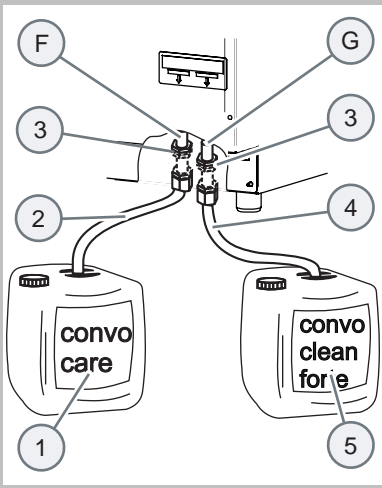
- When connecting the ConvoClean forte and ConvoCare, extreme care must be taken to ensure that the tubes are connected to the correct point on the appliance and to the correct canister cap.

### **Requirements**

- Cold water supply connected as specified in the 'Water supply' on page 45 section
- Drain connected as specified in the 'Drain connection' on page 49 section
- Technical figures comply with requirements given in the 'Technical data' on page 57 section

### **Connecting the fully automatic oven cleaning system to canisters**

- 

Mix the supplied ConvoCare K concentrate with soft water in the empty ConvoCare rinse aid canister. Follow the instructions in the user manual on mixing the ConvoCare rinse aid in the canister.
- 

Plug the green extractor tube (2) for the ConvoCare rinse aid onto the connector nipple of the rear tube fitting (F) and secure the tube in place with the wire clip (3) (see label for rinse-aid connection on the rear panel of the appliance).
- Insert the suction nozzle on the green extractor tube (2) into the rinse aid canister (1). There must be no kinks in the tube and the vent hole in the canister must be open and unblocked.
- Plug the red extractor tube (4) for the ConvoClean forte cleaning agent onto the connector nipple of the front tube fitting (G) and secure the tube in place with the wire clip (3) (see label for cleaning-agent connection on the rear panel of the appliance).
- Insert the suction nozzle on the red extractor tube (4) into the cleaning-agent canister (5). There must be no kinks in the tube and the vent hole in the canister must be open and unblocked.
- Start level 1 cleaning and check that the cleaning agent is being injected.

### **Optional customization**

As an option, an authorized service company or the manufacturer can customize the ConvoClean system to suit the user's requirements (Service manual).

## 7 Putting into service

### 7.1 Safe working when putting the appliance into service

#### For your safety when using the combi oven

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Before putting the combi oven into service, it is essential that you familiarize yourself with the rules and hazard warnings specified in the chapter 'For your safety' on page 13 in the User manual, and follow the instructions given there. Follow the instructions in the relevant sections of the User manual when testing cooking operations and cleaning operations.

#### Basic rules for safe operation

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If it is known or evident that the combi oven has been moved after installation without authorization (whether intentionally or unintentionally), the appliance must not be put back into service until all the following requirements have been met:

- The appliance and fittings or accessories being used show no signs of damage.
- The installed electrical power cables, water supply pipes and pipes for wastewater and cleaning products show no signs of damage, are fixed securely, are not leaking from any point and appear safe and in working order on visual inspection.
- The 'Requirements relating to the operating condition of the combi oven' on page 14 are met.
- The 'Requirements relating to the operating environment of the combi oven' on page 14 are met.
- All warning signs are in their designated position.

#### Rules for safe operation of the appliance

---

To avoid hazards, the following rules must be observed during operation:

- The air vent and the ventilation port on the top of the appliance, the ventilation slots on the rear of the appliance and the openings in the base in the front area between the feet must not be covered, obstructed or blocked.
- The racks must be attached securely.
- The food containers must be inserted correctly; see 'Loading and removing food' in the User manual.
- The suction panel must be secured properly in place.

## 7.2 Procedure for putting the appliance into service

### Checks prior to putting the appliance into service

Before preparing the combi oven for first-time use, check that the following requirements are met:

- The appliance has no signs of damage.
- The appliance has been set up so that it cannot slide about or tip over; the requirements for the installation position and the area around the appliance have been met (see section 'Appliance' on page 26).
- Protective films, cardboard packaging and transport securing devices etc. have been removed completely.
- The cooking chamber contains no stored items or food nor any equipment other than necessary cooking accessories (e. g. food containers).
- The appliance is installed in accordance with the requirements in the chapter 'Installation' on page 38.
- The installed electrical power cables, water supply pipes and pipes for wastewater and cleaning products show no signs of damage, are fixed securely, are not leaking from any point and appear safe and in working order on visual inspection.
- The appliance was subjected to an individual electrical test (see below).
- All safety devices are in their designated position and are working correctly.
- All warning signs are in their designated position.
- The appliance and any accessories and fitting used have been cleaned properly.

The appliance must not be put into operation until all the specified requirements are met.




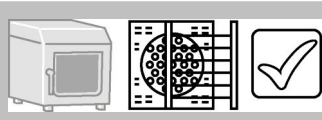


### Individual electrical test

The individual electrical test comprises the following three steps:






- Observation: Visual inspection for damage or improper use
- Measurement: Carry out prescribed measurements in accordance with accepted engineering standards (protective earth resistance, insulating resistance, protective earth current / leakage current)
- Testing: Functional test

The individual electrical test must be repeated regularly in accordance with the legal regulations.

### Preparing the appliance for first-time use

1.		Bring the ambient temperature to the permitted operating temperature.
2.		Switch on the circuit breaker.
3.		Open the water supply.
4.		Check that the following are seated properly and in the correct position: <ul style="list-style-type: none"> <li>▪ Suction panel</li> <li>▪ Racks</li> </ul>
5.		Switch on the combi oven.
6.		Make the following settings: <ul style="list-style-type: none"> <li>▪ Date</li> <li>▪ Time</li> <li>▪ Language</li> </ul>

### Putting the appliance into use

1.		Start the cooking operation using the following cooking data: <ul style="list-style-type: none"> <li>▪ 'Combi-steam' cooking mode</li> <li>▪ 150 °C</li> <li>▪ 10 minutes</li> </ul>
2.		Check the following points: <ul style="list-style-type: none"> <li>▪ Is the oven light illuminated?</li> <li>▪ Is the fan running?</li> <li>▪ Are there any leaks in the water supply and wastewater systems?</li> <li>▪ Does the temperature rise inside the cooking chamber?</li> </ul>
3.		Start the cooking operation using the following cooking data: <ul style="list-style-type: none"> <li>▪ 'Steam' cooking mode</li> <li>▪ 100 °C</li> <li>▪ 10 minutes</li> </ul>
4.		Check whether steam is being generated in the cooking chamber (Open the appliance door carefully).
5.		<b>For ConvoClean / ConvoClean+ option:</b> Check the ConvoClean / ConvoClean+ fully automatic oven cleaning system: <ul style="list-style-type: none"> <li>▪ Start the fully automatic oven cleaning.</li> <li>▪ Check the supply of ConvoClean forte and ConvoCare.</li> </ul>

### Customer guidance and instruction

Instruct the user in all safety-related functions and devices. Instruct the user in how to operate the appliance, and complete the checklist supplied with the appliance.

## 8 Removal from service and disposal

### 8.1 Removal from service and disposal

#### Rules for safe and responsible working when removing the appliance from service

Avoid any risks to yourself and others by following the rules below:

- Before any intervention work, the appliance must be disconnected from the power supply, protective measures taken to ensure the power cannot be switched on again, and a check performed to verify that the appliance is actually de-energized.
- Always lift the appliance carefully and secure it against tipping over.
- Be aware of the centre of gravity to keep the appliance balanced.
- The cleaning agents must be disposed of in accordance with the instructions on the canisters in order to avoid damage to the environment.

#### Requirements

Before removing the appliance from service, check the following points:

- The appliance is de-energized.
- The water supply is shut off.

#### Removal from service

To remove your appliance from service, follow the steps for setting up and installing your appliance in the reverse order (see the chapters 'Installation' on page 38, 'Moving the appliance' on page 24 and 'Setting up the appliance' on page 26).

Do not move the appliance until you have disconnected all the connections.

The following tasks must be performed correctly to remove the appliance from service:

- Disconnecting the water connection from the appliance
- Removing the drain connection from the appliance
- Disconnecting or isolating the electrical supply
- Removing the door catch
- Correct disposal of the cleaning agents as instructed on the cleaning agent containers and in accordance with any applicable national and local regulations

**For appliances with fully automatic oven cleaning:**

- Disconnecting the cleaning agent and rinse aid connections

#### Disposal

The appliance must not be disposed of with the household refuse, as bulk waste or in contravention of regulations.



Contact the manufacturer for guidance on the environmentally safe disposal of your appliance. The manufacturer is certified to the ISO 14001:2004 environmental management standard and will dispose of your old appliance in accordance with valid environmental protection regulations.



## 9 Technical data

### 9.1 Dimensions and weights

#### Dimensions and weights

		6.06 mini	6.10 mini	10.10 mini
Width				
Including packaging	[mm]	580	580	580
Excluding packaging	[mm]	515	515	515
Depth				
Including packaging	[mm]	740	910	910
Excluding packaging	[mm]	599	777	777
Height				
Including packaging	[mm]	850	850	1085
Excluding packaging (standard)	[mm]	628	628	858
Without packaging (easyTouch controls)	[mm]	665	665	895
Weight (without ConvoClean option)				
Including packaging	[kg]	57	67	82
Excluding packaging	[kg]	45	54	69
Weight (with ConvoClean option)				
Including packaging	[kg]	58	68	83
Excluding packaging	[kg]	46	55	70
Safety clearances				
Rear	[mm]	50	50	50
Right	[mm]	50	50	50
Left (larger gap recommended for servicing)	[mm]	50	50	50
Top (for ventilation)	[mm]	500	500	500

**Dimensions and weights (marine model)**

		6.06 mini	6.10 mini	10.10 mini
<b>Width</b>				
Including packaging	[mm]	580	580	580
Excluding packaging	[mm]	515	515	515
<b>Depth</b>				
Including packaging	[mm]	740	910	910
Excluding packaging	[mm]	599	777	777
<b>Height</b>				
Including packaging	[mm]	955	955	1225
Excluding packaging (standard)	[mm]	702	702	902
Without packaging (easyTouch controls)	[mm]	739	739	939
<b>Weight (without ConvoClean option)</b>				
Including packaging	[kg]	57	67	82
Excluding packaging	[kg]	45	54	69
<b>Weight (with ConvoClean option)</b>				
Including packaging	[kg]	58	68	83
Excluding packaging	[kg]	46	55	70
<b>Safety clearances</b>				
Rear	[mm]	50	50	50
Right	[mm]	50	50	50
Left (larger gap recommended for servicing)	[mm]	50	50	50
Top (for ventilation)	[mm]	500	500	500

**Dimensions and weights of stand**

		6.06 mini	6.10 mini	10.10 mini
<b>Open stand</b>				
Width	[mm]	515	515	515
Depth	[mm]	475	653	653
Height	[mm]	900	900	700
Weight	[kg]	9.7	12	10.6
Overall height including stand (standard)	[mm]	1559	1759	1689
Overall height including stand (easyTouch)	[mm]	1596	1796	1626

**9.2 Maximum permissible loading weight****Maximum permissible loading weight**

The total weight of items placed on the shelf levels must not exceed the maximum permissible loading weight of the combi oven; details of loading weights are given in the user manual:

		6.06 mini	6.10 mini	10.10 mini
<b>Maximum load</b>				
Per combi oven	[kg]	13	20	30
Per shelf	[kg]	5	5	5

## 9.3 Electrical supply

### Electrical supply

		6.06 mini	6.10 mini	10.10 mini
<b>3N~ 400V 50/60Hz (3/N/PE)</b>				
Rated power consumption	[kW]	5.7	7.1	10.5
Convection power	[kW]	5.4	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	11.8	14.8	15.7
Fuse rating	[A]	16	16	20
Protective earth current (leakage current, with reduced fan speed)	[mA]	7	7	7
Protective earth current (leakage current, with fan speed not reduced)	[mA]	2	2	2
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	5G2.5	5G2.5	5G2.5
<b>3~ 200V 50/60Hz (3/PE)</b>				
Rated power consumption	[kW]	5.7	7.1	10.5
Convection power	[kW]	5.4	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	17.1	21.1	31.0
Fuse rating	[A]	20	25	35
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	4G4	4G4	4G4
<b>3~ 230V 50/60Hz (3/PE)</b>				
Rated power consumption	[kW]	5.7	7.1	10.5
Convection power	[kW]	5.4	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	23.5	28.5	26.5
Fuse rating	[A]	25	35	32
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	4G4	4G4	4G4

## 9.4 Electrical supply, Korea

### Electrical supply

		6.06 mini	6.10 mini	10.10 mini
<b>3~ 220 V 60 Hz (3/PE)</b>				
Rated power consumption	[kW]	9.6	6.5	9.6
Convection power	[kW]	10.2	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	24.2	26.1	24.2
Fuse rating	[A]	32	32	32
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	4G4	4G4	4G4
<b>3N~ 380 V 60 Hz (3/N/PE)</b>				
Rated power consumption	[kW]	5.2	6.5	9.6
Convection power	[kW]	5.4	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	10.6	13.4	14.2
Fuse rating	[A]	16	16	20
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	5G2.5	5G2.5	5G2.5

## 9.5 Electrical supply, marine

### Electrical supply

		6.06 mini	6.10 mini	10.10 mini
<b>3~ 400V 50/60Hz (3/PE)</b>				
Rated power consumption	[kW]	5.7	7.1	10.5
Convection power	[kW]	5.4	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	8.7	10.7	15.7
Fuse rating	[A]	16	16	20
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	5G2.5	5G2.5	5G2.5
<b>3~ 440V 60Hz (3/PE)</b>				
Rated power consumption	[kW]	5.7	7.1	10.5
Convection power	[kW]	5.4	6.8	10.2
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	13	9.6	14.1
Fuse rating	[A]	16	16	20
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	5G2.5	5G2.5	5G2.5
<b>3~ 480V 60Hz (3/PE)</b>				
Rated power consumption	[kW]	6.7	8.4	12.4
Convection power	[kW]	6.4	8.1	12.1
Motor power	[kW]	0.25	0.25	0.25
Rated current	[A]	13.9	10.3	15.2
Fuse rating	[A]	16	16	20
Recommended conductor cross-section for wires laid uncovered in air up to 5 m in length.	[mm <sup>2</sup> ]	5G2.5	5G2.5	5G2.5

## 9.6 Dissipated heat

### 9.6.1 Dissipated heat

		6.06 mini	6.10 mini	10.10 mini
Dissipated heat				
Latent heat	[kJ/h]	1000	1330	1850
	[kW]	0.28	0.37	0.51
Sensible heat	[kJ/h]	1100	1450	2030
	[kW]	0.31	0.40	0.56

## 9.7 Water connection

### Water connection

Water supply (cold only)		
Shut-off device		With EA (verifiable) check valve and dirt filter
Water supply		
Connection		2 x G 3/4", Fixed connection recommended
Flow pressure	[kPa]	200 - 600 (2 - 6 bar)
Flow pressure (for ConvoClean / ConvoClean+ option)	[kPa]	300 - 600 (3 - 6 bar)
Water drain		
Model		Fixed connection (recommended) or funnel waste trap
Type		

### Water connection (for United Kingdom)

Water supply (cold only)		
Shut-off device		With double check valve (type BA or CA) and dirt filter
Water supply		
Connection		2 x G 3/4", Fixed connection recommended
Flow pressure	[kPa]	200 - 600 (2 - 6 bar)
Flow pressure (for ConvoClean / ConvoClean+ option)	[kPa]	300 - 600 (3 - 6 bar)
Water drain		
Model		Fixed connection (recommended) or funnel waste trap
Type		DN 40

## 9.8 Water quality

### Water quality

Water quality		
Water quality for general use		Drinking water, typically soft water (install water treatment system if necessary)
Hardness for injection		
German degrees of hardness (general hardness: GH)	[°dH]	4 - 7
French degrees of hardness	[TH]	7 - 13
English degrees of hardness	[°e]	5 - 9
International	[ppm]	70 - 125
Chemical	[mmol/l]	0.7 - 1.3
Hardness for condenser, cleaning		
German degrees of hardness (general hardness: GH)	[°dH]	4 - 20
French degrees of hardness	[TH]	7 - 35
English degrees of hardness	[°e]	5 - 25
International	[ppm]	70 - 360
Chemical	[mmol/l]	0.7 - 3.6
Properties		
Temperature	[°C]	max. 40
Electrical conductivity	[µS/cm]	min. 20
pH value		6.5 - 8.5
Cl <sup>-</sup> (chloride)	[mg/l]	max. 60
Cl <sub>2</sub> (free chlorine)	[mg/l]	max. 0.2
SO <sub>4</sub> <sup>2-</sup> (sulphate)	[mg/l]	max. 150
Fe (iron)	[mg/l]	max. 0.1
SiO <sub>2</sub> (silicate)	[mg/l]	max. 13
NH <sub>2</sub> Cl (monochloramine)	[mg/l]	max. 0.2
Carbonate hardness (KH)	[°dH]	Low GH

## 9.9 Water consumption

### Water consumption

		6.06 mini	6.10 mini	10.10 mini
Cold water (with ConvoClean / ConvoClean+ option)				
Average water consumption	[l/h]	0 - 20	0 - 20	0 - 20
Peak consumption	[l/min]	7	10	10
Cold water (without ConvoClean / ConvoClean+ option)				
Average water consumption	[l/h]	0 - 15	0 - 15	0 - 15
Peak consumption	[l/min]	0.5	0.5	0.5

	6.06 mini	6.10 mini	10.10 mini
Soft water			
Average water consumption for selecting the size [l/h] of the water filter	0 - 15	0 - 15	0 - 15



## 9.10 Appliance technical standards

### Appliance technical standards

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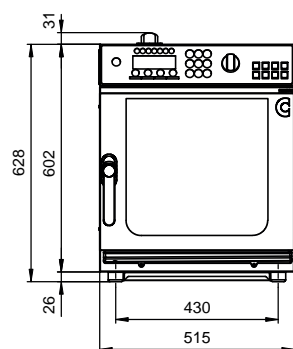
Appliance technical standards		
Degree of protection		IPX4
Approval mark according to national regulations		See type plate
Noise emission		
Measured	[dBA]	max. 60

## 10 Connection diagrams

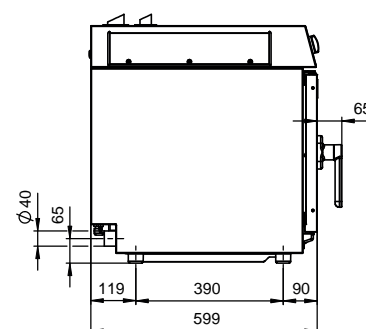
### 10.1 Dimensions and connection points (standard)

Dimensions and connection points for mini 6.06 (right-hinged appliance door)

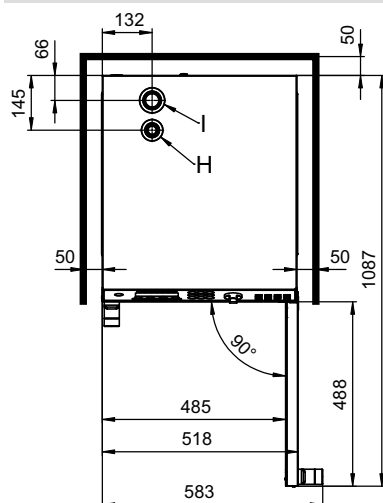
**Front view**



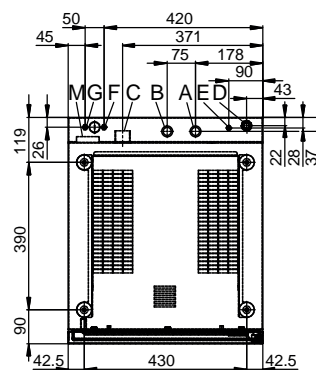
**Side view**



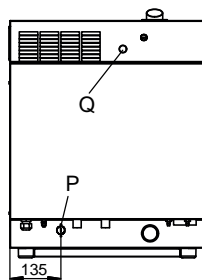
**View from above with wall clearances**



**Connections on the underside**



### Rear view

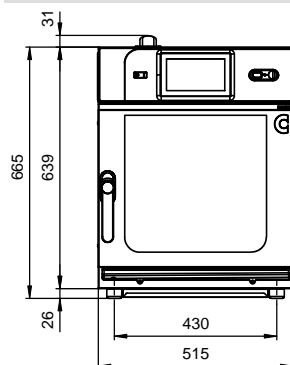


### Meaning of labelled elements

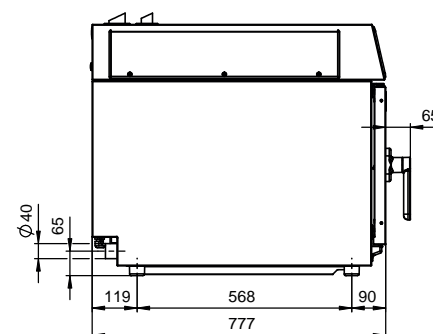
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- P mini Condensation Hood Pro - optional
- Q Thermal cutout reset

### Dimensions and connection points for mini 6.10 (right-hinged appliance door)

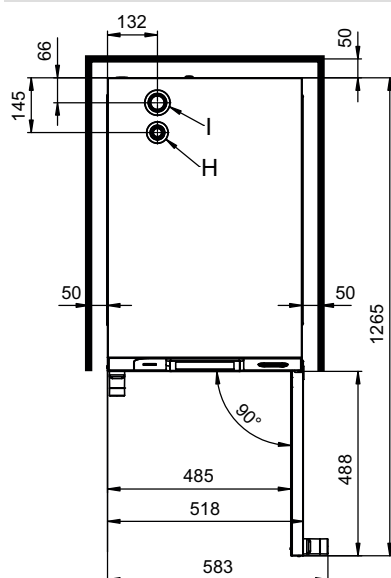
#### Front view



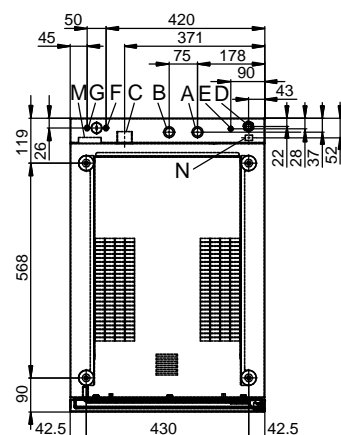
#### Side view



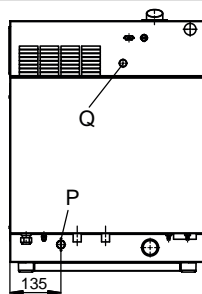
#### View from above with wall clearances



#### Connections on the underside



### Rear view

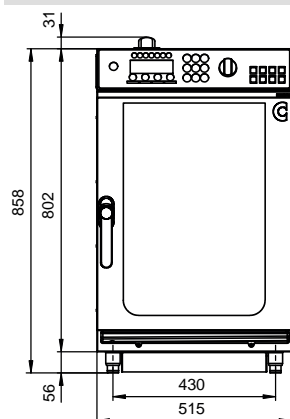


### Meaning of labelled elements

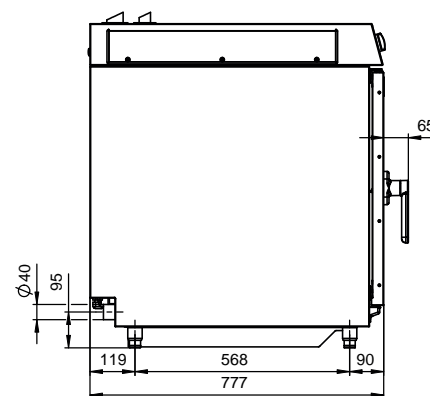
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- P mini Condensation Hood Pro - optional
- Q Thermal cutout reset

### Dimensions and connection points for mini 10.10 (right-hinged appliance door)

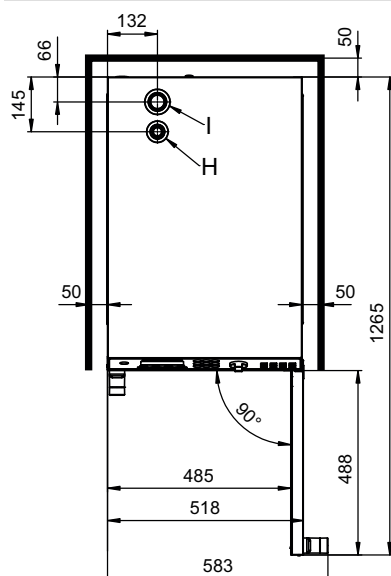
#### Front view



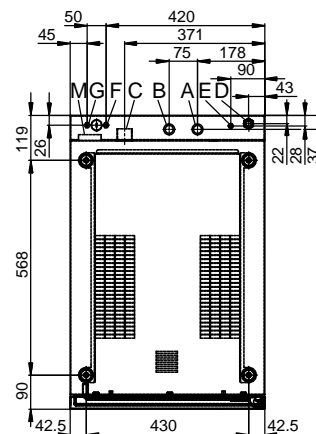
#### Side view



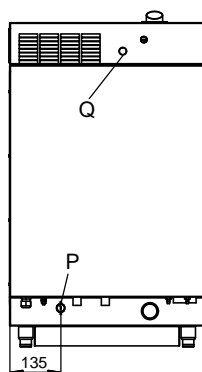
#### View from above with wall clearances



#### Connections on the underside



# **Rear view**



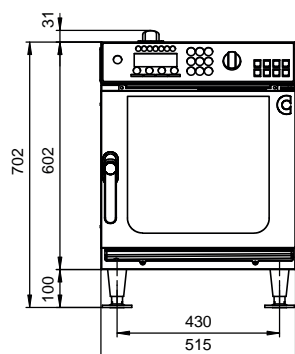
## **Meaning of labelled elements**

- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent Ø 30 mm
- I Ventilation port Ø 43 mm
- M Safety overflow 60 mm x 20 mm
- P Accessory CH Pro condensation hood - optional
- Q Thermal cutout reset

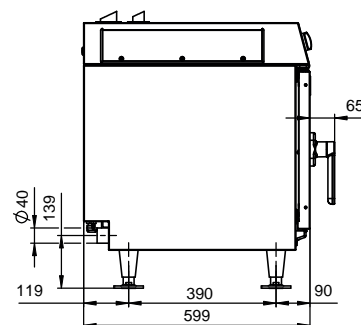
## 10.2 Dimensions and connection points (marine models)

### Dimensions and connection points for mini 6.06 (right-hinged appliance door)

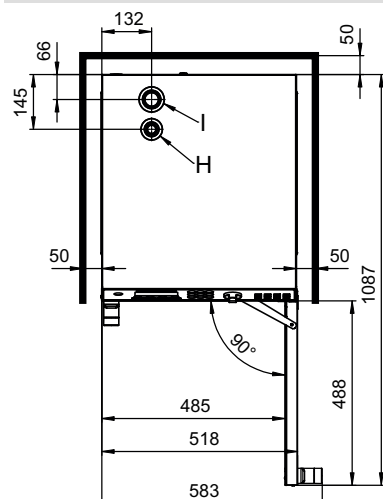
Front view



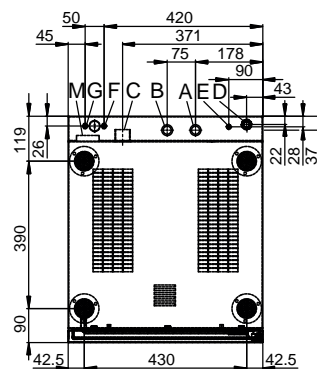
Side view



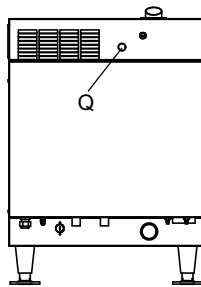
View from above with wall clearances



Connections on the underside



### Rear view

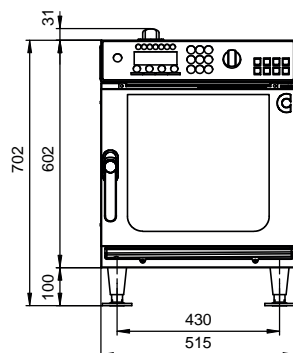


### Meaning of labelled elements

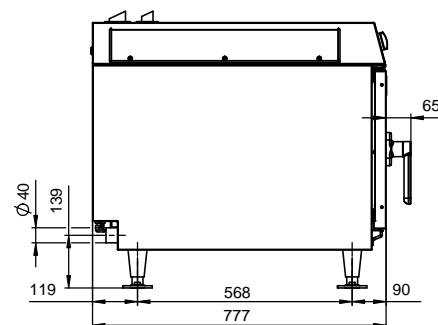
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- Q Thermal cutout reset

### Dimensions and connection points for mini 6.10 (right-hinged appliance door)

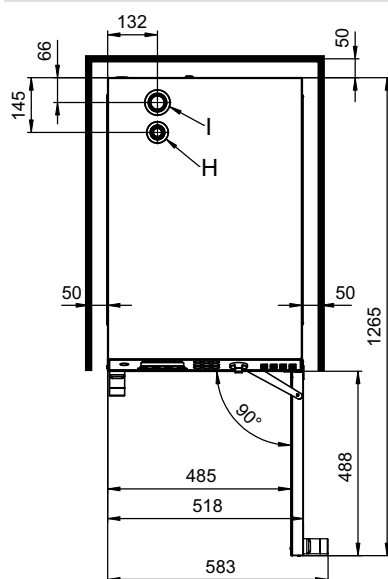
#### Front view



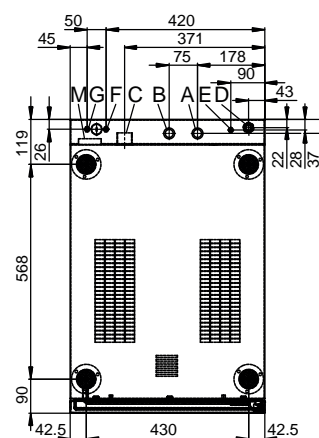
#### Side view



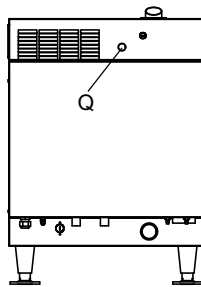
#### View from above with wall clearances



#### Connections on the underside



### Rear view

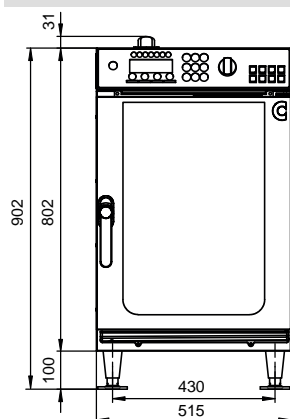


### Meaning of labelled elements

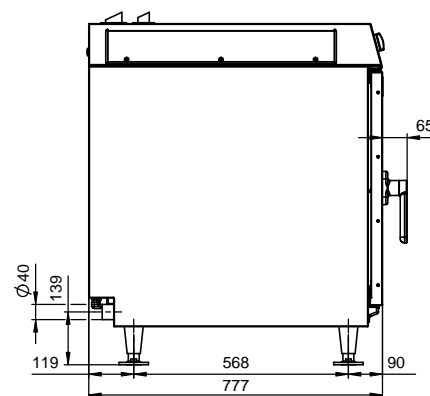
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- Q Thermal cutout reset

### Dimensions and connection points for mini 10.10 (right-hinged appliance door)

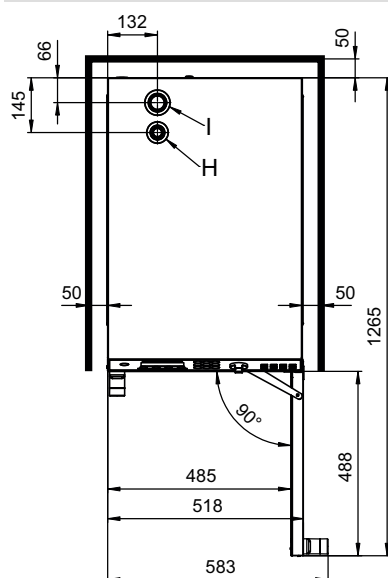
#### Front view



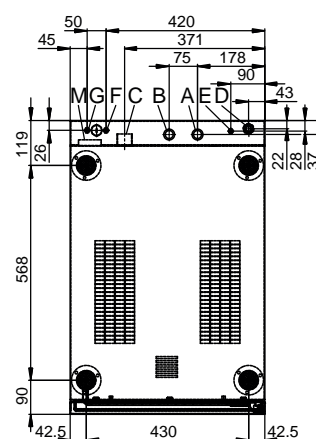
#### Side view



#### View from above with wall clearances

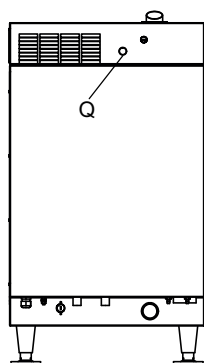


#### Connections on the underside





### Rear view



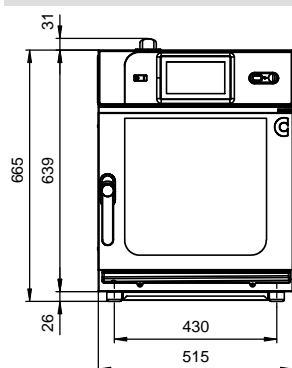
### Meaning of labelled elements

- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent Ø 30 mm
- I Ventilation port Ø 43 mm
- M Safety overflow 60 mm x 20 mm
- Q Thermal cutout reset

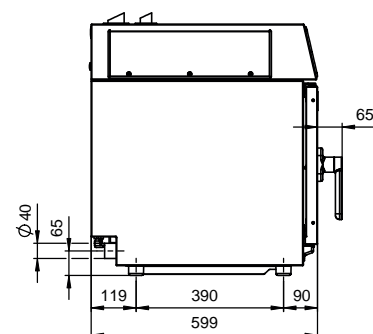
## 10.3 Dimensions and connection points (easyTouch)

### Dimensions and connection points for mini 6.06 (right-hinged appliance door)

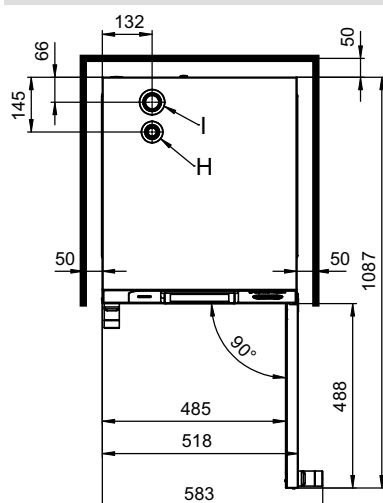
Front view



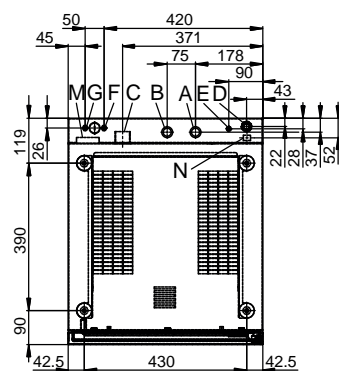
Side view



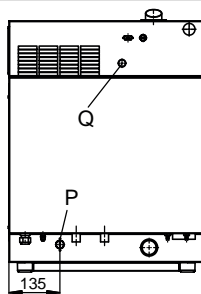
View from above with wall clearances



Connections on the underside



### Rear view

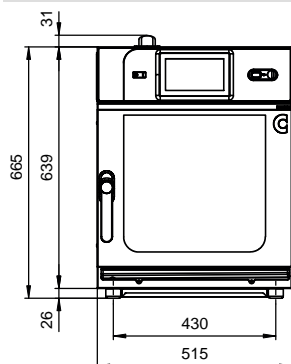


### Meaning of labelled elements

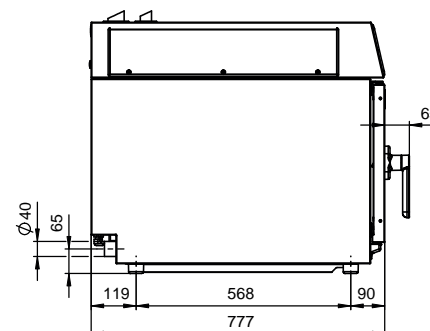
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- P mini Condensation Hood Pro - optional
- Q Thermal cutout reset

### Dimensions and connection points for mini 6.10 (right-hinged appliance door)

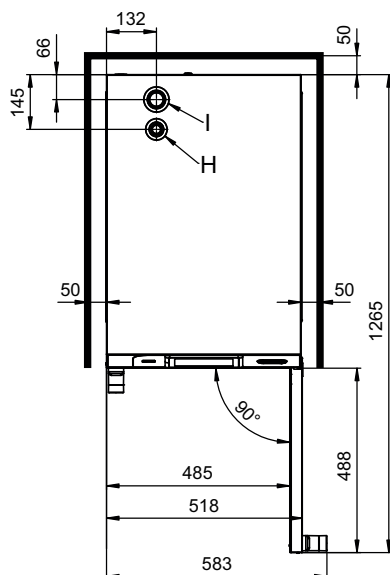
#### Front view



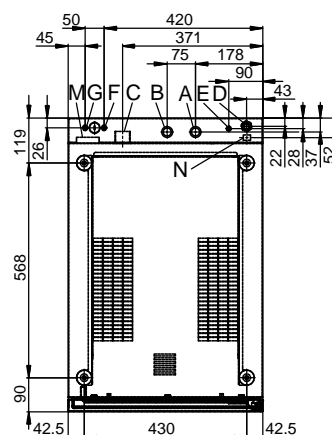
#### Side view



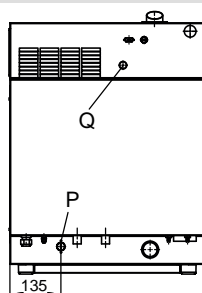
#### View from above with wall clearances



#### Connections on the underside



### Rear view

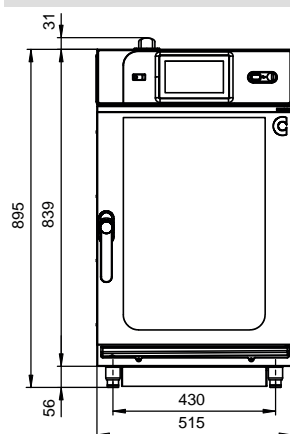


### Meaning of labelled elements

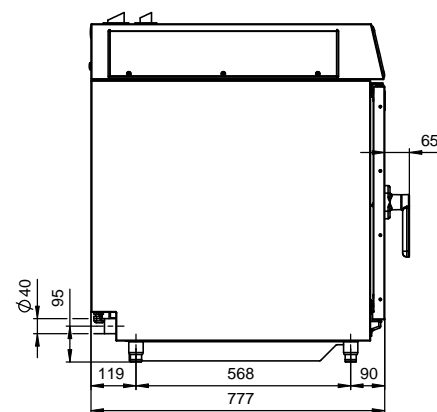
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- P mini Condensation Hood Pro - optional
- Q Thermal cutout reset

### Dimensions and connection points for mini 10.10 (right-hinged appliance door)

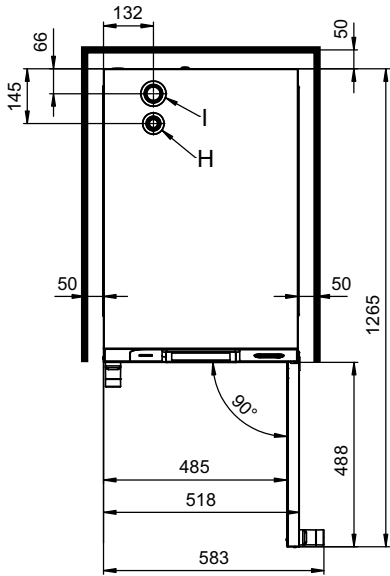
#### Front view



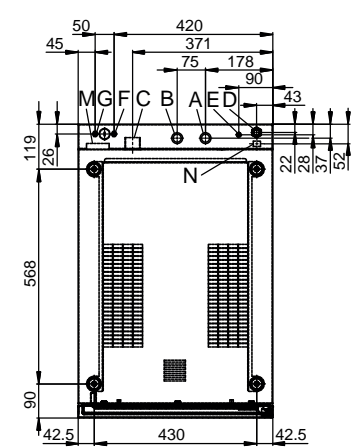
#### Side view

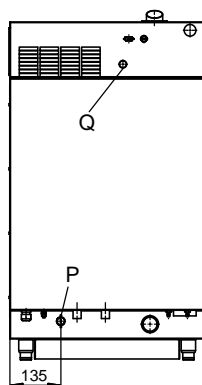


View from above with wall clearances



Connections on the underside



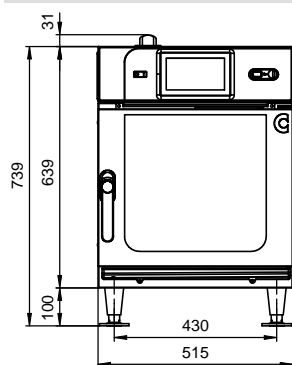
**Rear view**

**Meaning of labelled elements**

- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent Ø 30 mm
- I Ventilation port Ø 43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- P Accessory CH Pro condensation hood - optional
- Q Thermal cutout reset

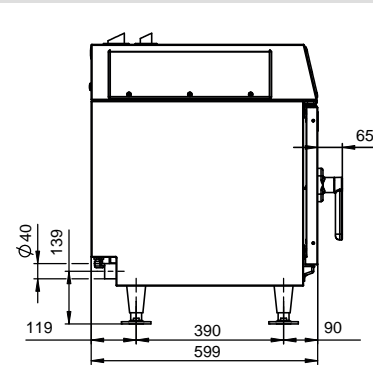
## 10.4 Dimensions and connection points (easyTouch, marine model)

### Dimensions and connection points for mini 6.06 (right-hinged appliance door)

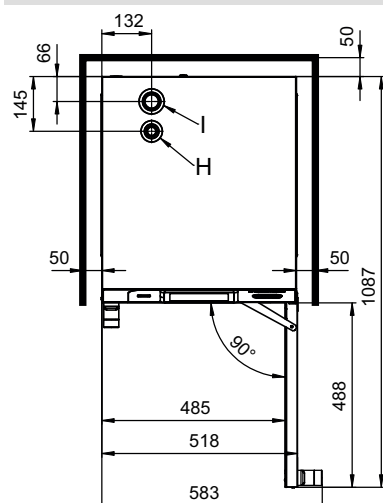
Front view



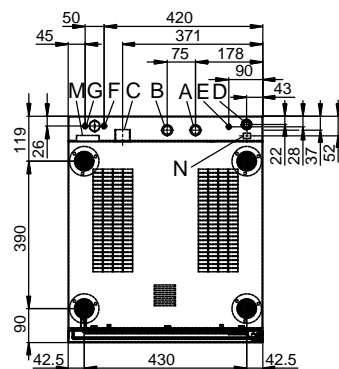
Side view



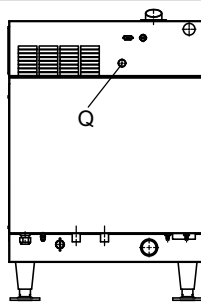
View from above with wall clearances



Connections on the underside



### Rear view

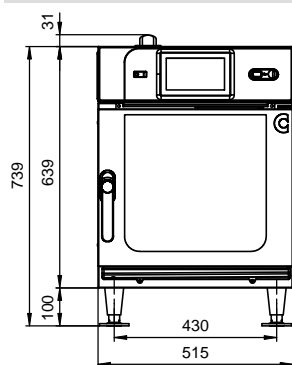


### Meaning of labelled elements

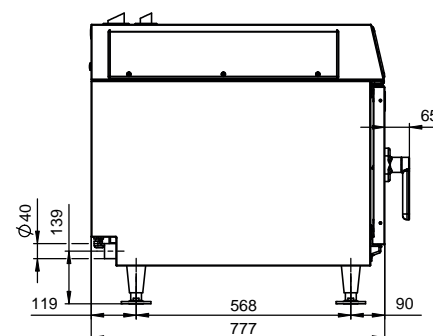
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- Q Thermal cutout reset

### Dimensions and connection points for mini 6.10 (right-hinged appliance door)

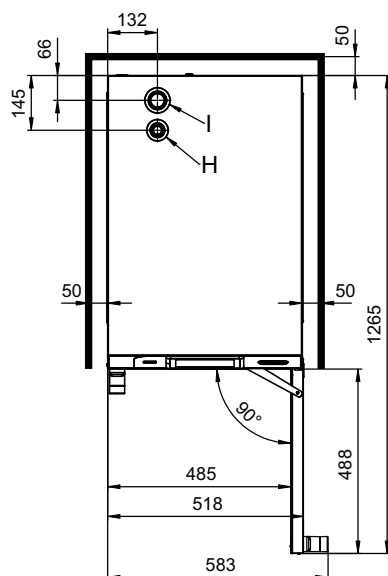
#### Front view



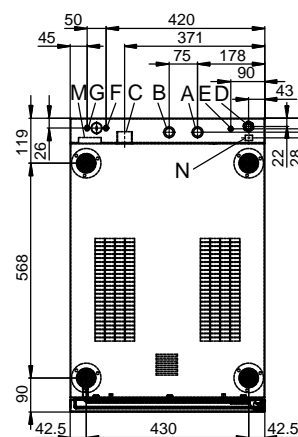
#### Side view



#### View from above with wall clearances

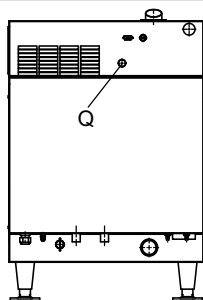


#### Connections on the underside





### Rear view

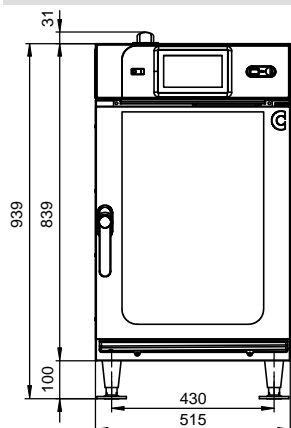


### Meaning of labelled elements

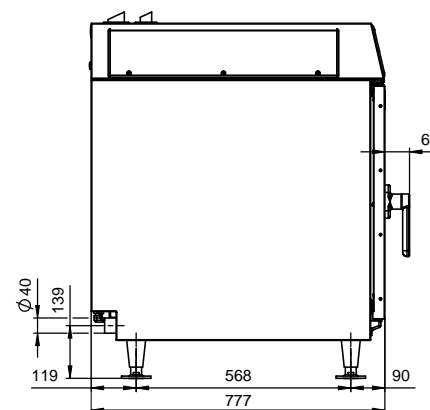
- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent  $\varnothing$  30 mm
- I Ventilation port  $\varnothing$  43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- Q Thermal cutout reset

### Dimensions and connection points for mini 10.10 (right-hinged appliance door)

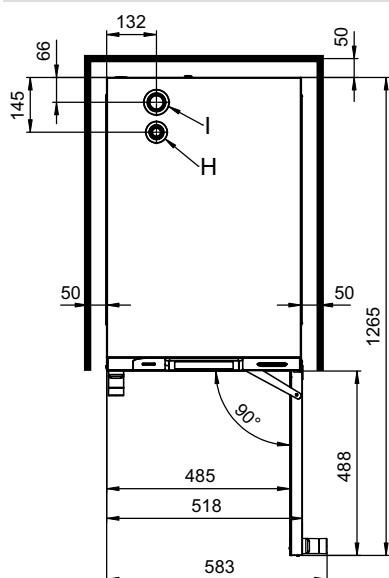
#### Front view



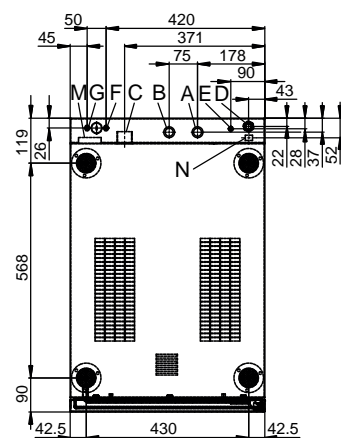
#### Side view

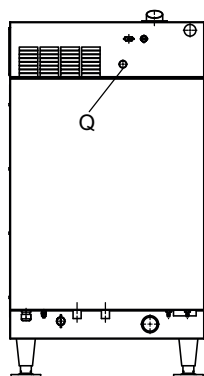


#### View from above with wall clearances



#### Connections on the underside



**Rear view**

**Meaning of labelled elements**

- A Water connection (soft water (filtered), for water injection)
- B Water connection (cold water (unfiltered), for cleaning)
- C 1.5" drain connection
- D Electrical connection
- E Equipotential bonding
- F Rinse-aid connection
- G Cleaning-agent connection
- H Air vent Ø 30 mm
- I Ventilation port Ø 43 mm
- M Safety overflow 60 mm x 20 mm
- N RJ45 Ethernet port
- Q Thermal cutout reset



Combi oven  
Convotherm mini  
OES mini 6.06, 6.10, 10.10

Serial no.

Item no.

Order no.

Additional technical documentation can be found in the download center at :  
[www.convotherm.com](http://www.convotherm.com)



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